

ORIGINAL

RECEIVED

AUG 15 1996

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

In the Matter of )  
)  
Amendment of the Commission's Regulatory )  
Policies to Allow Non-U.S.-Licensed Space )  
Stations to Provide Domestic and International )  
Satellite Service in the United States )  
)  
and )  
)  
Amendment of Section 25.131 of the )  
Commission's Rules and Regulations to )  
eliminate the Licensing Requirement for )  
Certain International Receive-Only Earth )  
Stations )

IB Docket No. 96-111

CC Docket No. 93-23  
RM-7931

DOCKET FILE COPY ORIGINAL

REPLY COMMENTS OF TRANSWORLD

Robert E. Conn  
Shaw, Pittman, Potts & Trowbridge  
2300 N Street, N.W.  
Washington, D.C. 20037  
(202) 663-8093

August 15, 1996

No. of Copies rec'd  
List A B C D E

249

**TABLE OF CONTENTS**

	<b><u>Page</u></b>
I. SUMMARY .....	1
II. FCC SHOULD AWAIT COMPLETION OF WORLD TRADE ORGANIZATION NEGOTIATIONS .....	3
III. IF ECO-SAT TEST IS ADOPTED, MAJOR CARVE-OUTS ARE WARRANTED .....	6
A. Certain Foreign Satellites Should Be Exempt .....	6
B. Certain Services Should Be Exempt .....	7
C. Practical Modifications To ECO-Sat Are Necessary .....	7
IV. FOREIGN SATELLITES DO NOT THREATEN ANY MEASURABLE ADVERSE IMPACT UPON THE U.S. MARKET: ECO-SAT COULD BE COUNTERPRODUCTIVE .....	10
V. PROPOSED RULES SHOULD NOT BE IMPLEMENTED UNLESS OR UNTIL THEY ARE FINALLY ADOPTED: RETROACTIVITY SHOULD BE ESCHEWED .....	12
VI. RECEIVE-ONLY EARTH STATIONS SHOULD BE DEREGULATED .....	13
VII. CONCLUSION .....	14

RECEIVED

AUG 15 1996

Before the  
FEDERAL COMMUNICATIONS COMMISSION FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554 OFFICE OF SECRETARY

In the Matter of	)	
	)	
Amendment of the Commission's Regulatory	)	IB Docket No. 96-111
Policies to Allow Non-U.S.-Licensed Space	)	
Stations to Provide Domestic and International	)	
Satellite Service in the United States	)	
	)	
and	)	
	)	
Amendment of Section 25.131 of the	)	CC Docket No. 93-23
Commission's Rules and Regulations to	)	RM-7931
eliminate the Licensing Requirement for	)	
Certain International Receive-Only Earth	)	
Stations	)	

**REPLY COMMENTS OF TRANSWORLD**

Transworld Communications (U.S.A.), Inc. ("Transworld"), an FCC common carrier licensee under Title II of the Communications Act, and Transworld International, Inc., an FCC common carrier licensee under Title III of the Act, (collectively "Transworld"), submit these reply comments pursuant to the Commission's Notice of Proposed Rulemaking released May 14, 1996, in the above-captioned matter ("NPRM").

**I. SUMMARY**

The opening round of comments, for the most part, cautioned the Commission against the adoption of rules, ECO-Sat or otherwise at this time, other than deregulation of receive-only U.S. earth stations receiving signals from foreign satellites. In the event, nevertheless, that the FCC were determined to adopt the ECO-Sat test, many of the opening comments urged major carve-outs of specified services or major modifications of the NPRM's proposals. Thus, the opening

round confirmed Transworld's "go-slow" recommendations, and provided additional reasons that support Transworld's position herein.

In its opening comments, Transworld submitted that it would be premature for the Commission to adopt rules at this stage, given the complexity of the issues, the paucity of specific proposals in the NPRM, and the absence of any findings showing a need for any rules. Transworld noted that the NPRM did not make the necessary findings to support the proposed rules; did not set forth the actual ills that the rules were supposed to cure; and did not even identify the foreign satellites or their actual or expected volumes of U.S. international traffic, except for specific mention of the intergovernmental organization ("IGO") satellites.

Transworld also showed that the enforcement of the ECO-Sat test (with its extraterritorial impact on foreign satellites directly, or indirectly through U.S. earth station operators) could engender international discord in the regulation of global telecommunications, provoke retaliatory actions by the impacted countries, and retard rather than promote the Commission's laudable objective of exporting U.S.-style competition.

Transworld recommended in its opening comments that it would be more prudent for the Commission to use this proceeding for fact and idea gathering purposes, to be followed-up, if deemed necessary, by a further NPRM with more definitive proposed rules. Transworld concluded that no rules, ECO-Sat or otherwise, should be promulgated pursuant to the NPRM, other than an across-the-board deregulation of receive-only earth stations, irrespective of whether they operate with domestic or foreign satellites.

Transworld will show below how the record to date in this proceeding warrants deferral of the ECO-Sat test pending the completion of ongoing international negotiations. If the FCC deems further action necessary after the completion of such negotiations, the record should be supplemented by the issuance of a further more explicit and updated NPRM. In the event that the Commission is determined to prescribe rules, notwithstanding the foregoing suggestions, the ECO-Sat test should be modified to permit the provision of necessary services via foreign satellites if they were the only available practical and economical means. In no event, however, should any exclusionary rules be applied to the Russian Satellites, which are vital to U.S.-Russian relations.

## **II. FCC SHOULD AWAIT COMPLETION OF WORLD TRADE ORGANIZATION NEGOTIATIONS**

The record in this proceeding does not support the unilateral adoption of ECO-Sat at this time, particularly since the U.S. is engaged in relevant multilateral negotiations, scheduled for completion in February 1997, under the framework of the World Trade Organization ("WTO").<sup>14</sup> GE American Communications has made the following cogent points:

"[T]here are ongoing WTO negotiations concerning basic telecommunications services. Those talks, which have been extended through February 15, 1997, are focused on developing a broad multilateral agreement regarding the terms of market access for telecommunications.

"We believe that the best course for the Commission at this point is to defer this proceeding pending completion of the current round of WTO negotiations. The Commission can then act on a more complete record once the WTO process has been concluded.

<sup>14</sup> "Trade negotiators from USTR, FCC, Commerce and State Depts. travel to Geneva in Sept. [1996] for next round of talks in World Trade Organization (WTO) Group on Basic Telecom (GBT)." Communications Daily, Aug. 9, 1996, 3-4.

\* \* \* \* \*

"In addition, the WTO process involves numerous bilateral and multilateral discussions with other members of the organization. As a result, the U.S. will have the opportunity to describe its objectives and respond to the concerns of other members. This process -- rather than a unilateral declaration of policy -- presents a greater likelihood that the U.S. can avoid misunderstandings of its policy goals. As a result, the possibility of backlash on the part of foreign administrations is reduced.

\* \* \* \* \*

"Our point, however, is that given the relevance of the WTO talks to the goals of the [DISCO II] rulemaking, the most prudent and efficient course of action is to defer this proceeding for seven months. By doing so, the Commission can also avoid any unintended suggestion that the U.S. has prejudged the outcome of the WTO negotiations. Such a perception on the part of the other administrations could undercut the effectiveness of the U.S. negotiators."<sup>2/</sup>

Hughes agrees:

". . . [T]he Commission must carefully coordinate the proposed ECO-Sat test with United States' obligations under the 1993 General Agreement on Trade in Services ("GATS"), which imposes on signatories national treatment and most favored nation obligations with respect to covered services. As the Commission has noted elsewhere, GATS currently contains no obligations with respect to basic telecommunications services provided over FSS and MSS satellites, because no country has scheduled any commitments in basic telecommunications. The United States has offered proposals for open market access in basic telecommunications in the Negotiating Group on Basic Telecommunications ("NGBT"), which is scheduled . . . in February 1997. If the U.S. proposals are adopted at that time, the Commission's [DISCO II] foreign satellite entry policy must conform to the agreement that ultimately is reached."<sup>3/</sup>

<sup>2/</sup> Comments of GE American Communications, Inc., 5-7 (emphasis added).

<sup>3/</sup> Consolidated Comments of Direct TV, Inc., Direct TV International, Inc., and Hughes Communications Galaxy, Inc. (collectively "Hughes"), 9 (fn. omitted, emphasis added).

Motorola agrees that the WTO/GBT talks in February 1997 may well obviate the need for a unilateral ECO-Sat test:

"Motorola and Iridium are optimistic that there will be enough improved offers to form a critical mass of WTO members by February 15, 1997, which will form a basis for a GBT agreement. Such a broad agreement would provide important market-opening benefits in the MSS/GMPCS market (as well as in a variety of other telecommunications sectors) for those countries that choose to open their national markets to these services. The agreement would also achieve the essential goal of market access in a critical mass of countries without dependence on implementation of a new U.S. [ECO-Sat] entry standard for non-U.S.-licensed satellite systems."<sup>4/</sup>

AirTouch urges the Commission not to adopt the ECO-Sat test "at least until the completion of the multilateral trade talks currently underway."<sup>5/</sup> Lockheed Martin suggest that "it is vitally important" that "the Commission and the rest of the Government should pursue an effective multilateral understanding concerning satellite services in the basic telecommunications negotiations currently underway under the auspices" of the WTO, and at the ITU Policy Forum "scheduled for this October."<sup>6/</sup>

Accordingly, the unilateral adoption of the ECO-Sat test by the Commission prior to completion of the WTO process would be inadvisable.

<sup>4/</sup> Comments of Motorola Satellite Communications, Inc. and Iridium, Inc. (collectively "Motorola"), 14 (emphasis added).

<sup>5/</sup> Comments of AirTouch Communications, 12.

<sup>6/</sup> Comments of Lockheed Martin Corporation, 3-4.

### **III. IF ANY ECO-SAT TEST IS ADOPTED, MAJOR CARVE-OUTS OR MODIFICATIONS ARE WARRANTED**

#### **A. Certain Foreign Satellites Should Be Exempt**

Transworld has shown in its opening comments, 5, that the Russian satellites should be excluded from the ECO-Sat test because of the unique relationship for space exploration and satellite communications between the U.S. and Russia, the world's leaders in space technology.

The Executive Branch has supported U.S. usage of the Russian commercial satellites. On September 2, 1994, the State Department wrote to the FCC that "there are no fundamental foreign policy reasons which would lead the Russian Federation or the United States to deny use of each other's satellite systems for commercial uses." Letter from Michael Fitch to Kathleen Wallman. On September 20, 1994, NTIA wrote to Transworld as follows:

"We note that the [Transworld] applications are for commercial use of three existing Russian satellites and that such use could significantly increase the communications capacity between Russia and other parts of the World. We recognize that the commercial use of these satellites and the anticipated revenues are important to the continued operation of them by the Russians for humanitarian and scientific purposes. We understand that the proposed use could encourage further conversion of former Soviet military technology to commercial use, help it rebuild its economic infrastructure and foster further technological and scientific cooperation with Russia." (This NTIA letter is on file with the FCC in File No. 952-DSE-P/L-95).

Other parties have presented strong cases supporting the exemption of other foreign satellites from the ECO-Sat test. Charter has shown that the Mexican Solidardad satellites should be excluded because of the recently signed U.S.-Mexican agreement permitting the satellites of each country to serve the other's market.<sup>71</sup> Japan Satellite Systems, Inc. ("JSAT") has shown that the

<sup>71</sup> Comments of Charter Communications International, Inc., 5.

Commission has already made the necessary public interest findings for the use of Japan's JCSAT satellites by U.S. earth stations.<sup>8/</sup>

### **B. Certain Services Should Be Exempt**

The broadcast networks have shown that "it would not be appropriate to apply the ECO-Sat test to prohibit the use of a non-U.S. satellite for international video transmissions because that satellite might constitute the only suitable transmission capacity available, or at least the only one reasonably available."<sup>9/</sup> Transworld agrees. By the same token, non-broadcast video transmissions, such as for humanitarian telemedicine or vital teleconferencing, should not be prohibited because the only reasonably available transmission means -- a non-U.S. satellite -- might not pass the ECO-Sat test.<sup>10/</sup> As will be shown below, the ECO-Sat test should be modified so as to permit vital voice and data, as well as video, transmissions when the only practical method of transmission is via non-U.S. satellites.

### **C. Practical Modifications To ECO-Sat Are Necessary**

The overarching policy governing U.S. usage of international satellites, both foreign and domestic, has previously been promulgated by the FCC:

<sup>8/</sup> Comments of JSAT, 3.

<sup>9/</sup> Comments of Capital Cities/ABC, Inc., CBS, Inc., NBC, Inc., and Turner Broadcasting System, Inc. ("broadcast networks"), 13.

<sup>10/</sup> Other commenters have presented their cases for exemption of certain services from ECO-Sat. See Comments of: (1) AirTouch Communications, 12 (Big LEO satellites should not be covered because of their unique international status); (2) TMI Communications and Company, 7-8 (link between twin TMI Canadian and AMSC U.S. MSS satellites should not be disrupted); and (3) Western Tele-Communications, Inc., 6-7 (Canadian DBS satellites should not be procluded because of shortage of U.S. orbital slots).

"The foundation of a U.S. international satellite policy is the establishment of a global competitive communications environment that provides customers with increased satellite service options, improved quality, and lower rates."<sup>11/</sup>

Any test for the usage of foreign satellites by U.S. customers that might ultimately be adopted as a result of the instant NPRM, should implement the above-quoted FCC policy -- not conflict with it. Appropriate modifications to the ECO-Sat test are necessary, Transworld respectfully submits, to achieve this result.

Several of the commenters have suggested such modifications to ECO-Sat. As noted above, the broadcast networks have suggested a "reasonably available" modification that would permit the use of foreign satellites if U.S. satellite capacity was not reasonably available.<sup>12/</sup> Another commenter has advanced the "insufficient U.S. capacity" modification, which means that the usage of foreign satellites would not be prohibited when "U.S. licensed satellite capacity is either insufficient, economically impractical or unavailable."<sup>13/</sup>

Several commenters also suggested that the proposed "route" country aspect of ECO-Sat should not be used to deprive U.S. customers of satellite access to developing countries whose

<sup>11/</sup> Vision Accomplished, 10 FCC Rcd 3716, 3718 (1995) (authorizing the connection of a U.S. earth station with a Japanese satellite).

<sup>12/</sup> Broadcast networks, supra at n.9. There is no reason to limit this modified test to broadcast video only, when there are other equally deserving non-broadcast video, voice and data services.

<sup>13/</sup> Joint Comments of Newcomb Communications, Inc. and Mobil Datacom Corporation, 5-6. See also, Comments of General Instrument Corporation, 8 ("Non-U.S. satellite resources should be permitted to deliver services to U.S. consumers when resources are not available from domestic satellites to meet consumers' needs").

only practical access is via a satellite system of a foreign country which might not satisfy the "critical mass" of "route" countries required by ECO-Sat.<sup>14/</sup>

Transworld endorses the foregoing suggested modifications to the ECO-Sat test. Transworld has found specific incidents where the only practical access to the U.S. is via the Russian satellites. These incidents involved cooperation between NASA and Russian agencies for medical teleconferencing via Russian Louth Satellites to assist with the diagnosis and treatment of patients, disaster relief and other humanitarian purposes. The Louth WSDRN Satellite provides the communications link with the Russian MIR space station, now occupied by a U.S. astronaut. The WSDRN Satellite provided the only practical means for transmission to the U.S. by Transworld of live TV coverage of the first democratic presidential campaign and election in South Africa.

As will be shown in the next section, any competitive distortion of the U.S. international satellite market by U.S. usage of the limited number of foreign satellites, is extremely unlikely. Therefore, U.S. earth station authorizations to use foreign satellites are best adjudicated on a case-by-case basis. In the event that the Commission, nevertheless, is determined to adopt an ECO-Sat test, the modifications proposed above should be adopted so that the ECO-Sat test becomes a flexible aid to the implementation of the FCC's pro-competitive, pro-consumer policy -- not an inflexible rule that could detract from that policy.

<sup>14/</sup> Comments of WorldCom, Inc., 5 (ECO-Sat test should "not be applied to route markets below the top 50 countries as measured by . . . 'IMTS' traffic"); Comments of Kokusai Denshin Denwa Co., Ltd. ("a specific route market, particularly to or from certain developing countries, might have been developed through the initiative and investment of a non-U.S. satellite system").

**IV. FOREIGN SATELLITES DO NOT THREATEN ANY MEASURABLE ADVERSE IMPACT UPON THE U.S. MARKET: ECO-SAT COULD BE COUNTERPRODUCTIVE**

---

The opening round of comments confirms Transworld's previously expressed view that the need for ECO-Sat or any other foreign satellite entry rules is "problematic":

"The NPRM does not identify the foreign satellites that it proposes to regulate [other than those of Intergovernmental Organizations ("IGOs")]. Nor does the NPRM provide any examples of foreign entry barriers that would or could be surmounted by the enforcement of the ECO-Sat test. We believe that there are a limited number of foreign satellite systems. We also believe that, aside from the home countries, the traffic volumes between the U.S. and the various route countries would be insubstantial." (Transworld Comments, 4).

None of the opening comments identified any non-IGO foreign-owned satellites providing Fixed Satellite Services ("FSS"), the prime service area of interest to Transworld, which pose a threat to the U.S. international satellite market. Thus, the record deficiencies in this proceeding remain. There still is no record support for the adoption of any foreign satellite exclusionary rules with respect to the non-IGO FSS sector.

Other commenters echoed Transworld's view that "the FCC's proposed extraterritorial enforcement would open the regulation of global telecommunications to international discord"; and that "ECO-Sat might retard rather than promote the Commission's laudable objective of exporting U.S.-style competition" (Transworld Comments, 3). One commenter, for example, showed how ECO-Sat might be counterproductive:

"Since many countries do not have satellite systems which would seek U.S. landing rights, such countries may, condition access for U.S. satellite systems on another commodity, e.g., content restrictions on U.S.-transmitted video services, provision of a certain level of satellite services, or access to U.S. markets for telecommunications services or unrelated commodities. To achieve the

benefits of open markets for U.S. consumers, the Commission should not adopt policies for authorizing access to non-U.S. satellites which suggest that grant of landing rights to a satellite system is a 'trade' issue."<sup>15/</sup>

By the same token, commenters offer cogent arguments against the NPRM's proposal to require U.S. earth station applicants to show that their proposed interconnecting foreign satellites meet FCC technical, financial and legal requirements.

- Such requirements pay "only lip service to the foreign licensing scheme by simply moving the entry barrier to another position in the regulatory process, and it invites foreign administrations to do the same to U.S.-licensed operators."<sup>16/</sup>
- [R]equiring a demonstration that non-U.S. licensed space stations meet all U.S. legal, technical and financial qualifications is tantamount to relicensing the system. And, it is not practical to require such compliance because, by the time the earth station application is filed, the non-U.S. system may already be licensed, under construction and/or launched."<sup>17/</sup>
- "These proposals are unnecessary, and complying with them would be extremely burdensome for [U.S.] earth station operators, many of which are relatively small companies."<sup>18/</sup>

The record herein contains some basis for FCC regulation of IGO (Intelsat, Inmarsat and their progeny) satellite entry into the U.S. market.<sup>19/</sup> Orion "urges the Commission to take up the

<sup>15/</sup> Comments of L/Q Licensee, Inc. and Loral Space & Communications Ltd. ("Loral"), 12-13. See also, (1) Comments of GE American Communications, Inc., 4 ("adoption of a reciprocity standard might lead to a backlash . . . [and] impede rather than enhance U.S. providers' efforts to gain access to markets abroad"); and (2) Comments of AirTouch Communications, 12 (FCC should "avoid the potential negative backlash that could occur if the United States was perceived as closing the U.S. market").

<sup>16/</sup> Comments of Orion Network Systems, Inc., 5. Accord, TMI, 17-18.

<sup>17/</sup> Comments of Loral, 21.

<sup>18/</sup> Comments of WorldCom, 9.

<sup>19/</sup> See Comments of AT&T Corp., 14-17; Columbia Communications Corporation, 21-25; Home Box Office, 20-21 (a "separate ECO-Sat test should be applied to IGOs"); Lockheed Martin, 13-14; PanAmSat Corporation, 5-6; and Orbital Communications Corpora-

Footnote continued on next page

question of liberalized U.S. market access for ISOs [IGOs] in a separate rule making devoted exclusively to resolving the many issues raised by such a proposal.<sup>20/</sup> Transworld takes no position herein regarding IGOs other than to urge that unique IGO issues do not warrant the adoption of any FCC rules regulating U.S. earth station access to non-IGO foreign satellites.

**V. PROPOSED RULES SHOULD NOT BE IMPLEMENTED  
UNLESS OR UNTIL THEY ARE FINALLY ADOPTED:  
RETROACTIVITY SHOULD BE ESCHEWED**

In its opening comments, Transworld noted that the effect on future applications to use non-U.S. satellites "could be devastating" to important service requirements if the non-final ECO-Sat test were applied to applications filed subsequent to the NPRM but prior to the final adoption of any proposed rules (Transworld, 4-5).

The record supports a lengthy delay in the adoption of any final rules if, indeed, any are to be adopted. See the earlier section of these comments entitled, "FCC Should Await Completion Of World Trade Organization Negotiations" until February 1997. The need for, and scope of, any ECO-Sat-type rules is problematic, as demonstrated by the record to date. Accordingly, future applications by U.S. earth station operators to use foreign satellites should be processed promptly on a case-by-case basis based on existing Commission rules and precedents.

In order to promote the prompt authorization of needed services without prejudice to the ultimate adoption of any new rules, WorldCom made the following constructive proposal:

Footnote continued from previous page

tion, 5-8. See also, Bureau of National Affairs, Aug. 7, 1996, A-14 (General Accounting Office report recommends that competitive concerns be addressed in the restructuring of Intelsat and Inmarsat.)

<sup>20/</sup> Orion, 13 (emphasis added).

"[T]hat the Commission implement interim measures to ensure that operators can provide important new services pending adoption of [any of] the new rules. Specifically, WorldCom suggest[ed] that the Commission grant special temporary authorizations ('STAs') to newly-filed applications that comply with the existing rules. The grant of an STA would be without prejudice to Commission action on the underlying application."<sup>21/</sup>

Transworld agrees with the foregoing STA proposal, provided that action on the underlying applications is not interminably delayed pending the adoption of rules that might never be finalized.

## **VI. RECEIVE-ONLY EARTH STATIONS SHOULD BE DEREGULATED**

The record supports Transworld's position that there be no further licensing requirements for receive-only earth stations, irrespective of whether they operate with U.S. or foreign satellites, including Intelsat. Most reasoned comments addressing this issue, agreed.<sup>22/</sup>

Keystone Communications Corporation presented a persuasive case for deregulation of international receive-only earth stations:

"The Commission should once and for all exclude international receive-only earth stations from licensing regulation. Receive-only earth stations, whether domestic or international, are passive devices having no transmit capability, and therefore, they cannot possible create interference with any satellites or other users of radio frequencies. Any licensing requirement for such facilities is unnecessary, unduly burdens applicants and the Commission, and delays the introduction of service.

". . . Keystone urges the Commission now to adopt the regulatory policy that all international receive-only earth stations not subject

<sup>21/</sup> WorldCom, 4.

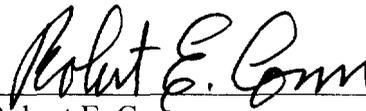
<sup>22/</sup> See Comments of (1) Comsat Corporation, 39-42; (2) TMI, 21 ("forbearance is clearly required under Section 401 of the Telecommunications Act of 1996"); and (3) Western Tele-Communications, Inc., 14-17.

to any international treaty restrictions are free to operate without a license and are eligible for registration." (Keystone, 6-7).

## VII. CONCLUSION

For the reasons set forth in Transworld's opening and reply comments, no rules should be promulgated as a direct result of the NPRM, other than an across-the-board deregulation of receive-only earth stations.

Respectfully submitted,



---

Robert E. Conn

Shaw, Pittman, Potts & Trowbridge

2300 N Street, N.W.

Washington, DC 20037

(202) 663-8093

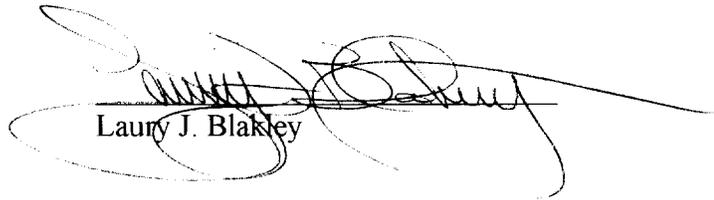
Attorney for Transworld

August 15, 1996

342152-01 / DOCSDC1

**CERTIFICATE OF SERVICE**

I hereby certify that I have served copies of the foregoing Reply Comments in IB Docket No. 96-111 upon each of those listed on the attached Service List by first class mail, postage prepaid.

  
Laury J. Blakley

August 15, 1996

## SERVICE LIST

Robert S. Koppel  
WORLDCOM, INC.  
15245 Shady Grove Road  
Suite 460  
Rockville, MD 20850

Yasuharu Iwashima  
Executive Vice President  
Japan Satellite Systems Inc.  
5th Floor Tranomon 17 Mori Building  
1-26-5 Tranomon Minato-ku Tokyo  
105 Japan  
(via Air Mail)

Kazunori Inagaki, Director  
Kokusai Denshin Denwa Co., Ltd.  
Washington Liaison Office  
3400 International Drive, N.W.  
Suite 3K-02 (INTELSAT Bldg.)  
Washington, DC 20008-3098

Randolph J. May  
Sutherland, Asbill & Brennan  
1275 Pennsylvania Avenue, N.W.  
Washington, DC 20004-2404  
(Attorney for Capital Cities/ABC, Inc., CBS Inc., National Broadcasting Company, Inc.,  
and Turner Broadcasting System, Inc.)

Mark C. Rosenblum  
Room 3244J1  
295 North Maple Avenue  
Basking Ridge, NJ 07920  
(Attorney for AT&T Corp.)

Gary M. Epstein  
Latham & Watkins  
1001 Pennsylvania Avenue, N.W.  
Washington, DC 20004-2505  
(Attorney for DirecTV, Inc., DirecTV International, Inc., and Hughes Communications  
Galaxy, Inc.)

Henry M. Rivera  
Ginsburg Feldman and Bress, Chartered  
1250 Connecticut Avenue, N.W.  
Washington, DC 20036  
(Attorney for Intelsat))

Michael J. Lehmkuhl  
Pepper & Corazzini, L.L.P.  
1776 K Street, N.W.  
Suite 200  
Washington, DC 20006  
(Attorney for Alphastar Television Network Inc.)

Albert Halprin  
Halprin, Temple, Goodman & Sugrue  
1100 New York Avenue, N.W.  
Suite 650, East Tower  
Washington, D.C. 20005  
(Attorney for Orbital Communications Corporation)

Stephen L. Goodman  
Halprin, Temple, Goodman & Suqrue  
1100 New York Avenue, N.W.  
Suite 650, East Tower  
Washington, D.C. 20005  
(Attorney for AirTouch Communications)

Christine G. Crafton, Ph.D.  
Director, Industry Affairs  
General Instrument Corporation  
1133 21st Street, N.W.  
Suite 405  
Washington, DC 20036

Cheryl A. Tritt  
Morrison & Foerster, LLP  
2000 Pennsylvania Avenue, N.W.  
Suite 5500  
Washington, DC 20006  
(Attorney for ICO Global Communications)

Philip L. Malet  
Steptoe & Johnson, LLP  
1330 Connecticut Avenue, N.W.  
Washington DC 20036  
(Attorney for Motorola Satellite Communications, Inc. and Iridium, Inc.)

Michael D. Kennedy  
Vice President and Director  
Regulatory Relations  
Motorola, Inc.  
Suite 400  
1350 I Street, N.W.  
Washington, DC 20005

F. Thomas Tuttle, Vice President  
and General Counsel  
Iridium, Inc.  
Eighth Floor  
1401 H Street, N.W.  
Washington, DC 20005

Lon C. Levin  
Vice President and Regulatory Counsel  
AMSC Subsidiary Corporation  
10802 Parkridge Boulevard  
Reston, Virginia 22091

Bruce D. Jacobs  
Fisher Wayland Cooper Leader & Zaragoza L.L.P.  
2001 Pennsylvania Avenue, N.W., Suite 400  
Washington, DC 20006  
(Attorney for AMSC Subsidiary Corporation)

Richard H. Shay, Esquire  
Orion Network Systems, Inc.  
2440 Research Boulevard, Suite 400  
Rockville, MD 20850

Thomas J. Keller  
Verner, Liipfert, Bernhard, McPherson and Hand, Chartered  
901 15th Street, N.W., Suite 700  
Washington, DC 20005-2301  
(Attorney for Orion Network Systems, Inc.)

Joan M. Griffin  
BT North America Inc.  
601 Pennsylvania Avenue, N.W.  
Suite 725  
Washington, DC 20004

Joel S. Winnik  
Hogan & Hartson L.L.P.  
555 Thirteenth Street, N.W.  
Washington, DC 20004-1109  
(Attorney for BT North America Inc.)

Norman P. Leventhal  
Leventhal, Senter & Lerman  
2000 K Street, N.W., Suite 600  
Washington, DC 20006  
(Attorney for TRW Inc.)

Alan Y. Naftalin  
Koteen & Naftalin, L.L.P.  
1150 Connecticut Avenue, N.W.  
Suite 1000  
Washington, DC 20036  
(Attorney for TMI Communications and Company, Ltd.)

Carol R. Schultz  
MCI Telecommunications Corporation  
1801 Pennsylvania Avenue, N.W.  
Washington, DC 20006

Howard D. Polsky  
Comsat Corporation  
6560 Rock Spring Drive  
Bethesda, MD 20817

Gerald Musarra  
Senior Director, Commercial Programs  
Space and Strategic Missiles Sector  
Lockheed Martin Corporation  
1725 Jefferson Davis Highway  
Arlington, VA 22202-4127

Terri B. Natoli  
Fleischman and Walsh, L.L.P.  
1400 Sixteenth Street, N.W., Suite 600  
Washington, DC 20554  
(Attorney for Newcomb Communications, Inc. and Mobile Datacom Corporation)

Carol R. Schultz  
1801 Pennsylvania Avenue, N.W.  
Washington, DC 20006  
(Attorney for MCI Telecommunications Corporation)

Richard E. Wiley  
Wiley, Rein & Fielding  
1776 K Street, N.W.  
Washington, DC 20006  
(Attorney for Western Tele-Communications, Inc.)

Benjamin J. Griffin  
Reed Smith Shaw & McClay  
1301 K Street, N.W.  
Suite 1100, East Tower  
Washington, DC 20005  
(Attorney for Home Box Office)

Philip L. Verveer  
Willkie Farr & Gallagher  
1155 21st Street, N.W., Suite 600  
Washington, DC 20036  
(Attorneys for Loral Space & Communications Ltd. and L/Q Licensee, Inc.)

William D. Wallace  
Crowell & Moring  
1001 Pennsylvania Avenue, N.W.  
Washington, DC 20004

Philip V. Otero  
Vice President & General Counsel  
GE American Communications, Inc.  
Four Research Way  
Princeton, NJ 08540

Peter A. Rohrbach  
Hogan & Hartson L.L.P.  
555 Thirteenth Street, N.W.  
Washington, DC 20004  
(Attorney for GE American Communications, Inc.)

Scott Blake Harris  
Gibson, Dunn & Crutcher L.L.P  
1050 Connecticut Avenue, N.W.  
Washington, DC 20036  
(Counsel for Teledesic Corporation)

Raul R. Rodriguez  
Leventhal, Senter & Lerman  
2000 K Street, N.W., Suite 600  
Washington, DC 20006  
(Attorney for Columbia Communications Corp.)

Jack E. Robinson, President  
National Telecom Satellite Communications, Inc.  
2187 Atlantic Street  
Stamford, CT 06902

Henry Goldberg  
Goldberg, Goddes, Wiener & Wright  
1229 - 19th Street, N.W.  
Washington, D.C. 20036  
(Attorney for PanAmSat)

James T. Roche  
Keystone Communications Corporation  
400 N. Capitol Street, N.W.  
Suite 880  
Washington, D.C. 20001