

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

In the Matter of

AMERICAN TELEPHONE AND TELEGRAPH COMPANY
CICI, INC.
FTC COMMUNICATIONS, INC.
MCI INTERNATIONAL, INC.
TRT TELECOMMUNICATIONS CORPORATION
US SPRINT COMMUNICATIONS COMPANY
WU WORLD COMMUNICATIONS, INC.

Joint Application for Authorization Under Section 214 of the Communications Act of 1934, as Amended, to Construct, Assign Capacity in and Operate a High Capacity, Digital Submarine Cable System Between and Among the United States, Canada, the United Kingdom, France and Spain.

MEMORANDUM OPINION, ORDER AND AUTHORIZATION

Adopted: December 15, 1988; Released: December 27, 1988

By the Chief, Common Carrier Bureau:

1. We are considering the above-captioned Joint Application, filed on August 4, 1988, by several United States International Service Carriers (USISCs) requesting for authority, pursuant to Section 214 of the Communications Act of 1934, as amended, 47 U.S.C. Section 214 (1982), to construct and operate the TAT-9 high capacity digital, optical fiber submarine cable system. TAT-9 will extend between points in or reached via the United States and Canada on the west end and points in or reached via the United Kingdom, France and Spain on the east end. The USISCs also request authority to (1) acquire capacity in the TAT-9 cable system; (2) acquire, by lease, such extension facilities as may be required to extend capacity in TAT-9; (3) convey capacity in TAT-9 to foreign administrations on an ownership or indefeasible right of user (IRU) basis; and (4) activate and operate capacity in TAT-9 and in the aforementioned extension facilities for the provision of their respectively authorized telecommunications services. The cable system will be jointly owned by the USISCs, the telecommunications administrations of seventeen European countries who are members of the CEPT,¹ and a number of other foreign telecommunications entities in Australia, Canada, Japan, Mexico, New Zealand and the Philippines.² The proposed TAT-9 cable is planned to be in service in October, 1991.

2. The subject Application was placed on public notice on August 10, 1988. In response to the notice, Private Transatlantic Telecommunications System, Inc. (PSI), filed comments accompanied by a Petition for Rule Making. Cable and Wireless North America, Inc. (Cable and Wireless) filed a letter in response to PSI's filings. Reply comments were then submitted by the Joint Applicants and TRT Telecommunications Corporation (TRT) individually. PSI filed responsive comments to the reply comments.

3. Based on our review of the Application and in view of the Commission's determinations in Docket No. 79-184,³ we grant the Application.

I. DESCRIPTION OF PROPOSED FACILITIES

4. According to the Applicants, TAT-9 will be used to supplement the USISCs' existing facilities in the provision of service between points in or reached via the U.S. mainland and points in or reached via the U.K., France and Spain.⁴ The TAT-9 cable system, attached as Appendix 2, will be connected in the U.S., Canada, the U.K., France and Spain with the respective domestic networks in those countries and will be extended by suitable facilities to the borders of other countries or to the terminals of other international communications systems participating in the TAT-9 cable system. Digital terrestrial fiber facilities will interconnect the Spain branch of TAT-9 to the proposed MAT-2⁵ cable terminal on the Mediterranean coast of Spain. The MAT-2 cable system will then connect with the EMOS-1⁶ cable system, thereby extending traffic from North America to the Mediterranean Region.⁷ When the extensions into such territories by means of these facilities are proposed to be activated in the future, the individual carrier proposing such an extension will seek authorization from the Commission.

5. The TAT-9 Construction and Maintenance Agreement (C&MA),⁸ defines the proposed cable system in terms of segments and subsegments for ownership purposes. Segments A through E, listed in Appendix 3, are the cable landing stations. Segment F is the whole of the submarine cable system provided between and among and including the system interfaces at the cable stations in the U.S., Canada, the U.K., France and Spain. Segment F consists of subsegments F1 through F6. The main, or transatlantic portion of TAT-9 is subsegment F3. Subsegment F1 is the spur to Canada. Subsegment F2 is the spur to the U.S. Subsegment F4 is the spur to the U.K. while subsegments F5 and F6 land in France and Spain, respectively. Subsegment F also includes special equipment associated with the submersible plant, the transmission cable equipped with appropriate repeaters and the terminal power feeding equipment.

6. Segment F will have 15,120 minimum assignable units of ownership (hereinafter MAUOs or 64 kilobit per second (kbit/s) circuits)⁹ of usable design capacity¹⁰ in the transatlantic portion of the cable. This cable segment bears two digital, optical fiber cable pairs with a usable design capacity on each pair of 7,560 MAUOs, provided in four 140 Mbit/s streams, with each 140 Mbit/s stream containing 1,890 MAUOs. The cable will branch into two spurs on the North American side and three spurs at a point in the Atlantic Ocean, just off of the European continental shelf. The division into these branches, or spurs, and the switching between them, will be accomplished by a Branching Unit (BU). The capacity on each

branch, or spur, is dependent on the number of working fiber pairs. The branches extending to Canada, France and Spain each have one operating fiber pair and a usable design capacity of 7,560 MAUOs. The U.K. and the U.S. subsegments each have branches containing two operating fiber pairs and a usable design capacity of 15,120 MAUOs. Since the combined capacity of the eastern and western branches exceeds the transatlantic capacity, each branch will operate at less than maximum capacity. The coastal cable stations associated with each subsegment will be located at: Manahawkin, New Jersey and Pennant Point, Nova Scotia, on the west; and Goonhilly, U.K.; St. Hilaire, France and Conil, Spain, on the east.

7. Each subsegment of Segment F will be capable of providing notional capacity intended to satisfy requirements through the year 2000.¹¹ If fully equipped with Digital Circuit Multiplication Systems (DCMS),¹² an estimated nominal five virtual voice paths may be derived from each MAUO for the provision of voice services. The number of equivalent voice paths shown in Appendix 4 assumes that all MAUOs in each segment of the cable are used for the provision of voice services. Since this will not be the case, the number of equivalent voice paths shown should be considered as an upper limit.

8. The estimated total costs of each subsegment of the TAT-9 cable and the estimated USISCs' share of capital, operating and maintenance costs associated with each subsegment of the cable¹³ are as follows:

Subsegment	Total Cost Millions	% of Investment Costs by USISCs
F1	\$ 31.9	0.00000
F2	\$ 54.2	51.91865
F3	\$ 175.3	45.29639
F4	\$ 44.6	36.26282
F5	\$ 35.0	50.17509
F6	\$ 59.0	21.51158

Total Transmission Portion	\$ 400.0	38.49791
Cable Stations	\$ 6.4	
TOTAL	\$ 406.4	

DCMS costs are not included because DCMS is not a part of the cable system and will be added as needed to serve future demand. The ownership shares and associated capital, operating and maintenance costs for the main cable segment (F3), are allocated to the USISCs in the same proportions as the capacity assigned to them. The combined ownership shares of the USISCs is 38.49791% with AT&T alone accounting for 28.69297% of this total ownership share. Approximately 90 percent of the costs of Segment F of the TAT-9 cable system will be on a fixed price basis while the remaining 10 percent will be on a cost-incurred basis. Items such as the submarine cable, the repeaters, the terminal transmission equipment and the high voltage power plant will be furnished on a fixed price basis. Cost-incurred items include the UBMs, the cable laying, route survey, plowing and burial of the cable, project management, Owners' inspection and amounts payable for customs duties and value added taxes.

9. The TAT-9 co-owners have agreed that AT&T, Standard Telephones and Cable (STC) of the United Kingdom and SUBMARCOM of France will each construct portions of the cable system. Although the supply contracts for TAT-9 have not been awarded, the Applicants expect that AT&T will be awarded the contract to supply

subsegments F1, F2 and approximately one-half of subsegment F3.¹⁴ The portions of the TAT-9 cable to be supplied by AT&T will use AT&T's Submarine Lightwave (SL) 560 design, incorporating two working lightguide transmission paths with associated regenerators and supervisory circuits. The cable technology selected by AT&T will employ a 1.55 micron laser wavelength in order to reduce the number of repeaters that would be required with a 1.3 micron laser wavelength. The portion of the cable being supplied by STC will use STC's NL515 design. The NL515 design incorporates one or two working lightguide pair transmission paths in the cable with associated regenerators and supervisory circuits. The SUBMARCOM contracted portion of the TAT-9 cable will utilize the S560 design, incorporating one working lightguide pair transmission path in the cable with associated regenerators and supervisory circuits.

10. The terminal transmission equipment and the high voltage power feed equipment of all three cable designs use redundant equipment with automatic protection switching. The repeaters for all three designs employ laser transmitter redundancy. The underwater branching unit will enable TAT-9 to interchange traffic groups of 45 Mbit/s and/or 140 Mbit/s between its traffic paths and will provide the mechanical, optical and electrical interfaces between the TAT-9 trunk and branches. Power feed switches will reconfigure the power in the event of a branch or trunk failure. The TAT-9 cable will be buried on the continental shelves off the coasts of Canada, the U.S., the U.K., France and Spain in order to protect it from damage due to fishing and trawler activities. The cable will also be armored and fish bite protected where required.

II. THE PLEADINGS

11. PSI, in its pleadings, requests that we condition the Section 214 authorization on the USISCs' joint compliance with the following non-structural safeguards:

- a. The U.S. TAT-9 carrier consortium should be separate from the regulated businesses of TAT-9 owners; U.S. carriers investing in TAT-9 should own an equity interest in this facility;
- b. The TAT-9 owners should obtain financing on their own credit or out of their own retained earnings or profits in order to help ensure that TAT-9's success or failure is borne by the owners rather than regulated ratepayers;
- c. U.S. carriers that obtain capacity from TAT-9 should be required to apply to the FCC for authority to do so under Section 214 of the Communications Act, in the same manner as carriers that obtain capacity from PSI;
- d. Any capacity obtained by AT&T in TAT-9 through the Section 214 process should be provided by the consortium on terms and conditions no more favorable than those offered to other customers, and in no event below cost.

PSI asserts that its proposal would permit construction of TAT-9 without delay and affect only the USISCs. The safeguards defined in the proposal, according to PSI, are designed to treat any activities undertaken by AT&T outside of the ratebase. PSI states that its proposed safeguards

will provide the only effective check on AT&T's ability to support its international facilities, that it may never use for ratepayer services, through its ratebase. PSI further states that requiring equity ownership of TAT-9 does not affect the carriers' costs, service quality or ability to plan with foreign correspondents.

12. PSI also submitted a petition for Rule Making stating that fair competition requires that the Commission undertake a comprehensive Rule Making to adopt regulations that will govern AT&T's participation in the market for capital conveyance of overseas circuits. PSI states that a Rule Making would permit consideration of issues concerning dominant carrier participation in an international facilities market which is not subject to intense competition. PSI states that the above mentioned conditions, in conjunction with market regulations to govern AT&T's participation in the business of conveying capital interests in overseas circuits, are necessary to ensure full realization of the benefits of competition in international telecommunications facilities and services. PSI requests that these abovementioned safeguards be adopted in the context of this current Section 214 authorization or in a separate Rule Making proceeding.

13. Cable and Wireless filed a letter with the Commission stating that while it shares the general concern that there should be equal access to the marketplace, it does not support PSI's filings as they have been submitted. Additionally, it does believe that the Commission should, and indeed will, exercise care that it does not rule in a manner which gives unfair competitive advantage to any party nor treats the PSI system in an adversely discriminatory manner.

14. Reply comments were filed by the Joint Applicants and by TRT individually. The Applicants state that PSI's proposal calling for non-structural safeguards is aimed at eradicating intramodal competition and is an attempt to gain an unfair competitive advantage without regard for the public interest. They assert that non-structural separation will deprive common carriers of both cable ownership and the ability to control the quality of their serving facilities. The Applicants maintain that, while they are not in the business of selling cable capacity, they are in the business of providing common carrier service over both cable and satellite transmission media. Construction and ownership of a cable, they assert, are incidental to that purpose. Additionally, they note that intense competition currently exists in the international services market and that this competition will constrain any carrier's ability to raise international rates or to warehouse unnecessary facilities because the carrier's revenue requirements would be too high if the ratebase were overloaded.

15. TRT maintains that PSI's conditions are patently designed to give PSI a competitive advantage and states that these conditions would create opportunities for anti-competitive mischief. TRT believes that the unique conditions proposed by PSI would result in increased costs and service delays to the detriment of the public. If additional regulatory safeguards are considered, TRT asserts that they should be considered in the context of a broad Rule Making or, as PSI proposes, in the context of a narrow Rule Making.

III. DISCUSSION

16. The issues concerning the need and timing of specific facilities chosen to be utilized in the Atlantic Ocean Region (AOR) during the 1991-2000 time period were considered by the Commission in its Report and Order in CC Docket No. 79-184. In its Report and Order, the Commission concluded that introduction of the TAT-9 cable system for service as early as 1991 will serve the public interest in meeting the North Atlantic telecommunications needs during the 1991-2000 period.¹⁵ The Commission approved a cable configuration that will incorporate five landing points, two on the North American side and three on the European side. The facility proposed in the Application before us is consistent with the Commission's findings.

1. Basis for TAT - 9 in 1991

17. Although the Commission decided in the Report and Order that the TAT-9 cable introduced as early as 1991 would serve the public interest, we are required to make a determination under Section 214 of the Communications Act that the public convenience and necessity will be served by authorization of the facilities requested in the Application before us. The standard to be employed is "whether the specific facility chosen and the use to be made of that facility are required by the public convenience and necessity." *AT & T Co.*, (TAT-7), 73 FCC 2d 248, 256 (1979). In making this determination, we will consider the following aspects of the Application; (1) demand; (2) cost; (3) media and route diversity; (4) restoration; (5) digital connectivity; (6) intramodal and intermodal competition; (7) technological innovations and (8) international comity. Also, we will consider those issues raised in comments filed in response to the Application.

18. In the Third Notice of Proposed Rule Making, the USISCs and Department of Defense (DoD) submitted projected demand forecasts of digital cable facilities (*i.e.* 64 Kbit/s bearer circuits) through the year 1994. The Commission found that the projected demand for digital cable facilities demonstrated that introduction of TAT-9 in 1991 is required in order to satisfy the combined demands of the USISCs and DoD for digital 64 Kb/s cable circuits in the North Atlantic Region. These combined demands for digital circuits would essentially result in the saturation of TAT-8 by 1992.¹⁶ It further concluded that absent TAT-9 demand flexibility would be insufficient to accommodate the demand for digital cable requirements, including wideband digital services, beyond 1991. The Commission also found that the TAT-9 digital cable will provide an important interconnection between the various developing domestic digital networks in the countries linked by TAT-9. The development of, and demand for, these digitalized services on TAT-9 could very well stimulate circuit demand beyond that projected in the traffic forecasts. Nothing in the Application or comments provides a basis for departing from these conclusions.

19. In addition, the Commission found in its Report and Order that the TAT-9 cable, which will incorporate five landing points, will enhance media and route diversity and provide restoration capability for other facilities. AT&T estimates that, with the introduction of TAT-9 in 1991, 73% to 85% of all IMTS circuits would survive a failure of the largest route to Belgium, France, Germany, Netherlands and the United Kingdom, which represents about 70% of the total IMTS circuit demand during the

planning period.¹⁷ TAT-9 will also provide a viable restoration alternative for TAT-8 and other facilities. The need for terrestrial digital restoration for TAT-8 is even more compelling in light of DoD's substantial digital circuit requirements which were not included in the USISCs' traffic forecast.

20. The Commission also concluded that introduction of the TAT-9 cable as early as 1991 will provide digital connectivity, enhance intramodal and intermodal competition and promote international comity. The establishment of digital connectivity with the proposed MAT-2 and EMOS-1 cable systems would serve the public interest by providing direct, secure transmission channels to Mediterranean basin countries. The increase in intramodal and intermodal competition would also spur providers of both international satellite and cable services to keep their services innovative and their prices low. These technological innovations would provide users with the widest range of technological alternatives in meeting their specific service requirements.¹⁸ The Commission also found that introduction of the TAT-9 cable as early as 1991 satisfies their objective of promoting international comity in the North Atlantic Region. The record in this proceeding does not alter the Commission findings.

21. The estimated costs of the TAT-9 cable system in the Application vary slightly from the cost information provided in the Report and Order.¹⁹ Overall, the total construction costs for the TAT-9 cable are twenty percent greater than the total construction costs associated with the TAT-8 cable. However, the TAT-9 cable is twice the capacity of the TAT-8 cable. The capital cost per half-MAUO in the TAT-9 is currently estimated to be approximately \$10,000 per half-MAUO between the U.S. and the U.K., \$13,000 per half-MAUO between the U.S. and France, and \$14,000 per half-MAUO between the U.S. and Spain. The capital cost of a basic digital half-MAUO in TAT-8 between the U.S. and the U.K. was \$22,200. With the introduction of the TAT-9 cable system, the cost savings per half-MAUO will be approximately \$12,200 for the U.S.-U.K. path. Like TAT-8, the unit costs for a virtual voice path in TAT-9 can be further reduced through the addition and use of DCMS, which will derive nominally five virtual voice paths from each MAUO.

2. Allocation of Capacity Among Carriers and Party Users

22. The capacity assignments in the TAT-9 cable system are based on the forecasted demand of each of the Joint Applicants.²⁰ Capacity assignments between cable interfaces are indicated in the attached Appendix 6 and reflect the full allocation of the design capacity of the transatlantic portion of TAT-9.²¹ Capacity pools²² were created for each subsegment of the TAT-9 cable to accommodate parties and/or entities that may want to acquire capacity on an ownership or IRU basis.²³ Capacity in excess of projected need will be held by the terminal country carriers in proportion to total ownership.

23. The TAT-9 C&MA provides for the admission of other carriers as owners, up to the RFS date, October, 1991. According to the TAT-9 C&MA, a party may transfer its ownership interests in MAUOs to other parties or to carriers not party to the TAT-9 C&MA. After the RFS date, transfer of other than an ownership interest may take place. Both prior and subsequent to the RFS date, carriers may acquire TAT-9 capacity by IRU, lease or mutually agreed upon arrangements. In the present application, except for the transfer of an interest between

the U.K. and Spain, a party may transfer ownership interests in MAUOs to another party or carrier prior to the RFS date and interests in other than an ownership basis after the RFS date. There is still some notional capacity that can be expanded to its usable design capacity between the U.K. and Spain, thereby preventing a transfer of an interest between the U.K. and Spain.

24. We conclude that the mechanism described in the TAT-9 C&MA for allocating TAT-9 capacity is consistent with Commission policy. However, we will continue to make specific provision for new United States international carriers to have access to circuits in the cable system, as we have done in authorizing other cable facilities.²⁴ Specifically, we adopt the approach taken by the Commission in its TAT-8 authorization²⁵ and authorize the construction and operation of the TAT-9 cable system on condition that the USISCs make IRU interests available to carriers who receive authority from the Commission pursuant to Section 214 to acquire such capacity. We also reserve the right to reallocate capacity in the TAT-9 cable to the extent necessary to enforce our policies regarding the accommodation of additional carriers.

3. Extension Facilities

25. The Applicants each seek authority to acquire, by lease, such connecting facilities as may be required to extend the capacity in the TAT-9 cable system to points located beyond the TAT-9 landing points. Requests for authority to acquire and activate such capacity in other connecting cable systems on an IRU or ownership basis will be governed by the Commission's Rules applicable to each Applicant.

4. Issues Raised by PSI

26. PSI's proposal to require the Applicants to create a consortium in order to remove the costs of the TAT-9 cable from the rate base is conceptually the same request that PSI made, and the Commission rejected, in the previous phase of the North Atlantic Facilities Planning Process in Docket No. 79-184.²⁶ In that proceeding, PSI argued that TAT-9 should be operated by the carriers as an enterprise structurally separate from their domestic and international communications services in order to prevent cross subsidization from domestic and international rate base customers.²⁷ In rejecting PSI's proposal, the Commission stated that it had never imposed structural separation requirements in connection with common carrier ownership of transmission capacity to provide basic services internationally. It further stated that any potential for anticompetitive pricing can be dealt with in the context of our current regulatory environment. We find PSI's current proposal inconsistent with the basic tenet underlying the Commission's decision not to impose structural separation requirements on common carrier ownership of transmission capacity. We further find that PSI has not provided a basis for change in the Commission's basic policy conclusions on this issue.

27. PSI does not dispute our public interest finding for the construction of TAT-9 in 1991. Rather, PSI asserts that, by removing the costs associated with the TAT-9 cable from the ratebase, fair competition will prevail in transatlantic cable facilities. However, PSI is unclear as to how its proposed conditions would ensure the successful development of facilities based competition in the North Atlantic region. PSI only asserts that the establishment of its conditions will ensure that fair competition prevails in

the international facilities arena. PSI states that it is concerned that rate base treatment of the entirety of AT&T's TAT-9 investment would permit AT&T to warehouse capacity at subsidized prices to carriers and non-carriers in a market where competition is just emerging. However, the record provides no evidence that AT&T is warehousing capacity. The Commission has already determined that user demand for digital cable capacity requires the introduction of TAT-9 as early as 1991. Additionally, PSI fails to address adequately the potential for increased costs to ratepayers associated with its proposal. In the absence of a showing from PSI that its proposal is necessary to preserve competition and will not otherwise be injurious to ratepayers, we are not compelled nor consider it appropriate at this time to require that regulations or additional constraints be imposed on the USISCs.

CONCLUSION

28. The instant Application to construct and operate the TAT-9 optical fiber cable system is consistent with the Commission's policy determinations in the Report and Order and its ultimate conclusion that the introduction of a lightguide submarine cable system in the North Atlantic region as early as 1991 would be in the public interest. The proposed system is required to satisfy the service preferences and needs of users. The TAT-9 cable system will provide service quality benefits in terms of path diversity, media diversity and restoration capability including satisfying DoD's needs for alternative routing arrangements. The proposed system also meets the international comity concerns, the needs of national security, and benefits the U.S. economy as a whole and promotes a leading role for the U.S. industry in lightwave cable system technology.

29. The grant of the requested authorizations will not constitute major actions as defined in Section 1.1305 of the Commission's Rules and Regulations implementing the National Environmental Policy Act of 1969, 42 U.S.C. Sections 4321-4347 (1976).²⁸ Consequently, no environmental information is required to be submitted with this Application by Section 1.1311 of the Commission's Rules.

30. Upon consideration of the Application, we find that the present and future public interest, convenience and necessity requires the construction and operation of the TAT-9 cable system as described herein.

31. Accordingly, IT IS ORDERED that the Application, File No. I-T-C-88-181, of the USISCs is GRANTED, subject to the following terms, conditions, limitations and the Applicants are authorized to:

- (a) construct and operate the TAT-9 Cable System as proposed herein;
- (b) acquire and activate capacity in the TAT-9 Cable System, on an ownership basis, the interests indicated in the MAUOs specified in Appendix 6;
- (c) acquire capacity, by lease, in such connecting facilities as may be required to extend capacity in the TAT-9 Cable System;
- (d) utilize digital circuit multiplication systems equipment to derive additional voice paths from the circuits (MAUOs) authorized herein in accordance with the appropriate Commission authorizations; and

(e) activate and operate capacity in the TAT-9 Cable System and aforementioned extension facilities for the provision of the Applicants authorized telecommunications services.

32. IT IS FURTHER ORDERED that the Applicants shall convey their interests, on an ownership or IRU basis, in the TAT-9 Cable System capacity pools for joint use by the Applicants and their correspondents, as set forth in Appendix 7, on or before the TAT-9 RFS date.

33. IT IS FURTHER ORDERED that Applicants other than AT&T are authorized to acquire, by lease, appropriate connecting facilities between the Manahawkin cable station and their respective operating offices in the United States.

34. IT IS FURTHER ORDERED that when a given Applicant seeks to acquire or transfer an ownership or IRU interest in the TAT-9 capacity, the reimbursement it receives shall be on the basis of depreciated original cost (or the pro-rated accumulated cost of such circuit if the systems are not then operational) or in conformance with such policy as the Commission shall develop in the future regarding the price at which IRUs will be made available.

35. IT IS FURTHER ORDERED that the Applicants shall make available half-interests in the TAT-9 capacity to such present and future U.S. carriers as may be authorized by the Commission to acquire such capacity.

36. IT IS FURTHER ORDERED that the Commission retains jurisdiction to reallocate U.S. carriers' interests in capacity herein authorized, as the public interest may require to accommodate additional carriers or otherwise, with, where required, the concurrence of the foreign administration or carriers concerned, and, further, jurisdiction is retained by the Commission over all matters relating to the Applicants' ownership, management, maintenance, and operation of the cable system as authorized herein, to assure the most efficient use not only of this cable system, but of all means of communications between the U.S. and North Atlantic Region.

37. IT IS FURTHER ORDERED that the Commission retains jurisdiction to review the DCMS, multiplexing, and interworking arrangements and attribution of the costs thereof and to require such changes in the provision of these services and equipment as may be necessary.

38. IT IS FURTHER ORDERED that no Applicant, which is deemed a dominant carrier pursuant to the Commission's decision in CC Docket No. 85-107, herein shall dispose of any interest in any TAT-9 capacity it is authorized to acquire in any way without prior authorization by the Commission.

39. IT IS FURTHER ORDERED that the Applicants shall include TAT-9 facility use in the monthly Circuit Status Reports filed pursuant to the Commission's Orders. These reports shall be filed no later than the 20th day of each month providing the information for the preceding month.

40. IT IS FURTHER ORDERED that this authorization is issued subject to the terms and conditions of any license issued to the Applicants herein under the act entitled "An Act relating to the landing and operation of submarine cables in the United States" (47 U.S.C. Sections 34-39), covering the subject submarine cable, and shall become effective upon the acceptance of the aforementioned license by all such parties.

41. This order is issued under Section 0.291 of the Commission's Rules and is effective upon release. Petition for reconsideration under Section 1.106 or applications for review under Section 1.115 of the Commission's rules may be filed within 30 days of the date of public notice of this order (See Section 1.4(b)(2)).

FEDERAL COMMUNICATIONS COMMISSION

Gerald Brock
Chief, Common Carrier Bureau

APPENDIX 1

OWNERSHIP INTERESTS OF SEGMENT F OF THE TAT-9 CABLE SYSTEM

PARTIES	PERCENT
RTT (Belgium)	0.94461
TD (Denmark)	0.47800
SFPT (Finland)	0.11956
DGTF (France)	6.24738
DBP (Germany)	4.28648
OTE (Greece)	0.29757
BTE (Ireland)	0.94014
ASST (Italy)	3.66369
ITC (Italy)	2.85518
LPT (Luxemburg)	0.13384
NPTT (Netherlands)	1.26094
NTA (Norway)	0.22732
TLFN (Spain)	3.89521
STA (Sweden)	0.82753
SPTT (Switzerland)	1.88443
TPPT (Turkey)	0.59314
BT (United Kingdom)	20.88718
YPTT (Yugoslavia)	0.32078
OTC (Australia)	2.20986
TLGB (Canada)	8.59060
KDD (Japan)	0.34709
TLMX (Mexico)	0.26626
NZPO (New Zealand)	0.11964
PLDT (Philippines)	0.10584
ATT (United States)	28.69297
CICI (United States)	0.56282
FTCC (United States)	1.31203
ITT (United States)	0.74307
MCH (United States)	3.79326
TRT (United States)	1.86380
USSP (United States)	1.52996
TOTAL	100.00000

APPENDIX 3

The TAT-9 C&MA defines the Segments and Subsegments of the TAT-9 cable system as follows and indicates the following ownership thereof:

CABLE SEGMENT	LOCATION	OWNERSHIP
A	Pennant Point, Nova Scotia	TELEGLOBE (Canada)
B	Manahawkin, New Jersey	AT&T (U.S.)
C	Goonhilly, U.K.	British Telecom (U.K.)
D	St. Hilaire, France	DGTF (France)
E	Conil, Spain	Telefonica (Spain)
F	Whole of cable system between and among the cable stations at the U.S., Canada, the U.K., France and Spain.	Jointly by the TAT-9 owners as set forth in Schedule B of C&MA

APPENDIX 4

CABLE SUBSEGMENT ²⁹	NO. OF MAUOS	NO. OF EQUIVALENT VOICE PATHS
F1	2,250	11,250
F2	13,182	65,910
F3	15,120	75,600
F4	10,973	54,865
F5	4,101	20,505
F6	5,230	26,150

APPENDIX 7

SCHEDULE OF POOL CAPACITY (MAUOS) TO BE CONVEYED BY THE APPLICANTS

SEGMENT	F2	F3	F4	F5	F6
AT&T	1,483	1,483	660	468	54
CICI	18	18	8	0	10
ITT	5	5	0	5	0
TRT	90	90	30	30	30
USSP	30	30	0	30	0

FOOTNOTES

¹ Conference European des Administrations des Postes et des Telecommunications, an association of the state owned and operated postal and telecommunications entities in 26 European nations.

² The co-owners of the TAT-9 cable system and their ownership interests in the TAT-9 cable system are listed in the attached Appendix 1.

³ North Atlantic Facilities Planning, 3 FCC Rcd 3979 (1988) (hereinafter cited as Report and Order).

⁴ According to the Application, the USISCs had a total of 21,498 circuits, consisting of 10,654 submarine cable and 10,844 satellite circuits, in service to the countries and territories proposed to be served initially by TAT-9, as of December 31, 1987.

⁵ MAT-2 is a proposed digital, optical fiber cable system that will link Italy and Spain. The MAT-2 will interconnect with the TAT-9 cable at Conil, Spain and extend to connect with the EMOS-1 optical, fiber cable system at Palermo, Italy. The cable is expected to be in service by October, 1991.

⁶ EMOS-1 is a proposed Eastern Mediterranean optical fiber cable system extending from Italy to Greece, Turkey and Israel. The EMOS-1 cable will interconnect with the MAT-2 system at Palermo, Italy and will complete a fiber optic network that will

allow the transmission of traffic from North America and the U.K. to the Mediterranean Region. The cable is expected to be in service by July, 1990.

⁷ The Joint Applicants have indicated that separate applications will be filed for authorization to acquire capacity in the MAT-2 and EMOS-1 cable systems.

⁸ The TAT-9 Construction and Maintenance Agreement (hereinafter C&MA) describes the proposed cable in detail. The co-owners executed two Supplementary Agreements to the TAT-9 C&MA detailing the admission of new parties to the TAT-9 C&MA and delineating the procedure for capacity acquisition in the TAT-9 cable system. The First Supplementary Agreement was executed on December 9, 1987 and the Second Supplementary Agreement was executed on December 10, 1987.

⁹ A MAUO is an equivalent voice channel operating at 64,000 bits per second with an additional 9,684,656 bits per second required for multiplexing for a total of 73,684,656 bits per second in each direction at the System Interface locations. It is the minimum practical unit of ownership in the cable.

¹⁰ The TAT-9 C&MA defines Usable Design Capacity as "that capacity which is practically available within any subsegment having regard to the physical engineering and utilization of the TAT-9 Cable System."

¹¹ Notional capacity is the number of units in the cable system to which owners actually subscribe and is typically less than the design capacity of a cable. Notional capacity is a concept used to determine the unit price of capacity and to allocate costs. The unit price of capacity is determined by dividing the total cost of the appropriate submarine cable segment by the notional capacity of such segment.

¹² Digital circuit multiplication equipment was first introduced by AT&T for the TAT-8 optical fiber cable system. DCMS can derive five voice paths per MAUO. Thus, the maximum number of voice paths which the TAT-9 system could produce, if its capacity were devoted solely to voice services, would be 75,600 paths.

¹³ The allocation of costs (Schedule C-1 of the Second Supplementary Agreement) associated with the TAT-9 cable as well as the assignment of capacity in the cable (Schedule E of the Second Supplementary Agreement), upon which the costs are based, are shown in the attached Appendix 5. The allocation of costs and the assignment of capacity are both broken down into subsegments F1 through F6. The cost allocation percentages in Schedule C-1 are derived from Schedule E for each subsegment according to the notes attached to Schedule C.

¹⁴ Simplex Wire and Cable Company (Simplex) will be a major subcontractor to AT&T and will provide the lightguide submarine cable for the AT&T part of the project. It is anticipated that STC will supply the remaining portion of Subsegment F3, all of Subsegment F4 and the southern portion of Subsegment F6.

¹⁵ Report and Order at 3983.

¹⁶ Report & Order at 3984.

¹⁷ According to AT&T, the percentage of IMTS traffic routed via cable will remain relatively constant for the duration of the planning period with 56% of IMTS circuits routed via cable in year 2000. Report and Order at 3986.

¹⁸ In addition, we agree with the Applicants that the U.S. submarine cable industry will benefit from constructing a substantial portion of the cable. According to the Application, it is anticipated that AT&T will be awarded the contract to supply subsegments F1 and F2 and approximately one-half of subsegment F3.

¹⁹ The costs of the cable stations and interest during construction are somewhat higher in the Application than what they were projected to be in the Report and Order. Cable stations in the Report and Order were estimated to be \$5 million and are now estimated to be \$6.4 million in the Application. The USISCS' share of interest during construction, originally estimated at \$48 million is now estimated, in the Application, to be \$53 million.

²⁰ The Applicants' circuit forecast data was included in their June 4, 1987, submission in response to the Fourth Notice of Inquiry (NOI).

²¹ Each MAUO is shared jointly by a western and an eastern party for use in providing service between the two countries involved. Thus, each co-owner owns a half-interest in its respective MAUOs.

²² A Schedule of pool capacity, in MAUOs, to be conveyed by the Applicants is attached as Appendix 7.

²³ The Pool Administrator can transfer capacity in the Subsegment Pools to other Parties or Carriers. The cost of the pool capacity is borne by the landing point parties (Pool Parties) prior to acquisition by owners or IRU purchasers. The Pool Parties' percentage of cost support of remaining pool capacity is fixed and is based on each Pool Parties' projected initial capacity requirements for use jointly between themselves and other parties not signatory to the May 11, 1986 Agreement to Plan and Implement TAT-9. The Subsegment Pools should be dissolved approximately ninety days prior to the Ready For Service (RFS) date. Otherwise, the Pool Parties shall determine by consensus the terms upon which the capacity in the Pools may be disposed of following the RFS date.

²⁴ American Telephone & Telegraph Co., 73 FCC 2d 248, 260 (1979) and American Telephone & Telegraph Co., 98 FCC 2d 440, 452-456 (1984).

²⁵ American Telephone & Telegraph Co., 98 FCC 2d 440, 455 (1984).

²⁶ Report and Order at 3989.

²⁷ PSI also recommended that the Commission replace the current "rate of return regulation" with a system designed effectively to control prices charged by AT&T for all domestic and international services. Report and Order at para. 75.

²⁸ See Report and Order, 49 FCC 2d 1313, 1320 (1974) (the laying of submarine cable and installation of additional cable over existing routes is not "major action").

²⁹ Subsegment F1 extends between Canada and BU1, including one-third portion of BU1. Subsegment F2 extends between the U.S. and BU1, including one-third portion of BU1. Subsegment F3 extends between BU1 and BU2, including a one-third portion of BU1 and a one-fourth portion of BU2. Subsegment F4 extends between the U.K. and BU2, including a one-fourth portion of BU2. Subsegment F5 extends between France and BU2, including a one-fourth portion of BU2. Subsegment F6 extends between Spain and BU2, including a one-fourth portion of BU2. The cable subsegments are owned jointly by the TAT-9 owners as set forth in Appendix 5.