

# Broadband Via Satellite: A Key Piece of the Broadband Puzzle

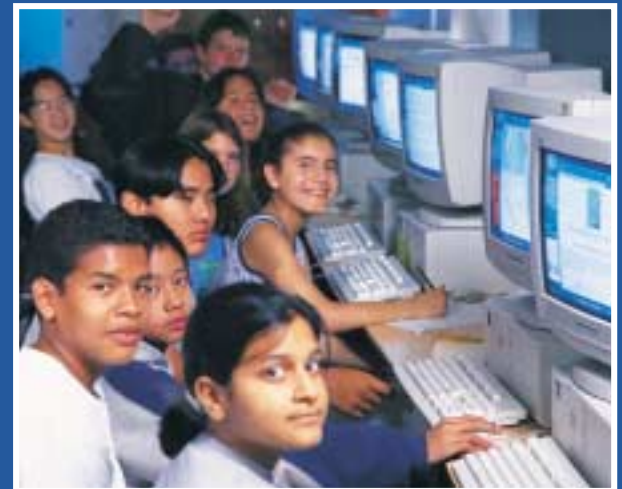
Erich Fischer, Senior Director  
Broadband Services

Intelsat

Promoting Broadband Workshop  
International Telecommunications Union  
Geneva  
9-11 April 2003

# Agenda

- Defining Broadband
- Advantages of Broadband via Satellite
- Deploying Broadband via Satellite – The Intelsat Approach
- Broadband via Satellite Case Study



# Defining Broadband

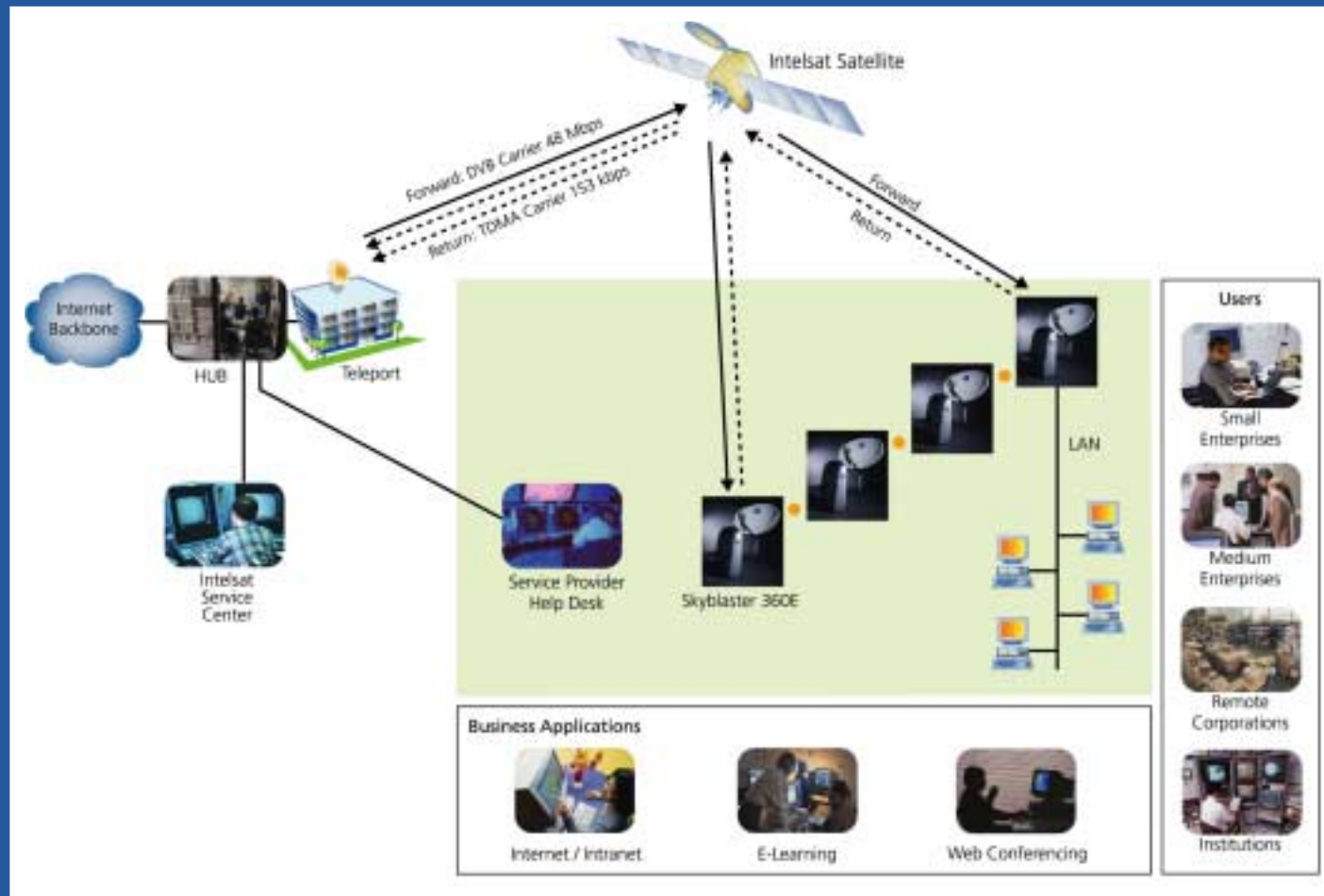
Broadband is more than high speed...

...It's about flexibility, scalability and application support



- For businesses, it's about delivering cost efficiencies and productivity
- For consumers, it's about delivering information, education and entertainment
- For governments, it's about delivering all of the above quickly and as universally as possible

# Broadband Via Satellite – SME/SOHO Example



Common platform for multiple services

# Advantages of Broadband via Satellite

- Quick deployment = “Instant Infrastructure”
- Advantaged where terrestrial alternatives do not exist or are not reliable
- Geographic advantages
  - Wide coverage
  - No geographic boundaries
  - Terrain insensitive
- Simpler network topology means fewer points of failure and latency
- Uniform quality
- Multicast advantaged



# Instant National Digital Infrastructure

- Solution for all regions
- Common fabric for connecting economic “hot spots”
- Window to the world
- Platform of convergence
- Ideal vehicle for government initiatives

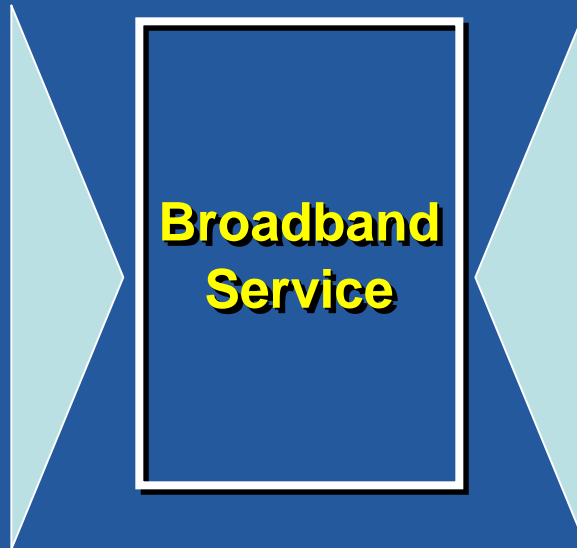


***Broadband via satellite –  
Bridging the “Digital Divide”***

# Intelsat Synergistic Business Model

## Intelsat

- Space segment
- Hub investment
- Gateway operations
- Network management
- CPT arrangement
- Support



## Service Provider

- Licenses
- Marketing and Sales
- Retail service
- Billing and collection
- Customer care

Reduces Service Provider capex and opex  
Reduces time to market  
Ensures local service

# Matching Market Needs

## User Needs

- Access availability
- Complete solution
- Dependable
- Flexible
- Scalable
- Application support
- Multi-router avoidance
- “One stop” service
- Affordable

## Solution

- Access anywhere
- Last mile
- “Always on”
- Direct access
- Turnkey deployment
- 2 way terminals
- Fully interactive
- DSL-like
- Resource economics

***Direct satellite Internet access... reliable and responsive***

# Applications



## Examples:

- Web browsing
- E-mail
- Extranet/Intranet
- Distance Learning
- Remote Training
- Web conferencing
- VPN
- E-Commerce
- FTP



# Target Segments

## Segment

## Solution

Large Multiple Site Corporation

Private Corporate Network

Small/Medium  
Enterprise (SME)  
Institutional sites  
Remote corporate sites

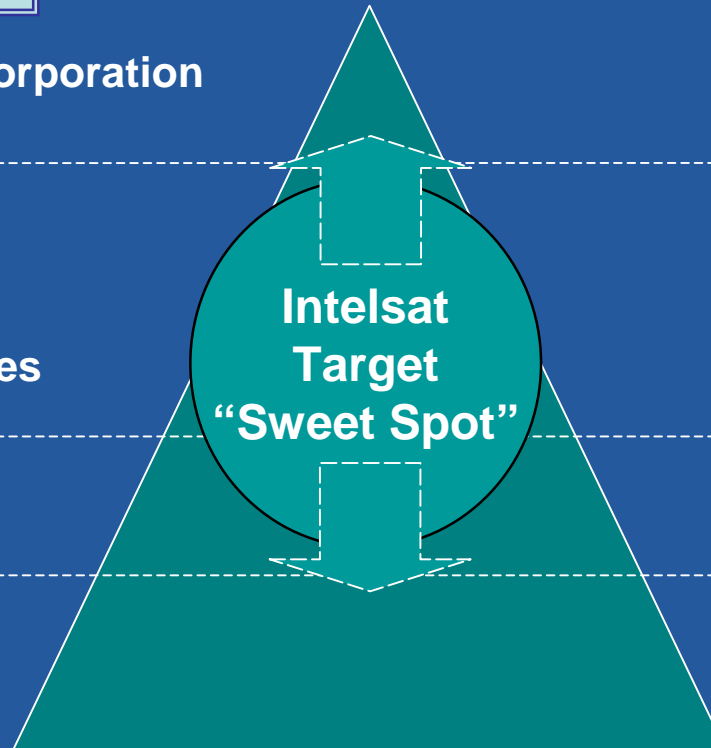
Internet Access,  
IP VPN, Extranet

Small Office/  
Home Office (SOHO)

Internet Access,  
IP VPN

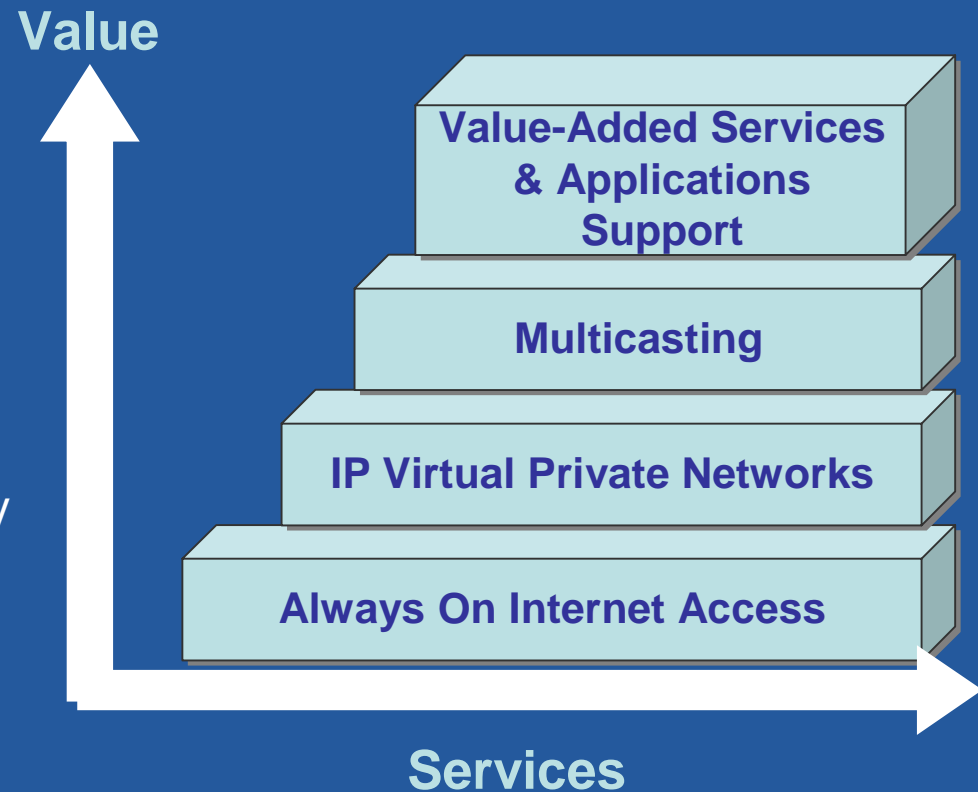
Consumer

Internet Access



# Intelsat's "Access-Driven" Approach

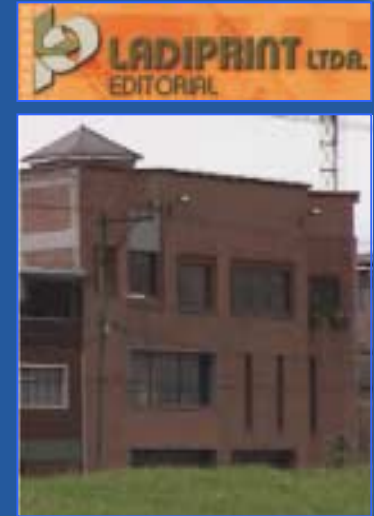
- Access as the foundation
- Valued added services
  - Network
  - Content
- Enhancements
  - Leverage network technology
  - Expand service offerings



*Access...stepping stone for growth and expansion*

# Case Study: Colombia

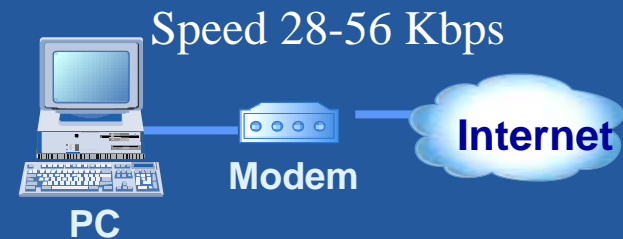
Ladiprint graphic arts shop in Bogota, with 100+ employees and 12 PCs per site (typical), uses the Internet to receive purchase orders, send status and monitor portal activity by customers in Colombia, Peru, Venezuela and Panama.



## Previous Solution: Dial-up and Internet Café

### Primary Issues:

- Inadequate speed for rich graphics content
- Insufficient availability for portal monitoring
- Poor reliability to ensure customer service
- High costs for cable alternative



# The Intelsat Broadband Via Satellite Solution

## Results:

Ladiprint now has a reliable, complete service solution operating at approximately 128 Kpbs:

***Always on***  
***Scaleable***

***Flexible***  
***One-stop***

- “Always on” enables Ladiprint to monitor its portal continuously and serve its customers better
- Large pipe/high speed access enables Ladiprint to download reports faster improving productivity
- Conexsat increases Ladiprint’s revenues with its value-added service offerings



Bogota, Colombia

**Testimonial:** *“Ladiprint has increased productivity by having the ability to monitor the portal 24/7, upload and download files, as well as delegate critical roles and responsibilities to Conexsat”*

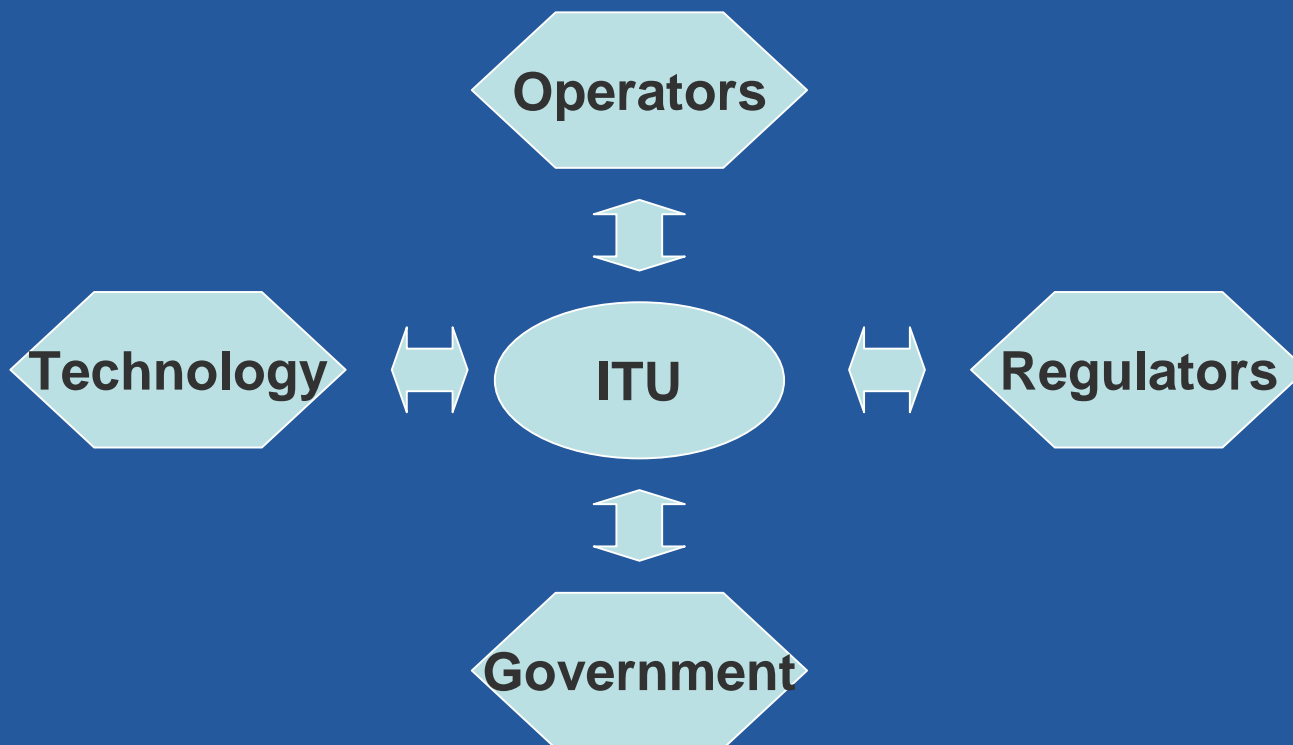
**Camilo Sepulveda (General Systems Administrator)**

# Another Testimonial for Broadband Via Satellite

*“In only four hours Conexsat had our Internet up and running for our first site. The reliability and speed of the platform allowed us to realize enormous time and money savings and convinced us to expand the use of the platform to more sites throughout Colombia.”*

Yesid Vanegas (Systems Manager – Carcafe, LTDA)

# ITU Positioned for Broadband Promotion



ITU is unique with its global linkages to

- Enable broadband convergence – IT, Internet, Telecom, Broadcasting
- Make broadband Internet a mainstream infrastructure
- Bridge the “Digital Divide”

# Promoting Broadband Via Satellite

- Reduce regulatory barriers, e.g.,
  - Local loop unbundling
  - Unmetered access
  - Blanket VSAT licensing
  - VSAT operations licensing fees
  - In-country hub requirements
  - Commonize regulations across regions
  - Bundled service licensing
  - Content and security regulation
- Facilitate affordable access
  - Standards (e.g., DOCSIS, wireless)
  - Internet-integrated services
- Educate and train Governments on utility of broadband
  - Universal service obligations
  - Rural/remote area Internet/Communications
  - E-government initiatives
  - E-commerce regulation and promotion
  - Promote catalytic initiatives, e.g.,
    - Distance learning
    - Telemedicine
- Educate other key stakeholders (e.g., end-users, institutions, regulators)



# **Intelsat Is How the World Connects**

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