

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Review of Commission Consideration)	IB Docket No. 00-106
of Applications under the Cable Landing)	
License Act)	

***EX PARTE* REPLY DECLARATION OF
JANUSZ A. ORDOVER AND ROBERT D. WILLIG**

1. Our names are Janusz A. Ordover and Robert D. Willig. We previously filed testimony in the Comments of AT&T Corp. ("AT&T") and its affiliates Concert Global Networks USA L.L.C. and Concert Global Network Services Ltd. (collectively "Concert").

I. QUALIFICATIONS

A. Janusz A. Ordover

2. I am Professor of Economics and Director of the MA Program at New York University, which I joined in 1973. At New York University, I teach undergraduate and doctoral level courses in industrial organization economics, the field of economics concerned with competition among business firms and upon which "antitrust economics" is founded. I have devoted most of my professional life to the study and teaching of industrial organization economics and to its application through antitrust and regulatory law and policy.

3. In July 1991, President George Bush appointed me to the position of Deputy Assistant Attorney General for Economics in the Antitrust Division of the United States Department of Justice ("DOJ"). In this post, I participated in the drafting of the 1992 Horizontal

Merger Guidelines, which have been widely used by courts and antitrust enforcement agencies. In addition, I led many merger reviews that employed and developed methodologies to define relevant markets in merger and other cases. I returned to New York University in 1993.

4. I have been actively involved in the formulation of public policy in the telecommunications sector. In particular, I have submitted written and oral testimony for AT&T to the Federal Communications Commission (“Commission” or “FCC”) and to the state regulatory commissions in the Midwest, New England, and New York on a number of issues, including the pricing of unbundled network elements, access to bottleneck facilities, bundling of complementary services by regulated firms, and other vertical competitive issues.

5. I have written extensively on a wide range of antitrust and telecommunications topics, such as mergers and joint ventures, predatory conduct and entry barriers. My antitrust articles have appeared in the *Yale Law Journal*, *Harvard Law Review*, *Columbia Law Review*, and many other journals, monographs and books, here and abroad. A full list of my articles and other professional publications and activities is presented in my *curriculum vitae*, which is attached to my prior declaration in this proceeding as Exhibit 1.

6. I have lectured extensively on antitrust topics to the American Bar Association, the International Bar Association, and the Federal Trade Commission (“FTC”). I recently delivered lectures to the FTC during its hearings on the Future of Antitrust Enforcement, which were organized by FTC Chairman Robert Pitofsky. I have also lectured on antitrust policy at colleges and universities in the United States and abroad, and at many conferences and meetings sponsored by various legal organizations.

7. I have acted as a consultant on antitrust and other competition matters to the DOJ, the FTC, and the post-communist governments of Poland, Russia, and Hungary. I have also consulted for the World Bank and the Organization for Economic Cooperation and Development in Paris. I have acted as a consultant in numerous antitrust lawsuits and investigations, including market definition and anti-competitive conduct matters for the FTC, DOJ and private clients in the United States, Australia, Germany, New Zealand, South Africa and the European Union. I have extensive experience in the analysis of competitive effects of business strategies, including tying and bundling.

B. Robert D. Willig

8. I am Professor of Economics and Public Affairs at the Woodrow Wilson School and the Economics Department of Princeton University, a position I have held since 1978. Before that, I was Supervisor in the Economics Research Department of Bell Laboratories. My teaching and research have specialized in the fields of industrial organization, government-business relations and welfare theory.

9. I served as Deputy Assistant Attorney General for Economics in the Antitrust Division of the DOJ from 1989 to 1991. I also served on the Defense Science Board task force on the antitrust aspects of defense industry consolidation and on the Governor of New Jersey's task force on the market pricing of electricity.

10. I am the author of *Welfare Analysis of Policies Affecting Prices and Products*; *Contestable Markets and the Theory of Industry Structure* (with W. Baumol and J. Panzar), and numerous articles, including "Merger Analysis, IO theory, and Merger Guidelines." I am also a co-editor of *The Handbook of Industrial Organization*, and have served on the editorial boards of

the *American Economic Review*, the *Journal of Industrial Economics* and the MIT Press Series on regulation. I am an elected Fellow of the Econometric Society and an associate of The Center for International Studies.

11. I have been active in both theoretical and applied analysis of telecommunications issues. Since leaving Bell Laboratories, I have been a consultant to AT&T, Bell Atlantic, Telstra and New Zealand Telecom, and have testified before the U.S. Congress, the FCC, and the public utility commissions of about a dozen states. I have been on government and privately supported missions involving telecommunications throughout South America, Canada, Europe, and Asia. I have written and testified on such subjects within telecommunications as the scope of competition, end-user service pricing and costing, unbundled access arrangements and pricing, the design of regulation and methodologies for assessing what activities should be subject to regulation, directory services, bypass arrangements, and network externalities and universal service. On other issues, I have worked as a consultant with the FTC, the Organization for Economic Cooperation and Development, the Inter-American Development Bank, the World Bank and various private clients. A full list of my articles and other professional publications and activities is presented in my *curriculum vitae*, which is attached to my prior declaration in this proceeding as Exhibit 2.

II. PURPOSE AND SUMMARY OF STATEMENT

12. We have been asked by AT&T and Concert to comment on certain matters raised in the Reply Comments filed by Global Crossing Ltd. ("Global Crossing") in this proceeding. In our prior declaration, we examined the economic arguments Global Crossing had advanced in the Japan-US cable ("JUS") landing license application proceeding regarding the competitiveness of the international submarine cable business in general and open investment

cables in specific. Based on that analysis, we explained why the Commission should not adopt Global Crossing's "35 percent solution" – *i.e.*, Global Crossing's proposal that the Commission treat as presumptively anticompetitive submarine cable landing license applications where the "landing parties on the U.S. end of the cable . . . have a combined share of more than 35 percent of active half circuits . . . on the U.S. side of the route served by the cable." *Notice of Proposed Rulemaking*, IB Docket No. 00-106, ¶ 37 (June 22, 2000) ("*Notice*"). More generally, we explained that international submarine cable competition was flourishing and that entry regulation in this context was likely to impose more social welfare costs than benefits.

13. Global Crossing's Reply Comments include a declaration by Dr. Andrew Joskow. Dr. Joskow responds to some of the arguments that we previously advanced and attempts to provide economic support for Global Crossing's proposed regulatory scheme. Global Crossing also attached to its Reply Comments testimony that Dr. Joskow filed in the JUS proceeding.

14. Our review of Global Crossing's Reply Comments and the attached declarations of Dr. Joskow indicates that Global Crossing has shifted the focus of its argument. First, Global Crossing says it is no longer advancing the "horizontal" arguments that it made in the JUS proceeding. Global Crossing Reply at 22 n.40; Joskow Dec. ¶ 4. Second, Global Crossing no longer claims that a new submarine cable raises competitive issues just because it lands in a closed foreign market. Global Crossing Reply at 16. In fact, Global Crossing expressly acknowledges that no competitive concerns are raised if *either* end of a proposed cable lands in a competitive market. *Id.* Global Crossing now says that the Commission should strictly scrutinize new open investment cable landing license applications in order to ensure that *domestic* carriers cannot leverage their control over bottleneck inputs in order to gain power in the downstream retail international telephone services market. Global Crossing Reply at 12, 16;

Joskow Dec. ¶ 34. In contrast, Global Crossing in the JUS proceeding sought to block approval of the JUS cable based on theories that focused on the purported lack of competition at the *foreign* end of the cable. *See* Response of Global Crossing, File No. SCL-LIC-19981117-0025, at 11-27 (filed March 15, 1999).

15. Despite this shift in emphasis, we find Global Crossing has still failed to provide a compelling justification for strictly regulating entry in this context. The Commission has repeatedly held that U.S. landing stations and backhaul are *not* bottleneck facilities, and that the domestic market is competitive. It has likewise held that the largest U.S. international carrier, AT&T, is non-dominant and controls no domestic bottleneck inputs. Further, as we discuss in detail below, carriers can protect themselves from landing station “market power” *ex ante* through contract. In fact, non-landing station owners collocate in U.S. landing stations at cost-based rates and self-provide backhaul thereby making it impossible for landing station owners to charge supracompetitive rates for backhaul and other related services.

16. Ultimately, however, it is unclear what economic theories Global Crossing is actually advancing in this proceeding. As we read Dr. Joskow’s current declaration, it is still dependent upon the “horizontal” argument that cable landing station owners on open investment cables will collude to gain market power. *See* Joskow Dec. ¶ 23. Likewise, Dr. Joskow’s clustering and foreclosure arguments are premised on foreign-end competitive concerns, not the U.S.-end issues on which Global Crossing now focuses. *Id.* ¶¶ 8, 24. Global Crossing has also introduced Dr. Joskow’s testimony from the JUS proceeding, which contains numerous economic theories that are not connected to Global Crossing’s current claim that entry regulation is necessary because of U.S.-end concerns. Accordingly, AT&T has asked us to provide in one declaration our reaction to all of the economic arguments Global Crossing has advanced in this

proceeding, including those it has incorporated by reference by refiling Dr. Joskow's JUS testimony.

17. The remainder of this declaration is organized as follows. Part III sets forth the general economic theory that we believe should guide the Commission's decisionmaking in this proceeding. In Part IV, we discuss the "horizontal" anticompetitive economic theories that Dr. Joskow has advanced as a justification for Commission regulation of submarine cable entry. In Part V, we discuss Dr. Joskow's "vertical" arguments. We address Dr. Joskow's arguments that open investment cables produce no efficiency benefits in Part VI. Finally, in Part VII we address the specific entry proposal advanced by Global Crossing and the economic justifications advanced by Dr. Joskow in support of that proposal.

III. THE REGULATORY FRAMEWORK THAT SHOULD GUIDE THE COMMISSION'S ANALYSIS IS SIMPLE AND STRAIGHT FORWARD

18. It is important to emphasize that neither Global Crossing nor Dr. Joskow has advanced any overall framework that should guide the Commission's analysis in this context. Dr. Joskow does say that because the Commission reviews mergers, it should also review "joint ventures" for *new* international submarine cables. *See* Joskow Dec. ¶ 20. As we previously explained in our prior filing, unlike a merger, entry of new capacity in an existing market is presumptively beneficial. *See* Ordover-Willig Dec. ¶¶ 25-32. This is true regardless of whether firms independent of the incumbents control the new capacity, or if the new capacity is added by incumbent firms that will use it to expand output. By contrast, entry regulation is a costly process. Not only does entry regulation require regulatees to spend considerable sums on the services of professionals required to secure the necessary approvals, it imposes significant opportunity costs. Because no regulator, no matter how conscientious, can replicate the

functioning of a competitive market, it is inevitable that entry regulation carries the risk of denial of entry that should have been granted and unnecessary delay for those entry applications that are ultimately approved. Most important, the risks, costs and delays of the regulatory process may deter potential entrants from seeking regulatory approval in the first place.

19. These problems are compounded by the fact that entry regulation provides competitors with the opportunity to engage in strategic behavior. The firms most threatened by new entry have a strong incentive to use the process to delay or forestall the new competition. Indeed, when examined closely, Global Crossing's current proposal appears to be just such an anticompetitive attempt to impede its open investment cable rivals.

20. We further explained in our prior declaration (§ 35) that our approach is fully consistent with widely accepted principles of market power analysis reflected in the FTC/DOJ *Antitrust Guidelines for Collaborations Among Competitors* and the 1992 *Agency Merger Guidelines*. In particular, we demonstrated that open investment cables raised little competitive concern based on analysis of market shares and concentration in the relevant markets, barriers to entry, and the likelihood of coordinated conduct. Ordoover-Willig Dec. §§ 36-63.¹

¹ Global Crossing asserts that the Commission should not rely on the *Antitrust Guidelines for Collaborations Among Competitors* because these guidelines do not allow for consideration of their "vertical" concerns. Global Crossing Reply at 32-33. We disagree on two levels. First, while not the focus of the *Antitrust Guidelines for Collaborations Among Competitors*, these guidelines expressly permit consideration of "foreclosure" issues created by a joint venture. *Id.* § 1.1 n.5. Second, as we discuss in greater detail below, Dr. Joskow's principal vertical anticompetitive theory – "clustering" – depends upon the assumption that open investment cables facilitate collusion by landing station owners. That issue is a significant concern of the *Antitrust Guidelines for Collaborations Among Competitors*.

21. Thus, in this context, we believe that a proponent of entry regulation must shoulder a heavy burden in identifying with clarity and precision the market failures that are alleged to justify regulatory intervention by the Commission. As we explain below, we believe that the unsubstantiated and speculative theories advanced by Global Crossing in both this and the prior JUS proceeding fail to satisfy that appropriate standard.

IV. DR. JOSKOW HAS FAILED TO IDENTIFY ANY HORIZONTAL COMPETITIVE ISSUE THAT WOULD SUPPORT BURDENSOME ENTRY REGULATION

A. Dr. Joskow Improperly Assumes That Landing Station Owners On Open Investment Cables Will Collude And Gain Market Power

22. In the JUS proceeding, Dr. Joskow argued that open investment cables facilitate collusion among carriers and thereby allow these carriers collectively to exercise market power. According to Dr. Joskow, large carriers would find it in their interest to conspire to charge smaller carriers excessive prices for landing station access and/or anticompetitively to restrict the amount of capacity that is available on the cable. *See* Joskow JUS Dec. ¶¶ 86-92. He further argued the collective nature of open investment cable operations facilitates such collusion. *Id.* ¶¶ 57, 59-60.

23. Dr. Joskow begins his current declaration by saying that he is no longer primarily advancing this type of “horizontal” theory. *See* Joskow Dec. ¶ 4.² But a few pages later, Dr. Joskow in effect re-adopts this same collusion argument as his reason why the Commission should strictly regulate entry in a market that, by any traditional economic measurement, is deconcentrated. *Id.* ¶ 22. Dr. Joskow writes:

² As noted, Dr. Joskow’s client likewise states that it has abandoned the “horizontal” claims it advanced in the JUS proceeding. *See* Global Crossing Reply Comments at 22 n.40.

When collaboration occurs among carriers that are also owners of key facilities, such as backhaul and landing stations, *they do not operate as true competitors when they are on the same cable*. To assume that they operate as competitors implies that somehow the existence of the joint venture is merely a veil for independently operating competitors with no common interest. This is not the case. *Through the governance structures established in the C&MA and related planning and data gathering meetings, carriers that control backhaul and landing stations can coordinate pricing and other access policies.*

Id. ¶ 23 (emphasis added).

24. Thus, regardless of whether it is labeled as “horizontal” or “vertical,” Dr. Joskow’s analysis is fundamentally premised on the incentive and ability of open investment cable landing station owners to collude. According to Dr. Joskow, the reason why open investment cables raise competitive concerns – and why proposals to build new open investment cables should be strictly scrutinized by the Commission – is that landing station owners on such cables may collude with regard to backhaul pricing. Indeed, Dr. Joskow even embraces the *reductio ad absurdum* of his argument – *i.e.*, that the Commission should actively *limit* the number of carriers operating landing stations for a cable. *See* Joskow Dec. ¶ 23 (“The fact that there are multiple landing stations on a cable does not create the necessary competition to negate th[e] concern [that the owners will collude]. By that logic it would be better for as many carriers as possible to operate landing parties on a cable. On the contrary, the control over the cable can be used to collectively impede the development of future competition by other cables and to raise the costs of other telecommunications rivals.”).

25. Dr. Joskow provides no evidence to support these sweeping – and counterintuitive – allegations. And while it is of course impossible for us to claim that submarine landing station operators will never collude, we think such collusion is unlikely. It is textbook economics that companies do not have incentive to collude if, even when acting collectively, the “cartel” cannot

gain the ability to raise prices or restrict output. D. Carlton & J. Perloff, *Modern Industrial Organization* 216 (1989). For example, even if all the corn farmers in a particular county in Nebraska could easily coordinate the prices that they would like to charge for their product, they would have no incentive to do so because they do not control sufficient production to affect the market.

26. To our knowledge, neither Dr. Joskow nor Global Crossing has identified a single open investment submarine cable serving one of the three major regions where, even if all the owners on that cable acted collectively, they would be able to exercise market power.³ And even if Global Crossing could identify an individual cable that might carry the majority of traffic in a region today, the owners of that cable would be unlikely to exercise market power because of the relatively low barriers to entry into the market and the substantial capacity that will be entering the market in the next two years. *See* Ordovery-Willig Dec. ¶¶ 44-54; McInerney Dec. ¶¶ 30-38.

27. Dr. Joskow also ignores the ability of non-landing station owners to protect themselves through contract – a point that the Commission has repeatedly recognized. *See AT&T Int'l Non-Dominance Order*, 11 FCC Rcd. 17963, ¶¶ 25-26 (1996); *AT&T Int'l Non-Dominance Recon. Order*, 13 FCC Rcd. 21501, ¶ 100 (1999). The accompanying declaration of Mr. McInerney demonstrates that non-landing station owners collocate at cost-based rates so that they may self-provide backhaul if they so choose. *See* McInerney Ex Parte Dec. ¶ 14. For example, there are 11 parties collocating at one of the U.S. landing stations for the TAT-14

³ Dr. Joskow's argument seems ironic in its application to Global Crossing itself. If the landing station owners on a single open investment cable had the ability to exercise market power, that would mean that Global Crossing would too. Global Crossing unilaterally sets the prices it charges for backhaul and landing station access on its cables – which is the same thing that would occur if landing station owners on open investment cables colluded.

cable, and 9 at the other station. *Id.* ¶ 13. Similarly, the JUS, Maya-1, Americas II and Columbus III cables will have six U.S. backhaul providers. *Id.* ¶ 6.

28. This ability to collocate forecloses any claim that U.S. landing stations owners could collude in order to charge supracompetitive backhaul prices. If landing stations owners were to attempt to impose such anticompetitive charges, the would-be “victims” could simply collocate and self-provide backhaul.

29. In the JUS proceeding – although not in his current statement – Dr. Joskow asserted that a carrier on an open investment cable is generally permitted to collocate in a landing station only in order to provide backhaul services for itself (but not for other carriers). *See* Joskow JUS Dec. ¶ 61. Dr. Joskow claimed in the JUS proceeding that this limitation on the ability of carriers to collocate was crippling because there are significant economies of scale in backhaul and smaller carriers, without the ability to aggregate traffic, cannot achieve the scale necessary to provide backhaul competitively. *Id.*

30. We are told that the opposite is true – that there are generally *no* restrictions on the ability of a collocating carrier to provide backhaul for other carriers. *McInerney Ex Parte* Dec. ¶ 14. We are not surprised that this is the case. Non-landing station owners have no desire to pay supracompetitive backhaul rates and can be expected to insist on the right to collocate in order to provide backhaul services to other carriers. For example, we have been told that in the JUS proceeding, SBCI (a new entrant with zero market share) stated that the opportunity to compete in the backhaul business and to provide backhaul for traffic other than its own was a factor in its decision to participate in the JUS open investment cable.

31. We are aware of no instance in which a collocating carrier has been denied access to a landing station or charged excessive rates for collocation. And while we understand that Sprint asserted in the context of the AT&T-British Telecom joint venture that AT&T was using its position as a cable station owner to advantage itself at the expense of the other cable owners, the Commission found no indication of anticompetitive conduct but rather that this was a common garden variety contractual dispute. *AT&T-BT JV Order*, 14 FCC Rcd. 19149, ¶ 100 (1999). The relative harmony of these arrangements does not surprise us. Would-be landing station owners know that if they develop a reputation for providing poor collocation arrangements that carriers will either use other landing station on the cable or switch to private cables such as those operated by Global Crossing.

32. Finally, we disagree strongly with Dr. Joskow's undeveloped suggestion that the governance structure established in the construction and maintenance agreement ("C&MA") helps facilitate collusion.⁴ C&MAs are the product of negotiation among *all* of the cable's owners. The notion that the non-landing station owners would willingly agree to a C&MA that helps facilitate collusion by the landing station owners is, to say the least, far-fetched. Additionally, although C&MAs are the means by which individual owners agree to cooperate with regard to the construction and operation of a cable, we understand that open investment cable C&MAs do *not* govern backhaul charges. *McInerney Ex Parte Dec.* ¶ 10. Rather, we have

⁴ In this regard, we note that well-established principles of antitrust law require the dismissal of Global Crossing's speculation concerning anticompetitive collusion among carriers to the extent it appears based on nothing more than their attendance at meetings necessary to plan and operate open investment cables. Antitrust courts do not allow conspiracies to be inferred based upon the mere occurrence of meetings or other communications among competitors – particularly where, as here, there are legitimate business justifications for the challenged behavior. *See, e.g., Seagood Training Corp. v. Jerrico, Inc.*, 924 F.2d 1555, 1574-75 (11th Cir. 1991); *Wilcox v. First Interstate Bank*, 815 F.2d 522, 527 (9th Cir. 1987).

been assured that the actual rates charged by backhaul providers on open investment cables are secret and provided to customers pursuant to a non-disclosure agreement. *Id.* ¶ 11. That, combined with the fact that long term contracts are quite common in this industry, makes coordinated behavior in this context even less likely. Each “conspirator” would have a strong incentive to cheat by offering long term contracts with secret price terms to carriers – and thereby steal traffic away from the other landing station owners trying to maintain an artificially high price. *See* William J. Baumol & Alan S. Binder, *Economics: Principles and Policy* 599 (5th ed. 1991).

33. In sum, there is no basis for Dr. Joskow’s assertion that landing station owners are likely to collude and charge supracompetitive prices for backhaul.

B. Dr. Joskow Has Failed To Demonstrate That International Carriers Control Bottleneck Inputs

34. Although Dr. Joskow’s current arguments are based on the assumption that landing station owners are able to wield market power by acting collectively, in the past he has suggested that *individual* firms control bottleneck inputs. More specifically, in the JUS proceeding, Dr. Joskow argued generally that there is little competition for the “inputs” necessary to provide international services – *i.e.*, international transport, backhaul/landing stations and operating agreements. *See* Joskow JUS Dec. ¶¶ 52-64. Filing in the gaps, we take Dr. Joskow to be claiming that, even in the absence of collusion, individual owners of open investment cables may control monopoly facilities, and that new cable projects involving such entities should be subject to significant scrutiny.

35. Before turning to discussing the specific inputs identified by Dr. Joskow as potential bottlenecks, we believe that his argument can be rejected at a more general level. First,

it flies in the face of the Commission's decision to declare AT&T, the largest international carrier, non-dominant. In that proceeding, the Commission carefully scrutinized whether AT&T controlled bottleneck inputs and found that it did not. *See AT&T Int'l Non-Dominance Order* ¶¶ 52-65; *AT&T Int'l Non-Dominance Recon. Order* ¶¶ 15-27.

36. More generally, this claim is flatly inconsistent with the overwhelming market evidence in this proceeding. As AT&T and Concert have shown in their comments, traffic, capacity and competition are rapidly expanding and prices are rapidly declining. In just three years (1998 to 2001), capacity will grow by 5,649 percent in the Atlantic region, by 1,225 percent in the Pacific region, and by 2,212 percent in the Americas region. AT&T-Concert Reply at 8-9. At the same time that wet link capacity has exploded, prices for wholesale capacity have fallen dramatically. *Notice*, Ness Statement at 1 & n.7 (citing <http://www.band-x.com>). Cable & Wireless submitted evidence showing that per circuit cable costs have dropped by 80 percent or more in the last three years. Cable & Wireless Comments at 7-8 & App. A. And these savings have been significantly passed on to consumers – international long distance prices have plummeted in the last few years. McInerney Dec. ¶ 7. These market realities are inconsistent with any claim that carriers control bottleneck inputs and are exercising market power.

37. We also disagree with Dr. Joskow's related claims that significant entry barriers exist – and that therefore potential entry imposes no market discipline – because it requires 2-3 years to deploy a new cable. Joskow Dec. ¶ 17. It is ironic that Dr. Joskow would rely on the time required today to deploy a new submarine cable as a justification for entry regulation when the majority of the parties to this proceeding, including Global Crossing, acknowledge that the current regulatory regime contributes significantly to such “delay.” Global Crossing Comments

at 44. Beyond that, it is important to emphasize that Dr. Joskow does not take into account the entry into the market of new capacity by means of expansion of existing cables. There is no dispute that existing cables can substantially expand capacity in a very short time. *See* McInerney Dec. ¶ 8.

38. In this regard, Dr. Joskow's reliance on the purported "fact" that there has not been significant new entry in recent years is illogical and misplaced. *See* Joskow Dec. ¶ 17. It is illogical because, even if there has been little entry over the last few years, that does not mean that potential entry does not constrain prices. And it is misplaced because, as Mr. McInerney explains in his accompanying statement, there has been significant new capacity added over the last few years, particularly expanded capacity on existing cables, and many companies have plans to deploy even more capacity. *See* McInerney Ex Parte Dec. ¶ 17. *See also* AT&T-Concert *Ex Parte* Comments, Part II.B (discussing recent entry).

39. *International Transport.* Although Dr. Joskow made a perfunctory claim in the JUS proceeding that the international transport "input" was not competitive, *see* Joskow JUS Dec. ¶¶ 53-55, he has abandoned any such argument here. In his latest declaration, Dr. Joskow concedes that, by any standard economic measure, international transport is unconcentrated. Joskow Dec. ¶ 22. Despite this concession, we believe it is necessary to correct certain assumptions Dr. Joskow has made with regard to the state of competitiveness of transport that are central to his argument that carriers control bottleneck inputs.

40. First, in his JUS statement, Dr. Joskow asserted that satellite capacity should not be considered. Joskow JUS Dec. ¶ 35. Based upon that assertion, all the potential "bottleneck" inputs that Dr. Joskow has identified (backhaul/landing station and operating agreements) are

inputs to submarine cable transport, and these omit the functionally comparable but physically distinct inputs to the comparable satellite services. If, contrary to Dr. Joskow's assertion, satellite capacity can be substituted for submarine cable capacity, then it follows that Dr. Joskow's bottleneck analysis must be thoroughly reexamined.

41. Despite the fundamental importance of this issue to his argument, Dr. Joskow fails to provide any analysis to support his prior conclusion. Thus, Dr. Joskow in his current declaration makes no attempt to reconcile his position with the fact that the problems which plagued satellites in the past are being diminished by technological advances and that these problems are less relevant for data (which, as explained below, constitute more than 90 percent of new traffic). *See* AT&T-Concert Comments at 45. Also, Dr. Joskow does not address the substantial showings by other carriers in this proceeding that satellite capacity should be included in the relevant market. *See* FLAG Comments at 5-6 (discussing competition from satellite and citing Commission decisions); Tycom Comments at 9-10 (same).

42. Second, in his JUS statement, Dr. Joskow suggested that the Commission could infer that open investment cables possessed power in the transport "market" from the fact that some recent cables offered "volume discounts" to large purchasers. Although Dr. Joskow concedes that these discounts could be cost-justified – and that he has no knowledge of whether they in fact are – he nonetheless asserts that the Commission should presume that they are not because of his claims about the ability of open investment cables to collude. *See* Joskow JUS Dec. ¶ 89-90. Dr. Joskow has simply assumed his conclusion. He is only able to eliminate the obvious pro-competitive justification for volume discounts by assuming that the largest owners of a cable can set supra-competitive prices for capacity. But they would only have the ability to

do so if the *new* cable (which they presumably control) has market power.⁵ While we agree that an entity (or entities acting collectively) with market power can charge supracompetitive prices, it is not true that one can infer the existence of market power from the existence of volume discounts. Indeed, given the ubiquitous use of volume discounts throughout the economy, Dr. Joskow's approach would lead to the extreme conclusion that nearly every U.S. industry is monopolized.

43. Finally, Dr. Joskow's argument that "bottlenecks" exist is implicitly premised on the distorted views that the relevant transport markets are "point-to-point." As we have explained, if the markets are regional, the fact that there are several submarine cables serving each of the three major regions means that no particular cable (or inputs necessary for service on that cable) can be a bottleneck because transit arrangements may be used to route traffic between the areas "served" by the individual cables. Ordoover-Willig Dec. ¶¶ 74, 85. It is noteworthy that Dr. Joskow concedes that the relevant markets may in fact be regional. Joskow Dec. ¶ 30. Dr. Joskow nonetheless asserts that he need not address this issue because Global Crossing's "35 percent solution" would permit parties to demonstrate the existence of a regional market on a case-by-case basis in subsequent cable landing license application proceedings. *Id.*

44. By arguing that the Commission should presume (albeit allowing subsequent rebuttal) that the relevant markets are country-pairs, Dr. Joskow is effectively asking the

⁵ Dr. Joskow also relies on the "fact" that volume discounts were not offered on older cables but have only been offered recently. According to Dr. Joskow, if volume discounts were perceived to be unnecessary in "yesterday's" less competitive environment, they are not necessary in today's more competitive period. See Joskow JUS Dec. ¶ 89. Although we do not know the accuracy of Dr. Joskow's factual assertion, the opposite inference seems more reasonable. Competition forces prices towards costs. Thus, the advent of volume discounts could easily be explained by increased competition.

Commission to repudiate its prior holdings that the relevant markets are regional. *See MCI-WorldCom Merger Order*, 13 FCC Rcd. 18025, ¶ 84 (1998); *AT&T-BT JV Order* ¶¶ 45-51, 75. Dr. Joskow, however, neither acknowledges these holdings nor explains why they were wrongly decided. But even if the Commission had not ruled on this issue before, we believe that Dr. Joskow's request that the Commission simply "punt" on the proper market definition in this proceeding is plainly inappropriate. If, as we contend, the relevant markets are likely regional, there is clearly no basis for adopting the "point-to-point" oriented entry regulations advocated by Global Crossing.

45. Thus, instead of adopting a presumption in favor of a need for regulation, as Dr. Joskow advocates, we believe the Commission should definitively hold in this proceeding that the relevant markets are regional. Not only would this holding be consistent with the Commission's prior findings, it is indicated by the competitive realities of the market. Submarine cables are "ring" systems that land in multiple countries. *McInerney Dec.* ¶ 21. *See also* Tycom Comments at 5-6. Further, as the Commission has found, there are often multiple routes to other countries from any particular landing station because of the widespread use of switched hubbing, refile, reorigination and transit services.

[T]he global transit market is highly competitive. [T]here are thousands of routes to the 240 countries of the world. In addition . . . there is no dearth of capacity on most transit routes and . . . there are no barriers to firms with excess capacity to provide transit services.

AT&T-BT JV Order ¶ 75. *See also id.* ¶¶ 45-51.

46. This is confirmed by the most recent data from TeleGeography. It reports that new international carriers "now refile 30 to 50 percent of their total international traffic" and that the world's largest international carriers will be refiling 20 to 25 percent of their traffic this

year.⁶ Indeed, as Mr. McInerney has testified in this proceeding, these alternative arrangements have become so prevalent that a “spot market” for re-routing traffic has emerged, and many geographic regions advertise that they are “hubbing” points that can efficiently direct traffic from particular locations to other areas in the region. McInerney Dec. ¶ 26. As a result, submarine cable capacity is generally not sold in terms of specific country-pairs, but rather as “units of capacity for the entire ring system, so that customers may use that given amount of capacity between any and all termination points on a ring.” Tycom Comments at 5-6.

47. Global Crossing has effectively conceded the irrelevance of “point-to-point” markets. Global Crossing admits that its “customers can . . . buy a specified amount of international transport capacity upfront and subsequently specify the destinations they need.” Global Crossing Comments at 8 n.1. Global Crossing also has informed the investment community that it operates a “seamless global network” which allows it to offer “worldwide . . . connectivity for [its] customers.” Global Crossing Press Release, *Asia Global Crossing and Global Bandwidth Solutions Announce Completion of Pacific Ocean Subsea and Japanese Terrestrial Cable Systems* (December 21, 1999).⁷ These indications of ready interconnectivity are inconsistent with the network fragmentation expected if each country-pair genuinely constituted a separate market.

48. *Landing Stations/Backhaul.* As we discussed above, the core of Dr. Joskow’s primary horizontal argument is that U.S. cable landing station owners on open investment cables

⁶ M. Scheele & C. Woodall, *The Market for Refile and Transit Services*, TeleGeography 1997/1998.

⁷ This press release also notes that its Asia Global Crossing joint venture was created to serve “the Asia Pacific region.”

will conspire to charge supracompetitive backhaul prices in order to gain power in the downstream market for international services. It is quite clear that an essential factual predicate of this argument is that landing stations are bottleneck inputs. Recognizing this, Dr. Joskow states that “I would not agree with Profs. Ordovery & Willig that the supply of landing stations is effectively competitive in the United States.” Joskow Dec. ¶ 18.

49. Dr. Joskow’s disagreement on this key point is not just with us, but with the Commission. The Commission has repeatedly rejected the notion that landing stations are bottlenecks:

- *AT&T Int’l Non-Dominance Recon. Order* ¶ 26 (finding that “owners of a submarine cable can choose to land the cable at any one of several cable landing stations,” that cable landing stations are not “bottlenecks,” and that arrangements regarding cable station access are “contractual” matters).
- *AT&T Int’l Non-Dominance Recon. Order* ¶ 26 (affirming that cable station access concerned “contractual arrangements”).
- *Memorandum Opinion and Order, Merger of MCI Communications Corp. and British Telecom PLC*, 12 FCC Rcd. 15351, ¶ 163 n.224 (“*BT-MCI Merger Order*”) (observing that merger opponents offered *no* evidence or theory that would even purport to show that “either BT or MCI possesses or exercises market power in any U.S. input market” or could “obtain market power in any such input market”).
- *MCI-WorldCom Merger Order* ¶ 115 (finding barriers to entry were sufficiently low that even if the MCI-WorldCom were to attempt to raise prices for backhaul, that would simply shift customers to alternative backhaul providers).
- *AT&T-BT JV Order* ¶ 100 (rejecting the claim advanced by Sprint that AT&T had “bottleneck control over cable landing stations in the U.S.” and could use its “position as a cable station owner to benefit itself at the expense” of the carriers landing traffic at stations it owned).

50. Dr. Joskow further fails adequately to explain how cable landing stations can be a bottleneck given that U.S. cable landing stations permit non-landing station owners to collocate and self-provide backhaul. As we explained above in the context of Dr. Joskow’s collusion

arguments, carriers can protect themselves against the possibility of supracompetitive pricing by landing station owners by ensuring that they can collocate at landing stations at cost-based rates and thereby bypass the landing station owner's backhaul services.

51. These conclusions are also supported by empirical evidence. Mr. McInerney estimates that U.S. prices for backhaul have fallen by half over the last two years. McInerney Ex Parte Dec. ¶ 11. He further estimates that prices have fallen even more for high volume traffic. *Id.* Mr. McInerney also shows that backhaul services are increasingly competitive in the European countries that are the landing points for transatlantic cables, all of which are fully open to facilities-based competition and have multiple backhaul providers and declining backhaul prices. There are also multiple backhaul suppliers and declining backhaul prices in most liberalized countries in Asia and Latin America. *Id.* ¶ 15.

52. The only evidence we have seen to the contrary is the table provided in Dr. Joskow's JUS testimony purporting to show backhaul prices in Japan. *See* Joskow Dec., Table 3. Although we have no way to review the accuracy of Dr. Joskow's table in light of the fact that he has not put his sources into the record and they are not publicly available,⁸ it is still clear that this "evidence" – which is on its face over two years old – should be given little weight. In the JUS proceeding, AT&T provided testimony regarding the emergence of backhaul competition in Japanese, *see* Affidavit of Thomas K. McInerney, File No. SCL-LIC-19981117-00025, ¶ 7 (filed March 8, 1999), and recent events have confirmed these claims. According to Mr. McInerney, at least six backhaul suppliers in Japan will serve the Japan–U.S. cable (*i.e.*, C&W-IDC, Global

⁸ We understand that by a letter dated December 8, 2000 counsel for AT&T and Concert requested copies of these materials from Global Crossing.

Access, Japan Telecom, KDD, NTT Com and TT Net), and Concert has recently issued request for proposals to various suppliers to handle its backhaul needs in Japan for this cable. *McInerney Ex Parte Dec.* ¶ 16. Backhaul prices in Japan have declined significantly over the past year, and the market rate for a STM-1 circuit from the Japan-U.S. cable stations in Japan to Tokyo is now under \$100,000 per year. *Id.*

53. *Operating Agreements.* Dr. Joskow also claims that operating agreements are a critical input. *Joskow Dec.* ¶ 12; *see also Joskow JUS Dec.* ¶¶ 62-63. This is so, according to Dr. Joskow, because benchmark traffic is significantly above cost and therefore a U.S.-based carrier needs access to the return traffic that a dominant foreign carrier provides (which is likewise carried at the benchmark settlement rate) in order to reduce its effective termination costs. *Joskow Dec.* ¶ 14. Dr. Joskow dismisses the ability of carriers to compete by providing end-to-end service. Dr. Joskow claims that end-to-end services are too costly because “a carrier [must] acquire a license as a facilities-based carrier in the foreign country,” and “incur potentially large transaction costs in negotiating agreements in the foreign country.” *Id.* ¶ 13.

54. This analysis should not be persuasive. It has no direct applicability to Internet, data and other traffic carried on private line circuits that are exempt from the settlement process and that do not earn proportionate return. *McInerney Ex Parte Dec.* ¶¶ 4-7. Consequently, one critical question for the Commission is the relevance of IMTS traffic to carriers in the market today.

55. Dr. Joskow claims that an international carrier’s success today depends upon its ability to carry IMTS traffic because in 1998 IMTS accounted for 37 percent of active circuits. *Id.* ¶ 15. But the relevant question for this proceeding is not the embedded ratio of voice/data

traffic, but the *forward-looking* level. New cables are not built to serve yesterday's mix of traffic, but rather the mix of anticipated traffic. *McInerney Ex Parte Dec.* ¶ 3. And it is now undisputed that over 90 percent of the circuits on new cables are private line circuits that do not earn return traffic. *Id.*⁹

56. The Commission has in the past rejected the notion that operating agreements are bottleneck inputs even for IMTS traffic. "Generally, U.S. carriers are able to obtain operating agreements or establish alternative arrangements to provide international services." *MCI-WorldCom Merger Order* ¶ 117. And since that determination, the Commission has found that the WTO Agreement has lowered foreign entry barriers, making it even easier for U.S. carriers to obtain operating agreements from either new entrants or incumbent carriers. *See AT&T-BT JV Order* ¶ 50. TeleGeography reports that 44 countries had two or more international carriers as of July 1999, up from 23 countries with two or more carriers in July 1997, and that 26 countries in July 1999 had 10 or more international carriers.

57. Furthermore, Dr. Joskow overstates the extent to which IMTS traffic remains significantly above-cost (and, therefore, has overstated the need to carry proportionate return traffic). To be sure, there is no dispute that many countries charge above-cost rates to terminate traffic originating from the U.S. But the Commission's *Benchmarks Order*, 12 FCC Rcd. 19806 (1997) has pushed rates lower and will continue to do so.

⁹ Mr. McInerney has also stated that no physical, technical or economic reasons exist why private line circuits used to carry data must be on the same cable as IMTS circuits. *McInerney Supp. Dec.* ¶ 3. Thus, there is no reason why a carrier wishing to purchase capacity on a new cable for its expanding data traffic would also need to shift embedded IMTS traffic on an existing cable to the new cable.

58. We are informed that Commission data show that 75 percent of all U.S.-outbound traffic is already terminated at benchmark settlement rates, and that 88 percent of all U.S.-outbound traffic terminates in countries required to provide benchmark rates by January 1, 2001. We are further informed that Commission rules allow International Simple Resale (“ISR”) arrangements with WTO Member countries that provide benchmark settlement rates, that these arrangements are exempt from requirements for the equal division of rates between the U.S. and foreign carrier and the proportionate return of inbound traffic, and that inbound traffic rates in these arrangements are generally lower than outbound rates and are frequently set at, or close to, cost-based levels. *McInerney Ex Parte Dec.* ¶ 9. Therefore, ISR arrangements further reduce any above-cost margin provided by return traffic after rates reach benchmark levels.

59. Likewise, Dr. Joskow’s claims regarding the costs of providing end-to-end services are exaggerated. Although a carrier may have to be licensed as a foreign carrier to provide end-to-end service, one of the purposes of the WTO Basic Telecom Agreement was to make this easier. *See Foreign Participation Order*, 12 FCC Rcd. 23891, ¶ 25-28 (1997). Spurred by the WTO Agreement, the number of international carriers worldwide is exploding. Industry experts expect that by the end of the year 2000, there will be 2200 facilities-based international telecommunications carriers. *McInerney Dec.* ¶ 19.

60. Nor is Dr. Joskow correct that it is prohibitive for an “end-to-end” carrier to negotiate with a foreign carrier to provide termination of traffic. *Joskow Dec.* ¶ 13. These “costs” clearly cannot be an insurmountable obstacle given the explosive growth in traffic carried on private lines outside the settlement structure.