Thomas W. Waelde*

I. INTRODUCTION

This article will survey the—sometimes substantive, sometimes only formal—changes in petroleum law governing development in most (non-US) petroleum producing countries as well as current licensing and negotiating practices. Given that the former socialist countries (CIS) are currently the main testing ground for oil and gas investment and its legal instruments, the article will focus on how existing legislative and contracting/licensing practices fare in the environment of these transition economies. In fact, it is in and through the challenge posed by the transition economies that petroleum legislation and contracting will be forced to evolve.

The 1970s were the time of strong assertion of state sovereignty over economic and political emancipation of developing countries, resulting in large-scale nationalization, renegotiation, and emergence of strong state resource companies supported by foreign loans.¹ Resource endowment was seen as an important lever to gain economic power, and private investment generally was excluded, de-packaged and restricted.² This attitude has changed, first gradually and then with dramatic speed and scope,³ in the aftermath of the collapse of the supposedly ever-rising petroleum price in 1985 and in the wake of the collapse of state socialism. Encouragement of foreign investment is the order of the day,⁴ remnants of the 1970s restrictions are dismantled everywhere, ex-socialist countries are rushing into foreign investment as a panacea for their woes,⁵ and strongly entrenched state

* Professor of International Investment, Petroleum & Mineral Law Jean-Monnet Chair of European Economic and Energy Law (1995-98) and Executive Director Centre for Petroleum/Mineral Law & Policy, University of Dundee (CPMLP/Dundee), with the collaboration of Andrew Philip-Speed (Lecturer in Energy Policy/Tax, CPMLP/Dundee; Ph.D. Cambridge, LL.M. CPMLP/Dundee) and Jonothan Fitzpatrick (LL.B. Dundee, LL.M. CPMLP/Dundee).

1. Thomas Waelde, Revision of Transnational Investment Agreements in the Natural Resource Industries, 10 LAW. AMERICAS 265 (1978); Thomas Waelde, North/South Economic Cooperation and International Economic Development: Legal Process and Institutional Considerations, 23 GERMAN Y.B. INT'L L. 59 (1980).

2. Thomas Waelde, *Third World Mineral Development in Crisis*, 19 J. WORLD TRADE L. 3 (1985) (this attitude is best illustrated in Decision 24 of the Andean Pact of 1976 - for the history, including its repeal in 1991, see J.R. Pate, *Introductory Note to Andean Pact Decision 290*, 30 I.L.M. 1283 (1991)).

3. See Thomas Waelde, A Requiem for the New International Economic Order, Conference Presentation to the March 1994 International Law Conference in Quatar. (Najeeb Al-Nauimi ed., forthcoming).

4. See Thomas Waelde, Investment Policies and Investment Promotion in the Mineral Industries, 6 ICIS-REv/FILR 94 (1991).

5. Thomas Waelde & J. Gunderson, Legislative Reform in Transition Economies, 43 INT'L & COMP. L.Q. 347 (1994).

enterprises are being restructured and move towards privatisation.⁶ Western countries—particularly those in Europe—are gripped by strong concerns over their global competitiveness; emerging policies emphasise privatisation, de-regulation and liberalisation of nationally entrenched energy markets.⁷

What are the implications of these worldwide developments for specific countries, *e.g.*, the transition economies, the major Gulf producers or African or Asian countries? The world petroleum industry is globally interdependent. Investment and trading terms tend to leapfrog from country to country. International oil companies tend to compare investment opportunities worldwide with each other and pursue global strategies; investment opportunities compete with each other, and fashions tend to possess the world's oil companies. The article will try to identify—and distinguish—the influence of worldwide trends on major groups of existing and prospective oil and gas producers around the world.

II. THE DECLINING ROLE OF THE STATE AS CHIEF PARADIGM FOR PETROLEUM LEGISLATION

The overall paradigm underlying the current situation is a re-definition of the role of the state with respect to the economy. The state, quite generally, is retreating from a pervasive presence in business to a role as regulator, *i.e.*, the guarantor of a market-economy framework, a level playing field, fair competition, and of essential public functions—security, health and safety, education and infrastructure.⁸ This is particularly true where the oil and gas industry is a country's key industry.

The European Union's difficulties with creating an integrated and competitive energy market illustrate the conservative nature of energy market structures.⁹ The energy industry is based on large capital investments. It engenders strong vested interests involving both government (captured regulating agencies) and private institutions (including captured academic, research and other opinion-building institutions). Liberalisation of this sector, quite apart from "national interest" and "strategic" sentiments sometimes fronting for established interests,¹⁰ usually proceeds in a

9. See Second Progress Report on the Internal Energy Market, EU Commission, COM (93) 261 (July 2, 1993); see also D. McDougal & T. Waelde, European Community Energy Law (Note, A. Cardozo y Cunha, Foreword, S. Price & G. Caroll) (1994).

10. Vito Stagliano, The Ghost of OPEC in Energy Security Policy, 119 RESOURCES FUTURE 6 (Spring 1996).

^{6.} Thomas Waelde, Restructuring and Privatisation: Viable Strategies for State Enterprises in Developing Countries, 5 UTIL. POL'Y 412 (1991).

^{7.} See MICHAEL PORTER, COMPETITION IN GLOBAL BUSINESS (Cambridge Harv. Bus. School Press 1986); Thomas Waelde, Critical Review of Arguments on Third-Party Access, in E.J. MESTMAECKER, NATURAL GAS IN THE INTERNAL MARKET 227 (1992).

^{8.} See CENTO VELJANOWSKI, REGULATORS AND THE MARKET (1991); CENTO VELJANOWSKI, PRIVATISATION AND COMPETITION (1991); D. CORRY ET AL., REGULATING OUR UTILITIES, INSTITUTE FOR PUBLIC POLICY RESEARCH (1994); see also T.W. Wälde & J.L. Gunderson, Legislative Reform in Transition Economies: Western Transplants - A Short-cut to Social Market Economy Status?, 43 INT'L & COMP. L.Q. 347 (1994) (for discussion of transition economies).

quite deliberate fashion. Nevertheless, a change of the fundamental policy paradigm has occurred and is reflected in overall national investment policies,¹¹ such as the relaxation, up to full elimination, of traditional government majority ownership requirements.¹²

Contracts in the 1970s were characterized by very extensive involvement of the state, usually represented by the Ministry of Mines and Energy and the state petroleum enterprise acting as holder of the mineral title and mandatory partner.¹³ Such involvement meant substantial mandatory equity participation by the state—as a rule "free equity" or "carried"—at least until development,¹⁴ and extensive obligations by the foreign contractor/investor to obtain approvals and authorisations at almost every stage of the process. The state, through its bureaucracy, was intensively involved in the operation, irrespective if it was a developing or developed country.¹⁵

The swing of the pendulum of bargaining power—and some realisation of the limits of bureaucratic competence—is causing a much more hands-off approach by governments. Recent petroleum laws and agreements are likely to give more leeway to the discretion of companies on the theory that those who spend their risk funds will, and should, know best how to spend these funds effectively. Approval of operations is now often transformed into mere information of or consultation with the government, leaving the ultimate decision to the company.¹⁶

There are issues where government consent is required, such as environment and safety. Governments are under pressure to grant such consent according to already specified criteria within stipulated deadlines.

13. KAMAL HOSSAIN, LAW AND POLICY IN PETROLEUM DEVELOPMENT 120 (1979); Hasan Zakariya, New Directions in the Search for and Development of Petroleum Resources in Developing Countries, 9 VAND. J. TRANSNAT'L L. 545 (1976); Hasan Zakariya, Sovereignty, State Participation and the Need to Restructure the Existing Petroleum Concession, 10 ALBERTA L. REV. 232 (1972).

14. Hossain, supra note 13, at 134.

15. A MANUAL OF UNITED KINGDOM OIL AND GAS LAW 71 (T. Daintith & G.Willoughby eds., 1971) (on previous UK oil and gas law); Ole A. Lindseth, *Petroleum Policy and Legal and Contractual Frameworks, in* INTERNATIONAL ENERGY LAW 757 (Int'l Bar Ass'n/Matthew Bender 1984).

16. It may be worthwhile to quote from a 1991 production-sharing agreement, one of the first concluded in Eastern Europe: In lieu of a government consent requirement, the "exploration work programme shall be *reviewed* by a joint committee . . . Following such review by the . . . Advisory Committee, Contractor shall make such revisions as *Contractor deems appropriate*." This procedure, focusing on notification of and perhaps consultation with the government on exploration, and later development, contrasts with the earlier drafted Model Agreement of the government of Malta (i.e., the government's bargaining position) where the development plan needs to be "submitted for approval by the Government." Article 74.

^{11.} UNITED NATIONS, WORLD INVESTMENT REPORT 1994 (Geneva 1994) at 277-313, U.N. Sales No. E.94.II.A.14.

^{12.} See R. Sims, Government Ownership Versus Regulation of Mining Enterprises in Less Developed Countries, 9 NAT. RESOURCES F. 265 (1985) (on the rationale and implication of government ownership); Charles Blitzer et al., Contract Efficiency and Natural Resource Investment in Developing Countries, 19 COLUM. J. WORLD BUS. 10 (1984) (on the risk aspect). Government majority requirements existed in particular for the petroleum sector in Nigeria, Mexico, and Brazil (full state monopoly under the 1988 constitution), but has either been dismantled or is in the process of dismantling. The reversal of nationalist policies filters down-gradually and not without conflict and contradictions—into detailed regulatory, contractual and fiscal issues.

Thus, a 1990s petroleum agreement will reflect the spirit of de-regulation and de-bureaucratization. The definition of what is a public concern justifying government intervention is likely to be much narrower than in the 1970s. Government discretion will be circumscribed by more objective and thereby reviewable—standards and its exercise subject to time limits.¹⁷

Finally, the structure of taxation has a considerable impact on the industry's ways of developing petroleum projects. Most petroleum tax writing, and fiscal practice, seems to be oriented at maximising the government's share relative to the investor, rather than enhancing the total income from petroleum extraction—a function of both maximising the relative share and the total net revenue available.¹⁸ This may have been reflection of analysis and policy formulation in times of high—and, presumedly, ever increasing—oil prices from 1971 to 1986. High marginal tax rates with full recovery tend to reduce focus on minimising recoverable cost; the same applies to deductibility of new exploration and development from existing operations producing revenue streams subject to high marginal taxation.¹⁹ There is little evidence that apart from some initial concerns voiced in the UK Government's initiative on competitiveness ("Crine")²⁰ and the UK's 1993 oil tax revision,²¹ such factors have so far been paid sufficient attention in both theoretical analysis and public policy.²²

It is suggested that the future will see less government participation by equity or regulation—in actual petroleum operations, a re-orientation of tax from increasing the relative share to maximising the total government share, and a review of the impact of government regulation and taxation on the type, structure and relative cost of oil company operations.

19. Already pointed out by Pedro Van Meurs (1988), in N. BEREDJICK & T. WAELDE, PETROLEUM INVESTMENT POLICIES IN DEVELOIPING COUNTRIES (1988).

^{17.} Government participation in resource ventures is generally less pervasive, more gradual and optional, and aiming less at the target of majority participation than at objectives such as participation in information, technology, and obtaining an additional fiscal participation in case of profitable ventures. State participation is usually assigned to state companies, and these have found it increasingly difficult to finance their share essentially as non-operating partners. *Compare* R. Ramlogan, *State Participation in Joint Ventures*, 10 J. ENERGY & NAT. RESOURCES L. 279 (1992).

^{18.} See Van Meurs & Leleuch, *in* N. Beredjick & T. Waelde, Petroleum Investment Policies in Developing Countries 47, 81 (1988).

^{20.} Penelope Warne (May 1995) (CPMLP Conference Report, Houston); UK DEP'T OF TRADE & INDUSTRY, OFFSHORE INFRASTRUCTURE CODE OF PRACTICE, CONSULTATION DOCUMENT BY DTI (May 1994).

^{21.} The UK's 1993 oil tax revision reduced deductibility of new exploration against existing operations and simultaneously reduced the marginal tax rate on production (PRT), thus making it more expensive to carry out high-risk exploration and more attractive to develop marginal fields. 11 OIL & GAS L. & TAX'N REV. 342 (1994).

^{22.} A hypothesis is that replacing high marginal tax rates by a larger percentage royalty, graduated according to field quality, might generate effective incentives for cost savings not inherent in the currently popular tax allowing full recovery. However, such systems are likely to encourage high-cost operations. A more royalty based system, leaving a greater share of the net surplus to the contractor is, on the other hand, likely to favour vigorous cost-cutting.

1996]

III. STATE PETROLEUM ENTERPRISES: GOING THE WAY OF THE DINOSAURS?

To appreciate the legal, fiscal and contractual regimes for petroleum development, there must be an understanding of the role of state petroleum enterprises. They have mandatory intermediaries between the government and, mostly foreign, oil companies. State petroleum enterprises obtained and maintained commanding positions indicating the symbolic, political and economic importance attached to the state enterprise as a vehicle for national ownership, control and management of the petroleum industry.²³ In producing countries, they became often, if not always, the richest, best-paying instrumentality of the state. Control over them was hence much coveted.²⁴ The less developed the country, the more important—financially, economically, politically—the state petroleum company. The state petroleum company as a rule controlled all petroleum acreage; mineral rent went first into the state enterprise and only what the enterprise did not consume itself was subject to appropriation by the government as such.²⁵ In most producer countries, access to attractive acreage is exclusively through the state company as a mandatory partner.²⁶

State enterprises are not restricted to the developing or transitioneconomy world: Companies such as BP, the former BNOC, STATOIL, Elf, TOTAL, ENI, REPSOL and PetroCanada expressed the same desire for an instrument of national control over a strategic economic sector as in developing countries. Nevertheless, greatly influenced by the market-oriented policies of the Thatcher government in the United Kingdom,²⁷ there has been a movement towards privatisation of state energy companies (BP, British Gas, later and more gradually TOTAL, Elf, REPSOL and Petro-Canada), introduction of a liberalised legal regime, and replacement of

23. UNITED NATIONS STATE PETROLEUM ENTERPRISES IN DEVELOPING COUNTRIES (1980); RICHARD BENTHAM, STATE PETROLEUM COMPANIES: LEGAL & ORGANISATIONAL STRUCTURE (CPMLP/ Dundee 1988); Irene Agalliu, Privatisation of Petroleum Industry in Russia (1995) (LL.M. dissertation, CPMLP/Dundee).

24. Instructive on the history of Indonesian Pertamina (until 1974), see W.A. STOEVER, RENEGOTIATIONS IN INTERNATIONAL BUSINESS (1981) (on Norwegian petroleum law).

25. W. ASCHER, SURVEY OF ISSUES IN GOVERNMENT POLICY AND PUBLIC MANAGEMENT OF STATE OIL AND MINING COMPANIES IN DEVELOPING COUNTRIES (1991); Richard Auty, 18 NAT. RESOURCES F. 92 (1994).

26. In most cases, the state enterprise obtains, by law or preference, the mineral rights and contributes the use of such rights to a venture with a foreign contractor—joint venture/association, production-sharing, or other type of service contract. The foreign partner has to deal not only with the government, but with the organisational machinery and self-interest of a generally politicised and powerful state company. Association with the state companies brings advantages—mineral title and access to information, political cover, local know how—but in sum, the disadvantages may often have prevailed, such as much higher cost of operation, due to the more complicated joint decision processes and the state company's needs for using foreign investment for dispensing political patronage. For a description of this role in Indonesia, see Z. GAO, INTERNATIONAL PETROLEUM CONTRACTS: CURRENT TRENDS AND NEW DIRECTIONS 59 (1994); BERNARD TAVERNE, AN INTRODUCTION TO THE REGULATION OF THE PETROLEUM INDUSTRY, LAWS, CONTRACTS AND CONVENTIONS 84, 97 (1994).

27. See CENTO VELJANOWSKI, REGULATORS AND THE MARKET (1991); DAINTITH & WILLOUGHBY, UK OIL & GAS LAW (1993); Peter Cameron, Property Rights and the Role of Government: The Problem of Property in North Sea Oil (1980) (Ph.D. thesis, Edinburgh).

government ownership by a state regulator monitoring public service obligations and not yet removed monopolistic elements (mainly in gas/electricity distribution, much less so in oil and gas production).²⁸

With these privatisations being seen as successful,²⁹ restructuring and privatisation of state enterprises has entered the agenda of economic policy in most countries.³⁰ What is not surprising is that several countries (among them Canada, France, Italy, Argentina, Bolivia and Peru) are currently formulating and implementing privatisation policies for state energy companies. But what is surprising is that the bulk of state sector involvement in the oil and gas industry has been largely immune from the privatisation trend. The major petroleum producers (Saudi Arabia, Kuwait, Iraq, Iran, Abu Dhabi, Quatar, Indonesia, Malaysia, Mexico, Brazil, Venezuela, Egypt, Colombia, Ecuador, Angola and Nigeria) may have contemplated pre-privatisation moves but outright privatisation—defined as the sale of the company as such, or of its vital assets—has met resistance.

Privatisation, naturally, has been an important issue in the transition economies. While the situation is far from settled, the major Russian oil/ gas companies—GAZPROM and LUKOIL—have experienced the sale of some shares to employees, the general public and even to foreign investors.³¹

What are the implications of restructuring and privatisation for petroleum legislation and licensing? Access to acreage may be obtained without association with the state oil company. This has been very much the result of privatisation of YPF in Argentina where YPF assets were sold to private companies, YPF itself to investors, and access to exploration acreage is now available without mandatory association with the state company. Similarly, a retrenchment of the scope of the state enterprise—which can take many forms—may result in a different "contract menu" available to the private (foreign or national) investor; mandatory association and joint venturing agreements with the state enterprise may be replaced by modern

28. Stephen Dow, Post-Privatisation Regulation of the UK Energy Industries, CPMLP/Dundee Technical Report, June 1995; see also S. Albaracin et al., on the Argentine oil & gas privatisation, J. ENERGY & NAT. RES. L. (forthcoming 1996); T. Waelde, Restructuring and Privatisation: Viable Strategies for State Enterprises in Developing Countries, 5 UTIL. POL'Y 412 (1991).

29. See the progression from Mary Shirley, Managing State-Owned Enterprises, WORLD BANK STAFF WORKING PAPERS 577 (1985), through Charles Vuylsteke, Techniques of Privatisation of State-Owned Enterprises, WORLD BANK TECHNICAL PAPER 88 (1988), to Chakib Khelil, Argentina: Hydrocarbon Sector Privatisation, INDUSTRY & ENERGY DEP'T, REPORT NO. 1 (March 26, 1993).

30. GRAHAM & TROTMAN, PRIVATISATION - CURRENT ISSUES (1994).

31. See Irene Agalliu, Privatisation of Petroleum Industry in Russia (1988) (LL.M. dissertation, CPMLP/Dundee); R. Starr, Foreign Participation in Oil and Gas Projects in the Former Soviet Union, 12 J. ENERGY & NAT. RESOURCES L. 442 (1994); Kaj Hober, A Game Called Russian Oil, 13 J. ENERGY & NAT. RESOURCES L. 96 (1996). Privatisation in the ex-socialist countries is very different from Western privatisations since the ex-socialist state enterprises provided most of the public services associated in the West with local government. In addition, it is far from clear if the sale of shares in Russia, for example, has the same effect in terms of giving up control and being subject to capital markets discipline as in the West. (Christian von Hirschhausen, From Combinates to Enterprises: Changing Strategies of Industrial Restructuring in Post-Socialist Central and Eastern Europe (1994) (unpublished research paper, Ecole Nationale des Mines/CERNA (Paris)).

concession agreements (so in Argentina) or equivalent forms, for example production-sharing agreements with the state enterprise, the licensing authority or another state agency,³² with the state enterprise's material influence being reduced.³³

IV. LEGISLATION AND REGULATION FOR OIL & GAS DEVELOPMENT

Petroleum legislation, derived from mining law covering development of hard minerals and oil and gas,³⁴ is mainly concerned with title, the modalities of giving access to these resources (licensing and contracting), public-interest derived intervention powers of government authorities (environment, safety, rational use of resource, including imposed unitisation and joint development), disclosure obligations and inspection, access to land (including balancing between competing land uses), and rules governing the establishment and use of required subsidiary facilities.

In the 1980s, perhaps the most interesting development was the by now completed World Bank petroleum promotion project series.³⁵ New petroleum legislation was prepared with the help of World Bank-financed consultants in over 40 developing countries. Two observations need to be made. First, the programme did not have a very significant effect in encouraging petroleum investment. The reasons may be the then declining oil price, which reduces oil companies' willingness to move into non-producing countries.³⁶ Second, it did not have any significant impact on the

33. The inability of NNPC in Nigeria to fund its mandatory 60% share of joint venture agreements has led to *logical* proposals for production-sharing agreements which in effect—though not in form and appearance—reduce the state enterprise's influence significantly. PIW July 4, 1994, at 1, 2.

34. For a discussion of international and comparative petroleum law, see BERNARD TAVERNE, AN INTRODUCTION TO THE REGULATION OF THE PETROLEUM INDUSTRY, LAWS, CONTRACTS AND CONVENTIONS 84, 97 (Kluwer/Nijhoff eds. London 1994); K.W. BLINN ET AL., INTERNATIONAL PETROLEUM EXPLORATION AND EXPLOITATION AGREEMENTS: LEGAL, ECONOMIC, AND POLICY ASPECTS (1986); K. HOSSAIN, LAW AND POLICY IN PETROLEUM DEVELOPMENT: CHANGING RELATIONS BETWEEN TRANSNATIONAL GOVERNMENTS (1979); E. SMITH ET AL., INTERNATIONAL PETROLEUM TRANSACTIONS (1993); Z. GAO, INTERNATIONAL PETROLEUM CONTRACTS: CURRENT TRENDS AND NEW DIRECTIONS (Kluwer Int'l/Nijhoff London 1994), is the most recent comparison of four developing country regimes. Licensing was treated in a special issue of the JOURNAL OF ENERGY & NATURAL RESOURCES LAW in 1987. The JOURNAL OF ENERGY & NATURAL RESOURCES LAW in 1987. The JOURNAL OF ENERGY & NATURAL RESOURCES LAW has published over the years numerous surveys of individual countries' petroleum regime. Important country regimes were also described in T. WAELDE & G. NDI, INTERNATIONAL OIL & GAS POLICIES (1994) (Countries described therein include: Russia, Kazakhstan, Indonesia, Malaysia, Nigeria, China, and Latin America).

35. The programme has, so far, not been systematically examined outside the Bank. For an inhouse perspective, see Newcombe et al. Petroleum Exploration Promotion Projects: A Decade of Experience (December 1990) (Industry/Energy Division, Africa Technical Department Papers); James Bond & Ted Gorton, Non-Commercial Risk and Financing Energy Investments in the Least Developed Countries, IED Note No. 15, July 1992; Akin Oduolowu, An Evaluation of World Bank Funded Petroleum Exploration Promotion Programs, 1980-1990, World Bank, Industry & Energy Operations (September 1992).

36. Thomas Waelde, Investment Policies and Investment Promotion in the Mineral Industries, 7 ICSID REV-FILJ 94 (1992).

^{32.} Russia's new draft (passed as of July 1995 by the Duma, but not yet signed by the President) 1995 production-sharing law seems to be a contract neither with a state enterprise nor with the principal licensing authority (ROSKOMNEDRA), but rather with the Ministry of Energy/Fuel.

major producing countries (Saudi Arabia, Kuwait, Abu Dhabi, Quatar, Mexico, Brazil, Iran and Iraq).

While countries such as China and Vietnam³⁷ attracted international oil/gas investment quite a while ago, enacted new petroleum legislation and developed model agreements, the situation in the former East European/ CIS countries, in particular Russia, Aserbaijan, Kazakhstan, Uzbekistan and Turkmenistan,³⁸ is much more complex. In the process of transition, a common approach seems to be the formulation of umbrella codes for "natural resources" (or "subsoil")³⁹ which in very general terms declares the natural resources state property and makes general references to licenses or contracts administered by state authorities, usually with extensive state powers to intervene in natural resources development, all with an underdeveloped notion of property and contractual rights. The nature of the various instruments purporting to be "law" (parliamentary laws, presidential decrees and edicts, regional and local decrees), and the legal status of rights created or derived from such legislation is very unclear. Taxation is imposed by numerous, often inconsistent pieces of legislation issued by several central and often several regional and local authorities. Determination of title and ownership-and thereby licensing, contracting and taxation authority—is usually contradictory.40

There exists a gap in understanding between the Russian and other CIS legislators and their many Western advisers concerning what "law" is supposed to effect.⁴¹ Law is still seen with the eyes of the central planners as an instrument of directing state action, of prohibition, restriction and intervention powers and of settling jurisdictional disputes among conflicting state agencies. Its function in a market economy of protecting and enforcing property rights and contracts, and providing a vehicle for transactions and of corporate organisation are not fully appreciated. In addition, the need of investors—national or international⁴²—for predictability of investment conditions, enforceable contract rights, unfettered freedom to run the business in accordance with modern business management and a calculable tax regime allowing recovery of capital and of the requisite, risk-adjust return—are not widely enough understood. Lastly, the necessary

38. See T. Waelde, The Russian Oil & Gas Industry and Foreign Investment, OPEC BULL 25, July 1994, at 16-21; Regular Reporting: Russian Petroleum Investor/F.T. East European Energy Newsletter.

39. See Russian Subsoil Law of 1992 as amended in 1995, mirrored in the Kazakh Subsoil Law; see also M. Friedrich, in T. WAELDE & G. NDI, supra note 34.

40. See R. Starr, Foreign Participation in Oil and Gas Projects in the Former Soviet Union, 12 J. ENERGY & NAT. RESOURCES L. 442-52 (1994). The law that is valid, the 1992 Subsoil Law, assigns title ambiguously to central and local authorities with reference also to people living in the area.

41. Thomas Waelde & James Gunderson, Legislative Reform in Transition Economies, 43 INT'L & COMP. L.Q. 347 (1994).

42. It is significant that Russia, for example, experiences considerable flight of capital generated domestically by the new businessmen to Western "safe havens," see Andrew Seck, Political Risk of Energy Investment in the CIS, in T. WAELDE, THE 1994 ENERGY CHARTER TREATY (Kluwer/Nijhoff eds., 1996).

^{37.} See generally David Peng, in INTERNATIONAL OIL & GAS POLICIES (T. Waelde et al. eds., 1994) (on China); T. Nguyen, Comment, New Petroleum Law, 12 OIL & GAS L. & TAX'N. REV. 214 (1994) (on Vietnam).

political consensus or definitive political will to accept foreign capital on its terms has not yet evolved, nor have the manifold constitutional questions (assignment of title, licensing and taxation powers between central and regional authorities) been politically and legally settled.

Economic considerations have entered into the legal equation of domestic preference policies embodied, explicitly or implicitly, in petroleum law: The recently completed GATT round⁴³ forbids "trade-related investment measures" (TRIMs). Arguably, most of the domestic preferences in petroleum legislation, could be considered TRIMs contravening GATT obligations and subject to notification and the GATT-specific dispute settlement process.

Similarly, within the European Union (EU), the drive towards a competitive, non-discriminatory and integrated energy market has led the Commission to combat, with increasing effectiveness, protectionist policies. The recent Directives of the EU Commission, in particular the Utilities and the Licensing Directive,⁴⁴ and other recent measures to eliminate discrimination in favour of national suppliers have more or less eliminated explicit preferences embodied in legislation and licence terms. The Commission is imposing transparency in procurement and tender procedures as well as oil and gas licensing which impose an obligation to use only objective, nondiscriminatory criteria in awarding supply and service contracts and to make the process of tendering a matter of public knowledge. The Commission is also tackling domestic preferences inherent in the mandatory control or dominant participation of national state enterprises over oil and gas development—(the subject also of the European Economic Area Agreement (EEA)).⁴⁵

44. Huw Dundas, *in* McDougal & T. Waelde, European Community Energy Law (Graham & Trotman/Nijhoff eds., London 1994).

45. T. BLANCHET ET AL., THE AGREEMENT ON THE EUROPEAN ECONOMIC AREA (Clarendon, Oxford 1994). This agreement subjects EEA members outside the European Union (Norway, Switzerland) to EU law.

The model effect of the European Union on other regional integration schemes (Andean Pact; Latin American Free Trade Zone; ASEAN) and the expansion of similar concepts through the North American Free Trade Association (NAFTA) is likely to constitute a similar attack on domestic preference schemes in the petroleum industry. The 1994 Energy Charter Treaty contains a specific Article 5 prohibiting trade-related investment measures. See E. Smith in the Special Issue of the J. ENERGY & NAT. RESOURCES L. (1987) (discussion on Mexico); see also T. Waelde, The Investment Regime of the 1994 Energy Charter Treaty, in J. WORLD TRADE L. (October 1995). The Treaty, with an introductory note by the author, is reprinted in the April 1994 issue of Int'l Legal Materials. Fifty eastern and western countries have signed the Treaty, except for the United States and Canada.

^{43.} For a discussion of GATT/NAFTA implications for trade in energy, see 12 J. ENERGY & NAT. RESOURCES L. 1 (1994); David McDougal & Peter Cameron, Trade in Energy and Natural Resources, Trade-Related Investment Measures—Focus on Eastern Europe, 28 J. WORLD TRADE L. 171 (1994); Ingris Frasl, The Trade Regime in the 1994 Energy Charter Treaty, in T. WAELDE, THE 1994 ENERGY CHARTER TREATY (Kluwer/Nijhoff eds., 1996).

V. Agreements Governing Exploration & Development: Substance, Form, Type & Label

Much effort has been exercised over describing, categorising, comparing and appraising the various types of contractual arrangements used in the international petroleum industry for organising investment.⁴⁶ Given this emphasis, have new forms emerged such as the joint venture form in the 1950s, or the service and production-sharing contract in the 1960s? Obviously, the form of contract is much less of the essence than the actual content.⁴⁷

Most of the contract types which emerged in the 1960s and 1970s⁴⁸ seem to assign control to the state company. A close analysis, however, will show that the link between risk capital and control is not broken. The state company may possess title, ownership of oil extracted, and have the contractual right to "overall management," but specific management powers are retained by the investor and service contract.⁴⁹

In our view, the selection of the contract type is mainly an issue of legal tradition and the logic of politics requiring symbolic, rather than real control. Legal forms thus are used for generating the symbols of national control, while the specific management mechanism set up in an agreement co-determines, together with the distribution of bargaining power and knowledge, the practicalities of real-life control.

The most popular form of contracting over oil and gas resources in developing countries is the production-sharing agreement.⁵⁰ The production-sharing contract emerged in Indonesia in the 1970s. It is not much different from the "pretend" service contracts: risk, financing and manage-

47. T. Waelde, Mineral Investment Policies, in: GULLEY & DUBY, supra note 46; Z. Gao, Recent Trends and New Directions in International Petroleum Exploration and Exploitation Agreements, 17 WORLD COMPETITION 110 (March 1994).

48. The "service" or "risk contract" (1970 forms employed in Uruguay, Argentina, Brazil, but also Nigeria and Angola) whereby a company undertakes exploration at its own risk and then becomes in form a provider of management services to the state company for oil and gas development, assuming day-to-day management and being remunerated by a mechanism ensuring recovery of cost and a fee usually linked to production and mostly to the oil price as well.

49. This is illustrated by the comparative analysis of both UK licence/concession agreements on one hand and Sudanese production-sharing agreements on the other currently being undertaken by Howayda Fawzi, Ph.D. candidate, CPMLP/Dundee; on UK licences, see DAINTITH & WILLOUGHBY, UK OIL & GAS LAW (1993).

50. Robert Fabrikant, Oil Discovery and Technical Change: Aspects of Production-Sharing Contracts in the Indonesian Petroleum Industry, (1973) Singapore Institute of Southeast Asian Studies; Bakar & Machmud, in T. WAELDE & G. NDI, OIL & GAS POLICIES (1994); Daniel Johnson, Production-sharing Agreements (CPMLP/Dundee 1994).

^{46.} KAMAL HOSSAIN, LAW AND POLICY IN PETROLEUM DEVELOPMENT 109-170 (London 1979); Thomas Waelde, Third World Mineral Investment Policies in the Late 1980s, in DAVID GULLEY & PAUL DUBY, THE CHANGING WORLD METALS INDUSTRIES 121-182 (Gordon & Breach Publishers, New York 1988), reprinted in U.N., MINING POLICIES AND PLANNING IN DEVELOPING COUNTRIES (1989); PETER CAMERON, The Structure of Petroleum Agreements, in N. BEREDJICK & T. WAELDE, PETROLEUM INVESTMENT POLICIES 29-46 (1988); A. Maniruzzaman, The New Generation of Energy and Natural Resource Development Agreements, 11 J. ENERGY & NAT. RESOURCES L. 207 (1993) (useful for an extensive set of bibliographic references); ERNEST SMITH ET. AL., INTERNATIONAL ENERGY TRANSACTIONS 297-98 (1993).

ment from the investor, title (to the reserves and to the extracted oil) and "overall supervision" with the state company. In lieu of the investor/concessionaire obtaining all oil and then paying to the government income and additional taxes plus a royalty on production, the state company obtains all oil, and then shares with the contractor specified percentages of the oil.

Cost recovery under the concession/income tax system is effected by depreciation, amortisation and deduction of such capital and operating cost against taxable income under the production-sharing system through the cost oil and cost computation mechanism; profit-sharing under the concession/income tax system is determined by the income tax (plus additional profit tax) percentage; under the production-sharing contract by the profit-split. The financial mechanisms of the production-sharing contract, hence, mirror closely the financial mechanisms of standard licence/concession combined with income tax/royalty systems.⁵¹

The distinctive feature of the production-sharing contract seems to be the role of the sharing of production in lieu of the company taking production and paying its taxes in cash. Obligations to sell oil production to the state company at a price based on a crude-basket, or even at preferential rates (frequent in the 1970s in Latin America), achieve the same objective as production-sharing, *i.e.*, to provide the state with oil in lieu of cash. The fact that petroleum is paid to the government in lieu of cash can, therefore, not explain the relative success of this contract model.

There are, in fact, more implicit advantages to using the productionsharing contract: the financial regime of the production-sharing contract often, though not always, includes a mechanism whereby the state company, in consideration for the sharing of "profit oil" assumes the taxes payable by the venture.⁵² Even where it does not, the method of cost recovery is usually contract-specific, *i.e.*, not governed by generally applicable tax laws and regulations. Both features allow in a relatively inconspicuous and flexible fashion to shift existing taxes of all sorts and arising from all kinds of government authorities as well as the risk of unpredictable future taxes

^{51.} See R. GARNAUT & A. CLUNIES ROSS, TAXATION OF MINERAL RENTS (Clarendon, Oxford 1983); JAMES OTTO, MINERAL TAXATION (Kluwer 1994).

^{52.} This issue has been at the heart of the emergence of production-sharing agreements in Indonesia, see Fabrikant, supra note 50; see also DAVID TILLINGHAST, ISSUES IN THE TAXATION OF PETROLEUM EXPLORATION AND DEVELOPMENT, UN/CTC, TECHNICAL PAPER (1984); Kamil Khan, Petroleum Taxation and Contracts in the Third World: A Law and Policy Perspective, 22 J. WORLD TRADE L. 67 (1988).

on the state enterprise contracting with the investor.⁵³ What this does is make the state enterprise the bearer of the fiscal risk.⁵⁴

When a country's political risk is perceived to be high, then imposition of new taxes disrupting the contractually engineered fiscal regime, and perhaps in breach of contractually stipulated stabilisation clauses protected by international arbitration, is a major concern.⁵⁵ The usual risk-management device—stabilisation clauses forbidding subsequent increase of taxes or declaring such tax increases as not applicable⁵⁶—is fraught with legal controversy (often considered to lack legal effect,⁵⁷ and politically objectionable). What more elegant way to circumvent the lawyers' dispute and political controversy than to simply make the state company, through the contractual cost recovery mechanism, responsible for all present and future taxes?

To sum up: The various types of contracts have emerged much in response to a new political imperative and in adaptation to national law. Contractual form is, in today's world, much less indicative of material substance than in the past. Hybrid forms predominate. We can not observe any significant innovation in contractual form. Production-sharing types seem to predominate in new petroleum exploration areas and in institutionally underdeveloped countries, while the take-over of existing projects might often take the form of concession or joint venture agreements.

VI. FISCAL REGIMES: WHO GETS WHAT, WHEN & HOW

The development of fiscal instruments to make the government take more profitable, with price-graduated royalties, rate-of-return based income taxes and government equity was a significant innovation during the last fifteen years.⁵⁸

55. M. SORNARAJAH, INTERNATIONAL LAW OF FOREIGN INVESTMENT (Cambridge Univ. Press 1994); P. M. Norton, A Law of the Future or a Law of the Past? Modern Tribunals and the International Law of Expropriation, 85 Am. J. INT'L L. 474 (1991).

56. T. Waelde & G. Ndi, *in* JAMES OTTO, MINERAL TAXATION (Graham & Trotman eds., London 1994).

57. See T. Waelde & G. Ndi, in J. OTTO, supra note 56; T. Daintith, The Legal Character of Petroleum Licences: A Comparative Study (1981) (CPMLP/Dundee & IBA).

58. See R. GARNAUT & A. CLUNIES ROSS, TAXATION OF MINERAL RENTS (Clarendon, Oxford 1983).

^{53.} The contract may either include a clause according to which the state company, in exchange for its profit-oil share, will assume "all taxes, present and future"—the ideal tax stabilisation mechanism—or, in the accounting rules, a very inconspicuous, but very significant definition of the costs recoverable, with priority, as "cost oil" by the company which includes "all taxes, present and future." The latter version, one needs to recognize, reduces, but does not altogether eliminate the impact of subsequent additional taxes. The higher the marginal tax/production-sharing rate, the greater the tax stabilisation effect by way of cost recovery rules. The draft Russian production-sharing law version adopted in July 1995 by the Duma provides for an exclusive list of taxes which can be levied on a contractor.

^{54.} See T. Waelde & G. Ndi, Stabilizing International Investment Commitments, TEXAS J. INT'L L. (forthcoming 1996); see also an earlier and shorter version in J. OTTO, MINERAL TAXATION (Kluwer 1994); David Frecker, D., Coping with Political Risks, AMPLA (1991) 507 (Australian Mineral Law Association Yearbooks); Malcolm Garratt, Political Risk, in T. WAELDE & G. NDI, INTERNATIONAL OIL & GAS POLICIES (1994).

Petroleum taxation tends to be standardized and revised infrequently in countries with a well established production history. In new situations that is most ex-socialist countries now entering into the world oil industries—the fiscal regime will be much the result of trial-and-error after negotiations. Companies will try to obtain a flexible regime, but flexible only with respect to downside developments. Rare is the financial analysis presented to the government team which does not use a "marginal" base case and rare the tax package proposed which will not "just" allow the development of a marginal project.

As companies' negotiators are keen on bringing home bargaining victories, perhaps neglecting the inherent instability of one-sided deals, so governments tend to look for most comfort from international reference cases.⁵⁹ The regime of advanced countries (Indonesia, Egypt) is often taken as a reference point with disregard of the unproved geology, high costs of infrastructure and political risk of a country just entering the industry. It is for this absence of comparability that a standard resource tax package has not yet evolved.

Petroleum revenues were often "ring-fenced," *i.e.*, costs for exploration and development in areas outside the ring-fence (based on production area, contract area or country) could not be deducted or recovered against the revenues from within the "ring-fence." Under the impact of low oil prices and the need for greater promotional efforts, ring fencing seems to be on the decline. Elimination of ring-fencing means that in effect the government participates in the risk of new exploration at the expense of its income from existing production.⁶⁰

VII. Environmental Protection and Socio-Economic Impact

A. The Background: Environmental Policies & Petroleum Development

One significant development in petroleum regulation has been the much greater emphasis on environmental issues, including, in a larger sense, the socio-economic and cultural impact of resource development. Earlier, most petroleum and other mineral laws and agreements included a general reference to environmental protection obligations ("To minimize and reduce negative impact on the environment").⁶¹ In the hands of government agencies with the principal remit to promote mineral development,⁶² such general principles inevitably meant that environmental

62. In other words, the ministries of mines & energy, the national geological surveys and the state petroleum companies.

^{59.} See Bryan Land (1994) (LL.M. thesis, CPMLP/Dundee) (discussing the frequently mistaken use of petroleum arrangements as model for mining investment).

^{60.} The 1993 UK North Sea oil tax reform meant a reduction of government subsidies, effected by tax rules, to high-risk exploration combined with greater tax incentive support for marginal field development. See generally T. DAINTITH & G. WILLOUGHBY 1-1101 (1977).

^{61.} F.V. Schlabrendorff, *Umweltrechtliche Regelung*, in Schanze et. al, Rohstofferschliessungsvorhaben in Entwicklungslaendern 245-69 (Frankfurt 1990).

objectives had to step behind investment and production priorities,⁶³ that environmental objectives had no political and administrative constituency to back them up. Environmental concerns were assigned, by all participants in the process, a mere cosmetic role.⁶⁴

The environmental theme is fueled by concerns over global warming, the greenhouse effect and acid rain, fed, in a scientifically not fully established way, much by energy consumption of hydrocarbons, population growth and other current and future environmental issues.⁶⁵ While there is undoubtedly an element of fashion in the current concern, world opinion clearly needs dramatically formulated, and after some obsolescence, changing themes. It is equally clear that the environment is a scarce commodity of great relevance for current and future quality of life.

The environment versus petroleum extraction balance tends to tilt more in favor of production in most developing countries. A very strong view holds that environmental protection is a luxury for rich nations; rich nations, contributing out of proportion to their population to global environmental concerns, would have no business preaching to poor countries about the virtues of the environment over economic growth. If the rich countries wished to spread the gospel of the environment to the poor, they should pay for it.⁶⁶ These debates have given birth to the principle of sustainable development which tries to fuse environmental protection with a concept of long-term economic growth which is conceived to be sustainable since its environmental foundation is safeguarded.

While the balancing process in developing countries assigns different weights to extraction and environmental effects, there is no doubt that the models of industrialized countries are having, and will have, a very powerful effect on the underdeveloped part of the world.⁶⁷ For example, Article 22(i) of the 1994 European Energy Charter treaty imposes a general obligation on its members to "promote the transparent assessment at an early state and prior to decision, and subsequent monitoring, of environmental impacts of environmentally significant energy investment projects." Together with the other obligations under Article 22, the Treaty for the first

^{63.} See Thomas W. Waelde, Environmental Policies towards Mining in Developing Countries, 10 J. ENERGY & NAT. RESOURCES L. 327, 327-58 (1992) (discussing the legal, policy and institutional setting for environmental protection in mining investment).

^{64.} See Z. GAO, INTERNATIONAL PETROLEUM CONTRACTS: CURRENT TRENDS AND NEW DIRECTIONS 59 (Kluwer International/Nijhoff eds., London 1994) (focusing on the regulation of environmental provisions in petroleum agreements).

^{65.} See Thomas W. Waelde, A Requiem for the NIEO, presentation at March 1994 International Law Conference in Quatar (March 1994) (published by N. Al-Naumi 1995).

^{66.} See T. Waelde, Environmental Policies Towards Mining in Developing Countries, 10 J. ENERGY & NAT. RESOURCES L. 327-58 (1992).

^{67.} Irene McConnell, NAFTA: Trading Natural Resource Goods and Protecting the Environment, 12 J. ENERGY & NAT. RESOURCE LAW 151, 151-174 (1994); CATHERINE REDGWELL, ENERGY, ENVIRONMENT AND TRADE IN THE EUROPEAN COMMUNITY 128-150; Alyson Warhurst, Mineral Trade Policies and Agreements: Environmental Implications, 11 RAW MATERIALS REP./JMBPE 30 (1995). See T. Waelde, supra note 63; see generally Daniel J. Dudek et al., Environmental Policy for Eastern Europe: Technology-Based Versus Market-Based Approaches, 17 COLUM. J. ENVTL. L. 1 (1992).

time imposes specific responsibilities for the member states' regulation of oil, gas and other energy projects, albeit in a much diluted form.⁶⁸

B. Environmental Considerations in Regulation, Licensing & Negotiations

In developed countries, license terms do not play a major role in regulating environmental behaviour by petroleum operators.⁶⁹ In many developing countries, the situation seems less clear. For a number of reasons, contracts have been taking on a heavier role in expressing regulatory—as contrasted with mere property right—concerns of public policy. Does this also apply to the environmental issues? Zhigu Gao, in a significant study on environmental provisions in offshore petroleum agreements, found that most agreements from the 1970s and 80s examined contain little more than a general environmental good-will clause.⁷⁰ For a large internationalised corporation with centrally formulated operating standards, application of differentiated standards may not be easy. Nevertheless, in addition to the general environmental good-will clause usually found in petroleum agreements,⁷¹ there are a number of specific issues which tend to—and should occur in agreements or in specialised regulation,⁷² such as:

68. Clare Shine, Environmental Regulation under the Energy Charter Treaty, THE 1994 ENERGY CHARTER TREATY (forthcoming 1996).

69. For example, the 1995 Falklands oil and gas regulations impose environmental obligations mainly by general regulation, but the grant of a licence is conditioned upon an environmental assessment; *see* Andrew McHardy, UK-Style Petroleum Law in the Falkland Islands (1995) (LL.M. dissertation, CPMLP/Dundee).

70. Z. GAO, INTERNATIONAL PETROLEUM CONTRACTS: CURRENT TRENDS AND NEW DIRECTIONS (1994); see F. v. Schlabrendorff, supra note 61.

71. For example, a recent (transition economy) production-sharing agreement provides:

Contractor shall conduct petroleum operations in a safe and proper manner in accordance with generally accepted international petroleum industry practice and shall cause as little damage as reasonably practicable to the general environment, including, inter alia, the surface, air, lakes, rivers, sea, animal life, plant life, crops, other natural resources and property. In the event of a blow-out, accident or other emergency, contractor shall take all immediate steps to bring the emergency situation under control and protect against loss of life and loss of or damage to property and prevent harm to natural resources and the general environment. In the event the ... government ... reasonably determines that any works or installations erected by contractor or any operations conducted by him endanger or may endanger persons or third party property or cause pollution or harm the environment to an unacceptable degree, the ... government ... may require contractor to take remedial measures within a reasonable period and to repair any damage to the environment. Government's right hereunder shall survive the termination of this contract by a period of 6 months. In the event the ... Government ... deems it necessary, it may also require contractor to discontinue petroleum operations in whole or in part until Contractor has taken such remedial measures or has repaired any damage. In the event that contractor fails to take the remedial measures required by government within the time period established, the ... government ... may carry out such remedial measures for contractor's account. Contractor shall be under no obligation under this article if the work, installation or operation in question had been approved by the . . . government . . . or meets standards generally applicable in the international oil industry.

72. See generally McHardy, supra note 69 (discussing the 1995 Falklands oil and gas regulations, with an emphasis on strict liability for environmental damages).

(1) Restriction of off- and onshore oil exploration to areas not used for touristic purposes;

(2) Obligation to submit a separate environmental impact statement using recognized independent environmental expertise;

(3) Obligation to submit a comprehensive environmental management plan;
(4) Setting-up of environmental responsibilities within the operator's internal organization;

(5) Obligation to submit bonds/guarantees for environmental liability (in particular offshore oil spillage) and to include *limited* environmental liability in mandatory insurance coverage;

(6) Obligation to carry out periodic environmental audits or to allow the government agency to arrange for an independent environmental audit evaluating compliance with environmental obligations, best environmental practices and standards, identify major environmental risk and the "at any time" most effective/efficient risk mitigation and disaster management programmes.

(7) Obligations to restore areas used for exploration and extraction to a safe state, in particular to comply with international guidelines for abandonment of offshore installations.⁷³

To sum up: One would not expect or fear too much from the very general international environmental law emerging. International environmental law may have an effect in the construction of generally worded treaty, legislative and contract terms. The more open-ended a contract term, the more emerging international standards may be relevant in the process of interpretation and gradual adaptation.

C. Regulation of Socio-Cultural Impact In Petroleum Legislation

Related to environmental concerns are conflicts⁷⁴ between the technical concerns of petroleum operations and the existence and interests of local communities affected by such operations.⁷⁵ Local communities are typically affected by noise, fumes and water pollution from oil and gas operations, by pipeline and other transportation, by unattractive sights and by the risks of accidents (blow-outs; spills) which can occur in extraction and transport. On the other hand, poorer communities can benefit from the creation of employment (direct and indirect) and business opportuni-

74. HERNANDO DEL SOTO, THE OTHER WAY (1987); Thomas Waelde & James Gunderson, Legislative Reform in Transition Economies, 43 INT'L & COMP. L.Q. 347 (1994); Richard Rose, INT'L & COMP. L.Q. (April 1994); RICHARD ROSE, EASTERN EUROPE'S NEED FOR A CIVIL ECONOMY, FINLAND AND THE INTERNATIONAL ECONOMY 6-11 (R. O'Brien ed., 1992).

75. M. Tumzah, Socio-Economic Impact and Local Communities (unpublished LL.M. dissertation, CPMLP Dundee); Allen Clark, *Mining and the Environment, The Berlin Guidelines, in* MINING JOURNAL BOOKS 106 (1992) (discussing socio-cultural impact); *Social-Cultural Impacts of Vietnam's Energy and Minerals Development* (Programme on Resources, East-West Centre, Honolulu); Harold Brookfield, *Energy and Mineral Development: Environment and Economics, in* SOUTH-EAST ASIA'S ENVIRONMENTAL FUTURE 75 (U.N. Univ. Press/Oxford Univ. Press 1993).

^{73.} See U.K. OFFSHORE OPERATORS' ASS'N, THE ABANDONMENT OF OFFSHORE INSTALLATIONS AND PIPELINES (1988); following the 1995 case of the Shell platform Brent Spar, several studies will be published on abandonment; T. DAINTITH & G. WILLOUGHBY 71 (London 1977) (discussing U.K. law); See generally 10 J. ENERGY & NAT. RESOURCES L. (1992) (discussing an earlier comparative survey with contributions on Germany, Netherlands, Norway, USA, UK, Canada and Australia); Rosalyn Higgins, Abandonment of Energy Sites and Structure: Relevant International Law, 11 J. ENERGY & NAT. RESOURCES L. 6 (1993) (discussing international law implications).

ties inherent in the often quite massive investment required by oil and gas development. Communities can, but often don't, benefit from petroleum operations if a share of the fiscal revenues is directed to them (further on this *infra*).

The attitude of local communities towards petroleum development is influenced by the way the fiscal regime applicable to the project operates in practice. It is fairly typical that the fiscal regime, designed, negotiated and implemented by the government entity exercising sovereignty and ownership over minerals,⁷⁶ generates revenues exclusively for the central government. A way out of this dilemma is to earmark a significant part of the tax revenues to the local community (*e.g.*, a share of royalties or taxes) by law. The main license/concession agreement can also entitle a local community (township, province, regional development corporation or fund) to direct resource-based payments. Direct community/company agreements can also be used to direct a part of the operation's revenue stream.⁷⁷ The planning process in developed countries, particularly if it enables local communities to severely hinder or to block oil and gas development, can provide leverage to re-direct payments from the central authority to local government.⁷⁸

VIII. NEGOTIATING AND LICENSING PRACTICE

Is a contract at all necessary in granting the legally secure title required for petroleum investment?⁷⁹ Traditional (non-US) mineral law proceeds in a sequence of steps (prospecting, exploration, development right) to create the necessary legal title for extraction of minerals.⁸⁰ The

78. Even if local planning leverage results in agreements to provide extra, not legally foreseen, payments to local authorities, this results effectively in a re-direction of tax income streams since agreed payments to local authorities are likely to qualify, if not for tax credit, at least as tax-deductible operating expenditures. The local government of the Shetland Islands is, for example, entitled to significant payments from oil company operators requiring the use of the Sullom Voe facilities based on an agreement underlying the planning consent finally given. See C. HARVIE, FOOL'S GOLD: THE HISTORY OF NORTH SEA OIL (1994).

79. George Hardy, Address at the IBA/SERL Conference, Barcelona (April 1994) (discussing title issues); PETER FISCHER, DIE INTERNATIONALE KONZESSION (1974); See also Concessions, in 10 ENCYLOPEDIA OF PUBLIC INTERNATIONAL LAW 100 (R. Bernhardt ed., 1987); E. Smith et. al, International Petroleum Transactions, ROCKY MTN. MIN. L. FOUND. 279-361 (1993).

80. This sequence is reflected in most civil law mining codes, civil law petroleum codes (including the subsurface laws of Russia and Kazakhstan) and even in UK offshore legislation with its distinction of exploration and production licences. See DAINTITH & WILLOUGHBY, UK OIL & GAS LAW 1-601 (1993). It is not clear in such (mainly civil law) jurisdictions if the mineral right/title granted for exploration and later for exploitation can be considered as a contract. One view, currently adhered to, for example, in Russia by the licensing authority ROSKOMENDRA, is that the legal nature is "administrative," with the result that it may be easier to revoke such titles than if they were considered "contracts." The difference, however, is less important than it seems: Western civil law systems provide

^{76.} See J. OTTO, MINERAL TAXATION (Graham & Troutman eds., London 1994) (discussing such issues in mineral taxation).

^{77.} As was apparently done at some time in Papua New Guinea. See SAM PINTZ, POT OF GOLD: "PANGUNA LANDOWNERS' AGREEMENT," PNG (1986); Assigning "native title" is likely to lead to an entitlement of the local/indigenous community resulting eventually in payment. See, e.g., BARRY BARTON, CANADIAN LAW OF MINING 110 (Calgary 1993).

ENERGY LAW JOURNAL

contractual form emerged as the dominant mode in the United States as the land-owner (here owner of subsurface minerals) granted the right to extract by way of mineral lease agreements and, due to the then dominance of the American oil industry worldwide, expanded into the Middle East, Far East and parts of Africa. The legal instrument of contract between company and government, however, provides additional advantages: It helps to insulate the conditions agreed upon from the reach and interference of subsequent legislation, and mobilizes "sanctity of contract" to protect foreign resource investment in international arbitral tribunals.

The use of the instrument of government/investor contract is, however, neither necessary nor sufficient for investment security. Cases of, sometimes coerced, renegotiation and cancellation of contracts by government abound.⁸¹ The example of UK and Norwegian oil and gas law,⁸² with greater reliance on general oil and tax regulation, subject to periodic modifications by the legislative bodies, demonstrates that the oil industry can live, quite comfortably, without having to rely on the contract as the dominant legal form of government/company interaction.⁸³ In these countries, government/industry consultation takes place regularly and the industry has learned to have some reasonable confidence in the government's moderate use of its legislative powers. The contract, however, is likely to remain the main legal tool of organising mineral licensing in countries where such confidence is lacking and where companies seek comfort, sometimes perhaps a more psychological than legal comfort, from a reciprocal contract with the government, in particular if such contract is protected by international arbitration.⁸⁴

extensive protection against revocation of rights granted under administrative law which have become the basis for investment; often, licences/concessions would be considered as "administrative law contracts" (contrat administratif; oeffentlich-rechtlicher Vertrag) and be protected against abrogation by duties of compensation. See R. Geiger, The Unilateral Change of Economic Development Agreements, 20 INT'L & COMP. L.Q. 73 (1974); Matthias Herdegen, Der Konzessionsvertrag aus offentlich-rechtlicher Sicht: das Beispiel des Kanaltunnelprojekts, F. NICKLISCH (HRSG) RECHTSFRAGEN PRIVATFINANZIERTER PROJEKTE, NATIONALE UND INTERNATIONALE BOT-PROJEKTE, C.F. Mueller Verlag Karlsruhe. The distinction is therefore less significant and certainly less than the Russian view referred to think; the Russian view, naturally, bears the imprint of a statist legal tradition. See DAINTITH & WILLOUGHBY, supra this note (discussing the UK view of licences); R. W. Bentham, The Acquisition of Natural resource Interests by the State in the United Kingdom and International Law, 5 J. ENERGY & NAT. RESOURCES L. 49 (1987); Howaydah Fawzi (1996) (Ph.D. thesis, CPMLP/Dundee).

81. T. Walde, Revision of Transnational Investment Agreements: Contractual Flexibility in Natural Resources Development, 10 LAW. AMERICAS 265 (1978); D.F. Vagts, Coercion and Foreign Investment Rearrangements, 72 AM. J. INT'L L. 17 (1978); Noel Fabri, Renegotiation of International Mineral Agreements, in AMPLA-YEARBOOK 1986 (Australian Association of Mineral Lawyers).

82. T. Daintith & I. Gault, Pacta Sunt Servanda and the Licencing and Taxation of North Sea Oil Production, 8 CAMBRIAN L. REV. 27 (1977); T. Daintith, The Legal Character of Petroleum Licences: A Comparative Study (CPMLS/Dundee); P. CAMERON, PETROLEUM RIGHTS AND SOVEREIGN RIGHTS: THE CASE OF NORTH SEA OIL (Academic Press 1983); Mestad, The Ekofisk Royalty Case: Construction of Regulations to Avoid Retroactivity (1987) (Technical Report, University of Oslo).

83. It is not absolutely clear if the "license" or "concession" can be qualified as an instrument of administrative law or as a contract; *see* Richard Bentham, State Petroleum Companies: Legal and Organisational Structure (CPMLP/Dundee 1988).

84. As most current petroleum investment agreements inevitably are, except for Latin American countries still enforcing a strict Calvo doctrine. In West-East investment, Article 26 of the 1994 Energy

In high-risk countries (currently all transition economies), security of title is of particular concern.⁸⁵ Given the lack of clarity with respect to ownership of land, facilities, subsurface minerals and the status of legislation providing authority to license and tax, most if not all agreements in the CIS are concluded under the shadow of legal uncertainty and controversial authority. Intelligent companies appreciate that there is an acute political and legal risk. They will balance these risks against the expected rewards and look towards advanced techniques of risk management as much as possible.⁸⁶

These legal risks of title do not simply end when a contract is concluded (or license issued), ratified by the competent authorities and the various conditions for effectiveness met. The validity of title can be attacked ex-post on several grounds. The award by a not competent government authority would be a cause for nullity. The objection of *ultra vires* is particularly relevant in the CIS context. It also raises the interesting question if contracts issued by the extinct Soviet government bind the successor states in the CIS; a parallel question is if exploration conducted by the former USSR state bodies should result in a mineral right of the companies succeeding to such state bodies in mineral properties in- and outside Russia.⁸⁷ No uniform response can be given without close examination of national law, but the direct award of a contract/license bypassing mandated bidding or a serious breach of accepted bidding practice (*e.g.*, material fraud) can taint an otherwise good title.⁸⁸

Lastly, no discussion of contracting/licensing is complete without discussion of the implication of illicit payment made by company agents to government officers to influence the licensing process. Without entering into an extensive discussion, it suffices to point out that illicit payments can lead to the invalidation of a mineral right, either through the application of petroleum or government contracting law or by application of general principles of contract (*contra bonos mores*) or administrative law.⁸⁹ Illicit payments also may engender criminal and corporate disclosure responsibilities,

Charter Treaty provides for an automatic right of investors to request international arbitration against governments, without need for a specific arbitral clause/agreement; *see* Jan Paulsson, *in* T. WAELDE, THE 1994 ENERGY CHARTER TREATY (1996); GENEVIEVE BURDEAU, NOUVELLES PERSPECTIVES POUR L'ARBITRAGE, DANS LE CONTENTIEUX ECONOMIQUE INTERESSANT LES ETATS, REV DE L'ARBITRAGE 2-37 (1995).

85. George Hardy, supra note 79.

86. A. Seck, Political Risk, in T. WAELDE, THE 1994 ENERGY CHARTER TREATY (1996).

87. Lukoil and the Russian government have started to claim a right in or over oil, gas and mining properties discovered by Soviet exploration efforts in the non-Russian CIS states, *e.g.*, Aserbaijan, Kazakhstan, Uzbekistan and Turkmenistan. See F.T. EAST EUROPEAN ENERGY REP. (March 1994), at 3.

88. THE RUSSIAN PETROLEUM INVESTOR (1995), has reported cases where Russian courts/ prosecutors have tried to invalidate licences granted for non-compliance with mandatory tendering procedures.

89. Hans Baade, *Mineral Law*, *in* INTERNATIONAL ENCYCLOPEDIA OF PUBLIC LAW (forthcoming 1996).

but it is clear that a right thus obtained is of dubious legal value.⁹⁰ Making illicit payments to accelerate licensing in a situation of institutional and legal complexity or to win an advantage in intensive competition for promising acreage is understandable. There is extensive pressure on middle managers in charge of business development to win under any circumstance; and a discretionary system of licensing and contracting affords ample potential for decision-makers to exploit their control over licensing and contracting. There are also official and non-governmental efforts at the moment to reduce their scope.⁹¹

IX. PETROLEUM INVESTMENT IN THE EX-SOCIALIST COUNTRIES

The former Soviet Union has become, over the last years, the main challenge faced by the international petroleum industry. The USSR was once the world's major oil and gas producer, with still very large oil reserves and the world's largest gas reserves.⁹² Its oil and gas industry has undergone, for several years, noticeable decline due to overproduction, obsolete technology and the deterioration of infrastructure, organisation, morale and supplies. From what can be observed at present, this decline has not yet stopped. To a large extent, it reflects the transition from a system with one central decision-making body and "unconscious" members to a new set-up where central planning is replaced by contractual transactions among many autonomous participants in an emerging, far from perfect, market. One can not expect a successful economic transition before the major political issues, in particular the distribution of powers within the giant Russian Republic and the former republics, are resolved. While there are numerous discussions, most ventures reported are in protocol stages and deals signed stand on flimsy feet, politically and legally.⁹³ There are numerous drafts for petroleum laws,⁹⁴ and regulatory projects again abound on the level of the Russian republics. It is not clear where ownership, negotiating, taxing and commerce powers lie; fiscal demands seem exorbitant, as would be expected if numerous levels of governments formulate their financial expectations without much coordination and familiarity with investment conditions of the industry. The CIS petroleum industry is

94. Patricia Fry Eldridge, Russian Energy Legislation: Regulating State Monopolies to Allow the Development of Competitive Markets, 13 ENERGY L.J. 1 (1992).

^{90.} William A. Mogel, International Energy Transactions: The Role of The Export Administration Act and The Foreign Corrupt Practices Act, 1 TULSA J. COMP. & INT'L L. 149 (1993).

^{91.} On recent developments, see Jill Rhodes, The U.S. FOREIGN CORRUPT PRACTICES ACT, WORLD BANK TECHNICAL REPORT (Jan. 10, 1995); OECD GUIDELINES (COUNCIL RECOMMENDATION) ON BRIBERY IN INTERNATIONAL BUSINESS TRANSACTIONS (May 27, 1994, Paris) reprinted in 34 I.L.M. 1389 (1994).

^{92.} James Dorian & Yevgenij Khartukov, *in* T. WAELDE, THE 1994 ENERGY CHARTER TREATY (forthcoming 1996); Andrew Seck, Financing Petroleum Projects in the CIS (1996) (Ph.D. thesis, CPMLP/Dundee).

^{93.} See Robert Starr, Foreign Participation in Oil and Gas Projects in the Former Soviet Union, 12 J. ENERGY & NAT. RESOURCES L. 442 (1994); Doran Doeh, in T. WAELDE & G. NDI, INDEPENDENT OIL & GAS POLICIES (1994); and Kaj Hober, A Game Called Russian Oil, 13 J. ENERGY & NAT. RESOURCES L. 96 (1996).

under-financed and no effective financing mechanism, either internal or external, has so far been identified, apart from a few official loans by Western development and export-import agencies.

Will the specific nature of the ex-USSR force new innovations in petroleum licensing and negotiations? The mechanisms currently available have evolved and been tested in the turmoil of the last twenty years. Accordingly, they should provide an ample toolbox to deal with the CIS challenges. There is likely to be a need to develop contracts which satisfy politically pressing domestic demands for fulfilling domestic energy requirements, while capable of servicing the requirements of extensive financing. Swaps between a CIS-producer far from export markets and a CIS-exporter are currently one answer. Swaps between production for the domestic markets freeing foreign exchange now used for importation and export commodities (e.g., cotton in Uzbekistan) are another. Building of new pipelines or finding viable solutions to pressing transit problems can provide other, necessary, ways out of the export dilemma. The contractual issues discussed will be much pertinent in new Russian petroleum agreements. Production-sharing agreements seem now to have become popular, partly because their financial structure allows for shifting the large fiscal risk on the Russian partner. Otherwise, joint ventures with foreign minority participation might be the suitable form for recognising the Russian partner's strength, capabilities, ambitions and sensibilities. The multiplicity of claims to ownership, licensing, regulatory and fiscal powers will have to be dealt with, and either a suitable Russian partner is found to assume this "transition risk" or major investment will have to wait until the constitutional, legal and fiscal situation clears up.

The current East-West dialogue involving governments and companies on both sides is fraught with significant misunderstandings. "Legislation" in the Western understanding is mainly a method to define and protect property, provide forms of commercial transactions and keep the state from interfering in the economy except for narrowly defined purposes; in the CIS, legislation is rather seen as a set of instructions to government agencies reminiscent of the former GOSPLAN directives. "Foreign investment" is a Western term denoting a business operation combining the provision of risk capital with management, control and ownership; in the East it seems to have been largely understood as a Western promise to provide foreign exchange monies to existing state- or self-owned operations. The Western concept of a commercial company means an organisation focused almost exclusively to its core business with a primary financial motivation; the petroleum companies now emerging in the CIS out of the earlier Soviet-style ministries are embracing numerous functions of social welfare for which, so far, no other public or private alternative providers exist. "Contract" means to Western companies a commitment which is meaningful and certain enough to justify significant investment and risk exposure; in the CIS it seems rather to mean the protocol of discussions and a business plan open to abrogation and change at the respective government's whim. To create a meaningful commercial operation these misunderstandings will have to be cleared up and a socially and politically viable solution has to be found for the social contribution so far made by the petroleum production associations.

Petroleum licensing is usually discussed in the context of agreements concerning exploration and development. The owner of the resource grants the right to search for and, in case of commercial discovery, develop the deposit. In the ex-USSR, the situation is likely to be different in most circumstances: Here, existing operations in need of modernisation and upgrading or re-opening will be offered to foreign companies for association or outright sale. This raises two major issues: First, the ownership and entitlement to the project at stake needs to be settled, clearly and definitively, in view of the confused ownership situation in the ex-socialist countries, a question that will take long to resolve. This ownership/entitlement issue is quite different from the issue dealt with by standard petroleum laws of ownership over unexplored resources in the ground. Secondly, the possibilities for association with and sale to foreign companies need to be defined in a firm legal framework and then spelled out in specific, projectoriented agreements. Given the lack of tradition and familiarity with all the issues of law and commercial practice in business in general, and in the petroleum industry in particular, inconsistent legislation, protracted negotiations and volatile arrangements are scarcely avoidable.

X. THE ENERGY CHARTER TREATY AS THE MAJOR NEW INSTRUMENT OF INTERNATIONAL INVESTMENT LAW FOR THE OIL & GAS INDUSTRIES

The intense controversies surrounding the major issues of international investment law—nationalisation, compensation, submission to international arbitration and the legal effect of stabilisation clauses⁹⁵—have to some extent subsided. The major attempt of the 1970s to develop at least "soft" international investment law through the UN Codes of Conduct⁹⁶ have faltered. The 1992 Foreign Investment Guidelines by the World Bank⁹⁷ represent the current view of investors' requirements, but have no force of law. The main current development of note is the Energy Charter Treaty (ECT) completed in December 1994 and signed by fifty OECD,

97. Reprinted with commentary in T. WAELDE & G. NDI, INTERNATIONAL OIL & GAS POLICIES 339-356 (1994), and World Bank, Legal Framework for the Treatment of Foreign Investment 1992; Ibrahim Shihata, *Recent Trends Relating to Entry of Foreign Direct Investment*, 9 ICSID REV/FILJ 47-70 (1994).

^{95.} See T. Waelde & G. Ndi, Stabilisation Clauses (1994) (manuscript), short version published in J. Otto, Mineral Taxation (Graham & Troutman eds., 1994); and two major new books: M. SORNARAJAH, THE INTERNATIONAL LAW OF FOREIGN INVESTMENT (1994), and PETER MUCHLINSKI (forthcoming); see also P. NORTON, in T. WAELDE, THE 1994 ENERGY CHARTER TREATY (Kluwer, forthcoming 1996).

^{96.} For the text of the abortive U.N. Code of Conduct on Transnational Corporations, see S. ZAMORA & R. BRAND, BASIC DOCUMENTS OF INTERNATIONAL ECONOMIC LAW, Vol. I, 533-559 (CCH, Chicago 1990). For a positive discussion of it, see M. SORNARAJAH, INTERNATIONAL LAW OF FOREIGN INVESTMENT (Cambridge Univ. Press 1994); and for a critical evaluation, see Peter Muchlinski, *in* T. WAELDE, THE 1994 ENERGY CHARTER TREATY (Kluwer, forthcoming 1996).

Eastern European and CIS countries (but not the United States and Canada).

The ECT, following-up on the non-binding European Energy Charter Declaration of 1991, is designed to constitute an international legal and policy framework for energy investment⁹⁸ needed to modernize ex-USSR oil and gas industries and to increase the energy supplies, notably gas, to Western Europe. The ECT is likely to create a new type of regional and industry-focused international investment law.⁹⁹

The ECT imposes "national treatment"¹⁰⁰ once investment is made ("post-investment"). Before investment is made ("pre-investment"), the ECT Article 13 obligation is watered down to a "best endeavour" obligation not to discriminate and to create "stable, equitable, favourable and transparent conditions"; a supplementary treaty to be negotiated is to specify national treatment in the pre-investment phase. The Treaty requires domestic law to provide an effective recourse for rights arising out of investment (and agreements); it re-formulates customary international law with respect to state responsibility by imposing on states to provide compensation for losses by requisitioning. In case of nationalisation, "prompt, adequate and effective compensation" amounting to "fair market value" in "freely convertible currency" is owed. Article 16 of the Treaty requires each member state to guarantee repatriation of capital and revenues from investment. A most interesting method of the Charter Treaty, under Article 26, allows investors from member countries to select international arbitration for investment disputes with a government; without that the state and the investor previously negotiated the normally required arbitral clause.¹⁰¹ The Charter Treaty provides, so far, the most extensive protection for foreign investors in the energy industries. Such extensive "investor

99. The ECT has been signed by 50 countries (all OECD except the United States and Canada and all Eastern European and CIS countries).

100. Article 10, incorporating bilateral investment treaty practice and, mostly non-binding, OECD guidelines and model instruments. See J. SALACUSE AND K. VANDERVELDE, in T. WAELDE, THE 1994 ENERGY CHARTER TREATY (Kluwer, forthcoming 1996).

101. It is worth quoting from Article 26: "The investor party to the dispute may choose to submit [the dispute] for resolution in accordance with the following paragraphs. . . [and] . . . each contracting party hereby gives its unconditional consent to the submission of a dispute to international arbitration" The article, in effect, imposes international arbitration on the option of an energy investor on all member countries in case an investor feels discriminated or not treated fairly and equitably or if he considers that "agreements" made with him are not complied with; the extreme case would be the foreign owner of a gas station raising discrimination by local planning regulation with an arbitral tribunal, a surprisingly (and hopefully well considered) far-reaching implication. For further analysis, see JAN PAULSSON, *in* T. WAELDE, THE ENERGY CHARTER TREATY (Kluwer, forthcoming 1996).

^{98.} The Charter Treaty also deals with trade, environment, competition law, and transit, which are beyond the scope of the present analysis. For the text of the Charter Declaration and the (December 1993 draft) treaty, see T. WAELDE & G. NDI, supra note 97; for a comparison of the 1993 draft treaty with other legal instruments, see Lorna Brazell, Draft Energy Charter Treaty: Trade, Competition, Investment & Environment, 12 J. ENERGY & NAT. RESOURCES L. 299-341 (1994). The Treaty is published in 35 I.L.M. 509 (1995), with an introductory note by this author. For a detailed analysis of the investment regime of the Treaty, see T. Waelde, The Energy Charter Treaty's Investment Regime, J. WORLD TRADE L. (forthcoming 1996). The main book covering most relevant issues of the treaty will be, T. WAELDE, THE 1994 ENERGY CHARTER TREATY (Kluwer, forthcoming 1996).

power" goes beyond what is at present feasible within the European Community and comparable multilateral investment treaties; one wonders how governments, in the confused situation of transition or the well-entrenched situation of the Western countries, will cope with arbitral litigation over their treatment of foreign energy investors. While the Treaty will only become effective once thirty states have ratified it, states as of now are under the obligation to provide provisional application except if such provisional application would be contrary to national law. As we see it, the Treaty's investment arbitration under Article 26 allows investors as of now to litigate directly against governments under the provisional application scheme.

XI. CONCLUSION

Stability of the terms underlying the decision to commit risk capital or those agreed upon is the constant theme of international petroleum investment. One question is if the cycle of foreign investment and nationalist reaction so familiar from the last twenty years will repeat itself in the ex-USSR.

The environment will continue to dominate government policies. It is likely that energy minerals contributing least to the currently perceived global concerns of greenhouse effect and global warming such as, in particular, natural gas, will play a greater role, to the detriment of more polluting minerals such as coal. Pollution taxes such as now being advocated in the European Community will accelerate such tendencies. The current trend towards internal company environmental audits could continue and move towards independent environmental audits. Much like independent financial accounting to protect the financial constituencies of companies, a practice of independent environmental auditing could develop to ensure compliance with environmental obligations, evolving best industry practices, and identification and management of major environmental risks, as a complement to or substitute of merely government-issued regulation.

What are the implications of these global trends for the existing oil and gas producers and developing countries keen to attract petroleum investment? First, these countries compete now with a considerably increased number of countries with massive prospective exploration acreage for the attention of the international oil and gas industry and the flow of risk capital for exploration and development capital for the development of oil and gas facilities. Should Russia, Kazakhstan, Aserbaijan and other countries emerging from the former USSR really open up and make even a moderate parcel of their massive exploration and rehabilitation projects available, perhaps even privatize by selling to or joint venturing with foreign companies' existing oil operations, then risk exploration and project development in other countries will be much harder to finance than before. The opening up of Eastern Europe and Central Asia, therefore, means greater difficulty for other developing countries. This being said, prospects and investment conditions will always be able to compete on their own merit: A promising oil prospect off the shore of Angola may well be more attractive than an oil

prospect in remote Siberia. Companies will weigh the geological prospectivity, infrastructure requirements and the contractual and fiscal conditions against each other in deciding which investment to prioritize. With the prospects of joint venturing and privatisation of the ex-Soviet state entities, it will be hard for Third World state oil companies to resist similar changes. So far, there have been massive inflows of Western experts, negotiators and business developers, and many protocols and declarations of good will towards commercial collaboration in the former USSR, but apart from some modest deals very few definite contracts suitable for the commitment of large-scale investment funds. The petroleum countries in transition, hence, provide the major testing area for petroleum law and contracts in the years to come.