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Telecommunications Services Trade and the WTO Agreement

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Summary

World telecommunications services trade is growing and evolving very rapidly, appearing to corroborate expectations that the 1997 international agreement to liberalize trade in basic telecommunications services would greatly increase world trade in those services. While the agreement, under the auspices of the World Trade Organization (WTO), faces many obstacles to full effectiveness, it is expected to benefit the highly competitive U.S. telecommunications industries and facilitate world economic growth. Congress, as always, is concerned that trading partners adhere to their commitments. Essentially no bills in the 107th Congress were directly related to this issue, however. This report will be updated as events warrant.

Context. The WTO Agreement on Basic Telecommunications Services, which concluded nearly three years of negotiations, occurred in a context of developments on several fronts — statutory, institutional, technological, economic, and structural. It appears to have spurred and to have been spurred by such developments.

Statutory and Institutional. The Agreement was one event in a sequence of developments in international trade and U.S. law. The North American Free Trade Agreement, which included some liberalization of trade in enhanced telecommunications among Canada, Mexico, and the United States, went into effect January 1, 1994. The Uruguay Round Final Act entered into force January 1, 1995, after nearly a decade of multilateral negotiations to expand world trade under the auspices of the General Agreement on Tariffs and Trade (GATT). It established the World Trade Organization, which replaced GATT.[1] The U.S. Telecommunications Act of 1996, (P.L. 104-104), which aims to promote greater competition in U.S. telecommunications by removing

[1] See CRS Report 98-928, *The World Trade Organization: Background and Issues*, by (name redacted).

regulatory barriers was enacted February 8, 1996.[2] In another regional arena, European Union telecommunications markets opened to competition on January 1, 1998. In November 1997, the U.S. Federal Communications Commission liberalized its policy of restricting entry of foreign firms in U.S. non-broadcasting telecommunications with an "open entry" standard for firms from WTO member countries.[3]

The WTO basic telecommunications agreement built upon the Annex on Telecommunications, part of the General Agreement on Trade in Services (GATS), itself a component of the Uruguay Round Final Act. The Annex requires WTO members to ensure that all service suppliers seeking to take advantage of scheduled commitments have reasonable and non-discriminatory access to and the use of public basic telecommunications networks and services. Basic telecommunications was one of several issue areas upon which only partial agreement was reached in time for the Final Act. Further negotiations were to be completed by April 30, 1996. While some progress was made, it was deemed insufficient by some country participants but promising enough to justify extending the negotiations. The agreement was reached February 15, 1997, and went into effect February 5, 1998. Sixty-nine countries originally endorsed the agreement. Since then, the number of Member governments with scheduled telecommunications commitments has risen to 86. Member governments started a new round of WTO negotiations in 2000, but the proposals from these negotiations were tabled. Members began new negotiations in 2002.

The statutory and institutional arena also has seen a widespread trend for countries to liberalize and/or at least partly privatize their telecommunications markets. A number of countries have completed or begun a process of converting state-controlled organizations to privately owned market-oriented firms through private investment. Liberalization has included allowing more than one supplier of a particular type or category of product or service, and/or within particular geographic areas.

Technological, Economic, and Structural Developments. The above-described factors have interacted with or have been at least partly driven by technological, economic, and structural changes in telecommunications and in related industries. For example, digital technologies make it possible to distribute voice, data, and video on the same communications channel, and thus to transmit more information per cable and portion of spectrum. Wireless transmission improvements and higher productivity in installing undersea fiber-optic cable have lowered the cost per circuit. Such developments enable telecommunications providers such as telephone and cable television companies to expand their capabilities to become generic multi-faceted information providers, and compete in many markets once considered to be monopolistic. International “call back” and "refile" services enable telephone callers from high-cost countries to effectively originate calls from lower-cost countries and be billed at the lower rates; this has tended to hold down international rates. The technological advances, moreover, are very rapid.

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[2] See CRS Report 96-223, *The Telecommunications Act of 1996 (P.L. 104-104): A Brief Overview*, by (name redacted).

[3] U.S. Federal Communications Commission. *News.* "Commission Liberalizes Foreign Participation in the U.S. Telecommunications Market." November 25, 1997.

Structurally, telecommunications has become globalized and increasingly linked across international borders. Many telecommunications firms are joining forces — through mergers, acquisitions, equity sharing, marketing arrangements, and other combinations — to position themselves better for future market growth by offering a range of services, and, increasingly, functionally integrated international service. This globalized merger and acquisition trend has involved a number of telecommunications firms of different countries, and continues to do so at a rapid pace.

Both a major cause and a major consequence of the above developments has been rapid growth in world telecommunications services, including international trade in such services. Data compiled by the International Telecommunication Union (ITU) show that world revenue from telecommunication services of all types more than doubled between 1990 and 2000, and expected to increase 21%, between 2000 and 2002 (see Table 1). Revenue in 2000 from mobile service was over 23 times its 1990 level; 2000 revenue from other services (including leased circuits, data communications, telex, and telegraph) was almost six times its 1990 level; and international telephone traffic minutes more than tripled between 1990 and 2000. High service growth is expected to continue in 2002.

Table 1: World Telecommunications Services

Indicator	1990	1992	1994	1996	1998	2000	*2002*[1]
Billions of U.S. dollars[2]							
Total telecommunications service revenue	396	448	517	672	767	920	*1,110*
Telephone service[3]	356	350	386	444	456	489	*529*
International[4]	33	43	47	53	56	60	*60*
Mobile service	11	26	50	114	172	261	*331*
Other[5]	29	72	81	114	139	169	*250*
Number							
Number of main lines (millions)	520	574	645	741	849	986	*1,115*
Mobile cellular subscribers (millions)	11	23	56	144	319	741	*1,390*
International telephone traffic minutes (billions)	33	43	57	71	89	110	*135*

[1] Forecast
[2] Current dollars, converted using annual average exchange rates.
[3] Installation, subscription, and local, trunk, and international call charges for fixed telephone service.
[4] Retail revenue.
[5] Includes leased circuits, data communications, telex, telegraph, and other telecom-related revenue.

Source: International Telecommunications Union. *Key Global Telecom Indicators.*

The Agreement. The agreement covers basic telecommunications services only. Participants agreed at the start of the talks to disregard differences in how countries might define "basic" telecommunications, and to negotiate on all public and private telecommunications services that involve the simple transmission of customer-supplied information (voice or data) from sender to receiver. Whereas the *Annex* on telecommunications addresses access to existing services and networks by users, the basic telecommunications *agreement* addresses the ability to enter telecommunications markets and sell services.

The specific types of services covered in the negotiations include voice telephone, data transmission, telex, telegraph, facsimile, private leased circuit services, fixed and mobile satellite systems, cellular telephone, mobile data services, paging, and personal

communication services. Broadcasting is not included. So-called value added services, in which suppliers enhance the form, content, or retrievability of customers' information, were not formally covered by the negotiations. However, a few participants chose to include these services in their offers. Enhanced services include on-line data processing, data base storage and retrieval, and electronic data interchange.[4]

Three Basic Elements. The agreement, which will be enforceable internationally through the WTO's procedures for dispute resolution and/or through individual country actions (as specified by the agreement), has three basic elements. First, the agreement provides for companies of a signatory country access to the telecommunications markets — local, long distance, and international — of other signatory countries. Companies may have market access through any means of network technology, by installing and using their own facilities, through purchase and/or resale of existing network capacity, and through interconnections. Because countries agreed to cover basic telecommunication services provided over network infrastructure and through resale over private leased circuits, market access commitments will cover services provided through the establishment of foreign firms or commercial presence. This includes the ability to own and operate independent telecommunications network infrastructure.

Second, the agreement provides that companies of one country can acquire and/or hold significant ownership or control of telecommunications services and/or facilities in other participating countries. This is partly implied in market access commitments that permit the establishment of foreign firms and the ownership and operation of telecommunications network infrastructure.

Third, participants agreed to establish a framework of fair competition comprised of a set of regulatory principles in a "Reference Paper" based upon the U.S. Telecommunications Act of 1996. The regulatory principles define and prohibit anti-competitive practices such as discrimination and non-transparency, especially with respect to interconnections, licensing criteria, and universal service. Each country is required to have an independent and impartial regulatory body.

Overarching Aspects. In general, the results of the basic telecom agreement are extended to all WTO members on a non-discriminatory basis through the "most-favored-nation" (MFN) principle.[5] However, at the end of the negotiations, many participants exercised their right to file MFN exemptions for certain telecom services.[6]

General descriptions of the elements of the basic telecommunications agreement mask the wide differences in the present openness of individual country telecom markets, in the degrees to which individual countries have agreed to the numerous aspects of the

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[4] There are numerous exceptions in which countries have specified later dates for, or the phasing in of, implementation of commitments applying to one or more services or concepts.

[5] Under MFN, any concessions, privileges, or immunities granted to one country (the "most favored") are extended to all countries that are accorded MFN treatment. For more discussion of MFN and U.S. MFN policy, see CRS Issue Brief IB93107, *Normal Trade Relations (Most-Favored-Nation) Policy of the United States*, by (name redacted).

[6] The United States filed an MFN exception for one-way satellite transmission of direct to home satellite, direct broadcast satellite, and digital audio transmission services.

agreement, and in the scopes of such commitments. Some countries, albeit a minority, made no commitments whatsoever with respect to some individual aspects of the agreement. Details of individual country commitments can be found at the Internet web sites of the WTO and of the Office of the U.S. Trade Representative ([http://www.wto.org] and [http://www.ustr.gov], respectively).

Implementation. Translation of the agreement into actual increased openness of telecom markets and lower rates for services faces a variety of hurdles. One is the difficult institutional and legal transition to a competitive environment by many countries that now have a single supplier of telecom services and no independent regulatory body (called for in the WTO agreement's regulatory principles). Two other hurdles are (a) the large amounts of capital relative to domestic resources that some countries will require to put modern telecommunications infrastructures in place, and (b) the corresponding technical assistance and support that some countries will require. It may well be a number of years before the agreement's terms are fully implemented and the goals realized.

Congressional Oversight. As a rule, trade agreements have not needed congressional action unless Congress mandated they be approved in legislation or they required changes in U.S. law. Legislation approving or implementing the agreement is necessary in those cases. Congress acknowledged that the United States would participate in extended telecommunications negotiations in the Uruguay Round implementing legislation, where it set forth the U.S. negotiating objective for these talks. Congress did not expressly require that any resulting agreement be legislatively approved, however, and most observers believe that the basic telecommunications services agreement does not require implementing legislation. The agreement has entered into force essentially without objection as an executive agreement.

Some Members of Congress initially were apprehensive about foreign investment in U.S. telecommunications, particularly regarding broadcasting. The agreement does not cover broadcasting, however, and congressional concern seems to have eased in this respect and others.

Impact. The WTO basic telecommunications services agreement is expected to increase world trade in telecommunications services and facilitate economic growth in general. Freer trade should result in improved products and services, lower prices, additional investment, and a better allocation of productive resources in the world economy. Inasmuch as the countries committing to full competition by 2005 accounted for 89% of world telecommunication service revenues in 1995 (ITU data), liberalization is to be applied to a very broad base of activity.

Data suggest that the potential benefits of telecommunications trade liberalization may be greater in relative terms for emerging economies than for developed ones.[7] However, the U.S. telecommunications industry and U.S. economy (with one of the most

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[7] The ITU reports that the gap between emerging nations and developed nations in total telephone penetration dropped by more than half between 1991 and 2001. However, while the growth rate in least developed countries' (LDCs) telephone networks has been accelerating, the gap in telephone penetration between developed countries and LDCs increased between 1991 and 2001.

advanced telecommunications infrastructures) should benefit greatly in absolute terms; this country accounted for 28% of world telecommunications services revenues in 1995. The highly competitive U.S. telecommunications services industry should be able to greatly increase its presence in other countries' telecommunications markets. Similarly, the competitive U.S. telecommunications equipment manufacturers should be able to boost sales considerably with the expected growth in world telecommunications services.

Increased competition resulting from telecom trade liberalization is driving down settlement rates charged by foreign telephone carriers to complete international calls, lowering the prices of such calls to consumers and businesses. Foreign settlement rates have tended to be much higher than U.S. rates, and many more calls originate in the United States than abroad, accounting for much of the U.S. trade deficit in telecom services during the 1990s (table 2). Probably indicative of the above-noted effects of greater competition, revenue from international telephone service increased 13% between 1995 and 2002 while total international telephone traffic minutes rose 114% (table 1).

Table 2 shows that the U.S. trade deficit in telecom services decreased steadily between 1996 and 2000, and that, in 2001, the United States had a surplus of $498 million. Services trade has been one of the fastest growing components in total world trade in recent years, and the U.S. telecommunications services industry appears to have benefitted from this trend. Two possible reasons for the increase in services trade are recent technological progress in telecommunications and information technology, and worldwide trends in trade liberalization and regulatory reform.[8]

Table 2: U.S. Trade in Services (millions of dollars)

Year	Telecommunications Services			Total Private Services		
	Exports	Imports	Balance	Exports	Imports	Balance
1986	1,827	3,253	-1,426	77,205	66,419	10,786
1989	2,519	5,172	-2,653	118,081	87,001	31,080
1993	2,785	6,365	-3,580	172,031	111,259	60,772
1995	3,228	7,305	-4,077	204,229	133,355	70,874
1996	3,301	8,290	-4,989	221,120	137,081	84,039
1997	3,918	8,346	-4,428	239,444	152,042	87,402
1998	5,538	7,687	-2,149	244,099	167,607	76,492
1999	5,549	6,601	-2,052	256,492	173,241	83,251
2000	4,756	5,473	-717	277,478	202,060	75,418
2001	4,796	4,298	498	266,209	192,305	73,904

Source: U.S. Department of Commerce. Bureau of Economic Analysis. *Survey of Current Business*, October 1999, October 2000, July 2002.

[8] See The World Bank Group, "Trade Services in the World Economy," *Trade Fact Sheet*, September 26, 2002. [http://www1.worldbank.org/wbiep/trade/services/worldecon.htm]