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Report to the Chairman, Committee on Commerce, House of Representatives

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TELECOMMUNICATIONS

Competitive Impact of Restructuring the International Satellite Organizations

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Resources, Community, and
Economic Development Division

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The Honorable Thomas J. Bliley, Jr.
Chairman, Committee on Commerce
House of Representatives

Dear Mr. Chairman:

Several decades ago, when satellites emerged as vehicles for commercial international telecommunications, the technology was under development and, thus, both risky and expensive. At that time, worldwide organizations were considered the best means for providing satellite-based services, such as basic telephone service, to all nations. One objective of the United States, as stated in the Communications Satellite Act of 1962, was to contribute to world peace and understanding through the development of a worldwide satellite communications system established in conjunction and in cooperation with other countries. At the initiative of the United States, the International Telecommunications Satellite Organization (INTELSAT) was begun in 1964 to provide mainly telephone and data services, and the International Maritime Satellite Organization (Inmarsat)[1] was formed in 1979 to provide maritime communications, including services related to safety and rescue at sea. These treaty organizations faced little, if any, competition for many years after their establishment.

Now, technological advances such as enhancements in satellite capacity and capabilities, as well as new applications and increases in demand, have made it economically feasible for private companies to provide satellite-based services and have expanded the services that can be offered, including new video broadcast and mobile telephone services. Interest in changing the treaty organizations has arisen among both members of the organizations and potential competitors. While some believe the organizations have achieved their missions and may no longer be needed, others believe that the organizations are still necessary in some form to guarantee safety at sea and services such as telephone and data transmission, especially for developing countries.

Because of your concern that any changes be made in a way that promotes competition, we agreed with your office to describe the potential competitive impact of (1) possible alternative approaches to reforming the

[1]In 1994, Inmarsat's full name was changed to International Mobile Satellite Organization.

organizations; (2) an Inmarsat affiliate company, formed in 1994 to provide new services; and (3) proposals for restructuring INTELSAT.[2]

Results in Brief

Options for restructuring the treaty organizations range from dismantling them to creating one or more affiliates with varying degrees of ownership by the parent organization. The competitive impact of any alternative approach depends on how the resulting organizations are structured, particularly regarding the number of separate entities created and the degree to which they are owned by the parent organization, or its owners, in its present or a new form. In particular, the more entities that are created and the lower the proportion of ownership by the parent organization or its owners, the more likely it is that the restructuring will improve competition.

In forming a separate affiliate to provide new services, Inmarsat took a step that could give the affiliate a competitive edge over potential competitors. Under the terms of its organization, at least 70 percent of the affiliate will be owned by Inmarsat and some of Inmarsat's signatories (owners). With their ownership interest in the affiliate, these signatories may have the incentive to grant access to their markets to the affiliate and to preclude or inhibit access to other competitors, even though the competitors might offer services at lower prices. The United States supported creation of the affiliate on the condition that its structure include certain principles that favor competition, such as open market access, and Inmarsat accepted many of these principles. The United States and its signatory are currently pursuing action to ensure that the affiliate is bound by the Inmarsat-approved principles.

Proposals for restructuring INTELSAT could improve the competitiveness of the market. A joint proposal by the U.S. government and U.S. signatory (U.S. proposal) suggests splitting INTELSAT into two entities by scaling back the INTELSAT parent to roughly one-half its current size and creating one affiliate company that would be, at a maximum, 20-percent owned by INTELSAT's current signatories. Twenty percent ownership is considered an important upper limit to ensure that INTELSAT and its signatories have minimal influence on any new entities created. Another proposal, which is supported by a coalition of U.S. satellite firms, favors establishing two new private companies in addition to a scaled-down parent organization. The effect on competition of either proposal depends on the degree to which it

[2]We will issue a broader review of issues surrounding international communications satellites later this year.

can reduce the market dominance that INTELSAT enjoys in certain markets and encourage countries to open their telecommunications markets to new entrants.

Background

Under the Communications Satellite Act of 1962, the United States created the Communications Satellite Corporation (now known as COMSAT) to develop, alone or in conjunction with foreign entities, a commercial communications satellite system. Subsequently two treaty organizations were created to provide such services.[3] INTELSAT now comprises 139 member countries and operates 24 satellites providing voice, data, and video communications. Inmarsat was established to provide global maritime communications; since 1985, its services have expanded to the aeronautical sector.[4] Inmarsat operates a global system of eight satellites—four of them operational and four spares. In 1994, Inmarsat established as an affiliate a separate company, ICO Global Communications Limited (ICO), to implement a global system to serve handheld mobile telephones. ICO, which is likely to compete with companies that plan to enter the market, is expected to begin operations by the year 2000.

Structure of the Treaty Organizations

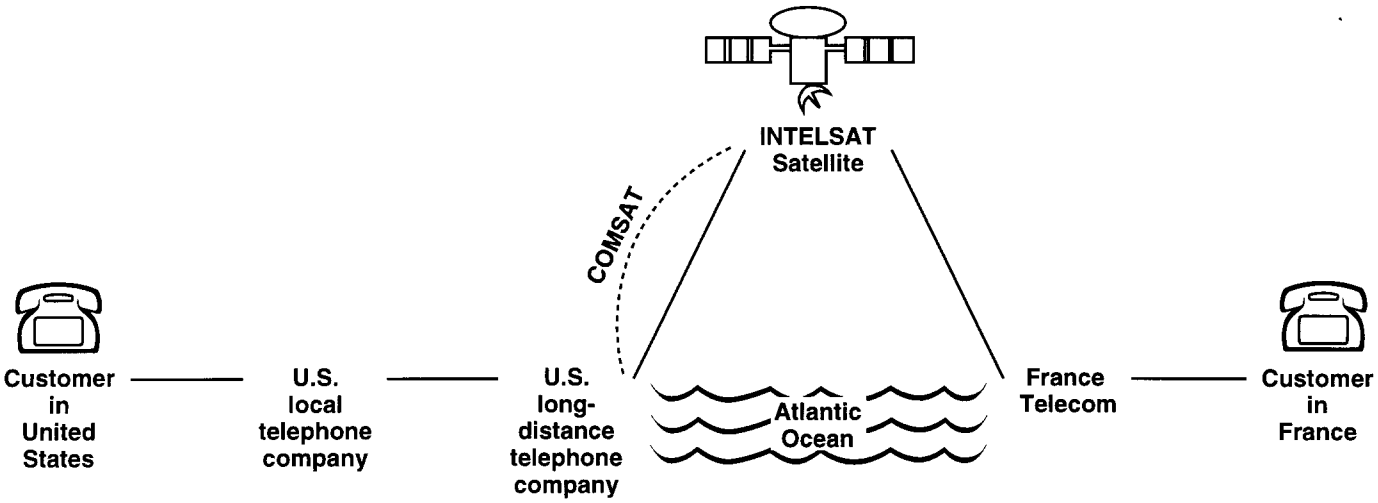
As treaty organizations, INTELSAT and Inmarsat are made up of parties and signatories. Parties are the national governments that have signed the international agreement. The signatories—the organizations' owners—are typically government agencies or government-sanctioned monopolistic telecommunications companies. These entities usually control or influence access to telecommunications services within their countries. The signatories are responsible for financing INTELSAT and Inmarsat and have a financial interest in their operations. COMSAT is the signatory for the United States to both organizations and operates as a private corporation subject to U.S. government regulations. COMSAT holds the largest single investment share in each organization—19 percent of INTELSAT and 23 percent of Inmarsat. The signatories, including COMSAT, generally provide a retail—or marketing—function for the organizations within their domestic markets. For example, figure 1 shows how one type of service—a basic telephone call between the United States and France—would be provided through INTELSAT's satellite system. According

[3]According to an official of the U.S. Department of State, the United States has entered these organizations under congressionally authorized executive agreements.

[4]More recent amendments, initially approved in 1989 but still awaiting final ratification by a sufficient number of member governments, would extend Inmarsat's mission to include mobile communications services on land, such as worldwide telephone service using portable telephones.

to COMSAT, INTELSAT and Inmarsat typically operate by consensus, which depends on reaching agreement among member nations worldwide with different perspectives and interests.

Figure 1: Transactions in a Satellite-Based Telephone Call Between the United States and France



Every international telephone call requires "matching" transactions by the two countries involved. As the U.S. signatory to INTELSAT, COMSAT buys the U.S. portion of the satellite transmission of an international call from INTELSAT and sells it to the U.S. long-distance company that is authorized to provide international service. The French portion of the transmission is bought from INTELSAT by France Telecom. As both a signatory to INTELSAT and the French national telephone company, France Telecom delivers the call directly to the customer. Transactions for other services, such as broadcast video, are somewhat different because they involve generally one-way transmissions.

INTELSAT and Inmarsat May Have Some Competitive Advantages

INTELSAT's and Inmarsat's ownership structures may provide them with important competitive advantages that could pose barriers to potential competitors. To provide service within a particular country, a satellite system must gain permission from domestic licensing authorities for, among other things, the right to use the necessary spectrum (radio frequencies), the right to establish necessary ground stations to receive satellite signals, and permission to interconnect on the ground with the domestic telephone system.[5] Because many of these licensing authorities or dominant telecommunications companies are the signatories that own

[5]While the Federal Communications Commission is the licensing authority in the United States, it is not a provider of telecommunications services. In many other countries, the licensing authority is the monopoly provider of postal and telecommunications services.

the organizations, they may have a financial incentive to favor INTELSAT and Inmarsat, or their affiliates, over other firms when determining who may do business within their countries. A recent analysis has found that the signatories, in addition to receiving a rate of return on their investments, also generally charge large markups on INTELSAT and Inmarsat services, which may be evidence that they have benefited from these competitive advantages.

The organizations' treaty status also provides certain privileges and immunities. Exemption from taxation and immunity from lawsuits give these organizations a financial advantage over other competitors. Immunity from lawsuits, for example, may allow them to act in the market in ways that their competitors cannot under U.S. antitrust laws. INTELSAT and Inmarsat also have easier access to locations in space where satellites can be placed (known as orbital slots) and to spectrum. Because these slots and spectrum are scarce resources, easier access to them is an important advantage. In addition, private satellite firms that want to compete with INTELSAT or Inmarsat have been required, under the treaty agreements, to coordinate their business plans with the organizations to ensure that they do the organizations no significant economic harm and cause no technical interference with them. This requirement has meant that the firms have had to share potentially sensitive and proprietary business information with the organizations. According to several agency officials, the tests for economic harm are being phased out, but the tests for technical coordination remain.

Both treaty organizations also have relatively easy access to financial capital because they can request it from their signatories as well as through the capital markets. In addition, commercial investors may view these organizations as good risks because of the signatories' ties to their governments in most countries.

According to COMSAT, however, these various factors do not necessarily translate into unfair competitive advantages in the marketplace. In particular, COMSAT believes that while the treaty organizations have some advantages, they also bear responsibilities, such as providing global services at nondiscriminatory rates.

U.S. Efforts to Enhance Market Access

Because of concerns about market access to foreign countries by U.S. telecommunications companies, including new satellite competitors, the United States is engaged in several efforts to encourage other countries to

open their markets to new entrants. For example, within the World Trade Organization, the United States is participating in negotiations for basic telecommunications services to open access to foreign markets.[6] In addition, the Federal Communications Commission (FCC), in its efforts to promote competition in international telecommunications, recently proposed formal rules for foreign-licensed satellite companies to serve the United States only if, among other things, an acceptable level of openness was provided in the foreign-licensed companies' home markets.[7] Furthermore, the United States has been developing a proposal to restructure INTELSAT and a position paper on Inmarsat, both of which the United States believes will promote competition.[8]

Competitive Impact of Restructuring Depends Largely on Two Factors

Currently, there is a wide belief among those that favor more competition, such as private satellite companies, and those that favor more flexibility for the treaty organizations, such as some signatories, that changes are necessary in the structure and functioning of INTELSAT and Inmarsat. Some satellite companies, for example, have questioned the continuing need for the two organizations and point out that some private competitors currently offer or will offer global coverage and provide significant services to the developing world. However, according to officials in the U.S. Department of State, most of the member governments and signatories, especially in the developing countries, are concerned that without the treaty organizations, their access to certain basic telecommunications services—including telephone and data services at reasonable rates—may be threatened. Most of the options for enhancing competition have focused on ways to reduce the barriers posed by the structure of INTELSAT and Inmarsat, while preserving some intergovernmental treaty structure. Key factors in developing options to promote competition are the number of new entities that are created and the extent of their ties to the parent organization or its owners.

[6]In April 1994, as a result of the Uruguay Round agreement that established the World Trade Organization, a group was formed to conclude negotiations on basic telecommunications services. These negotiations, which were to expire on April 30, 1996, have been extended to February 15, 1997, to allow time for more countries to come forward with better offers to open their markets.

[7]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, Notice of Proposed Rulemaking, FCC 96-210 (May 14, 1996) (Domestic-International Satellite Consolidation Order (DISCO 2)).

[8]According to the FCC, an INTELSAT committee reviewing restructuring proposals is currently scheduled to meet in September and December 1996 and is considering meeting in October 1996. INTELSAT's member governments currently expect to review the committee's recommendations on restructuring at an April 1997 meeting. An Inmarsat committee reviewing restructuring proposals is meeting in early July 1996 and is expected to schedule additional meetings, while the Inmarsat signatories are scheduled to meet to discuss restructuring in July and November of 1996 and February of 1997. Inmarsat's member governments expect to meet in March or April 1997 to consider the committee's recommendations on restructuring.

Some Changes May Be Warranted in the Way INTELSAT and Inmarsat Function

When INTELSAT was formed, satellites were an efficient way to provide basic telephone services worldwide. However, since the mid-1980s, there has been a dramatic increase in the capacity and capabilities of transoceanic fiber optic cables, which can transmit telephone calls.[9] INTELSAT's share of international telephone service, traditionally the organization's prime service, has fallen significantly in places where such cables are now available. In response, INTELSAT has focused more intensely on providing other, more technologically advanced services, such as broadcast video. In these growing markets, it faces some competition from new satellite-based companies as well as from many domestic and regional satellite systems that provide services in specific areas.[10] Some of these current providers, and others who hope to enter the market, believe change is needed. They allege that their ability to thrive in the market and to bring more services and lower prices to consumers is limited because INTELSAT continues to dominate the market in some areas. A recent analysis by the U.S. Department of Justice found that in certain areas, INTELSAT currently dominates the market as a result of its large share of transoceanic satellite capacity and its signatories' ability to keep other competitors out of their domestic markets.[11] COMSAT, in contrast, believes that because of the cumulative effect of increased competition from fiber optic cables and regional and domestic satellite systems, as well as private satellite companies, INTELSAT no longer has substantial market dominance.

Some of INTELSAT's signatories believe that INTELSAT, with its lengthy decision-making process, is not well suited to adapt to new technologies and changing market conditions. As a result, these signatories are also interested in some restructuring of the organization.

In a desire to expand into new markets, Inmarsat chose to establish ICO to develop and provide satellite services for handheld mobile telephones because, according to U.S. State Department officials, some members

[9]Many of the treaty organizations' signatories may also be part owners of the fiber optic cables that serve their countries.

[10]In 1984, the United States authorized private companies to establish their own satellite systems to compete directly with INTELSAT and Inmarsat. One such company, PanAmSat, is providing near-global coverage with four satellites. In addition, several regional and domestic satellite systems provide some competition within their own service areas. In 1996, the FCC adopted a policy that permits all U.S.-licensed satellite systems to offer both domestic and international services.

[11]In particular, the Department of Justice found that INTELSAT currently possesses market power in basic telephone and private-line services between countries that are not well served by fiber optic cables or private satellite providers, as well as in markets for video and audio broadcast services. In this analysis, the Department of Justice did not consider regional and domestic systems as competitors because such systems do not currently serve the U.S. market. The draft analysis, dated December 15, 1995, was intended for government use only; according to a Department of Justice official, it contains confidential business information and is therefore not public.

believed that an affiliate unencumbered by the structure of a treaty organization could respond to the changing market more effectively. Several U.S. firms have been licensed by the FCC to provide similar services and are seeking access to foreign countries' markets and the licenses necessary to provide these services globally. But these potential competitors are concerned that Inmarsat's close relationship to ICO could hinder the development of competition.

Some Have Questioned the Continuing Need for the Treaty Organizations, While Others Prefer the Status Quo

Because of advances in technology since INTELSAT and Inmarsat were formed and an increase in demand, the private market is capable of and willing to provide many of these services, such as video, data, and mobile telephone services. Many privately financed companies have begun to or would like to provide traditional and advanced services at lower prices. Many companies told us that these services will be available globally and that some companies are particularly targeting their marketing of mobile services to developing countries, which are less likely to have established traditional telephone services. Furthermore, they note that some INTELSAT competitors are currently providing services to the developing world. As a result, some industry and other policy analysts have questioned the continuing need for INTELSAT and Inmarsat.

Despite the emergence of private competitors, however, some of the member nations believe that at least some aspects of the treaty organizations continue to be needed. According to officials in the U.S. Department of State, many nations believe that it may be desirable to retain some residual form of Inmarsat or another intergovernmental mechanism to ensure that services related to safety and rescue at sea continue to be provided. While the private market is more likely to be capable of providing all the services offered by INTELSAT, a State Department official told us that retaining some residual form of INTELSAT is important, at least for the foreseeable future. In particular, some of the developing countries, which consider that the treaty organizations have provided them with essential services, often do not believe that the private market would provide them with these services. These countries tend to be the most resistant to changing the function or structure of INTELSAT and Inmarsat. A Treasury Department official noted, however, that no country, including a developing country, has ever been refused service by a private company and that each country has the choice of permitting or not permitting service by private companies as well as by the treaty organizations.

Additionally, some U.S. companies have expressed concern that a restructuring that does not address barriers to competition could result in worse conditions for potential new competitors. Conditions could worsen, for example, if any new affiliates of the treaty organizations gain the flexibility to become strong competitors while barriers to competition by other firms remain in place. Some firms have stated that they would prefer to leave the treaty organizations as they are rather than restructure them in a way that does not correct the barriers to competition they impose under the current system.

Options for Restructuring to Enhance Competition

As an alternative to abolishing INTELSAT and Inmarsat, other changes could be made to enhance competition while preserving some of the treaty organizations' structure. For example, some portion of the satellite facilities of each of the two organizations could be privatized. For any option to enhance competition by reducing some of the barriers to competition, it must address the fundamental competitive problems of the present structure, such as (1) the incentives for the signatories to favor any newly created affiliates, in which they have an ownership interest, over other potential competitors for access to their domestic markets; (2) the potential dominance of the market by either a residual treaty organization or any resulting new entities; and (3) the advantages, such as tax privileges, immunity from lawsuits, and easier access to orbital slots and spectrum, currently enjoyed by INTELSAT and Inmarsat.

Key to restructuring the treaty organizations with a view to enhancing competition are the number of new entities created and the degree to which they maintain economic ties with the remaining parent organization or its owners. According to economic principles, creating the largest feasible number of new entities may be best from the standpoint of encouraging competition, particularly if domestic and regional satellite systems do not provide adequate competition to INTELSAT in the global market. Additionally, because INTELSAT, in particular, has benefited from its advantages for many years and dominates some markets, restructuring would optimally remove enough of this organization's assets, such as satellites and associated facilities, to reduce its dominance and to ensure that any newly created entities would not dominate the market. However, the costs of satellite technology may require that a firm have a significant

amount of assets in order to be efficient and survive.[12] Although there is no clear agreement on the smallest size a global satellite firm can be and remain efficient, the number of new entities that can be created and sustained is limited by these size considerations.

The second important factor in restructuring concerns the economic and cultural ties between the residual treaty organization and any new affiliates. Economic principles suggest that to encourage competition, it would be best to minimize the relationship between these entities. If the economic ties between a residual treaty organization and the entities that are spun off from it are strong, the barriers to competition could be exacerbated. Thus, restructuring would likely result in more competition if the treaty organization or its signatories (1) have little, if any, financial stake in or continuing business relationship with any new entities and (2) have no mutual members of the boards of directors.

Also, competition is more likely to be enhanced if the parent organization and its signatories have minimal control during any transition period from the current status to a new status. Among other things, if control is kept at a minimum, the member governments and signatories would have little incentive to favor the new entities over other competitors in their domestic markets. Even if the economic relationship between the parent and any affiliates is appropriately broken, there is concern that it could take some time for governments and signatories to provide open access to their markets because they are used to dealing mostly with the treaty organizations and may continue to wish to do so.

Inmarsat's Owners May Have Incentives to Aid ICO

When Inmarsat created ICO, it provided an example of how a treaty organization could restructure by forming a single affiliate whose ownership was primarily restricted to the parent organization and its signatories. That approach to restructuring may not enhance competition because of the shared ownership arrangement between the parent and affiliate. Inmarsat and its signatories have both the incentives and the ability to provide ICO with market advantages over its potential competitors. These advantages may include access to member countries' markets and financial benefits, such as more readily available financing.

[12]One recent econometric study suggests that a global satellite firm needs at least seven or eight satellites to reach a minimally efficient scale of operations. See Leonard Waverman, "The Political Economy of International Telecommunications Organizations: Breaking Up Is Hard To Do," in the forthcoming Global Speak, American Enterprise Institute Publications (cited by permission). Other analysts we spoke with also suggested that the smallest viable firm would need approximately this number of satellites. This number may suggest that INTELSAT's assets could support three viable firms.

The United States supported the formation of ICO on condition that its structure include certain principles that favor competition. Inmarsat's member countries agreed to many of these principles. Some U.S. officials have been concerned that ICO's organizing documents do not incorporate the Inmarsat-approved principles in a way that binds ICO to applying them, and they are working toward ensuring that those principles are incorporated. Also, Inmarsat is considering a restructuring proposal that raises concerns among potential competitors about the competitive impact of the relationship of a privatized Inmarsat to ICO.

ICO's Owners Control Essential Access to Markets

Inmarsat and those signatories that chose to invest directly in ICO hold a majority interest and thus have a significant vested interest in the organization's financial success because they share in ICO's profits. The initial sale of ICO's shares, which was open only to Inmarsat and its signatories,[13] raised a total of $1.4 billion. Inmarsat's portion of that total amounts to about 10.6 percent of the voting shares. Nearly 60 percent of Inmarsat's 79 signatories took advantage of the opportunity to invest directly in ICO and collectively hold well over 70 percent of ICO's voting shares. A public offering may occur in the future, but external investment, which is authorized only at the discretion of ICO's Board of Directors, is limited to 30 percent of the voting shares. As of June 1996, there was one external investor—the builder of new satellites for ICO—who currently holds a very small percentage of ICO's shares.[14]

As noted earlier, Inmarsat's signatories are typically the government authorities or dominant telecommunications providers that control or influence access to their domestic telecommunications markets. Market access is essential for the success of any provider of global satellite services. With their ownership interest in ICO, these signatories may have the incentive to grant such access to ICO and to preclude or inhibit access to other competitors, even though the competitors might offer services at lower prices.[15] Moreover, as an official of the U.S. Department of Commerce noted, Inmarsat's signatories had an incentive to invest through ICO because of the 17-percent rate of return they would earn on their investment, even though ICO has not yet generated revenues.

[13]The initial investors also included a signatory-led consortium of private investors.

[14]A second potential external investor—the builder of the system's ground segment—is expected, but details of the agreement had not been finalized as of mid-June 1996.

[15]Some signatories have also invested in the U.S. companies that will compete directly with ICO for mobile services. None of the three major potential competitors to ICO has more than one signatory investor.

ICO's Ownership Structure May Confer Financial Advantages

ICO's shared ownership with Inmarsat may make financing more readily available to ICO than it is to competitors. It has also raised concerns that prohibited cross-subsidies[16] may occur.

Ownership by Inmarsat and its signatories may give ICO financial benefits in the form of more readily available financing than potential competitors are likely to enjoy. For example, ICO could find it easier to obtain future commercial financing than other satellite companies do because of the implicit government backing associated with its ownership. Furthermore, since the signatories are typically government agencies or government-sanctioned monopolies, they may have financial assets readily available for investment in ICO.

Cross-subsidies could give ICO a financial advantage in competing with other companies by allowing ICO to offer lower prices than it could otherwise afford. Although cross-subsidization was prohibited when Inmarsat's member countries authorized the formation of ICO, the shared ownership of Inmarsat and ICO raises the risk that cross-subsidies could occur. For example, the U.S. Departments of State and Commerce, in a September 1995 letter to the FCC, expressed concerns about whether contractual arrangements between Inmarsat and ICO were conducted with sufficient independence to ensure that there was no cross-subsidization.[17]

Because of Inmarsat's protected status as an international treaty organization, the existence of cross-subsidies might be difficult to confirm because Inmarsat has immunity from prosecution under antitrust complaints and other lawsuits. However, it is not clear whether any of the protections Inmarsat enjoys would apply to its business transactions with ICO.

U.S. Approval of ICO Was Conditional

The United States agreed to the formation of ICO on condition that several principles of structural separation be met to promote fair competition for both ICO and the other companies that want to offer the same kinds of services. Those principles included (1) nondiscriminatory access to the

[16]A cross-subsidy occurs if the costs of producing one service are paid for by consumers of a different service. For example, many analysts believe that prior to the divestiture of AT&T, long-distance rates were set higher than the fully allocated costs of providing this service because regulators wanted to be able to keep residential rates low. Thus, long-distance service cross-subsidized local residential rates.

[17]ICO has contracted with Inmarsat to provide services such as system planning, operations, and support for spectrum and standards. Inmarsat was also contracted to provide other accounting, financial planning, procurement, contracts management and administration, and human resources services through the end of 1995.

countries' domestic markets for all mobile satellite communications networks, (2) no transfer of spectrum or orbital slots from Inmarsat to ICO, (3) no cross-subsidies from Inmarsat, and (4) no transfer of treaty-based privileges and immunities to ICO. In December 1994, Inmarsat's member governments agreed to the formation of ICO if certain conditions were met; those conditions incorporated many but not all of the principles the United States had sought to include in order to ensure structural separation.

In their September 1995 letter to the FCC, the Departments of State and Commerce concluded that ICO's organizing documents did not fully incorporate the conditions that Inmarsat's members had agreed to. State and Commerce asked the FCC to delay authorization of COMSAT's share of Inmarsat's investment in ICO until it is clear that ICO is bound by the principles Inmarsat adopted. They also requested that COMSAT (1) state on the record that ICO is bound by the principles approved by Inmarsat and (2) provide supporting documentation. In its comments on a draft of this report, COMSAT said that it had reported to the relevant U.S. government agencies in late May 1996 that at ICO's annual meeting on May 28, 1996, the shareholders approved an amendment to ICO's organizing documents that fully incorporates these principles. COMSAT stated that it expects to provide the supporting documentation in the near future.

Inmarsat's Restructuring Raises Concerns About Future Relationship With ICO

Inmarsat is reviewing proposals to restructure so that it may respond to commercial opportunities more readily than its members feel its treaty structure now allows.[18] Under one proposal, Inmarsat would be devolved into a privately owned international public corporation. According to Inmarsat officials, the current version of that proposal would transfer all of Inmarsat's satellites to the new corporation, while a smaller intergovernmental organization with more limited responsibilities would be retained to ensure the provision of services related to safety and rescue at sea.

The relationship that ICO will have to a restructured Inmarsat is of concern to some potential competitors. Inmarsat is on record as being interested in the possibility of a future merger of ICO with a restructured Inmarsat. However, COMSAT, the U.S. signatory, stated that it has recently confirmed to the executive branch of the U.S. government that it does not support such a merger in any foreseeable time frame and that it considers such a merger highly unlikely because the business plans of ICO and a restructured Inmarsat differ.

[18]As noted above, the United States is developing a position paper on the restructuring of Inmarsat.

Ownership ties between ICO and a largely privatized Inmarsat could create a company with significant advantages in the market that would be free of any of the decision-making or operational burdens imposed by an intergovernmental structure. Such ownership ties might reinforce the incentives of Inmarsat's signatories to open their domestic markets to ICO and the reorganized Inmarsat but not necessarily to potential competitors.

Recent Proposals for Restructuring INTELSAT

Two proposals for restructuring INTELSAT provide examples of options that retain a residual treaty organization while distributing portions of INTELSAT's assets to one or more entities that are able to compete more freely in the market.[19] Other countries have also made suggestions for change.[20]

To help ensure that any restructuring of INTELSAT would improve competition, the U.S. government has developed a proposal that would separate INTELSAT into two entities—a residual intergovernmental entity and a new affiliate. The affiliate would focus on providing more advanced services and would be owned primarily by private investors. Another proposal, which has been supported by a coalition of several U.S. satellite companies,[21] calls for separating INTELSAT into at least three entities: a residual intergovernmental entity and at least two affiliates. The degree to which either of these proposals can help to enhance competition depends largely on whether it can (1) encourage other countries to open their markets to new entrants and (2) diminish the large share of transoceanic capacity that INTELSAT currently holds.

The United States Has Proposed Restructuring INTELSAT

With Inmarsat's establishment of ICO as a backdrop, the United States has developed a proposal to restructure INTELSAT in order to ensure continued services worldwide at nondiscriminatory prices and to provide a more competitive marketplace. The key features of the proposal, aimed at reducing INTELSAT's dominant market position and reducing the signatories'

[19]Our discussion of these proposals is not an endorsement of either.

[20]Other nations, including Canada, the United Kingdom, France, the Netherlands, Venezuela, and a consortium of African countries, have also submitted commentaries on and/or proposals for restructuring INTELSAT that support a range of approaches, including the creation of one or more affiliates.

[21]The coalition—the Alliance for Competitive International Satellite Services, or ACISS—comprises the following companies: Columbia Communications Corporation, Motorola, Odyssey Worldwide Services, Orbital Communications Corporation, Orion Network Systems, PanAmSat Corporation, and TRW Inc. These companies are current or potential competitors to INTELSAT or Inmarsat and any entities created by their restructuring.

incentive to favor the newly created affiliate over other companies in their domestic markets, include the following:

- INTELSAT would be separated into two companies, each of which would receive about half of the satellites. The residual INTELSAT is intended to focus on traditional services, such as basic telephone service, while the affiliate is intended to focus on newer services, such as video broadcast.
- After a transition period of about 2-3 years, fully 80 percent of the affiliate would be owned by interests other than INTELSAT or its signatories.

The proposal requires that (1) the affiliate not have any privileges and immunities, (2) business transactions between the two companies take place as if the entities had no economic relationship, (3) the affiliate be subject to competition laws in the countries in which it operates, and (4) no special access to orbital slots be available to the affiliate.

From a competitive standpoint, separating INTELSAT into two companies is designed, in part, to reduce the size of the resulting entities relative to other competitors. Currently, INTELSAT has 24 satellites in space and 7 empty orbital slots. The affiliate, with which other competitors would most directly compete, would have about half of the INTELSAT satellites. In comparison, one private competitor, PanAmSat, plans to grow to an eight-satellite operation within a few years.[22] Moreover, since INTELSAT's signatories would be able to own, together, only 20 percent of the affiliate, the proposal is designed to reduce their financial incentive, as the telecommunications authorities in their own countries, to favor INTELSAT's affiliate over other new entrants when making decisions about access to their domestic markets.

Officials of several of the federal agencies that helped develop this proposal acknowledged that other options might have done more to promote competition, but they did not believe that other countries would have supported such options. In particular, State Department officials told us that INTELSAT members were unlikely to accept an option that resulted in the formation of more than one new affiliate or an affiliate with ownership by the signatories of less than 20 percent. They also said that because of these concerns, the proposal they put forth is likely to be the most competitively oriented proposal acceptable to INTELSAT's member governments and signatories.

[22]Additionally, several other major U.S. firms have applied to establish satellite systems with new technologies.

U.S. Satellite Coalition Has Suggested an Alternative Restructuring Design

A coalition of several U.S. satellite companies that had expressed interest in privatizing the treaty organizations entirely has more recently put forth a proposal for an alternative restructuring design. As with the U.S. proposal on INTELSAT, this proposal requires that any new affiliate gain no privileges or immunities or any other economic benefits from its relationship with INTELSAT. Under the proposal, INTELSAT would be separated into at least three parts, including at least two affiliates that are each owned at least 50 percent by entities other than INTELSAT or its signatories. Additionally, each signatory would be able to invest in one or the other affiliate, but not in both.

Proponents of this proposal believe that such an option would reduce concerns about market domination more than the U.S. proposal does because each resulting entity would be smaller than it would under the U.S. proposal. Moreover, some market observers have suggested that under this option, countries' telecommunications authorities may align themselves with one of the affiliates. Signatories may find that to do business with certain other countries, they may have to allow both affiliates to serve their domestic markets.

Competition Would Be Enhanced by More Affiliates and Reduced Ownership by INTELSAT's Signatories

The degree to which either of these proposals can help to enhance competition depends largely on whether it can encourage other countries to open their markets to new entrants. As discussed earlier, competition can be enhanced by creating more entities out of INTELSAT as long as each is technically and economically viable on its own.[23] In this regard, the industry's proposal may be more likely to reduce the potential for INTELSAT or the new affiliates to dominate the market because each entity would be smaller in size. Having more affiliates may also help to reduce the incentive that countries' telecommunications authorities may have to favor INTELSAT over other competitors. Some analysts believe that if countries open their markets to the two competitors envisioned under the proposal, those countries may then be more likely to open their markets to private competitors.

As noted earlier, it is best for competition for the treaty organization and its owners to have little, if any, financial stake in, or continuing business relationship with any new entities. The U.S. proposal may come closer to reaching this goal because it allows the signatories to own only 20 percent of the new entity, while the industry's proposal allows the signatories to

[23]The number of new entities created is less important if domestic and regional firms provide meaningful competition to INTELSAT.

own up to 50 percent of one of the new entities. However, another aspect of the industry's proposal mitigates the effects of the higher level of ownership by the signatories: that is, the requirement that each signatory invest in only one or the other new affiliate. Signatories may find that to do business with certain other countries, they will have to allow entry into their domestic markets by the INTELSAT affiliate in which they have not invested, and the need to allow both affiliates into their markets may induce countries to widen access to other entrants.

Even the lower 20-percent ownership level proposed by the United States may not be enough to ensure that INTELSAT's signatories have little influence over the new affiliate. Several U.S. regulations regarding ownership levels indicate that potential control or significant influence may occur at lower levels of ownership, such as 10-20 percent.[24] As such, the group that developed the U.S. proposal stated that the 20-percent limit on the amount of the affiliate that the signatories could own was an important upper limit to ensure that INTELSAT and its signatories have minimal influence on any new entities created.

Conclusions

The treaty organizations have benefited from their intergovernmental status and a variety of advantages designed to help ensure their success in achieving worldwide satellite communications. However, advances in technology and increases in demand have transformed the industry into one that may provide profitable business opportunities for private firms. Having achieved their original missions, the treaty organizations, as structured, may now be impeding the flourishing of a private market and the benefits it can bring to consumers.

Making changes to the present structure of the treaty organizations could be difficult because doing so would likely depend on achieving consensus among member nations around the world that have a broad range of perspectives and interests. Along with a goal of ensuring continued global service, a primary interest of the United States is the promotion of competition, which could provide many new options for international satellite services. Many other members of the treaty organizations are concerned about guaranteeing the availability of the basic services now

[24]The 20-percent limit on ownership by INTELSAT and its signatories is based, in part, on several U.S. laws and policies regarding competition and ownership control. For example, the Hart-Scott-Rodino Act (15 U.S.C. 18a) requires notification before a merger takes place if the acquiring person would hold 15 percent or more of voting securities or assets (or an aggregate total amount of the voting securities and assets in excess of $15,000,000) and certain minimum monetary thresholds are met. Several other laws and policies also set limits in the 10- to 20-percent range.

provided by each of the treaty organizations and thus may not be supportive of the kinds of changes that would most advance competition. Over time, however, consumers worldwide would benefit from increased competition in the marketplace.

Agency Comments

We provided copies of a draft of this report for review and comment to the National Economic Council and the Office of Science and Technology Policy in the Executive Office of the President; the Departments of State, Commerce, Justice, and the Treasury; COMSAT, the U.S. signatory to the treaty organizations, through the U.S. Department of State; the FCC; and the Alliance for Competitive International Satellite Services (ACISS), a coalition of private satellite providers. The draft was also reviewed by a representative of the Council of Economic Advisors.

Executive Branch, FCC, and ACISS representatives generally agreed with the report's findings and balance and provided us with several clarifications and more current information, which we have incorporated as appropriate. In written comments, which are presented in full in appendix I, ACISS commended the report for its balanced and thorough treatment of the complex issues surrounding the proposed privatization of Inmarsat and INTELSAT.

COMSAT also provided written comments on our draft report. COMSAT officials were concerned that they had provided us with a variety of information that we did not include in our report. They also stated that we did not accurately characterize the nature of the competition facing INTELSAT in the international communications market and that we had focused our discussion of certain restructuring proposals solely on their competitive effect, to the exclusion of other important issues.

We used documents obtained from COMSAT and a variety of other sources as background information in the preparation of this report. Because this report is an overview of issues related to the competitive structure of the international satellite market, we did not think that all of the documents provided by COMSAT contained information necessary for the report. Our report also clearly discusses the nature of the competition facing INTELSAT. COMSAT is correct in saying that this report focuses on the potential competitive impacts of various approaches for restructuring the treaty organizations; that is a goal of the U.S. proposal and is the issue we were requested to review. In response to COMSAT's concern, we have noted other

goals of the U.S. proposal in the report. COMSAT's complete comments and our detailed responses to them are presented in appendix II.

Scope and Methodology

This report is based on our analysis and our review of documents and other information obtained from the National Economic Council and the Office of Science and Technology Policy in the Executive Office of the President; the FCC; the Departments of State, Commerce, Justice, and the Treasury; COMSAT; INTELSAT; and Inmarsat. We also obtained information from experts from the Council of Economic Advisors and from ACISS as well as from representatives of several companies operating, licensed to operate, or applying for licensing to establish their own satellite systems. We conducted our work from May through June 1996 in accordance with generally accepted government auditing standards.

As agreed with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of this letter. At that time, we will send copies to interested congressional committees; the Chairman of the National Economic Council; the Director of the Office of Science and Technology Policy; the Chairman of the FCC; the Secretaries of State, Commerce, Justice, and the Treasury; and the Chairman of the Board of COMSAT. We will also make copies available to others upon request.

Please call me at (202) 512-2834 if you or your staff have any questions. Major contributors to this report are listed in appendix III.

Sincerely yours,

Phyllis F. Scheinberg for

John H. Anderson, Jr.
Director, Transportation and
Telecommunications Issues

Contents

Abbreviations

ACISS	Alliance for Competitive International Satellite Services
COMSAT	Communications Satellite Corporation
FCC	Federal Communications Commission
GAO	General Accounting Office
ICO	ICO Global Communications Limited
INTELSAT	International Telecommunications Satellite Organization
ITU	International Telecommunications Union

Comments From ACISS

COMMENTS OF ACISS* ON GAO DRAFT REPORT:

"TELECOMMUNICATIONS: Competitive Impact of Restructuring the International Satellite Organization," GAO/RCED-96-204 Draft Date: June 20, 1996

The members of ACISS, representing the views of companies across the satellite industry, commend GAO on its balanced and thorough treatment of the complex issues surrounding the proposed privatization of Inmarsat and INTELSAT. We hope that this report will help guide the deliberations of lawmakers and regulatory officials as they craft a new and more competitive environment for global satellite services.

We agree with the draft report's identification of the many ways in which these entities enjoy both horizontal and vertical market power in the global satellite services market. While this power was a natural and expected outgrowth of their intergovernmental organization (IGO) status at the time they were created, ACISS and many of the parties to Inmarsat and INTELSAT recognize that future global telecommunications will be best provided by the private sector not a bureaucratic cartel of monopoly PTTs. The GAO report affirms the long held industry view that in designing the sunset of these entities, it is critical to make the distinction between privatization and competitiveness.

The GAO draft report clearly outlines the key economic foundations for competitive restructuring:

- Complete separation between privatized affiliates and any residual IGO minimizes the vertical market power incentive for discriminatory treatment of private competitors.
- Division of the IGO assets into separate and competing companies sized to make them competitive with other private players minimizes the potential to misuse their current horizontal market power.

The GAO draft clearly identifies the competitive advantages of the special market power and privilege now enjoyed by Inmarsat and INTELSAT:

- The IGO signatories, as the regulatory entity for international communications in most countries, has an economic incentive to discriminate against competing companies.
- Private companies must divulge and coordinate their business plans around those of the IGOs, placing private industry at a distinct competitive disadvantage. As an example, Intelsat has recently sought to prevent a U.S. competitor from using an orbital location in a region where Intelsat already has nine orbital slots.
- Most signatories are government supported with access to capital at favorable terms.
- The IGOs and signatories are immune to anti-trust action in this market.
- IGOs regularly file for preferred spectrum and orbital slots through host governments which must pass them through to the ITU without the review process that private companies must submit to. This has resulted in the IGOs appropriating the premier orbital slots for transoceanic communications.

* ACISS: The Alliance for Competitive International Satellite Services, represents the views of the private satellite industry affected by the proposed changes to Inmarsat and INTELSAT. ACISS members include Columbia Communications, Odyssey Telecommunications International, Orbital Communications, Orion, Motorola, PanAmSat and TRW Inc.

The GAO draft report correctly identifies some of the competitive issues that have already come from the creation of the Inmarsat affiliate, ICO:

- ICO signatories have every incentive to limit market access, particularly in anticipation of an IPO whose windfall profits come from the value of Inmarsat's special access. Although ICO's private competitors have made marketing or gateway ownership agreements with companies in other countries, to date few licenses have been granted. The difficulties faced in getting operational licenses, spectrum and interconnection agreements have been heightened by the need to negotiate with the ICO/Inmarsat signatory.

- The competitive principles set forth by Inmarsat during the formation of ICO did not achieve structural separation and were not incorporated into the organizing documents of ICO or into its shareholder agreements. Many of these principles appear to have been violated in the process of creating and promoting ICO since that time. The State and Commerce Departments have correctly identified this as unacceptable and the FCC is evaluating possible measures to take if not corrected.

- Both the Inmarsat 10th Assembly and ICO organizing documents clearly identify that an objective of ICO is to re-merge with Inmarsat in the future. This clearly aligns the goals of all signatories and their governments with ICO success.

- The manner in which ICO's capital call received in a matter of days well over $2 billion in offers from signatories (enough to turn money away) reflects its preferential access to capital when compared with competitors who continue to spend years raising smaller sums from the private market.

- Complete separation of ICO from Inmarsat, as recommended by the industry, is the means that economic theory suggests to remedy the market distortions caused by these conflicts of interest.

The GAO draft report serves to support the strengths of the private sector proposal for INTELSAT restructuring:

- Separation into three entities reduces horizontal market power to near that of competitors.

- Elimination of ties between INTELSAT and private spinoffs minimizes vertical power.

- The need for structural safeguards to prevent abuse during implementation of the plan.

Unfortunately:

The GAO report also correctly identifies that U.S. willingness to lead fundamental change in Inmarsat and INTELSAT at this crucial time is limited by the concerns of signatories about dependence on the private sector and loss of economic and political benefits derived from a strong intergovernmental role. The history of reform in U.S. telecommunications has shown that the similar worries of dependence by parts of the government and the cries of pain from threatened monopolies have been misplaced.

There has been little doubt that the strong bi-partisan leadership in breaking up and reforming the domestic telecommunication sector has brought tremendous benefits to consumers and industry alike. We hope that policymakers will use the facts highlighted by the GAO report to take similar initiative internationally, allowing the next generation of satellite systems to bring the benefits of the telecommunications revolution to the world.

Comments From COMSAT

Note: GAO comments supplementing those in the report text appear at the end of this appendix.

COMSAT World Systems

John H. Mattingly
Vice President and
General Manager

6560 Rock Spring Drive
Bethesda, MD 20817
Telephone 301 214 3324
Fax 301 214 7100
Telex 197800

June 27, 1996

Mr. John H. Anderson, Jr.
Director
Transportation and Telecommunications Issues
United States General Accounting Office
Washington, DC 20548

RE: GAO Draft Report: TELECOMMUNICATIONS: Competitive Impact on Restructuring the International Satellite Organizations, GAO/RCED-96-204, 6/20/96, Job Code 348018

Dear Mr. Anderson:

Through Ms. Eileen L. Gower, GAO's Liaison Officer at the Department of State, COMSAT Corporation received copies of the subject draft report on June 20, 1996. Your transmittal letter of the same date to the Honorable Warren M. Christopher requested review and comments by COMSAT, the U.S. Signatory to the international satellite organizations, before the report is issued in final form. We appreciate this opportunity.

COMSAT committed from the outset to work cooperatively with GAO staff and to make available to them all the data they requested, including access to proprietary INTELSAT satellite traffic data and competitively sensitive COMSAT and INTELSAT documents that had previously been provided to the Antitrust Division of the Justice Department pursuant to a confidentiality agreement. We took steps to ensure that the GAO would have access to the most up-to-date information necessary to create an accurate report to the Congress, including an independent economic analysis sponsored by a former member of the President's Council of Economic Advisors on the current state of competition in the international telecommunications marketplace. Similar measures were taken to provide the GAO with all the Inmarsat materials it requested. We also made available COMSAT senior management time for extensive briefings concerning the history, operations, and reasons for seeking to restructure INTELSAT and Inmarsat.

Much to our dismay, none of the information provided by COMSAT appears to have been taken into account in the draft report, nor in the GAO's analysis of the competitive impact of the restructuring of these international treaty organizations. In addition, the draft report contains some serious factual errors and omits other highly relevant market data. It also does not evaluate the full range of U.S. objectives in restructuring the international satellite organizations.

Accordingly, we respectfully request that the GAO afford itself such additional time as may be required to more fully assess the information with which it has been provided and to develop a more complete record on the totality of relevant issues so that a more balanced and

accurate report can be produced. To expedite this process, Attachment 1 to this letter identifies key subject areas of the draft report that should be reviewed in order to correct inaccuracies and to include decisionally significant information. We would be pleased to offer additional information or assistance to the GAO upon request.

The importance COMSAT attaches to the restructuring of INTELSAT and Inmarsat cannot be overemphasized. These international satellite organizations were established as a direct result of the Communications Satellite Act of 1962, which created COMSAT to engage other nations, particularly developing countries, as partners in the formation of a global system, thereby strengthening their links, both economically and politically, to the United States. We embrace the view that restructuring of these international satellite organizations is required, and that such restructuring must promote the competition and foreign policy objectives of the United States. With this in mind, we urge you to fully consider the information we provided and our comments on the draft report.

Sincerely,

John H. Mattingly

Attachment

cc: Mr. Michael Deich - National Economic Council
Mr. Steven Lett - Department of State

ATTACHMENT 1

COMMENTS ON GAO DRAFT REPORT:

"TELECOMMUNICATIONS: Competitive Impact of Restructuring the International Satellite Organization," GAO/RCED-96-204, 6/20/96, Job Code 348018

1. The GAO Draft does not accurately present the basis upon which INTELSAT was initially established, the purposes it was intended to serve, and the multiplicity of interests that must be considered in the restructuring process.

The establishment of INTELSAT was undertaken by the U.S. Government to promote a broad range of foreign policy and economic interests. The fundamental reason for a worldwide organization was the U.S. desire to bring as many countries as possible into the democratic arena through closer ties to U.S. politics, culture and economy. The draft correctly states the risk associated with the technology, but the impetus to engage the widest possible number of countries was largely a political and economic response to the first satellites launched by the Soviet Union.

See comment 1.

See comment 2.

In this regard, the report incorrectly characterizes the mandate of the Communications Satellite Act of 1962. COMSAT was never charged with developing the system alone, but "in cooperation" with other countries, particularly developing countries. Also, the draft states that INTELSAT was begun "to provide mainly telephone and data services" implying that video services were outside its mission. In fact, satellites were the only means of transmitting video services internationally at that time, and a key purpose of INTELSAT was to broadcast U.S. news and video transmissions worldwide. INTELSAT's "mission" also included the provision of communications on a non-discriminatory basis to all areas of the world. The developing countries regard this as a commitment ensuring service, and they are deeply concerned about changes that would jeopardize this mission which has been agreed to by 139 countries. They also are involved in the governance of this international system and are concerned about being left out in a restructured INTELSAT. A complete delineation of these public policy elements is critical to an appropriate understanding of INTELSAT's current and future role, the developing world's participation in this process and their views on the future structure.

See comment 3.

Lastly, the GAO Draft does not take account of the four key objectives that the U.S. Government identified as guiding the restructuring effort. These are:

1. Preserve and strengthen INTELSAT's ability to meet its prime objective--providing high quality, reliable satellite service on a non-discriminatory basis to all areas of the world.

2. Ensure continuity of service for existing INTELSAT customers.

3. Satisfy broader member government policy objectives, particularly those which would use market competition to provide a wider array of services at the lowest prices to all areas of the world.

4. Protect the financial interests of Signatory and non-Signatory investors.

While promotion of competition is clearly one of these objectives, it is by no means the only one. By relying on promotion of competition as the only criteria for comparative assessment of the various restructuring options identified in the report, the GAO Draft presents an unbalanced assessment of the U.S. proposal for restructuring INTELSAT.

2. The GAO Draft assumes that INTELSAT and Inmarsat possess a significant competitive advantage as a result of so-called privileges and immunities without any critical analysis thereof.

See comment 4.

INTELSAT and Inmarsat are granted certain privileges and immunities as international organizations. This does not, however, necessarily translate into unfair competitive advantages in the marketplace.

While INTELSAT and Inmarsat are exempt from taxation, this is not necessarily true of the individual Signatory owners. Indeed, from a tax perspective, the tax treatment accorded INTELSAT and Inmarsat is no different than the tax treatment accorded partnerships under U.S. law. For example, COMSAT is fully subject to U.S. taxation for all earnings associated with its business activities related to its role as U.S. Signatory to INTELSAT and Inmarsat.

While INTELSAT and Inmarsat as international organizations have immunity from certain types of lawsuits, that is not the case for individual owners when functioning in a commercial manner. For example, COMSAT is fully subject to all U.S. laws, including the antitrust laws, in respect of the full panoply of commercial activities in which it engages, including those to the commercial provision of INTELSAT space segment capacity to customers in the United States.

See comment 5.

INTELSAT and Inmarsat categorically do not have "preferential access" to orbital slots. Neither organization has the ability to register orbital slots directly with the ITU, but must rely on the action of a notifying administration to perform orbital slot registration on its behalf. In terms of priority, INTELSAT and Inmarsat are subject to the same ITU regulations and standards that apply to all other operators. In this regard, it is noteworthy that neither INTELSAT nor Inmarsat have resorted to administrations of convenience, such as Tonga or Gibraltar, for purposes of notifying orbital locations, but instead have used the United States and the United Kingdom, respectively, as their notifying administrations.

See comment 6.

The procedures contained in Article XIV(d) with respect to economic harm have largely been phased out over the past several years, in large measure as a result of a combined concerted effort of the U.S. Government and COMSAT. Moreover, these procedures have **never** required the showing of any potentially sensitive and proprietary business information; the data that has been submitted under Article XIV(d) economic standards is purely theoretical in nature, and data submitted under the Article XIV(d) technical standards is comparable to the data that would have to disclosed by any satellite operator in the context of ITU coordination activities. Indeed, it is INTELSAT and Inmarsat that more often than not are expected to disclose what would be sensitive and proprietary business information to its competitors, through the public dissemination of internal documentation.

See comment 7.

3. The GAO Draft incorrectly characterizes the competition facing INTELSAT as "limited."

The discussion of potential competitive advantages of INTELSAT in the GAO Draft is superficial and incomplete. There is no market data provided or cited to justify any of the positions stated. COMSAT submitted publicly available data showing that INTELSAT's share of utilized switched voice and private line capacity on trans-oceanic routes to and from the United States is approximately 25 percent today, and that INTELSAT's share of total estimated satellite transponder capacity available for all regional and domestic services worldwide is currently less than 30 percent. It is difficult to understand how can a study focusing on competition would fail to address the relevant markets in any substantive manner.

The GAO Draft apparently has accepted the view of INTELSAT's competitors that INTELSAT does not face effective competition in the marketplace. This view is in stark contrast with the reality of the situation.

The GAO Draft entirely ignores the competitive significance of undersea fiber optic cables. The tremendous capacity of these cables now in all ocean regions has been fully documented. As the GAO Draft indicates, INTELSAT's market share of public switched telephony network (PSTN) services has dropped dramatically over the past eight years, since the introduction of the first fiber optic undersea cable in 1988. Close to 100 countries, including all major telecommunications nations, can access the U.S. via fiber optic connection. Total transoceanic fiber optic capacity already exceeds total available INTELSAT satellite capacity for the transoceanic service by a significant margin. This data is documented in work undertaken by the Brattle Group, an economic management and environmental consulting firm based in Cambridge, Massachusetts. (The particular study in question was undertaken by the Brattle Group in collaboration with Professor Hendrick S. Houthakker, Henry S. Lee, Professor of Economics (retired), Harvard University.)

See comment 8.

Additionally, INTELSAT today faces significant competition from competing satellite systems. The extent of this competition has also been fully documented by the Brattle Group.

This competition involves not only three U.S. separate systems that are today providing service (PanAmSat, Orion, Columbia), as well as the Russian Gorizont/Intersputnik system, a non-U.S. competing global system that has been licensed by the FCC to provide a full range of services in the United States, but a number of other international and regional systems that aggressively compete with INTELSAT in the provision of services in various regional markets around the world. One of the U.S. systems, PanAmSat, is operating a fully competitive global satellite system, with four satellites in orbit today, up to eight satellites slated to be in orbit by the time that any INTELSAT restructuring proposal could be implemented, and with ultimate plans for as many as a dozen satellites.

In the Americas alone, nearly 30 U.S. operational domestic satellites (but with coverage areas extending beyond the U.S.) are now authorized by the Federal Communications Systems, without limitation, to provide a full range of satellite services throughout their coverage areas. Other satellite systems today providing service in the Americas include Anik (Canada); Solidaridad (Mexico); Hispasat (Spain); Nahuelsat (Argentina) and Brazilsat (Brazil). Also, the French domestic system (Telecom) has coverage of portions of the Americas, and is currently used to provide services to French overseas territories off the Newfoundland coast (Saint-Pierre and Miguelon) and the Caribbean.

In other regions of the world, the competition from non-INTELSAT satellites is equally as fierce.

In Europe the following systems operate today: EUTELSAT (Pan-European); Astra (Luxembourg); Telecom (France); Italsat (Italy); Turksat (Turkey); DFS-Kopernicus (Germany); Hispasat (Spain), TV SAT/Tele-X/Thor (Nordic countries).

In the Middle East, Africa, Asia and the Pacific Rim, the following systems operate today: Arabsat (Pan-Arab); Amos (Israel); Optus (Australia); Asiasat (private); Apstar (private); Chinasat/Dongfangong (China); Insat (India); Koreasat (Korea); Measat (Malaysia); Palapa (Indonesia/Asean countries); Rimsat (Tonga); and Thaicom (Thailand). In addition, there are four Japanese systems currently providing service in this region as well -- BS, J-SAT, N-STAR, and SCC/Superbird.

These listings do not include the numerous planned systems that have been announced but are not today in operation, nor the Ka-band satellite systems for which extensive ITU filings have recently been submitted.

See comment 9.

It should further be noted that many of INTELSAT's largest owners are investors in these competing systems as well. Examples include: British Telecom (Astra); France Telecom (Telecom); Cable and Wireless (Optus and Asiasat); Telefonica (Hispasat); Deutsche Telecom (DFS-Kopernicus and Palapa); Telecom Mexico (Solidaridad); Embratel (Brazilsat). Their investment in competing systems is directly relevant counter evidence to the assertion that

INTELSAT Signatories may have incentives to favor the newly created affiliate over other companies in their domestic markets.

See comment 10.

The GAO Draft also fails to take account of the many difficulties that INTELSAT faces in competing that its competitors do not have. Provision of service on the INTELSAT system is complicated, in large measure due to the matching order requirement. In the case of services provided by COMSAT in the U.S., since all such services are provided on a tariffed basis, COMSAT does not have the ability to negotiate unique deals with particular customers. Also, the requirement that INTELSAT provide non-discriminatory service makes it increasingly difficult to construct "neighborhoods" (a community of broadcast customers aggregated on a single satellite, built around one or more major or anchor broadcasters) on INTELSAT satellites, a technique which has become the key marketing tool of those satellite operators competing with INTELSAT, especially in the provision of video services. The asset base which INTELSAT has (and which would be divided between the residual intergovernmental organization and the affiliate under the U.S. proposal) is not well-suited for the targeted provision of more competitive services to specific geographic regions, since the satellites are designed as generic "multi-purpose satellites" capable of operating in any ocean region. Given these difficulties, it should come as no surprise that PanAmSat has already established itself as the leading provider of video services in Latin America.

See comment 11.

4. The GAO Draft has not taken account of the significant market penetration that competitors to INTELSAT and ICO have achieved in its assessment of market conditions.

The GAO Draft identifies market access as a central issue in assessing all proposals for restructuring of INTELSAT and Inmarsat. Yet, the problem of market access is in no way rooted in the structure of the international satellite organizations such as INTELSAT or Inmarsat. The problem is not caused by the current structure of these organizations, and it is somewhat naive to expect that this problem can be solved by the way in which these organizations are restructured.

COMSAT does not dispute that market access is one of the overriding issues in the field of international telecommunications today. This is the case for satellite and non-satellite based services; it is not unique to satellites or to U.S. separate systems -- it is a problem for everyone. Without derogating the importance of this issue, it is nonetheless fully appropriate to take note of public statements made by satellite operators in competition with INTELSAT and ICO which indicate that great strides have already been made in overcoming this problem.

See comment 12.

In the case of competitors to INTELSAT, if one makes reference to publicly available information in filings before the Securities and Exchange Commission of both PanAmSat and Orion, it is clear that both have had considerable success in securing landing rights throughout the world. In the case of PanAmSat, in a Form S-1 filed with the Securities and Exchange

Commission on August 4, 1995, PanAmSat stated that it was then providing service in or into more than 110 countries. Similarly, with respect to the services provided by Orion's satellite currently operating in the North Atlantic region, an Orion Prospectus dated June 27, 1995, stated that it was then providing various services to 24 European countries.

Similarly, in the case of ICO, public disclosures made by both Globalstar and Iridium demonstrate that both companies have met with considerable success in obtaining market access. Globalstar's Annual Report for 1995 indicates that it has already signed "exclusive service provider agreements" in 91 countries and that "the number of subscribers projected for these countries represents more than two-thirds of the anticipated Globalstar revenue base. In other words, even if no other country were signed up, Globalstar would still be a major commercial success." The section of the report on market access, which is entitled "Globalstar is Well on the Way Toward Worldwide Market Coverage", concludes with the statement that "when service starts in 1998, virtually every country in the world is expected to be part of the Globalstar system."

A recent publication from Iridium includes the statement that "with the sale of this last IRIDIUM gateway territory, every country in the world is now represented by an Iridium, Inc. investor, who is responsible for the distribution of IRIDIUM services in partnership with local wireless and other service providers." ("Iridium Today", Spring 1996, P. 4)

See comment 13.

The GAO Draft also fails to address recent efforts by ICO to work cooperatively with the U.S.-licensed Big LEOs on these market access issues. The GAO Draft ignores a recent letter (which COMSAT provided), from the CEO of ICO, Mr. Olof Lundberg, dated May 27, 1996, to Mr. Robert Kinzie, CEO of Iridium, proposing joint efforts and mutual agreement on a code of conduct . The GAO Draft also does not reflect recent reports that ICO and the three Big LEO companies agreed at a recent conference in Rio de Janeiro on a detailed joint approach to these issues.

COMSAT fully agrees there should be a broad effort to promote global market access for all MSS systems in all countries. From the materials which Globalstar and Iridium are releasing to their investors and the general public, one must conclude that substantial progress has already been made on the MSS market access issue.

See comment 14.

5. The GAO Draft does not accurately reflect the current status of the INTELSAT restructuring activity.

The information contained in the GAO Draft concerning the restructuring options under consideration by INTELSAT is now outdated and should be updated to reflect developments of the recently concluded June meeting of the INTELSAT 2000 Working Party ("IWP"), including the emergence of the "Model X" option, submitted by a large group of African countries.

See comment 15.

As previously noted, key factors in evaluating options for restructuring have not been limited to the number of new entities that are created and the extent of their ties to the parent organization. Critical to achieving a worldwide consensus for approval of any restructuring proposal, and specifically included in the U.S. proposal, is the inclusion of provisions for protection of universal service obligations, continuity of service, and the interests of INTELSAT investors.

With regard to the GAO Draft, it is also necessary to correct certain errors and omissions as they relate to restructuring proposals:

See comment 16.

1) The U.S. at no time submitted a proposal that would result in the INTELSAT affiliate having 12 satellites immediately after the affiliate is created. The maximum number has been 9, assuming one INTELSAT launch failure in the 1996-1998 period. In light of recent developments with the IWP, that number may be reduced further.

See comment 17.

2) The report references the "U.S. Satellite Coalition Alternative Restructuring Design" proposal, which is supported by a number of U.S. companies, but fails to clearly identify these firms as those that compete with INTELSAT and Inmarsat and will compete with the INTELSAT affiliate and ICO. Clearly, the intent and bias of these organizations is to constrain INTELSAT and Inmarsat to the maximum extent possible in this process.

The well publicized "alternative restructuring design" has received no support in any decision-making body with jurisdiction in this process. This is due to the fundamental flaws that exist with this proposal that make it unworkable. The flaws include lack of economies of scale, inability to divide assets on an equal basis and potential disruption of ground segment access. It should be noted that no competition authority in the world has taken issue with the overall direction of INTELSAT's current restructuring approach.

In response to efforts initiated by the U.S. to transform INTELSAT and Inmarsat from intergovernmental organizations into fully private, publicly traded companies, many countries responded with alarm that COMSAT and the U.S. were less interested in ensuring that the communications needs of developing countries are met and more interested in promoting use of entirely U.S.-owned satellites as opposed to the internationally-owned and operated INTELSAT satellites. Considerable efforts have been and are being undertaken to convince developing countries that the U.S. is not abandoning them, that they still will be provided with connectivity to the U.S. and other countries, and that with both advances in satellite technology and the expansion of fiber optic cables to all regions, numerous providers -- both U.S. and non-U.S. -- other than INTELSAT will be eager to provide them with service.

See comment 18.

6. The GAO Draft does not accurately reflect the "access to capital" issue for the intergovernmental organizations.

Now on p. 5.

The GAO Draft's discussion of "the relatively easy access to financial capital" (p. 7, n.4) of INTELSAT and Inmarsat is over-simplified and erroneous. The statements in no way reflect the issues being discussed in both organizations over access to capital and the current resistance of some key Signatories to future "involuntary" capital calls.

The GAO Draft also assumes that ICO's ownership structure may confer financial advantages. The text asserts that ICO' s shared ownership with Inmarsat may make financing more readily available than it is for competitors (p. 16). This does not comport with the reality of the situation. Quoting from the Globalstar Chairman' s message in their Annual Report: " In addition, we have achieved almost 80 percent of our financing requirements by raising $1.4 billion through our partners initial equity investments, vendor financing, a $250 million bank credit facility, and two successful public financings . . . [O]ur remaining external financing requirements will be less than $400 million, which we intend to raise through the issuance of debt when needed." These are hardly the words of an entity that is having trouble raising funds. Also, a recent Iridium report indicate that another $300 million has been raised, to a total of $1.9 billion, and Iridium' s CEO commented that "this additional funding demonstrates the continued strength of the IRIDIUM program and reaffirms the commitment of our global investor group." (Iridium Today, Spring 1996, p. 4.) We can only conclude from their own public reports that these two big-LEO entities are under no competitive disadvantages in respect to raising capital.

7. The GAO draft incorrectly concludes that ICO is not appropriately bound to procompetitive principles supported by the U.S. and significantly overstates the likelihood of a future merger between ICO and Inmarsat.

Now on pp. 2, 10-11, 13.

The GAO Draft repeatedly addresses the import of certain public policy principles adopted by the Inmarsat Assembly in December 1994 as conditions to the creation of ICO (pp. 3, 14, 18). There are two problems with the development of this issue in the report.

Now on p. 2.

First, the text inaccurately describes the extent of global acceptance of the U.S. position. Whereas the authors indicate that "many" of these principles were accepted (p.3.), inferring that some number of principles were not accepted, COMSAT believes that the only principle put forward by the U.S. that was rejected by the Inmarsat Council and Assembly, out of a total of approximately fifteen, was that which would have barred ICO from using the Inmarsat name and logo. Moreover, for business reasons, ICO later determined that it would develop and use its own name and logo. Thus one could conclude that Inmarsat and ICO are fully "in sync" with the desired U.S. principles.

Now on pp. 2, 11, 13.

See comment 19.

More importantly, the text asserts over and over (pp. 3, 14, 18) that some government officials are concerned that these principles may not have been fully incorporated into the affiliate's structure. This is simply wrong. COMSAT reported to the instructional process agencies in late May that the ICO shareholders at their 1996 Annual Meeting had indeed

approved the amendment to ICO's Memorandum of Association desired by the U.S. Government, fully incorporating these Inmarsat Principles into ICO's organizing documents . COMSAT will be able to submit to the Executive Branch in the near future certified copies of the amended ICO Memorandum of Association, containing the language previously coordinated with the government. Thus, COMSAT will demonstrate that ICO is indeed bound by the Inmarsat Principles, and any inferences in the draft to the contrary, and any negative implications therefrom, should be removed.

See comment 20.

The GAO report indicates that some competitors are concerned about the relationship that ICO might have with a restructured Inmarsat, and it states that Inmarsat is on record as being interested in a future merger of the two (p. 19). COMSAT, which is by far the largest owner in Inmarsat, has recently confirmed to the Executive Branch that it does not support such a merger in any foreseeable time frame. Neither the current Inmarsat restructuring proposal nor others which were considered call for the merger of Inmarsat and ICO. Merger of these two organizations is highly unlikely given the different direction of their respective business plans.

The following are GAO's comments on COMSAT's letter dated June 27, 1996.

GAO's Comments

1. We believe that our report provides a broad overview of the establishment of INTELSAT. As our report notes, the Communications Satellite Act of 1962 states that a policy of the United States was to establish a global system in conjunction and in cooperation with other countries, and one of the objectives for such a system was to contribute to world peace and understanding. The statute also authorized COMSAT to "plan, initiate, construct, own, manage, and operate itself or in conjunction with foreign governments or business entities a commercial communications satellite system . . . ." [Emphasis added.]

2. Our description of the types of services that INTELSAT was formed to provide does not imply that INTELSAT was precluded from providing other kinds of services including video broadcast. At the time the treaty organization was formed, however, the bulk of the services provided could be expected to be basic telephone and data services.

3. The U.S. proposal for the restructuring of INTELSAT has several objectives, and we have added references to other objectives to clarify that point. However, we were asked to review only the potential competitive impact of different kinds of restructuring approaches. In that context, we reviewed the U.S. proposal as one example of the various ways in which restructuring could occur.

4. Other than quoting COMSAT, our report makes no reference to unfair competitive advantage in the marketplace. Our discussion of possible competitive advantages focuses on the treaty organizations, not the signatories. Furthermore, we state only that these factors may be, or may contribute to, potential competitive advantages.

5. We have clarified the issue of the treaty organizations' access to scarce orbital slots and spectrum by explaining in our report their comparative ease of access rather than characterizing their access as preferential. The treaty organizations, like private companies, must coordinate access to fixed orbital locations and spectrum through the International Telecommunications Union (ITU). However, according to the Federal Communications Commission (FCC), which processes INTELSAT's applications, submission of the applications through the host country is a formality, and applications are forwarded to the ITU automatically. (INTELSAT is headquartered in the United States; Inmarsat's applications are

processed through the United Kingdom, where that organization is headquartered.) The applications of private U.S. companies, on the other hand, are subject to FCC's review and approval before being submitted to the ITU.

6. We agree that INTELSAT is changing its coordination requirements and will ultimately eliminate the requirement for economic coordination set out in Article XIV(d) of the treaty agreement, and we have added a discussion of that issue in the report. However, the treaty agreement has not yet been amended to eliminate this requirement. Furthermore, not only is there no effort to eliminate the requirement for technical coordination, but, according to FCC officials, a recent INTELSAT vote to deny a U.S. company successful technical coordination was based on criteria not previously applied to technical coordinations. Also, satellite companies we spoke with that have undergone the coordination processes told us that they consider the information they had to submit for this process to be sensitive and proprietary.

7. Our report clearly points out that INTELSAT has faced increasing competition from fiber optic cables. However, fiber cables are not available to all countries, nor are they able to provide certain types of services. Moreover, because other signatories (not COMSAT) to INTELSAT and Inmarsat are often part owners of fiber cables, INTELSAT's reduced market share in the markets where it competes with fiber may not necessarily imply that strong price competition has emerged.

8. COMSAT has concerns about our characterization of competition for advanced services as "limited" and points out that there are many domestic and regional satellite systems providing services within their coverage area. We agree that there are domestic and regional satellite competitors and have so noted in our report. There is some disagreement among analysts regarding the degree to which these systems provide meaningful competition on a global basis. In particular, some of these systems are owned by signatories to INTELSAT, reducing the likelihood that they would provide significant pressure on pricing. We have deleted the word "limited" from that section of the report. We believe that in time there will be more fully global providers. For example, currently Orion and Columbia are less than global providers, but these firms plan to expand their systems' coverage. Additionally, several U.S. domestic satellite providers are expected to expand their systems' coverage globally in the future.

9. COMSAT's point that the signatories to INTELSAT often are part-owners of regional or domestic systems would seem to reinforce our belief that such systems may not represent additional competition, since their overlapping ownership may reduce the likelihood that they would compete significantly against one another.

10. Our report does point out some of the difficulties that INTELSAT faces that its competitors do not have. For example, our report notes that according to U.S. agency officials, some members of INTELSAT believe it may not be able to respond easily to changes in the market as a result of the difficult decision-making process entailed in the intergovernmental structure.

11. While restructuring these organizations may not solve all of the problems of market access, restructuring in a way that lessens the incentives of foreign governments to favor the treaty organizations may have an impact on market access. Moreover, as we note in the report, the United States is engaged in a number of activities aimed at encouraging open access.

12. As COMSAT notes, separate satellite providers such as PanAmSat have been able to get access in many countries. However, to be a full global provider, a company may need to gain access into nearly all countries to provide many different types of services. Companies told us that they want to provide global coverage, and some are closer to gaining the necessary access than others. Some of the companies that COMSAT mentions as having gained access to many countries are not yet providing services, and it is not clear what level of access they will achieve. Since some countries do limit entry, particularly regarding the provision of certain types of services (most notably basic telephone service), concerns about access remain. Moreover, even if a company may eventually gain significant access, a continuing concern would be the time, effort, and expense that it may take that company to do so.

13. We acknowledge the receipt of new information on ICO's recent efforts to work cooperatively with U.S. Big LEO (low-earth orbiting satellite systems, which are emerging to provide mobile services) companies on cooperation on creating a competitive regulatory environment. We believe that this recent development is ancillary to the focus of restructuring the treaty organizations and therefore have not added this information to our report.

14. In discussing the options for restructuring, our report speaks generally about certain issues and specifically about two proposals. As agreed with our requester, we focused on the U.S. and the industry proposals and did not attempt to provide a census of the array of proposals for restructuring INTELSAT.

15. Our request was to examine issues related to restructuring with regard to how competition would be affected. Nevertheless, we have clarified in the report that the U.S. proposal has additional goals.

16. We have revised the report to read that the affiliate will have roughly half of the INTELSAT satellites.

17. The draft named the companies that are part of the coalition in a footnote.

18. With regard to access to capital, both INTELSAT and Inmarsat contain provisions in their operating agreements requiring the signatories to provide capital as decided by the respective signatory decision-making bodies within the treaty organizations. Furthermore, as noted in our report, the affiliation of the treaty organizations with governments may make any public financing they seek easier to get than similar public investment in companies that cannot provide implicit governmental support. While COMSAT states that two potential competitors have now acquired portions of their needed funding, according to a representative of the industry coalition, companies that want to compete with INTELSAT and Inmarsat, including the two cited by COMSAT, have had difficulty in obtaining the needed level of financing through both public offerings and efforts to secure debt financing.

19. With regard to the incorporation of U.S.-proposed principles into ICO's formation, the Departments of State and Commerce said in their September 1995 letter to the FCC that the principles accepted by Inmarsat's member governments included "incorporation of many but not all of the U.S. Party's principles and structural separation elements." State and Commerce concluded in that letter that ICO's organizing documents did not fully conform with the requirements of Inmarsat's member governments and recommended that the FCC not approve COMSAT's application until COMSAT states on the record that ICO is also bound by these principles and provides supporting documentation. We have updated our report to reflect recent developments on this issue. As COMSAT notes, however, the

supporting documentation has yet to be provided to the Executive Branch of the U.S. government.

20. We have updated our report to include information on events that occurred after our draft report had been distributed for review and comment, including COMSAT's confirmation to the Executive Branch of the U.S. government that it does not support a merger between ICO and a restructured Inmarsat in any foreseeable time frame.

Major Contributors to This Report

Resources, Community, and Economic Development Division	Amy D. Abramowitz Charles Bausell Beverly Ann Bendekgey Phyllis Scheinberg Marnie Shaul John Thomson Phyllis Turner
Office of the General Counsel	Michael Volpe Mindi Weisenbloom
Office of the Chief Economist	Joseph Kile

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