
INTELSAT: Transforming a Market Leader to Meet Changing Global Telecommunications

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The International Telecommunications Satellite Organization (INTELSAT) is the product of a unique experiment—an ever-growing group of sovereign nations and territories coming together to own and operate a global telecommunications satellite network. INTELSAT was created at a time when the satellite industry was in its infancy, and has grown from the initial 11 nations to the current 134 member nations. Technological advances and the expanded use of satellite telecommunications have nurtured this growth. While the INTELSAT experiment has been a tremendous success, some are concerned that time may pass it by, that the nature of telecommunications has developed to a point where an international cooperative is no longer suited to the contemporary and future market environment.

We believe, however, that INTELSAT's time has not passed. INTELSAT will not go the way of the dinosaurs, becoming extinct because of an inability to adapt to a changing world. INTELSAT is acutely aware of the growing market challenges confronting it and is taking steps now to adapt to these changes. In the thirty years since INTELSAT's creation, the world of global communications has been transformed by technical progress and regulatory initiative. The spread of deregulation, the corporatization and privatization of national telecommunications providers, the growth of competitive industries, and the proliferation of new satellite companies have created greater choice in the marketplace and, therefore, greater competition for market share. In light of these dynamic changes, INTELSAT is transforming itself in order to remain competitive.

Global satellite telecommunications is a growing market, with estimated revenues of about \$3 billion. Satellites, however, constitute only a small component of the worldwide telecommunications service industry. Total worldwide telecommunications revenues currently approach \$600 billion, with about 78 percent for services and 22 percent for equipment. Europe and the Americas contribute about 75 percent of these revenues and the Asia-Pacific region provides 20 percent. International services have been growing about 15 percent per year, fueled by growth in international trade, travel, and liberalization of telecommunication policies. Barriers among industry segments are eroding due to deregulation, mostly within the nations which are the larger users of telecommunications services, and due to advances in technology and competitive pressures to provide value-added services across a mix of transmission facilities. This worldwide trend has spawned a new array of viable products and competitors. Rapid market developments have created the need for flexibility in providing high-quality customer service, which is often the decisive factor in consumer choice. The growth of the telecommunications marketplace and regulatory changes have created the impetus for change within INTELSAT. The interplay between the evolving telecommunications environment and INTELSAT's structure and organizational decision-making process, however, raises concerns about INTELSAT's ability to meet the demands of its future.

The increasing competition INTELSAT faces primarily comes from fiber-optic cables and other satellite systems. The boom in the fiber-optic industry is a direct product of deregulation and privatization of national telecommunications entities, which allows them to invest in new industries and markets and to expand into specialized services. Global fiber-optic capacity has doubled each year for the past five years. Over the next five years, it is expected to double again from its current level. Global fiber growth is concentrated in major point-to-point transoceanic routes and regional loops in Europe, Africa, and the Asia-Pacific region. Fiber costs per unit of capacity have declined rapidly due to technological improvements.

Fiber is perceived by customers to provide lower prices and higher quality than satellites for major routes. INTELSAT believes, however, that the differences in cost and quality are not as great as customers perceive. Nonetheless, as a result of the growth in fiber-optic capability, the migration from satellites to fiber on high-density routes has significantly reduced INTELSAT's growth in telephony services. Some of the customers migrating to fiber-optic cable

are members of INTELSAT's own closed group of customers (namely signatories) who are often investors and developers of cable networks. Despite the growth in fiber-optic capacity, however, INTELSAT still holds a large market share of telephony service because there are a number of areas in which cable is not practical. There are many routes for which cables cannot be provided economically and where they are significantly less cost-effective than satellites. Also, system planners desire media diversity and more diverse paths than there are cables available. Accordingly, INTELSAT believes that satellite and fiber-optic cables can play complementary roles in providing telecommunications services and will share in future market growth.

In addition to the increasingly intense competition from fiber optics, INTELSAT also is facing growing competition from alternative satellite capacity providers. The number of separate satellite systems has been growing dramatically. Domestic telecommunications satellite systems are now operated by twenty countries, and eight additional countries have announced plans to establish such systems. Many of these systems carry or plan to carry regional telecommunications services as well. Regional satellite systems exist in Europe, the Middle East, and Southeast Asia. There are private systems currently available to provide transoceanic telecommunications services in competition with INTELSAT. A number of companies have announced their intention to establish or expand satellite systems within the next ten years. Deregulation has allowed for the growth of new commercial satellite ventures and will affect the type of services and markets targeted by such ventures. For instance, although competing international satellite systems authorized by the United States are currently restricted in the amount and type of international public switched services that may be provided over their networks, this policy has minimal practical effect. In fact, this policy is scheduled for elimination by January 1997, allowing open competition for all services.

The anticipated growth in this area of communications is staggering. Satellite capacity provided by alternative satellite systems is expected to increase by 60 percent within four years, excluding domestic capacity in areas INTELSAT does not currently serve, like the United States where regulatory policies preclude INTELSAT's provision of domestic services. Regional capacity is expected to increase by 120 percent, global by 108 percent, and domestic by 8 percent by 1998. This new capacity is tailored for specific domestic and regional markets and service applications, thus allowing competitors to respond to the growth in emerging markets.

Private sector participation now dominates the telecommunications services industry. Privatization has been most intense in Latin America, but is increasing rapidly throughout Asia and Europe. Under a corporatized structure, the telecommunications entity has legal autonomy from the central government for administrative and financial functions. Many other telecommunications operators have been, or are, considering full or partial corporatization or privatization, and most of INTELSAT's largest signatories already have a corporatized structure.

While INTELSAT's competitors have been liberated by deregulation, allowing them to maneuver within markets and to explore growth opportunities, INTELSAT is still restricted by its unique circumstances. To understand the difficulty in meeting the challenges facing INTELSAT, it is necessary to understand INTELSAT's structure and history, which present hurdles along with market challenges. INTELSAT was established in 1964 when representatives of eleven nations signed international agreements setting forth interim arrangements for a global commercial communications satellite system. Born from the desire to make satellite telecommunications available to the nations of the world on a global and nondiscriminatory basis, INTELSAT, in the course of its thirty years of existence, has established the world's only global telecommunications satellite network. Currently comprised of twenty-two geostationary satellites, it provides international, regional, and domestic telecommunications services ranging from public switched telephony to broadcasting to dedicated business services.

Governance of INTELSAT is predicated on the traditional principles of an intergovernmental cooperative. The overarching international public interest mandate of the organization brings diverse governments together in such a way that their individual interests are compromised to achieve a common good. Accordingly, the current decision-making process mixes political, public policy, and business considerations.

The original substantive interest of the organization was focused in its practical definition: to provide globally interconnected public switched network telephony (PSN) on a nondiscriminatory basis. The business mission of the organization was less complicated when it was created than it is today. Accordingly, the decision-making structure, although complicated and possibly conflicted, was easier to apply than it is at present.

Now, however, the interests of the membership have become more diverse and are more fraught with potential conflicts of interest which are less conducive to compromise. Many of the original, traditional investment patterns, strategic objectives, and business interests of the organization and its members no longer exist-or have changed considerably. As the organization's members have diversified, privatized, and become subject to competition, their view of INTELSAT's role vis--vis their companies has changed. In many cases, this altered interrelationship gives rise to conflicts of interest between INTELSAT and its members, among members, and even among various constituencies of the same member company. Today, political considerations and unilateral business interests of individual members can obscure or take precedence over business decisions which are in the best interests of INTELSAT as a whole.

The present decision-making process itself is susceptible to excessive delay. Under current practice, INTELSAT management does not have the authority or discretion to make many of the decisions normally delegated to management in a commercial enterprise. The scope of authority presently exercised by the INTELSAT Board of Governors is broader and more preemptive of management's role than that found, for example, in a corporation.

While INTELSAT recognizes market trends and is aware of new growth markets, its current structure limits INTELSAT's ability to optimize business opportunities. First, the intergovernmental membership often distances INTELSAT from the end user, which limits INTELSAT's market knowledge and its flexibility in meeting customer requirements, while creating pricing inefficiencies. A cooperative organization such as INTELSAT is highly risk averse and, therefore, hesitant to seize business opportunities that a corporation might be quick to explore. Because INTELSAT is a cooperative originally formed for rather limited purposes, it also resists vertical or horizontal expansion into nontraditional businesses.

A new decision-making structure must be adopted which allows decisions to be based principally on a commercial basis, not on difficult to achieve compromises aimed at accommodating the conflicting interests of individual members.

Recent actions by INTELSAT's Board of Governors have alleviated some of the foregoing system constraints, but have not totally resolved them. INTELSAT now accommodates new regulatory schemes which allow end users, authorized by an INTELSAT member, to directly access the INTELSAT network. The authorizing member, however, retains the flexibility to shape the extent of direct access by an authorized customer. For instance, the United Kingdom has taken a leading role, along with some South American countries, in allowing direct access to INTELSAT by end users. The U.K. has completely opened the British telecommunications market by granting a blanket authorization for any U.K. telecommunications entity to directly access the INTELSAT system. The authorization, however, is only applicable provided the end user agrees to invest in INTELSAT in accordance with its utilization share. Nonetheless, this development will significantly expand INTELSAT's current base of customers in the U.K.

Limitations inherent in the present INTELSAT decision-making process and policies may only be diminished by a structural change to a truly commercial business entity, a corporate INTELSAT. Changing INTELSAT's structure, and the long-term future of the organization, have been the ongoing focus of the INTELSAT Assembly of Parties, which has convened a Working Party to examine these issues. The Working Party is studying a number of options for long-term organizational change aimed at enhancing INTELSAT's competitiveness. One of the structural options considered by the Working Party invokes the transformation of INTELSAT into an international corporation, amending the current agreements to accommodate greater direct access and greater flexibility in investment.

The Working Party also is considering a broad range of issues inherent in any structural change. These issues include matters of governance, regulatory policies, and financial and personnel concerns. The Working Party also is considering options which may be implemented in the short- to medium-term to enhance INTELSAT's ability to discharge its overriding mandate. This mandate, universal service and nondiscriminatory charging, remains inviolate in any discussions of INTELSAT's future structure.

In addition to efforts on the organizational level, INTELSAT is devoting more resources to customer development and service initiatives. INTELSAT is engaging in aggressive marketing efforts, including a global advertising initiative to showcase its growing capabilities to an emerging group of new communications customers and to maximize its presence in markets around the world. The goal of this effort is to focus on new growth markets to offset the

continuing decline in growth of PSN traffic. INTELSAT's operating revenue, which does not take account of members' revenues, is projected to grow by 60 percent, from \$658 million in 1993 to about \$1 billion by 1998. However, while the worldwide demand for telephony services is growing, revenues generated from this service sector are anticipated to decline as a percentage of INTELSAT's total business, from 60 percent to 40 percent during this period. This decline is a direct result of the influx of new telecommunications service providers and greater reliance upon fiber-optic cables for high-density telephony routes, both of which will only allow INTELSAT to capture a smaller percentage of growth in telephony traffic demand than in previous years.

Future INTELSAT revenue growth will be derived mainly from highly competitive services, including broadcast, private business, and regional/domestic services. These services also are being targeted by the alternative satellite systems. Broadcast continues to be a major growth market with annual industry growth of about 20 percent. INTELSAT is currently a leader in this market. This growth has resulted from increasing worldwide demand for television programming, increased number of direct-to-home video services, and reductions in sizes and costs of antennas. In addition, cable operators and broadcasters are expanding local and regional video networks. Satellites are more suitable than fiber for point-to-multipoint broadcasting, distribution to remote areas, and short-term coverage requiring transportable antennas. INTELSAT and competing satellite carriers are aggressively pursuing growth in the broadcast market, which will be a major marketing battleground in the years ahead.

The competitive challenges INTELSAT faces are real and present now. Continued robust growth of the telecommunications market is expected in the coming years, and INTELSAT will remain dedicated to securing its share of that market. INTELSAT's key competitive advantage is its extensive global connectivity, i.e., access to virtually every country through earth stations already directed at INTELSAT satellites. INTELSAT remains the only truly global communications network. The size of the INTELSAT system, which permits economies of scale and scope, and its long history of quality, security, and reliability are additional competitive strengths. INTELSAT's acquisition of adequate and market-responsive satellite capacity, increasing use of advanced digital techniques, and improved service flexibility are key indicators of INTELSAT's intention to compete and to compete vigorously. Overall demand for INTELSAT services will result in the organization becoming a \$1 billion service provider by 1998.

We realize that the present structure of INTELSAT must be changed if we are to compete effectively. The governance structure must be made more efficient and responsive to marketplace demands. The business strategies of the organization must allow for greater access to the financial markets. INTELSAT must also be free to pursue business opportunities and growth markets without the constraints of artificial structural limitations. These fundamental changes are necessary for INTELSAT to remain the leader in global telecommunications.

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