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Project Finance and Facilitating Telecommunications Infrastructure Development in Newly-Industrializing Countries

Christopher J. Sozzi

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**PROJECT FINANCE AND FACILITATING
TELECOMMUNICATIONS INFRASTRUCTURE
DEVELOPMENT IN NEWLY-
INDUSTRIALIZING COUNTRIES***

Christopher J. Sozzi†

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I. INTRODUCTION

Our current age has been described as an "information revolution": a new era along the continuum of industrial development that has brought tremendous change and innovation to our planet. Due to the convergence of the communications and computer industries, information once exchanged in physical form is now being transmitted electronically. Examples of electronic information exchange include access to medical technology, interactive video, immediate banking and investment services, home shopping, electronic mail, and database exchange.¹

As a result of these technological developments, many countries are focusing upon the development and upgrade of telecommunications infrastructure in order to compete economically at the international level. In the near future developing countries will spend billions to improve their communications networks.² The telecommunications industry therefore offers a highly promising market to foreign investors, spurred by both relaxed government regulation and expanding multinational business opportunities.³

The recently popularized term "information superhighway" refers to the basic physical infrastructure supporting this movement toward

1. For a detailed discussion of the policies contributing to current telecommunications development in industrializing countries, see Roy Carleton Howell, *International Telecommunications and the Law: The Creation of Pan African Satellites*, 31 *How. L.J.* 575 (1988).

2. Catherine Arnst et al., *The Last Frontier*, *Bus. Wk.*, Sept. 18, 1995, at 98.

3. Keith E. Bernard, *New Global Network Arrangements: Regulatory and Trade Considerations*, 18 *TELECOMM. POL'Y* 378 (1994).

informational interdependence. The information superhighway includes, among other technologies, fiber optic cables, high-speed switching devices, and wireless transmitters (referred to here as "telecommunications").⁴ Currently, much debate exists over how to properly establish, operate, and regulate this telecommunications infrastructure. Areas of technological development now controlled by governmental or quasi-administrative agencies are being shifted towards private sector control.⁵ In response to this shift, new approaches to investment strategies must be examined to determine how to most effectively enable telecommunications infrastructure development and to define government's role in telecommunications development and maintenance.

This comment addresses the problems involved in establishing telecommunications infrastructure in countries historically predisposed to governmental control of telecommunications development and industry. Part II explains traditional forms of infrastructure financing and describes current global trends in foreign investment strategy. Next, part III provides a brief description of the international telecommunications industry and the various forms of investment financing involved therein. Part IV describes and defines innovative project financing schemes, focusing primarily on a modern contractual arrangement: the Build-Operate-Transfer (BOT) model, in an attempt to evaluate the advantages and disadvantages of such organizational models within the telecommunications arena. The final section provides a discussion of some legal and regulatory issues surrounding the use of BOT agreements and explains various contractual protections potential investors and host governments may seek when utilizing such arrangements.

II. INFRASTRUCTURE DEVELOPMENT IN NEWLY-INDUSTRIALIZING COUNTRIES⁶

Infrastructure development traditionally has been facilitated through the public sector. State governments have generally funded

4. David Bank, *Foundation for an Information Age*, SAN JOSE MERCURY NEWS, Dec. 5, 1994, at 1D.

5. "[U]ser demand for services is driving telecoms infrastructure development globally, widening the possibilities for investment strategies as government monopolies realize they are ill equipped financially to meet consumer needs." Luke Hill, *User Demand Widens Telecoms Prospects*, UPI, Sept. 28, 1994, available in LEXIS, NEXIS Library, UPI File.

6. For the sake of convenience the term "newly-industrializing countries" will be used throughout this paper. It is intended to include nations that in the past have been referred to as "developing" or "Third World" countries; however, many of the assertions and generalizations set forth in this paper may reflect problems and solutions that can also be applied to nations commonly considered to be "industrialized" or "First-World" nations.

and controlled the construction, maintenance, and operation of nearly all public services, including communications.⁷ Examples of primary forms of public sector financing include direct government expenditure of appropriated funds,⁸ general-obligation bonds,⁹ subsidization,¹⁰ and concessions to state-owned enterprises.¹¹ These methods may have certain limitations however. Bonds require public approval, while revenue and debt limits may inhibit infrastructure investment by government agencies.¹² Economic deficiencies and poor financial management of resources have further depleted internal funding in many newly-industrializing countries (NICs),¹³ causing many to seek foreign capital as a primary source of funding for infrastructure development. Traditional modes of such foreign investment into NICs may generally be distinguished as either debt financing or foreign direct investment.

A. *Public Sector Debt Financing*

1. The World Bank

A common channel of debt financing NICs access to facilitate infrastructure building has been the International Bank for Reconstruction and Development, or more commonly, the World Bank. The World Bank is an international financial institution whose purposes involve assisting in the development of its member state's territories, promoting and supplementing private foreign investment, and facilitating long-term growth in international trade.¹⁴ To meet these goals, the Bank is empowered to: lend directly to member states and busi-

7. Daud Beg, *Private Power Generation Initiatives in Pakistan*, *ECON. REV.*, Aug. 1994, at 39.

8. See Ira P. Robbins, *The Legal Dimensions of Private Incarceration*, 38 *AM. U.L. REV.* 531, 621 (1989).

9. *Id.*

10. See Albert J. Rosenthal, *Conditional Federal Spending and the Constitution*, 39 *STAN. L. REV.* 1103 (1987); David A. Codevilla, Comment: *Discouraging the Practice of What We Preach: Saarstahl I, Inland Steel and the Implementation of the Uruguay Round of GATT 1994*, 3 *GEO. MASON. IND. L. REV.* 435 (1995).

11. Philippe Lietard & Everett J. Santos, *On the Move; Privatization of Infrastructure Services; Privatization in Latin America 1994*, *LATINFINANCE*, Mar., 1994, § 55, at S4, available in LEXIS, ALLNEWS Library, ASAPII File.

12. Robbins, *supra* note 8, at 623.

13. For a detailed discussion of the economic factors contributing to the Third World Debt Crisis, see Lee C. Buchheit, *Alternative Techniques in Sovereign Debt Restructuring*, 1988 *U. LL. L. REV.* 371 (1988). See also Alfred J. Puchala, Jr., *Securitizing Third World Debt*, 1989 *COLUM. BUS. L. REV.* 137 (1989); Rory MacMillan, *The Next Sovereign Debt Crisis*, 31 *STAN. J. INT'L L.* 305, 311-13 (1989).

14. Articles of Agreement Between the United States of America and Other Powers Respecting the International Bank for Reconstruction and Development, Dec. 27, 1945, art. I(i)-(iii), 60 Stat. 1440, [hereinafter Articles of Agreement].

nesses located within the borders of its member states;¹⁵ guarantee loans dispersed through private investment routes;¹⁶ issue, guarantee, and acquire its own individual securities; and acquire and guarantee the securities of other parties.¹⁷

Qualifying for loans or technical assistance from the World Bank requires a country to conform its economic policies to standards that promote efficient economic development.¹⁸ Often, convincing the World Bank to lend depends upon a nation effectively aligning its stated goals with values recognized by the Bank, *i.e.*, "privatization, the elimination of domestic subsidies, balanced budgets and vigilance against inflation, [and] policies that reflect capitalist models of development and benefit first-world investors."¹⁹ In addition, despite rhetoric within the Bank's Articles of Agreement instituting a policy of non-interference in member states' political affairs,²⁰ the Bank has been able to completely rearrange the constitutional framework of borrowing nations by exploiting its financial leverage and imposing restrictive conditions on its loans.²¹ As a result, some NICs are becoming disillusioned by such subjective standards and are seeking alternative forms of investment capital to fund infrastructure projects.²²

2. Multilateral and Bilateral Assistance Organizations

Other means of debt financing include regional multilateral financial institutions or regional banks, such as, the Inter-American Development Bank and the Asian Development Bank.²³ In the past, development banks have facilitated economic development primarily by lending funds to industrial pursuits within the public sectors of

15. *Id.* art. III, § 4, 60 Stat. 1444.

16. *Id.* art. IV, § 1, 60 Stat. 1445.

17. *Id.* § 8, 60 Stat. 1449.

18. PAUL B. STEPHAN III ET AL., *INTERNATIONAL BUSINESS AND ECONOMICS: LAW AND POLICY* 52 (1993).

19. *Id.*

20. Articles of Agreement, *supra* note 14, art. I, § 10 ("The Bank and its officers shall not interfere in the political affairs of any member.").

21. Jonathan Cahn, *Challenging the New Imperial Authority: The World Bank and the Democratization of Development*, 6 *HARV. HUM. RTS. J.* 159, 160 (1993).

22. For a comprehensive explanation of the World Bank's increasing role in NIC governance, see *id.*

23. Dante B. Fascell & Virginia M. Schlundt, *Perspective: United States International Communications and Information Policy: A Crisis in the Making?*, 5 *J. INT'L L. BUS.* 486, 501-502 (1983). For a more detailed discussion of the roles of multilateral financial institutions, in particular the International Finance Corporation (IFC), which includes examples of particular funding programs and methods available, see Alain Soulard, *The Role of Multilateral Financial Institutions in Bringing Developing Companies to U.S. Markets*, 17 *FORDHAM INT'L L.J.* S145 (1994).

NICs.²⁴ Such lending is usually facilitated through mutual financing arrangements involving more than one lender and requires such institutions to either fund directly to the public sector of NICs or to invest in private sector project financing arrangements along with other private sector investors.²⁵ These aid programs have proven effective to a large extent. However, lack of effective planning procedures and disorganization have led to duplication in funding and unreliability.²⁶ Many within the global economic community are also beginning to acknowledge the limited nature of such multilateral pools of investment funding,²⁷ and the fact that this limited pool of funding is also causing internal structural change within multilateral development banks. In response to the recent global debt crisis,²⁸ international commercial banks have become more selective in their lending determinations and wary of long-term lending.²⁹ This is evidenced by the massive rise in private sector lending in Africa, Asia, Eastern Europe and Latin America,³⁰ and increasing frequency of lending against the prospects of particular projects, rather than against the credit of governmental sponsors.³¹

Additional sources of infrastructure funding have come from bilateral assistance organizations. In efforts to assist NICs to achieve parity within the international community, the United States, for example, has established bilateral development assistance programs through the Agency for International Development (AID).³² Full repayment of development loans to NICs can be guaranteed by AID and are backed by the full faith and credit of the United States.³³ Develop-

24. *New Report Shows Private Sector & Industry Now Dominates Development Bank Lending*, PR Newswire, Apr. 4, 1995, available in LEXIS, BUSFIN Library, ALLNWS File [hereinafter *New Report*].

25. Manfred Ernst & Naja Ngoc-Nga Pham, *Financing Infrastructure in Developing Economies: Benefits, Risks, Sources*, E. ASIAN EXECUTIVE REP., Mar. 15, 1994, at 7, available in LEXIS, BUSFIN Library, ALLNWS File.

26. Fascell & Schlundt, *supra* note 23, at 500, 502.

27. *Asia Needs \$1.0 Trillion for Infrastructure - ADB*, Reuters Newswire, July 27, 1995, available in LEXIS, Nexis Library, BUSFIN File.

28. See generally Buchheit, *supra* note 13.

29. Victor Traverso, *The Rules of the Game; Project Finance Challenges in Latin America*; *Project Finance in Latin America*, LATINFINANCE, June 1994, at S4.

30. *New Report*, *supra* note 24.

31. *Id.* (Recent financing of BOO/BOT projects in Asia and Latin America have reached \$2.2 billion, while those in Eastern Europe and Africa have received \$45 billion in private sector loans.). See also *infra* text accompanying note 47.

32. Act for International Development of 1961, Pub. L. No. 87-195, § 621 (current version at 22 U.S.C. § 2381 (1988)).

33. *Id.* § 222 (current version at 22 U.S.C. § 2182 (1988)).

ment aid sponsored by AID also may take the form of grants to foreign governmental agencies.³⁴

Despite the utility of the AID program, the constitutional mandate found within the enabling legislation for AID also limits its effectiveness. AID's fundamental purpose has been redesigned to address basic human needs.³⁵ Financial assistance has been denied in the past for infrastructure projects, such as, roads and communications facilities on the grounds that such projects are not considered of primary necessity or "basic human needs."³⁶ The AID program also may suffer from the structural and ideological biases common to the World Bank and other multilateral and regional financial institutions as asserted above.³⁷ Currently, it is the intention that "[a]ssistance from the United States shall be used in support of, rather than substitution for, the self-help efforts that are essential to successful development programs."³⁸ Further, as modern infrastructure projects have become increasingly sophisticated and dependent upon high technology, the role of AID has changed.

[When selecting] [b]ilateral development aid [programs, the Executive Branch] should concentrate increasingly on sharing American technical expertise . . . and industrial goods to meet critical development problems, and less on large-scale capital transfers, which when made should be in association with contributions from other

34. As an example from the field of telecommunications, in Egypt a fairly representative low-to-middle income developing country with regard to the status of its industry, a 500,000-line fiber optic network expansion is being financed by AID through the use of a \$200 million grant. Toby Ash et al., *Gearing Up for a Great Leap Forward, Middle East Communications Industry, MEED Special Report: Telecoms Industry Overview*, MIDDLE E. ECON. DIG., Apr. 10 1995, at 13, available in LEXIS, BUSFIN Library, ALLNWS File.

35. Foreign Assistance Act of 1973, Pub. L. No. 93-189 § 2 (1973) (codified as amended at 22 U.S.C. § 2151 (1988)).

36. Fascell & Schlundt, *supra* note 23, at 500-501.

37. AID's asserted six basic principles are:

- Support for free markets and broadbased economic growth;
- Concern for individuals and the development of their economic and social well-being;
- Support for democracy;
- Encouragement of responsible environmental policies and prudent management of natural resources;
- Support for lasting solutions to transnational problems; and,
- Provision of humanitarian assistance to those who suffer from natural or man-made disasters.

Overview of Foreign Assistance: Hearings Before the Subcomm. on International Economic Policy, Trade, Oceans, and Environment; African Affairs and East Asian and Pacific Affairs of the Senate Comm. on Foreign Relations, 102d Cong., 1st Sess. 7-8 (1991) (statement of Ronald W. Roskens, Administrator, AID).

38. International Development and Food Assistance Act of 1978, Pub. L. No. 95-424, (1978) (codified at 22 U.S.C. § 2151-1).

industrialized countries working together in a multilateral framework.³⁹

Multilateral debt financing may also be inadequate to effectively manage the risks created with financing large infrastructure projects. Funding from international sources has traditionally involved loan agreements dependent upon payments denominated in foreign currency.⁴⁰ However, infrastructure projects usually rely upon revenues from domestic consumers payable in local currency to service debt.⁴¹ Thus, if exchange rates fluctuate, infrastructure projects financed with such international loans are directly affected.⁴²

Although the World Bank and other types of non-equity financing have provided somewhat reliable sources of funding in the past, these economic and ideological factors are causing many NICs to seek primary investment from alternative channels.

B. *Privatization and Foreign Investment*

Recent trends suggest that public sector control over infrastructure development and operation has been inefficient, in addition to being somewhat impractical.⁴³ State control of facilities may impair commercial objectives, such as, independent management, profit enhancement, and the establishment of cross-holdings and may be inhibited by public accounting procedures.⁴⁴ Many countries simply do not have the available finances to afford capital-intensive industrialization, even with the assistance of multilateral financing efforts.⁴⁵ Further, international financial institutions are restructuring lending policies in attempts to encourage greater private involvement and the commercialization of utilities operators in the area of infrastructure development.⁴⁶

39. Foreign Assistance Act of 1973, Pub. L. No. 93-189, § 2 (current version codified at 22 U.S.C. § 2151 (1988)).

40. Lietard & Santos, *supra* note 11.

41. *Id.*

42. *Id.*

43. *Id.* See generally, Jonathan C. Carlson, *A Missing Link in the International Debt Strategy: Trade Policy Reform in Industrial Nations*, 32 How. L.J. 771 (1989).

44. Daniel Hurstel & Mary Ann Carpenter-Pecquet, *Privatization and the Public Interest*, 13 INT'L FIN. L. REV. 34 (1994), available in LEXIS, BUSFIN Library, ALLNWS File.

45. See generally, Andrew D. Cao, *Infrastructure Financing Methods: Paving the Way for Privatization in Latin America*, LATINFINANCE, Jan. 1993, available in LEXIS, BUSFIN Library, ALLNWS File.

46. See Michael T. Burr, *Institutional Restructuring*, INDEPENDENT ENERGY, July/Aug. 1995, at 8, available in LEXIS, BUSFIN Library, ALLNWS File (describing restructured policy and new role of the World Bank); see also Cahn, *supra* note 21, at 162 n.149 (describing World Bank's differentiation between project and program lending).

When focusing on industries involving high-technology (*i.e.*, telecommunications, power utilities, sanitation facilities, *etc.*), the deficiencies of the public sector become magnified. "Past examples have demonstrated that the public sector seems ill-suited to effective and efficient management of infrastructure assets while private investors perform substantially better than the state in terms of investment, capacity expansion, service delivery and efficiency."⁴⁷ The argument in favor of privatization weighs heavily in industries such as telecommunications where these factors are essential and the necessity to keep pace with technological development is high.⁴⁸

1. Private Sector Participation

NICs are thus becoming increasingly reliant upon the private sector to provide the requisite financing for the development of crucial infrastructure.⁴⁹ These developing countries are also increasingly allowing private entities to exhibit greater control over their foreign investments. Most recent growth in private sector financing has come in the form of direct foreign investment.⁵⁰ Direct foreign investment involves investment whereby a private company acquires or establishes a "lasting business interest" in a newly-industrializing country.⁵¹ Many private companies favor such direct investment, in contrast to investment through the acquisition of foreign stock or other portfolio securities, as it enables greater control over the management of a foreign enterprise.⁵² Such investment also benefits NICs by providing needed investment capital and technological support.⁵³

In the area of infrastructure development, direct investment may be particularly effective. Some commentators argue that such direct investment is better suited to the kind of structured financing commonly required for infrastructure projects since "[t]he typical infra-

47. Lietard & Santos, *supra* note 11.

48. Alan Spence & Jon Marks, *FT Exporter*, FIN. TIMES, Oct. 5, 1994, at 4, available in LEXIS, BUSFIN Library, ALLNWS File.

49. The various techniques used in privatization programs include, among others: joint venture, management contract or lease, liquidation, and concession or build-operate-transfer. Matthew L. Hensley & Edward P. White, *The Privatization Experience in Malaysia: Integrating Build-Operate-Own and Build-Operate-Transfer Techniques Within the National Privatization Strategy*, 28 COLUM. J. WORLD BUS. 70 (1993), available in LEXIS, BUSFIN Library, ALLNWS File.

50. Lietard & Santos, *supra* note 11.

51. Patricia McKinstry Robin, *The Bit Won't Bite: The American Bilateral Investment Treaty Program*, 33 AM. U. L. REV. 931 (1984). Portfolio finance, in the form of debentures, bonds, or listed shares and private placements, is distinct from foreign direct investment. Lietard & Santos, *supra* note 11.

52. Robin, *supra* note 51, at 931.

53. *Id.*

structure project is large, has no operating track record, has a long construction period during which debt cannot be serviced, and involves risks that are not often addressed by the portfolio investor."⁵⁴

Probably the most popular recent form of direct foreign involvement is the joint venture. A joint venture has been defined as:

an integration of operations between two or more separate firms [where] (1) the enterprise is under the joint control of the parent firms, which are not under related control; (2) each parent makes a substantial contribution to the joint enterprise; (3) the enterprise exists as a business entity separate from its parents; and (4) the joint venture creates significant new enterprise capability in terms of new productive capacity, new technology, a new product, or entry into a new market.⁵⁵

By forming a partnership with foreign businesses, companies can enter the economies of NICs with the advantages of participating with local knowledge and experience.⁵⁶ Indeed, many developing countries insist upon local involvement as a condition upon foreign entrance into the marketplace.⁵⁷

The most grandiose method governments have chosen to attract foreign investment into the public sector is direct and total privatization of state-owned enterprises.⁵⁸ "Privatizations [of public infrastructure projects] transfer the ownership of existing assets, or rights to those assets, from the state to a foreign or domestic private entity that will assume the duties and operation of the property."⁵⁹ Common factors influencing governments to adopt privatization programs include

54. Lietard & Santos, *supra* note 11.

55. Joseph F. Brodley, *Joint Ventures and Antitrust Policy*, 95 HARV. L. REV. 1523, 1526 (1982).

56. Keith R. Evans, *Joint Ventures within ASEAN*, in MATERIALS ON ASEAN, INDUSTRIAL INVESTMENT IN ASEAN, AND US/ASEAN TRADE RELATIONS 95, 97 (Phiroze K. Irani ed., Singapore Summer Law Program, at 96, University of Santa Clara School of Law, June 1994) [hereinafter Evans in Irani].

57. U.S. International Trade Commission, Pub. No. 2820, Industry and Trade Summary 88 (1994), 1994 ITC LEXIS 568, at *1 [hereinafter USITC 1994].

58. Cao, *supra* note 45.

In 1988, the total proceeds of privatized [state-owned enterprises] worldwide were approximately \$19.5 billion according to Privatization International. This figure rose to \$24.7 billion in 1989 and to \$25.3 billion in 1990. With the abolition of centrally-planned economic systems in Eastern Europe and the former Soviet Union, privatization has become an even more important development strategy in the overall economic restructuring and liberalization of world markets. As evidence, total privatization proceeds in 1991 reached \$53.2 billion, an increase of 110% over the previous year.

Id.

59. Ernst & Pham, *supra* note 25.

increasing operational efficiency, utilizing external funding and commercial expertise, and accessing new sources of technology.⁶⁰

2. Incremental Privatization and Concessions to Private Industry

Complete and unilateral privatization of an industry requires great confidence and commitment to political liberalism as the loss of control and displacement of labor virtually assures local opposition. Many NICs are unwilling to relinquish dominion over strategic economic industries, such as, telecommunications and power generation, since such industries are both an important source of economic revenue, as well as an integral component of the effective operation of government.⁶¹ It also has been asserted that private sector concern with the "bottom-line" precludes it from recognizing the social function common to many utilities.⁶² Furthermore, it can be argued that the goals of increased efficiency and greater access to private capital and technology can be achieved through less extreme methods.

The political complexities arising from entire privatization of an existing public sector enterprise have led some governments to select the alternative strategy of allowing short-term private sector penetration into particular activities or niche markets prior to unilateral privatization.⁶³ This incremental approach allows private participants to be introduced into an industrial sector without the need to establish a completely new regulatory foundation.⁶⁴ Although uncertainties about the future regulatory environment of a host government may remain, the risks facing potential private investors can usually be mitigated through long-term contracts between participants (*e.g.*, equity investor(s), host government, contractors and lenders),⁶⁵ or, in the alternative, though legislation directed solely toward such incremental privatization attempts.⁶⁶

Such short-term private investments have been facilitated primarily through the use of concession agreements. "A concession agreement [is] defined as a license granted by a sovereign government to a foreign corporation or business for the express purpose of exploiting a natural resource, developing a geographic area, or pursuing some particular venture, for which the government desires the corporation's ex-

60. Hensley & White, *supra* note 49.

61. Cao, *supra* note 45.

62. Burr, *supra* note 46.

63. Lietard & Santos, *supra* note 11.

64. *Id.*

65. *Id.*

66. See *infra* part V.B.1.

expertise, assets, technology, or capital."⁶⁷ In a usual concession arrangement, responsibility for the management and operation of public sector services and/or facilities is privatized, while the state retains ownership interest in company assets.⁶⁸ These agreements may be useful in achieving economic development in fields where a host government is unwilling to surrender its rights of ownership.⁶⁹ Such unwillingness often arises because a host government perceives a threat to national sovereignty, such as increased concentration of economic power in foreign businesses⁷⁰ or the displacement of labor.⁷¹

Concession arrangements provide the state with an effective tool to defend and protect the public interest as "the state retains [ultimate] control over the conditions under which management is conducted."⁷² Such public interest concerns include continuity of provision, rate control and adequate and impartial service.⁷³ Thus, concession agreements enable collaboration of the state, as protector of the public interest, and private industry, who can contribute business acumen⁷⁴ and economic capability.

C. Project Finance

Project financing based upon nonrecourse lending is a mechanism for attracting private capital that may correspond with a national policy of staged privatization or concessionary licensing.

The term "project finance" . . . is generally used to refer to the arrangement of debt, equity, and credit enhancement for the construction or refinancing of a particular facility in a capital-intensive industry, in which lenders base credit appraisals on the projected revenues from the operation of the facility . . . and in which they rely on the assets of the facility, including the revenue-producing contracts and cash flow, as collateral for the debt.⁷⁵

In less complicated terms, project financing is lending based "on the merits of a project rather than the credit of the project sponsor."⁷⁶

67. Viktor Soloveytschik, *New Perspectives for Concession Agreements: A Comparison of Hungarian Law and the Draft Laws of Belarus, Kazakhstan, and Russia*, 16 Hous. J. INT'L L. 261, 263 n.1 (1993).

68. Hurstel & Carpenter-Pecquet, *supra* note 44.

69. Soloveytschik, *supra* note 67, at 271.

70. *Id.* at 271-72.

71. Cao, *supra* note 45.

72. Hurstel & Carpenter-Pecquet, *supra* note 44.

73. *Id.*

74. *Id.*

75. Scott L. Hoffman, *A Practical Guide to Transactional Project Finance: Basic Concepts, Risk Identification, and Contractual Considerations*, 45 Bus. Law. 181 n.1 (1989).

76. *Id.* at 183.

The nonrecourse nature of the debt relieves a project sponsor from liability to repay project debt or make interest payments on principal in the event that revenue generated by the project turns out to be insufficient to service debt obligations.⁷⁷ Credit assessments by lenders are instead predicated upon the potential underlying cash flow from revenue generation pursuant to project operation.⁷⁸

In the area of public sector infrastructure development, the use of project finance can be advantageous to both host governments and private investors. Primarily, it enables host governments to attract private capital investment without guaranteeing payment of project costs and without completely rearranging its economic markets through direct privatization.⁷⁹ Lenders may be more willing to lend on such a "project-specific" basis in situations where a developing country would present an otherwise unfavorable credit risk due to political unrest or other noneconomic factors.⁸⁰

Project financing methods provide investors with an alternative to internal, or equity, financing.⁸¹ Additional objectives in pursuing project finance may include:

- (i) elimination of, or limitation on, the recourse nature of the financing of a project, (ii) off-balance-sheet treatment of debt financing, (iii) leverage of debt to avoid dilution of existing equity, (iv) avoidance of restrictive covenants in other debt or equity arrangements that would otherwise preclude project development, and (v) arrangement of attractive debt financing and credit enhancement, available to the project itself, but which is unavailable to the project sponsor as a direct loan.⁸²

It is in contrast to term lending, in which lenders analyze the loan based on historical earnings of the borrower and are satisfied with recourse to the collateral value of the borrower's assets securing the loan to ensure debt repayment. Other distinguishing factors . . . include the high leverage of project finance debt, reliance on commitments by third parties for debt repayment in specified contingencies, and nonrecourse treatment of the project finance debt.

Id. at 181.

77. *Id.* at 183.

78. *Id.* at 182.

79. Furthermore, the nonrecourse or limited recourse nature of the financing also enables private investors to refrain from providing financial guarantees as well. *See infra* part III.

80. *Pakistan: Trade and Project Funds Flowing, Political Doubts Persist*, INT'L TRADE FIN., Mar. 24, 1995, available in LEXIS, BUSFIN Library, ALLNWS File.

81. Hoffman, *supra* note 75, at 182 n.4 ("[I]nternal financing [as distinguished from project financing, occurs where a] corporate sponsor uses retained earnings or short-term debt to finance the development and construction of a facility until the project requires permanent financing, which may be financed with long-term debt, equity sales, or other corporate finance techniques.").

82. *Id.* at 185.

Such project financings may also afford foreign investors with the opportunity to directly participate in an otherwise inaccessible and unpredictable market.⁸³

While the varieties of infrastructure project financing are diverse, two popular arrangements utilized by NICs have been the Build-Operate-Transfer (BOT) and the Build-Own-Operate (BOO) models.⁸⁴ Project financing under the BOT⁸⁵ model is used for new construction projects where a sponsoring foreign investor or consortium of lenders and/or investors supervises the construction and operations of a project facility for a determinate duration, and subsequently transfers ownership and control of the project "back to the host government at some future date."⁸⁶

By contrast, under the BOO method, a sponsor or sponsoring consortium controls the construction and operation of the particular project as owners, without a subsequent transfer of project assets to a host government.⁸⁷ The feasibility of a BOO project financing will be determined by its internal rate of return. Since there is no subsequent transfer of project assets, "the transfer value (or "terminal value") belongs to the sponsor and is included in the calculation of the target [internal rate of return]."⁸⁸ Primary rationales for a host government not to insist upon subsequent reversion of ownership would be the lack of political pressure to own or control the facilities, or true commitment to total private sector development and unilateral liberalization of industry.⁸⁹

83. See Alexa C. Lam, *Infrastructure Investment Tips*, CHINA BUS. REV., Sept. 1994, at 44, available in LEXIS, BUSFIN Library, ALLNWS File. See also *infra* text accompanying note 155.

84. Cao, *supra* note 45. Other methods have included Build-Transfer-Operate (BTO), Build-Lease-Transfer (BLT), Refurbish-Operate-Lease and other derivative models. Ernst & Pham, *supra* note 25. The model used will depend on both the existence of governmental restrictions on industry and how participating parties choose to allocate the project risks. The BTO model, for example, may be used where government ownership of a project is necessary for some reason. *Id.* In a BLT, however, construction risks are borne wholly by the private sector. It instead owns the project during the concession period, and leases it to the government for operation with lease payments designed "to amortize debt and provide a fixed return" on equity. *Id.*

85. The term "Build-Operate-Transfer" is sometimes used interchangeably with the term "Build-Own-Operate-Transfer" or BOOT. It has been asserted that it is actually the latter definition which more accurately describes the nature of such a project financing arrangement. Cao, *supra* note 45. However, for convenience, the term BOT will be used throughout this article.

86. *Id.* See *infra* part VI.

87. Cao, *supra* note 45.

88. *Id.*

89. *Id.* For more discussion of such political pressure against total privatization within the telecommunications industry, see *infra* parts III, IV.

Traditional dependencies upon international financial institutions and other forms of public sector debt financing are, therefore, being replaced by a greater openness to the use of direct foreign investment and alternative methods of private financing. Hence, the relevant question to ask when considering development of crucial infrastructure becomes: which financial and corporate arrangements are best suited for certain projects in light of both the particularities of a given industry, as well as the requirements of a host nation?

III. TELECOMMUNICATIONS INFRASTRUCTURE DEVELOPMENT

Determining adequate and effective methods of infrastructure development for industrializing nations will often depend upon the nature of the services that are sought to be provided. Therefore, in focusing on telecommunications development, the pervading nature of the industry becomes highly relevant.

Telecommunications are defined in the International Telecommunication Convention as “[a]ny transmission, emission or reception of signs, signals, writing, images and sounds or intelligence of any nature by wires, radio, optical or other electromagnetic systems.”⁹⁰ This transmission occurs by means of carriers, such as, broadcast or direct line. Carriers are coupled with satellite relays and switching devices, which allow such transmission systems to operate, and with terminals, which transmit and receive information.⁹¹ The communication network provides a set of infrastructures, composed of such switching facilities and transmission lines, which provide the means of transmitting and routing telecommunication signals.⁹² These infrastructure facilities:

transmit, receive, or carry data between the telecommunications terminal equipment at each end of a telecommunications circuit or path. Such facilities include microwave antennae, relay stations and towers, other telecommunications antennae, fiber-optic cables and repeaters, coaxial cables, communication satellite ground station complexes, [and] copper cable electronic equipment associated with telecommunication transmissions⁹³

90. International Telecommunication Convention, Malaga-Torremolinos, done Oct. 25, 1973, 28 U.S.T. 2495, 2644.

91. STEPHAN ET AL., *supra* note 18, at 785.

92. OECD WORKING PARTY ON TELECOMMUNICATIONS AND INFORMATION SERVICES POLICIES, TRADE IN TELECOMMUNICATION NETWORK-BASED SERVICES: ACCESS TO AND USE OF PUBLIC TELECOMMUNICATION NETWORKS (1990), *partially reprinted in* STEPHAN ET AL., *supra* note 18, at 786-87 [hereinafter OECD in STEPHAN ET AL.].

93. 7 U.S.C.A. § 950aaa-2(9) (West Supp. 1995).

Internationally, this infrastructure is primarily owned and operated by public telecommunication operators, often on the basis of state-sanctioned monopolies.⁹⁴

A. *Past Development of the Telecommunications Industry*

Control over the supply of telecommunications services has been historically viewed as properly residing within the public sector. Telecommunications infrastructure development was seen as restrictive to competition due to the huge capital investment outlays involved.⁹⁵ Additional political concerns over the provision of telecommunications services have included ensuring consistent and impartial service, maintaining low local rates, preventing duplicative investment, developing uniform equipment and transmitting standards, and advancing domestic commercial growth.⁹⁶ Considerations of national security and limiting access to pornography have also been asserted by some countries as justifications of such governmental control of the industry.⁹⁷ Further, since the construction of carriers requires the allocation of certain limited resources (*e.g.*, property easements for lines, frequency bandwidth for broadcast), in instances where governments did not own carriers outright, administrations still have imposed conditions upon its development.⁹⁸

As a result of these factors, "governments [have] either tolerated monopoly carriers, regulated them, or owned them outright."⁹⁹ In the United States, for example, the Government has considered the provision of telecommunications services to be a "natural monopoly" in the past. The Government acquiesced to American Telephone and Telegraph's (AT&T) role as the monopolistic supplier of a variety of communications services and equipment throughout the early stages of telecommunications development.¹⁰⁰ The intention was to ensure that

94. OECD in STEPHAN ET AL., *supra* note 92.

95. STEPHAN ET AL., *supra* note 18, at 791.

96. Douglas W. Colber, Comment: *Reform of Japanese Telecommunications Law: Panacea or Placebo?*, 8 N.W. J. INT'L L. & BUS. 145, 149 (1987).

97. Kristin Huckshorn, *Vietnam's Net Offensive*, SAN JOSE MERCURY NEWS, Sept. 26, 1995, at 1A, 5A.

98. STEPHAN ET AL., *supra* note 18, at 793. Broadcast media may be regulated by the federal government due to the scarcity of available broadcast bandwidth. *Red Lion Broadcasting Co. v. FCC*, 395 U.S. 367 (1969). STEPHAN ET AL., *supra* note 18, n.100.

99. STEPHAN ET AL., *supra* note 18, at 791.

100. GLOBAL COMPETITIVENESS OF U.S. ADVANCED-TECHNOLOGY MANUFACTURING INDUSTRIES: COMMUNICATIONS TECHNOLOGY AND EQUIPMENT: A SUMMARY OF THE REPORT TO THE COMMITTEE ON FINANCE, 1991 ITC LEXIS, at *16 [hereinafter USITC 1991 SUMMARY]. This arrangement was formalized recognized in the case *United States v. Western Elec. Co., Inc.*, 1956 Trade Cas. (CCH) ¶¶ 68, 246 (Jan. 24, 1956). The AT&T monopoly lasted until the Modified Final Judgment of 1982 disassembled it into seven regional holding companies for twenty-

“communications service was provided to the public on a nondiscriminatory basis and at reasonable prices.”¹⁰¹

Until recently, the large majority of foreign administrations relied on state ownership or direct governmental control as a means to develop their domestic telecommunications industries.¹⁰² These foreign enterprises were usually run as state monopolies and were “referred to as administration[s] of posts, telegraphs and telephones (PTTs).”¹⁰³ This reliance upon public sector control of the industry has subsequently affected the manner of financing telecommunications development. “When telephone operators were state-owned organisations operating under ministerial control, financing for telecommunications development was provided directly from state budgets.”¹⁰⁴ Technology maintenance was achieved primarily through research and development collaboration and state-subsidization,¹⁰⁵ and traditional sources of public sector debt financing were relied on for additional infrastructure funding.¹⁰⁶

B. *Private Sector Penetration into the Telecommunications Arena*

Recent industry trends indicate that developed and developing countries alike are recognizing the importance of private investment to telecommunications development.¹⁰⁷ While state budget deficits are an integral consideration in determining whether to privatize public sector enterprise,¹⁰⁸ the proliferation of trade alliances has also created

two local monopoly local service providers in the case *United States v. American Tel. & Tel. Co.*, 552 F. Supp. 131 (D.D.C. 1982), *aff'd*, 460 U.S. 1001 (1983).

101. USITC 1991 SUMMARY, *supra* note 100, at *20-21. Such governmental policies justifying monopolization of telecommunications are common to most nations, for example Japan. See Colber, *supra* note 96, at 149.

102. Stuart Z. Chiron & Lise A. Rehberg, *Fostering Competition in International Telecommunications*, 38 FED. COM. L.J. 1, at 3 n.8 (1986).

103. *Id.* “Essentially, PTTs are structured in one of three ways: 1. Government administrations or ministries directly operating the networks; 2. Public corporations under the authority of a government department; or 3. Operation by a private corporation, controlled and/or partially owned by the government.” *Id.* at 6 n.20.

104. Mark Newman, *Survey of International Telecommunications*, FIN. TIMES 15, Oct. 18, 1993, available in LEXIS, BUSFIN Library, ALLNWS File.

105. Desmond Bell, *The Corporate State and Broadcasting in Ireland: A National-Popular Program*, 11 CARDOZO ARTS & ENT. L.J. 337, 342 (1993).

106. Such financing has generally been considered supplemental by the world banking community as telecommunications investment, historically, has not been viewed as necessary to economic development. Fascell & Schlundt, *supra* note 23, at 504.

107. Larry Irving et al., *Steps Toward a Global Information Infrastructure*, 39 FED. COM. L. J. 271, 274 (1994).

108. Andrew Adonis, *Survey of International Telecommunications*, FIN. TIMES, Oct. 18, 1993, at 5, available in LEXIS, BUSFIN Library, ALLNWS File.

multilateral pressure to liberalize telecommunications industries.¹⁰⁹ In addition, the general global movement away from state-operated infrastructure development has also influenced NICs to liberalize their telecommunications facilities.¹¹⁰

Recent technological advances and new market opportunities have compelled deregulation and competition within the telecommunications industry.¹¹¹ New technologies, such as, cellular, cable, and mobile communications, compete directly with existing and dominant wireline telephone networks.¹¹² The growth of new specialized service provider industries has increased demand for fiber optic transmission systems and other infrastructure equipment outside the scope of traditional telecommunications suppliers.¹¹³ Such technological advances have also relieved the resource scarcity concern previously used to justify natural monopolies.¹¹⁴ Modernization and expansion are also motivating countries to open their telecommunications markets to foreign entities,¹¹⁵ as many NICs recognize that network upgrades will not only require massive infusions of foreign capital investment, but access to skills and technologies as well.¹¹⁶ Finally, while standardization was previously viewed as an essential compo-

109. For an explanation of such multilateral pressure to liberalize national telecommunications industry within the European Union, see Fernando Pombo, *European Community Telecommunications Law and Investment Perspectives*, 18 *FORDHAM INT'L L.J.* 555 (1994).

110. As acceptance of private sector penetration into areas traditionally administered by government slowly progresses, many NICs are beginning to recognize the benefits of competition within the telecommunications industry as well. Adonis, *supra* note 108.

111. STEPHAN ET AL., *supra* note 18, at 792. For example, in privatizing Nippon Telegraph and Telephone Public Corporation (NTT), the president of NTT determined that "preserving the NTT monopoly wasted national resources and impeded the potential of Japan's telecommunications industry" by limiting access to new technology and products. Colber, *supra* note 96, at 161.

112. USITC 1991 SUMMARY, *supra* note 100, at *13-14. In NICs, the licensing of cellular [concessions] often occurs before privatizing the government-run [PTTs], since cellular communication is generally seen as a luxury service and not in direct competition with [PTTs] By inviting outside private investment, governments are able to spur added growth, technology, infrastructure, and competition, and to increase overall revenues.

Lisa Sedelnick, *On the right track; Latin America's telecommunication industry*, *LATINFINANCE*, December 1994, at 18, available in LEXIS, BUSFIN Library, ALLNWS File.

113. Such modernized systems are generally referred to as "integrated services digital networks" or "ISDNs." The Federal Communications Commission has defined ISDN as "a network which is designed and constructed to provide a wide range of telecommunications and information services and to transport electrical signals in digital, rather than analog form." *Integrated Services Digital Networks (ISDN)*, 94 F.C.C.2d 1289 (1983).

114. Claus-Dieter Ehlermann, *Managing Monopolies: The Role of the State in Controlling Market Dominance in the European Community*, 14 *EUR. COMPETITION L. REV.* 61, 67-68 (1993).

115. For a helpful composite chart on the projected telecommunications investment requirements of various nations through the year 2000, see Arnst et al., *supra* note 2.

116. Arnst et al., *supra* note 2. See also *supra* text accompanying notes 48-49.

nent to the interoperability between segments of national network infrastructures, interface technology can now interconnect incompatible systems, effectively extinguishing another role governments formerly played in operating telecommunications infrastructure.¹¹⁷

With regard to technology maintenance, traditional procurement methods are becoming irrelevant. In the past, government-owned and government-controlled telecommunications enterprises "promote[d] technological advances in the local private communications equipment industry by preferential procurement policies and research and development collaboration."¹¹⁸ Under such procurement policies, PTTs often pursued political or social agendas, rather than sound economic considerations, in accommodating domestic suppliers.¹¹⁹ The unfortunate result of such methods is limited access to alternative forms of technology. Further, these traditional methods of technology adoption may soon be subjected to antitrust liability or other heightened scrutiny standards based on the course of international legal precedent regarding privatization and liberalization policies.¹²⁰

In response to these global economic trends within the international telecommunications community, the use of joint ventures and other forms of business alliances has escalated as a means of entering foreign markets.¹²¹ Foreign companies, such as, Ericsson, Siemens, and AT&T, have recently established telecommunications joint ventures with local partners in order to access a variety of developing markets.¹²² Local telecommunications authorities in Central Europe and the former Soviet Union are currently structuring joint venture arrangements with western companies as a method to upgrade existing

117. Cf. Colber, *supra* note 96, at 162-63.

118. USITC 1991 SUMMARY, *supra* note 100, at *27.

For example, France Telecom's research arm, CNET, both provides technical assistance and expertise to the communications provider and other French ministries, and does substantial cooperative research with French manufacturers of equipment. Similarly, NTT has traditionally worked extensively with major Japanese manufacturers to develop new projects or technology and has turned over or licensed results of its own development efforts to companies like NEC, Fujitsu, Hitachi, and OKI.

Id.

119. *Id.* at *36-37.

120. At the present time, the most that can be said regarding the future of government subsidization of technology development is that it is indeterminate, at least until the resolutions arising from the Uruguay round of GATT negotiations become institutionalized. STEPHAN ET AL., *supra* note 18, at 30-31. See Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations, version of 15 Dec. 1993, Agreement on Trade-Related Aspects of Intellectual Property Rights, Including Trade in Counterfeit Goods [hereinafter Uruguay Round], Part II, Annex 1C, Part II, § 8, published by Office of the U.S. Trade Representative.

121. USITC 1991 SUMMARY, *supra* note 100, at *6.

122. USITC 1994, *supra* note 57, at *46.

wireline systems.¹²³ In such joint ventures, local entities usually provide the manufacturing facilities and labor, while foreign companies provide technology and investment capital.¹²⁴

These joint ventures can provide benefits to both foreign investors and host countries. For NICs such mechanisms enable PTTs to open their enterprises to private capital markets and technologies without complete privatization of the industry and without the complete transformation of the host country's regulatory framework.¹²⁵ For foreign investors these arrangements may provide the most feasible method of entering an attractive yet otherwise restricted market.¹²⁶

In sum, it is apparent that the international telecommunications industry is undergoing fundamental change. Responding to the necessities of modernization as well as multilateral pressures to liberalize political policies and administrations, privatization of PTTs is becoming increasingly popular as a means to attract foreign capital and technology. Also, alternative financing and project development mechanisms involving short-term market penetration and joint venture partnering are gaining respect, even within the telecommunications arena. However, one must not overlook the perspectives of developing countries and the potential advantages state control over telecommunication operation affords them when assessing potential methods to finance infrastructure development. Thus, alternatives for facilitating telecommunications development must be examined in light of the many economic perspectives and industrial factors involved therein.

IV. THE BOT PROJECT FINANCING ALTERNATIVE TO TELECOMMUNICATIONS DEVELOPMENT

In light of the enumerated trends within the telecommunications industry and financial problems facing cash-strapped developing countries, it is evident that NICs need alternatives to traditional methods of investment financing to adequately facilitate the development of telecommunications infrastructure. It is this author's position that concessionary project financing under the Build-Operate-Transfer (BOT) model may provide an arrangement well suited to both the issues arising with regard to telecommunications development and the financial needs of industrializing countries.

123. *Id.* at 82.

124. *Id.* at 47.

125. Sedelnick, *supra* note 112.

126. See generally M. SORNARAJAH, INTERNATIONAL LAW ON FOREIGN INVESTMENT (1994); M. SORNARAJAH, LAW OF INTERNATIONAL JOINT VENTURES (1991) (discussing viability and structuring of joint venture partnerships in developing countries).

A. *The Build-Operate-Transfer Model*

The BOT model is a type of concessionary arrangement that is gaining tremendous popularity in developing countries as a method of infrastructure project financing.¹²⁷ BOT and other project financing methods have primarily been utilized within the telecommunications, transportation, and power generation industries.¹²⁸ The BOT model enables governments to extend privatization into the infrastructure sector, while concurrently allowing a government to refrain from supplying "inappropriate financial cover, managerial participation, or operating and administration costs associated with large scale [infrastructure] projects."¹²⁹

In practice, private sector participants organize a special project company and, upon securing an exclusive license from the host government to collect revenue (the concession agreement), construct, control, and operate a project for a determinate duration. Subsequently the private sector participants transfer the project company assets back to the host government.¹³⁰ The concession from the government exists for a limited duration, usually fifteen to twenty-five years depending upon the various characteristics of a project, which is estimated at the outset as being sufficient to pay back accrued debt and provide a reasonable return on equity for investors.¹³¹ Ideally, upon transfer, the project company will be vested with the managerial expertise and technological capability to enable the host government to assume control and effectively operate the continuing project.¹³²

The primary rationale for including the transfer feature has been to respond to political concerns over private sector ownership and control of sensitive economic activities, such as, telecommunications, power generation, or transportation.¹³³ Like the power sector, a host government's ongoing role in the telecommunications sector includes: expansion planning, rural access, system management, and ensuring

127. "Major BOT projects currently under way include tunnels in Chile, roads in China, power and roads in Malaysia, ports and roads in Mexico, power in the Philippines and telecommunications in Thailand." Scott Durchslag et al., *The Promise of Infrastructure Privatization*, 4 MCKINSEY Q., Second Issue, 1994, at 3, available in LEXIS, WORLD Library, ALLWLD File.

128. Cao, *supra* note 45.

129. Hensley & White, *supra* note 49.

130. *Id.*

131. *Id.*

132. Sidley & Austin, *Build/Operate/Transfer Arrangements, Singapore*, at 3 (article on file with the *Santa Clara Computer and High Technology Law Journal*).

133. Cao, *supra* note 45. Such activities have been deemed politically strategic due to "their important role in the economy as well as their importance to the government in running the country." *Id.*

low-cost services on a uniform scale.¹³⁴ Other rationales for including the subsequent transfer of facilities include: the innovative, untested nature of alternative project financing methods; fears of displacing entrenched bureaucracy; and persevering reluctance toward complete privatization of previously state-controlled industry.

Under the BOT scheme, financing is obtained by the project company, a lead investor, or a consortium of lenders composed of commercial participants. Financing is often guaranteed by export credit agencies and other bilateral and multilateral lending institutions.¹³⁵ Such "project-specific" lending often enables developing countries to receive more favorable credit terms than they might otherwise be forced to accept in circumstances where political upheaval or a history of debt default has caused lenders to view such countries as high credit risks.¹³⁶ If the project proceeds according to plan, at the point of transfer the project will have used its cash flows to pay off construction and project financing costs it has incurred without any substantial dependence upon the host government's financial support.

A key attraction of the BOT model for foreign governments is that such project financing is premised upon limited recourse financing, with project funds being raised without any ultimate guarantee of repayment by the host government.¹³⁷ This removal of the government as financial sponsor places obligations wholly on the private sector. Investors and lenders supporting the project company must instead rely on the revenues earned through project service sales to recover their returns on equity and service project loans.¹³⁸

Although in essence a type of contractual joint venture,¹³⁹ project financing based upon the BOT structure may be more suitable for foreign market penetration than traditional joint ventures in some circumstances. According to European Union legislative specifications for example, a joint venture is "an organized assembly of human and material resources, intended to pursue a defined economic purpose *on a*

134. Burr, *supra* note 46.

135. Hensley & White, *supra* note 49.

136. Atsuki Maeyama, *Asia & Pacific; Turnkey Operations Get New Twist, Japanese Firms Build, Finance, and Operate Facilities to Meet Asia's Infrastructure Demand*. NIKKEI WKLY., Mar. 6, 1995, at 19, available in LEXIS, BUSFIN Library, ALLNWS File. ("Interest rates in the usual project finance deal are 1.5-2 percentage points above the London Interbank offered rate over a 10-year period. The spreads in BOT arrangements can double that.").

137. Hensley & White, *supra* note 49.

138. Beg, *supra* note 7.

139. Evans in Irani, *supra* note 56, at 100.

long-term basis."¹⁴⁰ Indeed, European Union law cites the duration of agreements to undertake particular projects as a relevant factor in the determination of joint venture status.¹⁴¹ Such restrictions and customs deter foreign investors seeking shorter term investments. Also, traditional international joint ventures often suffer from indefiniteness, which creates additional complications in the event of business failure or termination.¹⁴² Events, such as, bankruptcy, merger, or nationalization, require reevaluations of the relationships between parties and often create conflicts as to ownership of assets or technology. Governments, or their respective state agencies, might also be hesitant to become involved with a foreign partner for the long term where such partnership relationships are of an undefined nature. The BOT model, on the other hand, affords both parties the predictability and security of a limited duration on one hand, while maintaining most of the beneficial elements of traditional joint ventures on the other.

B. *BOT Infrastructure Development and the Telecommunications Industry*

Project financing based upon the BOT model offers NICs an alternative method to facilitate telecommunications infrastructure development.

1. Advantages Offered by the BOT Model

The BOT scheme as a corporate mechanism for telecommunications development may be useful due to the nature of international and domestic telecommunications industries and the ability of the telecommunications sector to support itself economically. Additionally, such projects can potentially reduce investment and development costs, facilitate technology transfer, and negotiate foreign market restrictions.

First, due to increasing competition at the global level, many public and private telecommunications enterprises continue to seek competitive advantages from the state.¹⁴³ Cross-subsidization and defense procurements are still relied on to finance telecommunications technology research and development.¹⁴⁴ Perhaps more important, however, is the fact that private investors need assurances of the sta-

140. Commission Notice on the Concentrative and Cooperative Operations Under Council Regulation (EEC) No. 4064/89 of 21 December 1989 On the Control of Concentrations Between Undertakings, art. 8, 1990 O.J. (C 203) 10, 11 (emphasis added).

141. John H. Riggs, Jr. & Anthony Giustini, *Joint Ventures Under EEC Competition Law*, 46 Bus. LAW. 851, 878 & n.116 (1991).

142. Evans in Irani, *supra* note 56, at 99.

143. Bell, *supra* note 105, at 341.

144. See *supra* text accompanying notes 107, 120.

bility of host governments and the predictability of their investment market. Such assurances and incentives can be provided by the government to projects structured under BOT arrangements through the licensing procedure, national tariff legislation or contractual concessions.

BOT projects also enable wary governments to privatize in the short term while retaining future control. Many governments of NICs still wish to control the operation of communications services since the sector has such direct effects upon the lives of their citizens.¹⁴⁵ Host governments will seek to assert a role in system expansion planning, rural access, and providing low-cost, efficient services to their citizens.¹⁴⁶ Furthermore, since the effective operation of telecommunications industries has historically depended upon defense procurement funding and state-subsidized research and development, immediate and unilateral privatization may create turmoil within nations where public and private sectors are merged and lack clear definition.¹⁴⁷ BOT projects enable the partnership of both public and private sectors, thus exposing the public sector to market-based policy making and modernized operations. With the help of effective regulatory mechanisms, the BOT arrangement presents a compromise to these competing interests.

Second, telecommunications network development and upgrade projects have demonstrated the ability to be economically self-supporting, without relying upon foreign loans for continued financial support. For example, Turkey began upgrading its communications infrastructure in the early 1980s, increasing the number of phone lines per 100 persons from 3.5 in 1983 to 16 in 1992. Turkey's current calling revenues are now sufficient to fully finance continuing network development.¹⁴⁸ This factor provides further reassurance to both foreign investors and potential lenders of the feasibility of the limited recourse nature of such BOT telecommunications projects.¹⁴⁹

Third, BOT projects can reduce overall investment costs in the event a large, multipurpose private entity can be attracted to act as a project sponsor. It has been asserted that a private firm which acts as both the owner and operator of a project, in addition to acting as designer and builder, "has strong incentives to design the facility for

145. See generally Bell, *supra* note 105 (describing the ideological and nationalistic concerns over private control of communications).

146. See *supra* text accompanying note 136.

147. Cf. Bell, *supra* note 105, at 341.

148. Arnst et al., *supra* note 2.

149. This factor also strongly supports the practicality of pursuing a project financing based upon the BOO (Build-Own-Operate) model as an additional alternative. See *supra* part II.C.

efficient, lower-cost operations.”¹⁵⁰ Where project structures are of limited duration, private sponsors will naturally be motivated to provide quality services and run an efficient operation from an early stage to recover costs and profit through consumer revenue. In acknowledgment of the enormous amounts of capital required to adequately develop an efficient telecommunications network, such cost cutting considerations become highly relevant.

Most importantly, developing countries require access to private sector technology, as well as private sector capital, to effectively develop telecommunications infrastructure.¹⁵¹ Technology transfer can be facilitated through the BOT contract by way of an equity investment or license to the project company. On one hand, technology owners rest assured that such technology will not be misused by a host government and indeed may retain some control over its use if the technology is received by the company through an equity investment. On the other hand, private sector management and operation of the BOT project may increase the likelihood that telecommunications technology will be utilized to its maximum potential. Similarly, transfer of technology to a BOT project may more effectively allocate technology risk during a project’s higher risk initial stages to the private sector, and away from the host government.

Some governments insist on the BOT arrangement as a condition to foreign participation in certain business ventures. China, for example, has an existing national policy which “prohibits foreign investors from exclusive operation and control of infrastructure projects that closely affect the daily lives of the Chinese people.”¹⁵² In the power industry, the Chinese government has recently passed legislation designating “that with the exception of build-operate-transfer (BOT) projects, a foreign investor generally is not permitted to take more than a 30% equity interest in a power plant.”¹⁵³ The existence of similar restrictions in other industries¹⁵⁴ creates a strong presumption that the telecommunication industry, due to its direct influence upon the populace and potential for antigovernmental use, will be subjected to similar conditions.

150. *Prepared a Federal Privatization Agenda Testimony of Robert W. Poole, Jr. Presented Before the Senate Budget Committee*, FED. NEWS SERVICE, Mar. 7, 1995, available in LEXIS, WORLD Library, ALLWLD File.

151. *See supra* part III.

152. Lam, *supra* note 83.

153. *Id.*

154. Such industries also include the construction and operation of shipping ports and wharves. *Id.*

2. Potential Disadvantages and Problems

The use of the BOT model in developing telecommunication infrastructure is not without its disadvantages. The untested risk allocation structure, potential conflicts of interest, issues regarding technology transfer, and the limited liability nature of nonrecourse financing are factors that should make potential investors cautious when entering such project financing arrangements.

First, a distinguishable and untested risk profile arises in project financing arrangements which is complicated by the characteristics of any particular project.¹⁵⁵ Completion, operation, and political risks must be adequately understood and provided for within the contracts that define the project.¹⁵⁶ The completion risk comprises the risks involved during the initial construction and start-up phases necessary to bring the project into operation.¹⁵⁷ This initial period presents the highest risk due to potential problems, such as, cost overruns, delays in infrastructure construction, and technical failures.¹⁵⁸ Operation risk will depend on the management expertise of an operator, the competence of the work force, and the project's susceptibility to breakdown and environmental degradation.¹⁵⁹ The primary political risk arising under such agreement is the threat of nationalization of project facilities during the concession period.¹⁶⁰

Political risk . . . [also] includes the risk of civil disorder and revolutions, outright expropriations without compensation or creeping expropriations such as the imposition of taxes or royalties, the removal of construction licenses or licenses for the import of project equipment, the imposition of export prohibitions or price controls, exchange control regulations and forced management.¹⁶¹

In contrast to some other BOT projects (*i.e.*, power projects), fixed network telecommunications projects require project operators to sell services directly to domestic consumers to raise revenue, rather than to the host government.¹⁶² This lack of guaranteed revenue creates a risk many potential investors may be hesitant to take. It also

155. Traverso, *supra* note 29.

156. *See infra* part V.C.

157. PHILIP WOOD, 2A LAW AND PRACTICE OF INTERNATIONAL FINANCE § 14.01 (1990).

158. *Id.*

159. *Id.*

160. Project participation by certain multilateral financial institutions such as the IFC may mitigate this risk of nationalization in the eyes of more conservative lenders. *See generally* Soulard, *supra* note 23.

161. WOOD, *supra* note 157.

162. *The Scramble for Telecoms*, EUROMONEY TRADE FIN. AND BANKER INT'L, Mar. 23, 1995, available in LEXIS, WORLD Library, ALLWLD File [hereinafter *Scramble for Telecoms*].

may remove "government commitment to currency conversion," further exacerbating investment risk.¹⁶³ Thus, lenders and equity sponsors require proper understanding of and protections against these risks from the outset, tasks which require highly effective lawyering in the form of both consultation and drafting.

Conflicts of interest may also arise in BOT telecommunications projects. The World Bank recently cited problems in Thailand regarding that country's policy of granting franchises to the public sector through BOT contracts.¹⁶⁴ The report noted that as the public Telephone Organization of Thailand (TOT)¹⁶⁵ entered into new markets through private concessionary partnering, TOT functioned simultaneously as an operator and regulator of telecommunications services.¹⁶⁶ This duality created a conflict, "because as an operator [TOT] must maximize revenue," yet as a regulator the agency "may seek faster network expansion" and low cost public services.¹⁶⁷ Moreover, additional potential conflicts faced TOT since, upon privatization, the agency would directly compete against its own BOT contractors while still regulating their activities.¹⁶⁸

While these issues may appear unresolvable, independent administrative control may provide an effective solution. The World Bank recommended that Thailand create a legislative plan "which would better define the roles of TOT . . . and private sector participants" and "separate regulatory from operational functions."¹⁶⁹ This course more closely resembles the course the United States adopted in creating the Federal Communications Commission and granting the concession to AT&T years ago.¹⁷⁰

A significant issue facing private companies supplying technology to a BOT project concerns how the reversionary transfer of telecommunications infrastructure to the host government will occur at the end of the concession. Some suppliers may be encouraged to supply outdated technology since the project will ultimately revert to the host government. Also, some suppliers may be hesitant to supply more unstable governments with access to informational and communications network infrastructure in the fear that, upon reversion to the

163. *Id.*

164. *Preaching Privatization for Thai Telecoms*, E. ASIAN AFFAIRS, Jan. 4, 1995, available in LEXIS, BUSFIN Library, ALLNWS File [hereinafter *Preaching Privatization*].

165. TOT controls both local and international telecommunications in Thailand. *Id.*

166. *Id.*

167. *Id.*

168. *Id.*

169. *Id.*

170. *See United States v. Western Elec. Co. Inc.*, 1956 Trade Cas. (CCH) ¶ 68,246 (Jan. 24, 1956).

government, such technology may be misused. While such concerns are warranted, effective structuring of the BOT arrangement may serve to alleviate many of these issues surrounding technology transfer.¹⁷¹

Finally, the limited liability nature of project financing has been criticized by some. Project financing has been attacked as being a "heads I win; tails you lose" tactic which encourages investors to pursue extremely risky ventures at the potential expense of the public.¹⁷² Due to the limited recourse nature of BOTs, "the problems of the investors are passed on to subscribers in poor line quality, a low call connection ratio, long delays in repairing lines, relatively high communications costs and poor network management that manifests itself in inaccurate billing."¹⁷³ Indeed, it is the nature of such a project that no ultimate agent will be subjected to ultimate liability in the event of loan default. These risks may be mitigated, however, through government subsidization and tax incentives, by the use of extensive price fluctuation formulas within the contract, or through insurance.¹⁷⁴

Even with such disadvantages in mind, the potential benefits offered by the BOT model may outweigh any potential risks. Such projects offer foreign investors the security of having a high-risk/high-reward investment of a defined duration. BOTs offer the opportunity for limiting a host government's financial and managerial responsibilities in the short-term while offering the government the assurance of future control. Finally, BOTs can facilitate the efficient establishment of telecommunications infrastructure in countries requiring a large influx of both capital and technology.

V. LEGAL IMPLICATIONS OF BOT ARRANGEMENTS

Due to relatively recent development of project financing methods, existing legal commentary and case precedent relating to the subject is quite scarce. For this reason, an adequate understanding of the legal risks and contractual issues arising in the arrangement of such projects becomes essential.

171. See *infra* part V.C.7.

172. Jonathan R. Macey, *The Limited Liability Company: Lessons for Corporate Law*, 73 WASH. U. L.Q. 433, 448 (1995).

173. *Shortfalls of BOT Concessions Beginning to Appear*, BUS. ASIA, Sept. 13, 1993, available in LEXIS, BUSFIN Library, ALLNWS File.

174. See *infra* part V.C.

A. *The Legal Nature of Concessionary Agreements*

A BOT structured project requires a concessionary arrangement to be worked out between the project company and the government. Since some of the contractual obligations imposed upon the private party may be generated by legislation or decrees, legal anomalies arise due to the concession agreement's constitution as both contract and sovereign act.¹⁷⁵

Countries based upon the common law tradition "distinguish between private and government contracts."¹⁷⁶ Often, under such legal regimes, contractual and tort remedies are afforded as protection only for breaches that arise under private contracts.¹⁷⁷ In addition, "at common law, a private party to a government contract [generally] has no recourse against the government if the government breaches the contract."¹⁷⁸

Civil legal systems can be differentiated between those based upon either the French or German traditions.¹⁷⁹ French civil law system defines concession agreements according to the doctrine of "contrat administratif," rather than basing such agreements upon the doctrine of "contrat prive."¹⁸⁰ Thereby, French law "treats the parties to a 'contrat administratif' unequally and enables the state or its [contracting] instrumentality . . . to amend unilaterally the provisions of the contract."¹⁸¹ In contrast, under the German civil law system, the granting of a concession or license is considered a unilateral administrative act and there is no distinction between private and government contracts.¹⁸² The contract serves merely "to elaborate the relationship between the concessionaire and the government."¹⁸³ Thus, under the German legal system, a concession agreement's binding power is predicated "upon the existence of a valid administrative act."¹⁸⁴

In the past, host governments have attempted to avoid the legally binding nature of their obligations under concession agreements by relying upon the doctrine of sovereign immunity.¹⁸⁵ How-

175. Soloveytchik, *supra* note 67, at 264.

176. *Id.*

177. *Id.*

178. *Id.* A host government might permit suits, however, either explicitly within the concession agreement or by law. *Id.*

179. *Id.* at 265.

180. *Id.*

181. *Id.*

182. *Id.*

183. *Id.*

184. *Id.* at 265-66.

185. *Id.* at 266. *See, e.g.,* *Texaco Overseas Co. v. Libya*, 53 I.L.R. 389, 422 (I.C.J. Arb. 1977). For more on the doctrine of foreign immunity and its application to concession agree-

ever, institutional arbitrations and courts have almost universally rejected sovereign immunity defenses on international legal grounds where stabilization clauses are included within the concession agreement.¹⁸⁶ Such clauses act as a waiver of sovereign immunity and may also subject host governments to U.S. jurisdiction in the event American parties are involved.¹⁸⁷ Such findings magnify the need of promoters to insist upon stabilization or antinationalization clauses in the concession agreement in order to protect themselves under international law against unilateral termination by a host government.

Some European jurisprudential thought advances the view that concession agreements are to be considered "commercial transactions" between the state and private industry.¹⁸⁸ Under United States law, this characterization of concession agreements would place them in the realm of "commercial activity"¹⁸⁹ under the Foreign Sovereign Immunities Act of 1976,¹⁹⁰ which could result in a loss of sovereign immunity in disputes with foreign concessionaires.

Despite the fact that international judicial institutions have upheld the legal obligations created by concession contracts, it must be acknowledged that such protection may not prove satisfactory. Private companies may place too much reliance upon the contractual relationship and fail to recognize the importance of maintaining an open and honest understanding with their governmental partners. It can be argued that such a close relationship, based upon complete understanding of the risks and goals of the parties, is of utmost necessity under the BOT scheme in light of the concessionary nature of BOT projects (*i.e.*, private control and management of project company by private sector during concession but ultimate assumption of control by

ments, see Georges R. Delaume, *Economic Development and Sovereign Immunity*, 79 AM. J. INT'L L. 319 (1995).

186. Soloveytkhik, *supra* note 67, at 266, 267 n.19 (discussing effect of *Texaco Overseas Co. v. Libya* *supra* note 185).

187. Rebecca J. Simmons, Note, *Nationalized and Denationalized Commercial Enterprises under the Foreign Sovereign Immunities Act*, 90 COLUM. L. REV. 2278, 2287 (1990).

188. F. A. Mann, *The State Immunity Act 1978*, 50 BRIT. Y.B. INT'L L. 43, 52 (1979).

189. See, e.g., *Republic of Argentina v. Weltover, Inc.*, 504 U.S. 607, 614 (1992). For a detailed description of *Weltover, Inc.* and an explanation of the Court's characterization of the public debt of foreign states as "commercial activity," see Georges R. Delaume, *The Foreign Sovereign Immunities Act and Public Debt Litigation: Some Fifteen Years Later*, 88 AM. J. INT'L L. 257 (1994).

190. Foreign Sovereign Immunities Act of 1976, 28 U.S.C.A. §§ 1602-1611 (West Supp. 1995). The "commercial" exception of § 1605(a)(2) provides that a foreign state is not immune from suit in cases where state commercial activity causes direct effects in the United States. Foreign courts have also created similar exceptions to the doctrine of sovereign immunity. See Mann, *supra* note 188. See generally Delaume, *supra* note 185 (providing a more detailed explanation of sovereign immunity, the commercial exception and its extension to foreign jurisdiction and legislation).

host government), as well as the importance of telecommunications service to the general public. Since the project is nonrecourse, all parties will have strong incentives to see that the project makes money. But further, since such projects also involve technology transfers to foreign state agencies, investors may have even stronger incentives to ensure a solid relationship with its governmental partner.

B. *The Regulatory Framework*

Various regulatory mechanisms will affect the usage of the BOT model for the development of telecommunications projects. National regulation of BOT projects, the existence of bilateral and multilateral treaties, and the national and international regulation of the telecommunications industry, all become relevant when assessing the advantages of the use of a BOT model in developing network infrastructure.

1. National Regulative Methods

“Telecoms projects generally, and fixed network projects especially, rely on a definitive regulatory framework.”¹⁹¹ National legislative efforts by a host government will affect both the regulation of BOT projects on the one hand, and telecommunications projects, in particular, on the other. Regulation should provide a “clear framework for the enforcement of contractual obligations,” as well as, in the interest of foreign investors, “a comprehensive and reliable mechanism for ensuring that earnings in the local currency can be converted into foreign currency and repatriated.”¹⁹² An example from Vietnam’s BOT Regulations states:

The government shall guarantee that the revenue received by the BOT company during this period of operation be converted from Vietnamese currency into foreign currencies in accordance with the contract for the purposes of repaying loan capital and interest, paying all expenditure requiring foreign currency and paying to foreign investors their share of profits which are transferred abroad.¹⁹³

The regulation of concession agreements by the host government may be either through independent legislation, or through ordinary contract and administrative law.¹⁹⁴ Turkey, for example, recently passed legislation to ensure effective implementation of BOT arrange-

191. *Scramble for Telecoms*, *supra* note 162.

192. Ian Arstall & David Platt, *Project Finance*, INT’L FIN. L. REV., Feb. 1995, at 27, available in LEXIS, BUSFIN Library, ALLNWS File.

193. *Id.*

194. Soloveytchik, *supra* note 67, at 267.

ments.¹⁹⁵ The proclamation delineates the method for awarding contracts to local joint stock and foreign companies that seek to provide capital investment or services under BOT arrangements.¹⁹⁶ It also sets forth the particular authorization procedure and the required characteristics of companies seeking to participate in BOT projects, such as, technical qualifications and investment and capitalization ratios.¹⁹⁷ The enactment of this legislation in Turkey removed BOT projects from the realm of concessions, which can only be arbitrated when claims arise in Turkish tribunals.¹⁹⁸ Contracting participants now have the ability to directly appeal to international courts for the resolution of disputes arising from BOT projects.¹⁹⁹

The scope of such national proposals will be specifically tailored to a host country seeking to utilize the BOT structure. Invariably, such legislation will depend upon each particular nation's comfort zone with regard to foreign investment, its commitment to the BOT model, and its faith in the ability of international bodies to effectively handle extranational appeals.

A host government's regulation of the telecommunications industry will also affect the practicality of utilizing project financing. Primarily, governments must establish independent regulatory bodies, distinct from state-controlled PTTs, to resolve inherent conflicts of interest that may arise due to short-term privatization attempts.²⁰⁰ A fundamental priority for such a regulatory agency would be to establish a tariff structure in accordance with principles of open competition and which ensures that telecommunications suppliers do not exploit dominant market positions.²⁰¹ On the other hand, such regulation must also acknowledge the need for foreign sponsors of BOT projects to create adequate revenue to pay off investment costs.

Alternatively, or as supplemental sources of authority, several countries have established codes dealing specifically with the issues that arise when concessions are granted within particular industries.²⁰²

195. Turkish Decree No. 94/5907, concerning the Method and Principles of Application Regarding the realization of some Investments and Services Under the Build-Operate-Transfer Model, effective Oct. 1, 1994, reprinted in *BOT Regulations*, MIDDLE E. EXECUTIVE REP., Nov. 1994, at 25 [hereinafter *Turkish Decree in BOT Regulations*], available in LEXIS, WORLD Library, ALLNWS File.

196. *Id.*

197. *Id.*

198. Jim Bodgener, *BOT Formula Might Save the Day*, MEEED MIDDLE E. BUS WKLY., July 29, 1994.

199. *Id.*

200. See *supra* text accompanying note 165.

201. *Preaching Privatization*, *supra* note 164.

202. Soloveytchik, *supra* note 67, at 267.

Such codes may set forth requirements regarding ownership of resources, state participation in the operation of the project, tax regulation, or bidding procedures, with particularity as to the industry in which a concession is granted.²⁰³

2. Bilateral and Multilateral Treaties

With regard to issues regarding foreign investment, bilateral and multilateral treaties between the governments often affect the resolution of conflicts that may arise within a BOT investment arrangement.²⁰⁴ Such treaties typically provide that host governments attracting foreign investments “will accord fair and equitable treatment of foreign investors” and will generally “allow for the free transfer of a foreign company’s earnings.”²⁰⁵ Moreover, restrictions on state expropriations and assurances of “prompt, adequate and effective compensation” in return for governmental takings are standard provisions.²⁰⁶ Finally, arbitration provisions which serve as dispute settlement mechanisms are often included.²⁰⁷

While it is difficult to gauge the actual extent of protections offered by bilateral investment treaties, they do seem to enhance the security of overseas investments by providing investors with substantive rights.²⁰⁸ Some commentators acknowledge that the presence of bilateral investment treaties alone may cause host governments to reevaluate their legislative and constitutional provisions affecting foreign investment.²⁰⁹ At the least, such treaties should provide investors with interests in foreign contracts additional assurances that their overseas involvements will be protected against nationalization or expropriation by host governments.

Attempts to provide a uniform international telecommunications regulatory framework through a multilateral treaty were made during negotiations for the General Agreement on Trade in Services (GATS).²¹⁰ The purpose in seeking to establish a structure for open network activities is to:

promote open international markets for the provision of telecommunication network-based services, ensure fair and competitive

203. *Id.*

204. Robin, *supra* note 51, at 942.

205. *Id.*

206. *Id.* at 942 & n.82, 952 n.139.

207. *Id.* at 942 & n.83.

208. *Id.* at 943-44 & n.89.

209. *Id.* at 944 n.90.

210. Uruguay Round, *supra* note 120, General Agreement on Trade in Services, Part II - Annex 1B, ¶ 6.

market conditions, equal technical access to reserved facilities and services, transparency of public network protocols and technology, and protect suppliers of competitive facilities and services from unfair practices and discrimination by public telecommunication operators.²¹¹

Unfortunately, such a regulatory format is still currently under consideration,²¹² and potential investors must look to other regulatory bodies to determine the feasibility of telecommunications investment into NICs in the near future.

3. The International Telecommunication Union

For the past century, the International Telecommunication Union (ITU) has been the principal organization affecting the international regulation of telecommunications activity.²¹³ The purposes of the ITU are:

- (a) to maintain and extend international cooperation for the improvement and rational use of telecommunications of all kinds; (b) to promote the development of technical facilities and their most efficient operation with a view to improving the efficiency of telecommunications services, increasing their usefulness and making them, so far as possible, generally available to the public; and (c) to harmonize the actions of nations in the attainment of those ends.²¹⁴

In pursuit of this goal, the ITU has instituted guidelines governing telecommunications equipment manufacture, operations, and tariff setting. It has served as a forum for the exchange of technical information to be used in the construction and operation of telecommunications service.²¹⁵ This development of international technical standardization has enabled technicians to interconnect incompatible operating systems into a global network.²¹⁶

Although the ITU has been effective in facilitating the interconnection and interoperability of the global telecommunications network by providing standards and a forum for discussion, the organization lacks enforcement power.

211. OECD in STEPHAN ET AL., *supra* note 92, at 787.

212. See Uruguay Round, *supra* note 120, part III, Ministerial Decisions and Declarations, 7(d): Decision on Negotiations on Basic Telecommunications.

213. Fascell & Schlundt, *supra* note 23, at 496. Originally founded in 1865, the ITU was formally reorganized in 1947. International Telecommunications Convention, Oct. 2, 1947, 63 Stat. 1399 (amended in Malaga-Torremolinos, Spain in 1973).

214. International Telecommunications Convention, *supra* note 213, art. 3, § 1.

215. Fascell & Schlundt, *supra* note 23, at 496.

216. Anne W. Branscomb, *Global Governance of Global Networks: A Survey of Transborder Data Flow in Transition*, 36 VAND. L. REV. 985, 997 (1983).

The ITU essentially is a cooperative venture among nations that provides a forum for negotiating agreements which facilitate the flow of information across national borders through electronic means. . . .

. . . .

. . . Participation is completely voluntary; the organization has no sanctions to enforce compliance and no mandate to develop operational services.²¹⁷

This lack of enforcement power and limited operational authority can create a relatively unsettling environment for foreign investors seeking to participate in the international telecommunications industry.

As a response to these asserted problems with such traditional approaches to telecommunications development and the regulation thereof, the ITU is seeking to create a new organization, WorldTel, in an attempt to attract multinational funding from private industry.²¹⁸ This new organization will support project financing initiatives, such as, build-own-operate and build-operate-transfer, by "providing direct equity investment raised from private investors, as well as coordinating project finance from other sources."²¹⁹

4. The Federal Communications Commission

Finally, the role of the Federal Communications Commission (FCC) should not be underestimated in any discussion regarding the regulation of international telecommunications. The FCC is granted jurisdiction over foreign communications by radio, wire, and cable pursuant to the Communications Act of 1934 (as amended)²²⁰ and the International Maritime Act of 1978.²²¹ The FCC also interacts with PTTs through such formal settings as the ITU and the Organization for Economic Cooperation and Development (OECD), and through informal bilateral discussions and consultations, for the purposes of planning facilities and exchanging information regarding the development and regulation of communications systems.²²²

217. *Id.* at 997-98.

218. Julian Bright & Stephen McClelland, *ITU Plan to Close North/South Communications Gap*, TELECOMM. (International Edition), July 1995, available in LEXIS, BUSFIN Library, ALLNWS File.

219. *Id.*

220. Communications Act of 1934, 47 U.S.C. §§ 151-613 (1988 & Supp. 1993).

221. Chiron & Rehberg, *supra* note 102, at 3 n.6. Relevant language contained within Section 1 of the amended Communications Act of 1934 specifically authorizes the FCC to promote "a rapid, efficient, nation-wide, and world-wide wire and radio communication service." 47 U.S.C. § 151 (1988 & Supp. 1993) (emphasis added).

222. Chiron & Rehberg, *supra* note 102, at 7.

In serving the public interest, the FCC controls rates, facilitates interconnection of individual network systems, and provides approval for the construction and operation of network facilities.²²³ By eliminating obstacles to entry into the international communications field, "the Commission has sought to increase the number of carriers providing service, thus providing users with additional carrier and service options, creating a downward pressure on rates, and permitting carriers to efficiently utilize new technologies."²²⁴ The FCC has displayed an increasing willingness to extend domestic regulatory rulings to the international level.²²⁵ One such decision was the extension of the "basic/enhanced services dichotomy," as set forth in the Second Computer Inquiry,²²⁶ to the international arena.²²⁷ A final example of FCC participation in the area of international telecommunications development has been its "continued use of rate base regulation for carriers with clear market power or for carriers who provide a service on a monopoly basis."²²⁸

These factors demonstrate the ability of the FCC to foster effective telecommunication development at the international level. Such FCC participation may, in turn, be increasingly solicited to assist foreign host governments in establishing reliable rate determinations, clear interoperability standards and reasonable regulatory provisions in the event such governments seek to avail themselves of project financing techniques in the area of telecommunications development.

C. Contractual Assurances

Contractual protections are of primary significance to project finance structuring due to the somewhat undefined legal status of concession agreements and lack of a cohesive international regime which might provide dependable enforcement and regulatory functions in resolving conflicts between project participants. BOT arrangements,

223. *Id.* at 6.

224. *Id.* at 9.

225. *Id.* at 10.

226. *Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry)*, 77 F.C.C.2d 384, 386 (1980). In an attempt to address new regulatory issues arising from the convergence of the communications and data processing industries, the FCC differentiated between basic communication services and enhanced services. The former were subjected to "traditional Title II regulatory requirements such as rate-of-return regulations, tariffing requirements, and facilities authorization," while the latter were found to be outside the scope of Title II jurisdiction. Chiron & Rehberg, *supra* note 102, at 49-50. For an explanation of the current status of the basic/enhanced services dichotomy, see generally Robert M. Frieden, *The Third Computer Inquiry: A Deregulatory Dilemma*, 38 FED. COMM. L.J. 383 (1987).

227. *Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry)* 84 F.C.C.2d 50, 67 (1980).

228. Chiron & Rehberg, *supra* note 102, at 10-11.

like other alternative project financing methods, require detailed and particularized contract drafting due to the complex legal relationships between the parties and the importance of adequate risk allocation.²²⁹ Predictable risk allocation becomes crucial to such projects since “sponsors raise funds secured only by the revenue and assets of the project” without the existence of an ultimate guarantor to ensure project completion.²³⁰

1. The Concession Agreement

The concession agreement, entered into by the applicable administrative agency of the host government and the project company, establishes the essential definition of the project’s directive and provides the license for construction and operation of the project.²³¹ The contract “should carefully define what is required of the concession operator, what precisely the operator will be permitted to do, and, most importantly, the length of time for which the concession is granted.”²³² In addition, this agreement may also set out the corporate charter of the project company, with provisions regarding “equity and shareholding structure, restrictions on foreign ownership and control, the internal organisation and management, and the structure of the board of directors.”²³³

The concession agreement may also designate a fixed rate of return.²³⁴ Presumably, this would be tied to consumer rates of telecommunications services and may assist in minimizing financial risk and in obtaining flexibility in accessing additional capital.²³⁵ Unfortunately, fixing the rate of return fails to address capital cost attribution and may negatively affect the overall efficiency of the project or deter lenders.²³⁶ In the alternative, fixed rates of return may provide project sponsors with a windfall at the expense of the consuming public.²³⁷

229. Traverso, *supra* note 29.

230. *Asian Infrastructure; The Biggest Bet on Earth*, FORTUNE, Oct. 31, 1994, at 139.

231. Morris Fletcher & Cross, ON SITE, 1 MF&C CONSTRUCTION NEWSLETTER 3, Sept. 1991, at 4-5 (article on file with the *Santa Clara Computer and High Technology Law Journal*).

232. Sidley & Austin, *supra* note 132, at 6. Such terms should also reflect terms provided for under the Operations and Management Agreement. See *infra* part V.C.5.

233. Morris Fletcher & Cross, *supra* note 231, at 4. Such terms may, in the alternative, be provided for in the company bylaws or within a consortium agreement. See *infra* parts V.C.2.a-b.

234. This course has been insisted upon by such countries as China and India in the past. Burr, *supra* note 46.

235. Morris Fletcher & Cross, *supra* note 231, at 7.

236. Burr, *supra* note 46.

237. The Chinese government has recently voiced concern over such investment returns and is rumored to be considering capping rates of return at 12%. Louise Lucas & Simon Holberton,

These problems may be overcome however, by implementing a competitive bidding procedure with an unbiased approval process.²³⁸

Additional issues that will arise when drafting the terms of the concession agreement include: whether the host government is to be compensated through royalty payments and taxation or by an equity share in the project company; whether the company will be included within the scope of existing price controls or mandatory local sale specifications; and whether the company will be permitted to freely import foreign materials and equipment supplies.²³⁹ The concession agreement also should establish the terms of ownership of the project. Since telecommunications projects will require licenses, easements, and other various leasehold interests to be provided to the project company, the terms of such agreements must be adequately defined and may coincide with the duration of the concession period. It may also be necessary to include renewal provisions to facilitate future restructuring in the event the parties wish to extend the concession period.

The sponsors and lenders of the company may wish to seek additional guarantees from the government to enhance the security outlay of the project.²⁴⁰ The government may be required to provide protections against specified force majeure occurrences or tax reassessments.²⁴¹ Foreign sponsors may seek to permit indexation of telecommunications service prices as protection against inflation or fluctuations in the foreign exchange rate.²⁴² Investors may want the government to guarantee that the convertibility of local currency and remittability of foreign exchange extends to imported capital, debt services dividends, and capital repatriation.²⁴³ The investors may also insist that the government provide foreign exchange insurance to enable the project company to predict the actual cost of foreign debt service commitments.²⁴⁴

Finally, and perhaps most importantly, the concession agreement must enable the project company "to freely exploit the project with

Fear of China Cap on Power Profits – Rumours of Investment Return Limits, FIN. TIMES, May 13, 1994, at 6, available in LEXIS, NEWS Library, ALLNWS File.

238. *Id.*

239. Wood, *supra* note 157, § 14.05[2].

240. Such provisions may be consolidated into the Project Financing agreement or otherwise included within the Concession agreement.

241. Beg, *supra* note 7.

242. *Id.*

243. *Id.*

244. *Id.* Other available incentives that a host government may use are: tax holidays, waived duties on imported machinery or technology, or tariff calculations to provide attractive return on investment. *Id.*

minimum government interference.”²⁴⁵ Due to the many factors which are contributing to increasing privatizations in the telecommunications industry,²⁴⁶ as well as the inherent nature of the BOT financing structure, governmental participation should be limited, at least in the early stages of the project.²⁴⁷ The project sponsors will most definitely seek a stabilization clause ensuring against the nationalization of the project prior to its natural termination.²⁴⁸ Such a stabilization provision should clearly define the activities that will constitute a “nationalization” by the government.²⁴⁹ Government guarantees against nationalization or expropriation should reflect the duration of the project and may take the form of liquidated damages.²⁵⁰

2. The Project Company Structure

A BOT project financing will require the host government and project sponsor or sponsors to determine an appropriate corporate structure for the concession or “project” company.²⁵¹ When choosing an appropriate corporate structure and determining the manner of equity contribution to the project company, sponsors should be mindful of the three general categories of risk which need to be allocated by contract in a typical project financing: design engineering and construction risks, start-up risks, and operating risks.²⁵²

a. *The Consortium Agreement*

Depending upon the existence of large corporate partners capable of sponsoring such a telecommunications network project wholly on its own, the project company may be controlled by a consortium, com-

245. Morris Fletcher & Cross, *supra* note 231, at 4. See *infra* part V.C.5.

246. See *supra* part III (discussing problems facing state control of and technological factors contributing to privatization of telecommunications industries).

247. Restrictions on governmental control over the project may also protect the state from project liabilities.

248. As stated earlier, the lack of a stabilization clause in a concessionary agreement may be cause enough, under international law, for a foreign government to escape its obligations on the basis of sovereign immunity. See *supra* note 186 and accompanying text.

249. In Thailand, a recent highway project financing was disassembled when the parties failed to agree as to whether the Thai government's forcing open of a toll road, prior to complete party agreement as to revenue-sharing and other matters, constituted a “nationalization” of the project. Paul A. Sherer, *Mass-Transit Mystery: Bangkok Begins Building As-Yet Unfunded Railway*, *ASIAN WALL ST. J. WKLY.*, May 1, 1995, at 1, 11.

250. Since the project company is depending upon a 20 to 30-year concession period in which to recover its costs and repay its lenders, early termination would call for increased damages liability in the event of such a breach. In addition, quantifying liquidated damages in such projects may result in extensive negotiations between parties since valuation of telecommunications technology contributions may be complicated and somewhat indefinite.

251. Morris Fletcher & Cross, *supra* note 231, at 5.

252. Hoffman, *supra* note 75, at 195.

prised of "construction companies, consultants, financiers and equipment suppliers."²⁵³ The host government may also wish to participate in the project company through an equity position,²⁵⁴ especially since telecommunications service provision remains a viable component to the political policies of many NIC governments.

In the event such a consortium of players exists, a consortium agreement will be necessary to regulate the relationship between the members and to define the day-to-day management of the company.²⁵⁵ The contract should clarify funding responsibilities²⁵⁶ and levels of party shareholding, as well as any restrictions on share transfer.²⁵⁷ The parties to the project may also wish to include a detailed liquidation procedure for protection against project failure prior to transfer to the host government. Further, charter documents "should address issues such as share capital, directors, requirements regarding loan finance, appointment of [financial and legal advisors], access to accounting records, confidentiality, dividend policy, share transfers, debt servicing, governing law, service of process, and resolution of disputes."²⁵⁸ While an adequate explanation of loan syndications and consortiums is beyond the scope of this article, the practitioner should be wary of the many issues arising under such financing arrangements in the event such cooperative lending mechanisms are utilized.²⁵⁹

b. The Project Company

Primary factors to be considered when determining an ownership structure for the project company will include: the potential "need for a relatively high proportion of equity to debt;" the concern regarding project management; the taxation and credit impact; and the transferability of interests in the project company.²⁶⁰ The sponsor or sponsors of the project may either establish a joint venture arrangement or create in the jurisdiction of the project a separate business entity in which

253. Morris Fletcher & Cross, *supra* note 231, at 5.

254. *Id.*

255. *Id.*

256. Such funding responsibilities would take the form of equity injections to the sponsor company. *Id.*

257. The determination of shareholding levels will be dependent upon the stage of the project financing. *Id.* For example, "if the contractor responsible for construction is a member of the consortium, it should be a requirement that its shareholding be maintained at a specific percentage for at least the duration of the construction phase of the project." *Id.*

258. *Id.* at 6.

259. For a comprehensive discussion of the syndication of loans in financing public and private entities at the international level, see Brian W. Semkow, *Syndicating and Rescheduling International Financial Transactions: A Survey of the Legal Issues Encountered by Commercial Banks*, 18 INT'L. LAW. 869 (1984); *see also* Wood, *supra* note 157, § 11.

260. Hoffman, *supra* note 75, at 189.

the sponsors hold shares.²⁶¹ The corporate law of the project's jurisdiction will need to be examined in order to determine the feasibility of each particular corporate arrangement for the BOT financing.²⁶²

(i) *Parent/Subsidiary*

Assuming the existence of only one large project sponsor, a single purpose corporate subsidiary may be utilized for the project financing.²⁶³ Under such an arrangement, the project sponsor typically incorporates a wholly-owned entity "solely to develop, construct, own, operate, and maintain a particular project at a specific site."²⁶⁴ The subsidiary, however, may lack sufficient capital and credit rating to support the financial risks associated with the underlying loan obligation and be required to arrange some form of credit enhancement to justify the project.²⁶⁵ This may take the form of a guarantee supplied by the parent/project sponsor to assume the obligations of the subsidiary/project owner.²⁶⁶

While such an organization enables the corporate parent a great deal of control over the project, some disadvantages may exist under such a framework. First, a parent/subsidiary relationship may create problems when the duration of the project ends and the company is transferred to the government. For example, there could be unforeseen tax repercussions or questions as to dividend disbursements to the corporate parent prior to transfer. Second, the nonrecourse nature of the project financing can be threatened by claims to "pierce the corporate veil."²⁶⁷ Third, project sponsors may be unwilling to provide guarantees to cover project obligations in what otherwise would be a limited liability investment.

261. Wood, *supra* note 157, § 14.02[1]. In the event that a consortium of players is involved and a consortium agreement exists which designates control and definition of the project company, corporate organization may be duplicative. Regardless of which contractual method is used, major issues such as conditions precedent to equity injection, share capital, directors, dividend policy, share transfers and debt servicing should be addressed.

262. Such laws may, for example, set forth financial, technical or business requirements of shareholders, mandatory capitalization ratios or required statements of purpose. See, e.g., Turkish Decree in *BOT Regulations*, *supra* note 195.

263. Hoffman, *supra* note 75, at 189.

264. *Id.*

265. *Id.* at 208.

266. *Id.*

267. Such a determination to "pierce the corporate veil" would require a showing that the project is merely an "instrumentality" of the project sponsor. See *Lowendahl v. Baltimore & O.R.R.*, 287 N.Y.S. 62 (App. Div. 1936), *aff'd*, 6 N.E.2d 56 (1936). For a more in depth discussion of the application of this equitable remedy in the area of project financing, see Hoffman, *supra* note 75, at 189-90 & n.19.

Also, some countries simply do not allow complete foreign ownership of corporate entities²⁶⁸ or otherwise restrict alien ownership of certain common carrier facilities.²⁶⁹ In addition, due to the historically highly-regulated nature of the telecommunications industry, the host government may seek to retain some control over the company during the concession operation.²⁷⁰ This may be hampered by the omission of the state as an equity participant and perhaps could be more effectively enabled through a partnership or joint venture arrangement.

(ii) *General Partnership*

A general partnership structure for a project financing is typically utilized when "the project sponsor has inadequate equity, all partners have similar tax positions, or all partners desire participation in project management and control."²⁷¹ Such an arrangement may be insisted upon by a host government that is strongly concerned about the protection of the public interest.²⁷²

In BOT project financing, as distinguished from other forms of project finance, these factors may not exist. The sponsor selected by a host government for such projects would most likely possess sufficient equity for the initial start-up.²⁷³ In the area of telecommunications, this requirement would be essential due to the large-scale initial capital costs involved in network development. Also, in the event the host government is slated to be an active participant in the project, state participation in management and control should remain somewhat limited, at least in the initial stages of the project, to provide the private sponsor with freedom to arrange financing and to ensure favorable credit enhancement.²⁷⁴ Further, host governments may be reluctant to enter project financing organized as general partnerships because of unwillingness "to assume associated joint and several liability resulting from any negligent operation of the project."²⁷⁵

268. See *supra* text accompanying note 154. See also Lam, *supra* note 83.

269. See e.g., Communications Act of 1934, 47 U.S.C. §§ 310(a), 310(b) (1988 & Supp. 1993).

270. By participating in certain aspects of project management and control during the concession period, the host government will also be afforded the opportunity to learn how to operate the network by gaining an understanding of the underlying telecommunications technology.

271. Hoffman, *supra* note 75, at 190.

272. Hurstel & Carpenter-Pecquet, *supra* note 44.

273. Indeed, under typical BOT project financings, the project sponsor will be required to tender a substantial equity contribution in order to demonstrate the sponsor's commitment to ongoing participation in the project. Morris Fletcher & Cross, *supra* note 231, at 8.

274. See *id.* See also *supra* text accompanying notes 245-50 and 294.

275. Hoffman, *supra* note 75, at 190.

(iii) *Limited Partnership*

A limited partnership structure may also be considered. Under such an organization, "each limited partner shares in the project profits while enjoying the associated limitation of liability of a limited partner."²⁷⁶ This structure can facilitate equity contributions by passive project investors, such as, contractors and equipment suppliers.²⁷⁷ Such contributions can supplement project financing and ensure that construction and equipment goals are achieved.²⁷⁸ Once the project enters the operational stage and returns become quantifiable, limited partnership interests can be purchased by the project sponsor or host government, or otherwise transferred to protect operational integrity.²⁷⁹

The limited partnership structure also enables a dominant sponsor of the project to implement the project's development as a general partner without extensive controls being compromised. This factor may be prove effective for telecommunications infrastructure development projects due to the complications associated with network interconnection and interoperability standardization. Such a structure may also afford the host government an opportunity to retain an ownership interest in the project without adversely affecting the project's ability to obtain additional sources of financing in the future.²⁸⁰

(iv) *Joint Venture*

Many sponsors of project financings choose to organize the project company as a joint venture, perhaps according to the general definitions provided above or otherwise requiring contributions of equity with corresponding shareholding proportions. Joint ventures are often utilized for a project financing by sponsors seeking to cooperate with other enterprises in order to pool financial, technological, and management resources.²⁸¹ Such entities will usually be local parties or a host government. Additional attractions offered by the joint venture vehicle include "spreading risks, efficient allocation of tax benefits, and avoidance of restrictive covenants in loan or other agreements."²⁸²

276. *Id.* at 191. For a detailed description of potential advantages and disadvantages of limited partnership arrangements, see Gordon B. Shneider, *A Historical View of Limited Partnership Roll-Ups: Causes, Abuses, and Protective Strategies*, 72 DEN U. L. REV. 403 (1995).

277. Hoffman, *supra* note 75, at 191.

278. *Id.*

279. *Id.*

280. *See supra* text accompanying notes 81, 138.

281. Hoffman, *supra* note 75, at 191.

282. *Id.*

Under a joint venture BOT arrangement, a foreign investor should be licensed to not only construct and operate the project facility but to also exploit the underlying real estate required for construction and operation of the project facility.²⁸³ Thus, the local party or host government becomes "responsible for providing land-use, construction, and operation rights and the foreign partner is responsible for coordinating the design, construction, and funding of the facility."²⁸⁴ For the duration of the concession period, the joint venture company will hold the exclusive right to operate the network facility and collect service charges.²⁸⁵ Subsequently, at the concession's termination, all rights and assets of the company, including the facility itself, are transferred to the local project partner at little or no cost.²⁸⁶

Unfortunately, host governments may require local incorporation of the project company in an attempt to exercise greater control over the project and simplify taxation.²⁸⁷ Sponsoring companies may also prefer to incorporate locally in order to facilitate the contribution of project assets, defer attribution of project liabilities into parent accounts, isolate economic and financial risks, access local tax incentives, or enable subsequent project participation by additional parties.²⁸⁸

(v) *Limited Liability Company*

The modern limited liability company²⁸⁹ may be the most effective corporate structure that can be utilized under a BOT project financing.²⁹⁰ Due to the fairly recent development of the limited liability company, such a model may be used "where tax or other considerations are more significant than a relative lack of certainty re-

283. Lam, *supra* note 83.

284. *Id.*

285. *Id.*

286. *Id.*

287. Wood, *supra* note 157, § 14.02[1].

288. *Id.*

289. The author's use of the term "limited liability company" is in reference to the recently developed American investment form rather than the British limited liability structure. It is intended to connote an organizational model that affords limited liability to equity investors while avoiding the resulting double taxation of incorporation.

290. For example, the use of limited liability companies for project financing telecommunications projects was specifically authorized by statute in Indonesia in 1993. See *Project and Structured Finance Adviser - Indonesia*, ASIAMONEY, Oct. 1994, available in LEXIS, BUSFIN Library, ALLNWS File. Such a model was also recently utilized in China to develop and operate telecommunications systems facilities. See *Largo Group Ltd. Announces Pending Sale of Telecommunications in China*, Business Wire, Mar. 23, 1995.

garding the vehicle's status under [various jurisdictional] bankruptcy or [corporate] laws."²⁹¹

Sponsors typically organize limited liability companies "to create an entity that offers investors the protections of limited liability and the flow-through tax status of partnerships."²⁹² In contrast to limited partnership arrangements, these companies do not require the existence of a general partner who is exposed to unlimited personal liability.²⁹³ This factor could prove attractive in the event that neither a host government nor foreign sponsor wish to assume general partner liability for the project. Also, limited liability companies enable investors and member participants to exercise greater control over management than other limited liability organizations.²⁹⁴ This may be attractive to host governments who wish to participate in a BOT project with limited liability status but still maintain supervisory power over the provision of telecommunications services.

One potential problem with utilizing the limited liability company structure for a BOT project is the resulting increase in borrowing costs that can result from the limited liability nature of the company.²⁹⁵ Unfortunately, this factor directly contradicts many of the economic purposes of a BOT project financing. Such borrowing problems may be rectified however by having project sponsors or development banks provide guarantees to hesitant lenders.²⁹⁶ Other criticisms of the use of limited liability companies reflect many of the same arguments of social responsibility directed at most project financings. Critics allege that "when members of a limited liability company evaluate possible investment options, they are likely only to consider the marginal costs and benefits associated with the investments *that they will be required to internalize.*"²⁹⁷ The result is such that the members profit from risky or dangerous projects that turn out well, while costs arising from unsuccessful projects are absorbed by creditors, tort victims, and consumers.²⁹⁸ While such criticisms may indeed be justified, these disadvantages may be ultimately outweighed

291. *Structured Financing Techniques*, 50 BUS. LAW. 527 n.136 (1995). For a detailed description of the structuring of limited liability companies, see MARK A. SARGENT & WALTER D. SCHWIDENTZKY, *LIMITED LIABILITY COMPANY HANDBOOK* (1995-1996).

292. Macey, *supra* note 172, at 434.

293. *Id.* at 435.

294. *Id.* at 437. And see Sandra K. Miller, *What Remedies Should Be Made Available to the Dissatisfied Participant in a Limited Liability Company?*, 44 AM. U. L. REV. 465, 469 n.9 (1994).

295. Macey, *supra* note 172, at 437.

296. *Id.*

297. *Id.* at 448 (emphasis added).

298. *Id.*

by NIC's overwhelming need to establish and upgrade telecommunications infrastructure in otherwise unfavorable financial circumstances.

3. The Project Financing and Loan Agreements

Funding for a project financing can be accessed from a variety of sources and is usually provided through a combination of debt and equity.²⁹⁹ Like other private sector projects, financial goals include cost-effective financing, minimizing risks through utilization of hedging techniques, and ensuring finance in the long term.³⁰⁰

Project financing agreements enable the nonrecourse financing nature of the arrangement by shifting risks that would normally be assumed by the company to the government.³⁰¹ A standard nonrecourse project finance provision limits available recourse against a project company, for liability in connection with any contractual breach or tort claim, to the assets of the project, and removes liability against any project sponsor or its affiliates.³⁰² Recourse against the project sponsor is limited to claims arising from fraudulent representations or warranties occurring in connection with project financing negotiations.³⁰³ Two examples are included below: the first would be for use in a loan agreement signed by the project sponsor and the actual project owner (*i.e.*, the government), the latter would be included in project finance documents other than loan documents.³⁰⁴

The [Project Sponsor] shall not be personally liable for payment of the amounts evidenced by the Note executed by the Borrower. Nothing contained herein, however, shall (i) preclude the Lender or any holder of the Notes from exercising any right or enforcing any remedy under this Agreement, or the Note, whether upon an Event of Default or otherwise, under this Agreement, the Note, or any other collateral hereunder or furnished as security for any of the indebtedness evidenced by the Note, or (ii) limit the [Project Sponsor's] liability hereunder in respect of any damages suffered by the Lender as a result of any inaccuracy of any representation in this Agreement or as a result of any fraudulent conduct on the part of the [Project Sponsor].

Any claim against the Owner [actual project owner] that may arise under this Agreement shall be made only against, and shall be

299. Hoffman, *supra* note 75, at 191.

300. Morris Fletcher & Cross, *supra* note 231, at 7.

301. Beg, *supra* note 7.

302. Hoffman, *supra* note 75, at 185.

303. *Id.* n.10.

304. *Id.*

limited to the assets of, the Owner, and no judgment, order or execution entered in any suit, action or proceeding thereon shall be obtained or enforced against any partner of the Owner or the assets of such partner or any incorporator, shareholder, officer or director of the Owner or such partner or against any direct or indirect parent corporation of affiliate or any incorporator, shareholder, officer or director of any thereof for any purpose of obtaining satisfaction of any payment of any amount arising or owing under this Agreement.³⁰⁵

A sponsor company should seek to “maximise the proportion of finance at fixed rates to minimise risks, and obtain maximum flexibility as to borrowing instruments and access to borrowing markets over the term of financing” in order to ensure effective private control.³⁰⁶ Practically speaking, the government may also have to arrange to finance a proportion of project cost over-runs,³⁰⁷ perhaps through the usage of revenue bonds³⁰⁸ or more traditional governmental borrowing schemes.

The nonrecourse nature of the project financing debt may also affect the introduction of telecommunications technology to the project. Nonrecourse liability need not extend throughout the entire concession period and the financing may be structured to enable full recourse liability to exist against a sponsor for a limited or defined period of the project development.³⁰⁹ If new technologies are to be used in a project, the project sponsor’s full recourse liability could be limited to the construction phase.³¹⁰ Subsequently, if the technology passes minimum performance tests,³¹¹ lenders could then release the project sponsor from recourse liability and shift securitization solely to the assets of the project.³¹²

Loan agreements are also complex because project financing requires different risk assessments than are usually required in traditional forms of term lending. “Project loans involve a degree of equity risk in the sense that they rely on the project for their pay out and not

305. *Id.*

306. Morris Fletcher & Cross, *supra* note 231, at 7.

307. Hoffman, *supra* note 75, at 198.

308. Robbins, *supra* note 8, at 623. Revenue bonds, which are repaid from project revenues, are more closely aligned with the general purposes of BOT project financing and further enable minimal governmental participation. In the event such bonds are utilized, a priority payment scheme may need to be determined by the parties involved.

309. Hoffman, *supra* note 75, at 185-86.

310. *Id.*

311. Such minimum performance requirements could be determined in accordance with ITU interoperability and interconnection standards. See *supra* text accompanying notes 216-19.

312. Hoffman, *supra* note 75, at 186.

on the general credit of the borrower."³¹³ In addition to standard clauses, they will specify "special covenants, liquidating damages, events of default and reference to secured offshore accounts all geared to channeling the appropriate cash flows toward timely loan repayment and investment recovery"³¹⁴ and which, in turn, should be predicated on the duration of the project. Although the existence of highly-capable, well-capitalized private sponsors may affect the predictability of a project and, subsequently, its ensuing credit terms, loan provisions will primarily be reflective of the merits of any particular project and its chances for success.

4. The Construction Agreement

With regard to the actual construction of infrastructure, certain risks are usually allocated within a construction agreement, which too will be a particularized agreement due to the nature of project financing.

Network construction costs should be delineated through a lump-sum turnkey contract, which enables "a substantial portion of the project cost [to] be fixed or hedged."³¹⁵ Under the usual "turnkey" arrangement, "a private company contracts with the [relevant] government agency to provide the financing, design, and construction of [a] facility" and subsequently leases the completed project back to the contracting government agency.³¹⁶ A BOT project financing, on the other hand, will require the project company to operate the facility for a determinate duration prior to subsequent transfer back to the government. In addition, the facility and all its assets will be wholly transferred to the host government at the end of the concession, rather than leased back to the government.

The construction risk at issue in a project financing primarily entails two distinguishable uncertainties: completion and cost overruns.³¹⁷ Completion delays can be dealt with by including liquidated damages provisions in the construction agreement, while assurances of final completion may be secured by performance bonds supplied by the project company.³¹⁸ A performance-bond provision should represent the monetary amount that would adequately compensate the host

313. Wood, *supra* note 157, § 14.01.

314. Traverso, *supra* note 29.

315. Ernst & Pham, *supra* note 25.

316. Robbins, *supra* note 8, at 624. For a detailed description of turnkey construction arrangements, see Barry Joseph Miller, *Note: The Architect in the Design-Build Model: Designing and Building the Case for Strict Liability in Tort*, 33 CASE W. RES. L. REV. 116, 125-29 (1982).

317. Ernst & Pham, *supra* note 25.

318. Sidley & Austin, *supra* note 132, at 10.

government in the event of bankruptcy, default, labor strikes or acquisitions affecting the project company.³¹⁹ Cost overruns are usually dealt with by negotiating a "fixed-price turnkey contract" with appropriate liquidated damages payments reflective of the amounts of any additional financing costs which may result from such overruns.³²⁰

In the case of BOT projects developing telecommunications infrastructure, some of these may not be satisfactory solutions. Performance bonds requirements and liquidated damages protections impose additional costs to the project, which may be passed on to consumers through higher rates. Also, since the project sponsor will probably also be the entity constructing the information network, fixed price turnkey contracts may not be feasible. As alternatives, contractual provisions can instead provide for the infusion of additional equity in the event of cost overruns by the project sponsor, other equity participants, or standby equity participants.³²¹ The contract may provide for additional standby funding agreements, such as, subordinated debt, standby letters of credit, or the establishment of an escrow fund to further protect against cost overruns.³²² These alternatives could prevent performance bond and penalty costs from being passed on to telecommunications consumers during the operations stage of the BOT contract.

Finally, it may be in the project sponsor's interest to seek protections against uncontrollable or force majeure risks. This could be done through either insurance or through obtaining additional assurances from the government in the form of indemnification.³²³ Other construction risks that should be considered include price changes caused by currency fluctuations or inflation, material shortages, design changes required by law, and labor disputes.³²⁴

5. The Operations and Management Agreement

Although project investors will ordinarily appropriate performance and technology risks after completion of infrastructure construction, these risks are initially covered through warranties by the turnkey contractor and/or equipment supplier.³²⁵ Upon termination of such

319. Robbins, *supra* note 8, at 647.

320. Ernst & Pham, *supra* note 25.

321. Hoffman, *supra* note 75, at 200-201.

322. *Id.* at 198, 204-205.

323. *See infra* part V.C.5-6.

324. Hoffman, *supra* note 75, at 198-203.

325. Ernst & Pham, *supra* note 25. Again, the untested nature of BOT contracting in the field of telecommunications becomes relevant. Since telecommunications networks have been both constructed and operated by entities such as AT&T in the past, contractual relationships and risk assessments may change dependent upon the abilities of project sponsors.

warranties, the risks of telecommunications technologies performing up to standard are assumed by the network operator and are mitigated through an operations and management (O&M) agreement.³²⁶

This agreement will govern the parties upon completion of construction or upgrade of the network infrastructure.³²⁷ In addition to receiving fixed operations/management fees from the pool of incoming revenues, the operator (an established project company, project sponsor, or contractor) may be remunerated through incentive payments designed to encourage superior levels of performance.³²⁸ In the alternative, liquidated damages payments may be due if performance lags due to negligence or deficient maintenance.³²⁹

Since efficient operation of the telecommunications facility will be an indispensable element to the long-term profitability of the project, the operator must be endowed with the requisite experience "to operate the project at the levels necessary to generate cash flow at projected levels."³³⁰ In the event that this operator is a party distinct from the project company, it should also have the financial capability to provide operating guarantees or other assurances of completion under the agreement.³³¹ In addition, the operator should be enabled to operate the facility with minimal governmental interference in order to assure effective private sector control and protect against potential political influences.³³²

Despite these goals, the host government may still seek to retain some control over the project to ensure efficient operation of the telecommunications facilities. For further assurance of effective operation, the government, or lending banks, may wish to provide for the assignability of an operator's obligations and rights by the government within the contract.³³³ This would enable the removal of ineffective operators in the event of certain predetermined contingencies (*i.e.*, inadequate revenue, failing technology, poor service quality). Indeed,

326. *Id.* In the event that the operator of the facility is a party other than the project sponsor or project company, this agreement would be differentiated into an Operating Agreement and a Management Agreement. Under this scenario, a contracting party operates the facility while the project sponsor manages day-to-day decisions in areas other than actual project operation.

327. *Id.*

328. *Id.*

329. *Id.*

330. Hoffman, *supra* note 75, at 201.

331. *Id.*

332. *See supra* parts IV.B.2, V.A. One way this may be enabled through the contract is by allowing free assignability of operations obligations by the operator. In the event the government seeks to assert some control over the project on the other hand, governmental notice and consent to assignment may be insisted upon. Robbins, *supra* note 8, at 679.

333. Hoffman, *supra* note 75, at 214-15.

due to the importance of contract performance to a project's ability to generate predictable cash flow,³³⁴ conditional assignment of significant contracts to either project lenders or the host government will be crucial.

Another relevant issue that should be provided for within the O&M contract is party indemnification. The contracting agency of the host government should be protected against all liabilities and claims resulting from the project company's operation of the project.³³⁵ These contract provisions might also distinguish between claims, such as, third party personal injury and property damage, intellectual property infringement, and failures to comply with laws.³³⁶

The government's primary concern with regard to the O&M agreement will be the protection of the public interest.³³⁷ Again, such public interest concerns encompass ensuring the continuity of service, controlling costs, the adequacy of service, and equality to all users.³³⁸ Private investors wary of potentially adverse domestic court rulings intended to protect such public concerns may insist upon neutral arbitration in the event of disputes arising due to the operation of the network facility.³³⁹ Finally, the government may require the project company to reimburse costs associated with enforcing contract rights or get consent from the contracting government agency prior to any settlements or dispositions of claims against the project.³⁴⁰

6. Insurance

Effective allocation of risk through insurance will be critical due to both the limited recourse nature of BOT projects as well as the untested nature of such corporate models. Contracting parties should specify any and all potential liabilities that may arise from facility operation and construction, including property damage and personal

334. *Id.* at 211.

335. For an example of a model indemnification provision in a project financing operation contract, see Robbins, *supra* note 8, at 660.

336. *Id.* at 661-62. When considering the use of intellectual property infringement or infringement indemnification provisions, a practitioner should reference Uruguay Round, *supra* note 120, Part II, Annex 1C, Part II, §§ 1, 2, 4, 5, 6 (for standards relating to the availability, scope and use of various related intellectual property rights between member states).

337. See Hurstel & Carpenter-Pecquet, *supra* note 44.

338. *Id.*

339. See generally Convention on the Settlement of Investment Disputes Between States and Nationals of Other States, *submitted to governments*, Mar. 18, 1965, 21 U.S.T. 2517, T.I.A.S. 6997 (setting forth scope of jurisdiction and authority for the adjudication of investment disputes through arbitration before the International Centre for Settlement of Investment Disputes).

340. See Robbins, *supra* note 8, at 661.

injuries resulting from force majeure causes.³⁴¹ Force majeure insurance may also be available to protect against unforeseen delays in project completion and other construction liabilities.³⁴² Systems performance insurance can be utilized to cover risks that telecommunications technology or equipment will fail to perform at projected levels.³⁴³ Additionally, comprehensive general liability insurance, worker's compensation and employer's liability insurance should be sought to cover both construction and operation phase risks.³⁴⁴

One method American investors may utilize to protect against such risks would be to seek assistance from the Overseas Private Investment Corporation (OPIC). Established in 1969,³⁴⁵ OPIC's mandate is to facilitate the participation of American private enterprises in the economic development of NICs.³⁴⁶ To carry out this purpose, OPIC is authorized to insure "new investments against inconvertibility of earnings, loss of investment due to expropriation, nationalization, or confiscation, and loss due to war, revolution, insurrection, or civil strife."³⁴⁷ Due to the existence of many of such risks in BOT projects, OPIC may provide particularly effective guarantees to American investors seeking to participate in BOT arrangements abroad.³⁴⁸

7. Technology Transfer

Finally, the parties may wish to define the manner of technology transfer to the project company under some contractual arrangement. In the area of telecommunications, such technology transfer will be highly relevant to the nature of negotiations between the parties and also should be considered when determining the ownership structure of the project.

In the event telecommunications technology is supplied to the project company by way of equity injection, proper valuation of the technology will be crucial since the nonrecourse nature of project financing debt mandates efficient accounting of project assets. Legisla-

341. *Id.* at 665.

342. Hoffman, *supra* note 75, at 209 n.56. In this case, a relevant insurance provision should be included within the Construction Agreement, rather than otherwise included within the O&M Agreement.

343. *Id.* n.7.

344. *Id.*

345. Foreign Assistance Act of 1969, Pub. L. No. 91-175 (1969) (codified as amended at 22 U.S.C. §§ 2191-2200b (1988 & Supp. 1993)).

346. Overseas Private Investment Corporation Amendments of 1974, Pub. L. No. 93-390 (codified as amended at 22 U.S.C. §§ 2191-2220b (1988 & Supp. 1993)).

347. Robin, *supra* note 51, at 937 (citations omitted).

348. Edward Luce, *Manila Signs Joint Venture Deal for City Toll Road*, FIN. TIMES 3, Aug. 31, 1995, at 3.

tion may also set forth mandatory debt-to-equity ratio requirements.³⁴⁹ Parties should also consider the subsequent status of intellectual property interests created by technology upgrade or through other joint efforts from within the company.

If the technology owner is not a direct participant in the project financing, he may be required to enter into an exclusive license agreement with the project sponsor, contracting operator, or with the project company itself.³⁵⁰ Such a licensing arrangement may be exclusive to field of use or may be contingent upon the construction of the network facility.³⁵¹ If a contracting operator is the party to the license agreement, project participants may also insist that the technology owner enter into a technology supply agreement with the project sponsor in order to secure continuing accessibility to the technology in the event of default by a project operator.³⁵² Finally, in the event new technology is used, a guarantee of technological performance may be requested from the participant owning or licensing the technology to assure repayment of project debt.³⁵³

CONCLUSION

The Build-Operate-Transfer project financing model may indeed prove to be an effective mechanism in bringing telecommunications infrastructure to NICs who are hesitant to unilaterally privatize their telecommunications industries. The scheme allows host governments to tap private sector capital and technology, erstwhile being assured of future control over the industry. Furthermore, in recognition of the economic factors deterring the administrations of NICs from utilizing public sector debt financing, dependence upon international funding institutions is growing less and less popular. Such institutional funding is being used more often to supplement otherwise effectively capitalized projects. In light of such global and economic trends, project financing is gaining more respect as a method developing countries can utilize to attract sources of capital and technology necessary to facilitate the establishment of a viable telecommunications network infrastructure. With a proper understanding of the legal and economic risks that may arise when utilizing such arrangements, project finance

349. See *supra* text accompanying note 198.

350. Hoffman, *supra* note 75, at 195-96 n.30.

351. For an example of such a technology licensing arrangement in a BOO project financing, see Cao *supra* note 45 (involving license of catalytic extraction processing technology by American company to a Mexican hazardous waste facility).

352. Hoffman, *supra* note 75, at 195-96 n.30.

353. *Id.* at 200.

can serve as a vehicle which creates a "win-win" situation for all parties.