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Intelsat

- **Problem: Develop satellite communications infrastructure**
- **Questions:**
 - How should the cost be borne?
 - How should the operation be managed?
- **Solution:**
 - Create an international consortium
 - Spread ownership and operational responsibility among members
- **Result: INTELSAT**

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History of Intelsat

- **In 1962,**
 - The US passed the Communications Satellite Act
 - Enabled the creation of the Communications Satellite Corporation (COMSAT)
- **COMSAT worked with international counterparts**
 - CEPT in Europe
 - Counterparts in other countries
 - Created Interim Communications Satellite Committee (ICSC)
- **Intelsat interim agreement signed in 1964**
 - Reduced US influence desired
 - Final multilateral Intelsat Agreement signed in 1971

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Intelsat Structure

- **Open to members of the ITU**
- **Treaty organization, so governments are party to multilateral agreement**
- **Governments appoint designated representatives who are signatories to the operating agreement**
 - **Operating agreement specifies technical, operational, and financial guidelines**
 - **Separate from government agreement**
- **Costs of Intelsat is borne by its members**
 - **Each member has an investment share**
 - **Based on usage**

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Intelsat Structure

- **Assembly of parties**
 - **Meeting of the governments**
 - **Meetings are biennial**
 - **Concerned with policy issues**
- **Meeting of the signatories**
 - **Meeting of the signatories to the operating agreement**
 - **Annual meetings**
 - **Focus is on financial, technical, and operational matters**

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Intelsat Structure

- **Board of Governors**
 - **Meet quarterly**
 - **Representatives of nations who own a minimum share**
 - **Five or more signatories, regardless of investment, may be represented by one Governor**
 - **Number of governors and the minimum investment share for participation changes annually**
 - **28 Governors representing 114 signatories in March 1997**
 - **1.539350% in 1989**
- **Executive organ**
 - **Handles day-to-day work of Intelsat**
 - **Located in Washington DC**
 - **Director-General reports to the board**

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Intelsat Facts

- **Currently 142 signatories**
- **Ownership shares vary from 17.964040 shares (US) to 0.050000 shares (numerous countries, eg., Afganistan, Tunisia, Barbados)**

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Intelsat Services

- **Services are acquired by going through signatory**
- **Predominantly voice telephony**
- **Digital services are also available through Intelsat Business Services**
- **VSAT service is available through Intelnet**
- **Television service is also important**
- **Currently use 20 satellites from five generations**
 - **Intelsat V is the oldest (1980)**
 - **Intelsat VII**
 - **Three are up and in service**
 - **One is up and undergoing testing**
 - **Remaining two are scheduled for launch in early 1998**
 - **One Intelsat K satellite (all Ku band)**

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Pressure on Intelsat

- **Competition from undersea fiber optic cables**
- **Emergence of regional and private satellite systems**
- **Aggressive competition from Inmarsat**
- **Article XIV(D) of the Intelsat Agreement**
 - **Prevents parties or signatories from competing with Intelsat**
 - **“To avoid significant economic harm to the global system of Intelsat”**
 - **These provisions were effectively eliminated in 1992 by the Assembly**

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Business Summary of Intelsat

- **Pressures to privatize**
 - Largely from US (see CBO report)
 - **Agreement on the formation of Intelsat New Company (INC) on 12 Feb 1998**
 - Extraordinary Assembly of Parties in Salvador, Brazil
 - Will be implemented following formal approval of the Assembly of Parties
 - Initial Public Offering (IPO) expected next year
 - **INC will be independent of Intelsat**
 - Intelsat will retain 10% ownership stake, but no seat on the board
 - “Arms length” business relationships
 - Will get 5 satellites (transferred from Intelsat)
 - Will focus on
 - Multi-regional video distribution
 - Direct to home
 - Interactive multimedia services to residences and businesses

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Intelsat Financial Performance

- **Recent results**
 - Steadily climbing revenues (to over US\$ 900M)
 - Increases in operating income (to over US\$400M)
 - Return on Signatories capital investment between 15% and 20%, depending on the year
- **Dip in income and return in 1994 stimulated much of the privatization/restructuring discussion**

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Inmarsat

- **Formed in 1979 to support mobile communications at sea**
- **This mission has been generalized to support worldwide mobile communications**
- **Structure**
 - **Assembly**
 - **Supreme governing body**
 - **Currently has 79 members**
 - **Council**
 - **18 signatories with the largest investment shares plus four selected by the Assembly**
 - **Carries out broad directives of the Assembly**
 - **Directorate**
 - **Permanent staff (about 500)**
 - **Handles day to day affairs**

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Inmarsat Satellites

- **Owns 4 Inmarsat-2 satellites (launched in 1992)**
- **Leases capacity on ESA's Marecs B2 and Comsat's Marisats**
- **Three Inmarsat-3 satellites were launched in 1996**
- **Two additional Inmarsat-3 satellites were scheduled for launch in 1997**

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Inmarsat Terminals

- **Inmarsat A**
 - Original satellite system
 - Analog
 - Focus is on vessel management and video
 - 25,000 in use in 1996
- **Inmarsat B**
 - Digitized version of Inmarsat A
 - Added fax and data service
 - 2,000 in use in 1996

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Inmarsat Terminals

- **Inmarsat C**
 - Store and Forward system
 - Position reporting
 - Weather
 - 8,500 in use in 1996
- **Inmarsat M**
 - Most compact (Briefcase size)
 - Digital phone, fax, and data system (2.4kbps)
 - Lower user charges
 - 8,500 in use in 1996
- **Inmarsat D**
 - In development
 - Will support global messaging and GPS

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