PCCW Global provides easy-to-use, flexible and reliable turnkey Satellite Solutions for private data networks connecting enterprises and governmental institutions around the world.

**Key benefits to your business**
- Ideal for corporate networks, our Satellite Solutions provide reliable two-way transmission, even in challenging geographies
- Worldwide coverage with interconnections to PCCW Global’s high speed terrestrial backbone network
- Capability to provide turnkey services in over 95 countries worldwide, including arrangement of legitimate licenses
- Scalable-growth path, as high bandwidth requirements can be accommodated easily

**VSAT Services**
A Very Small Aperture Terminal (VSAT) is a two-way satellite ground station that accesses satellites in orbit and relays data from terminals and hubs on earth. VSATs can transmit both narrowband and broadband data and are used for various types of communications.

The strength of VSAT is in its ease of deployability and its secure and high speed connection regardless of latency. VSAT can also serve as backup for local infrastructure in case of potential disasters. It can also provide connectivity to thousands of locations at a time at cost-effective pricing.

**Managed End-to-End VSAT Service**
This satellite-based Single Channel Per Carrier (SCPC) technology uses a VSAT antenna and indoor unit to provide a reliable, two-way communications link anywhere under the satellite’s footprint.

**Specifications**
- Satellite space segment
- Local VSAT operations license
- Ground equipment includes VSAT antenna, RF ODU, satellite modem and cables
- One-time VSAT installation and commissioning
- Data rates support: 64Kbps up to 155Mbps
- Interface supported: V.35, G.703, RS-422, Ethernet, FE, HSSI and ASI

**Features**
- Quick implementation of reliable, dedicated capacity with clear channel circuits
- Both symmetric and asymmetric data-rates supported in 1Kbps increments
- Service Level Agreements (SLAs) offered for both hub and remote locations
- Extensive local partner network and PCCW Global’s own field engineering teams to provide fast and professional on-site support
- Terrestrial interconnection with PCCW Global’s optical fiber infrastructure (IMBS + MPLS VPN)

**Broadband VSAT Network Service**
An IP–enabled two-way broadband service based on meshed or star network topology provides dynamic and efficient use of bandwidth with burstable (offering delivery speeds equalling multiples of the Internet access rate) or shared throughput.

**Specifications**
- Typical information rates from 64Kbps to 11Mbps
- Quality shared bandwidth service, with QoS control
- C-band and Ku-band coverage
- Flexible profiles with symmetric and asymmetric data rates on forward and return links
- Real or private IP address allocation
- Interface: Ethernet or Fast Ethernet
- Antenna size: 0.75m to 2.4m

**Features**
- Multi-site bandwidth sharing enables most efficient use of network capacity
- IP–based connectivity with enhanced features such as TCP spoofing, caching and pre-fetching
- Supports VLAN, IP–VAN and transparent mode
- Voice–over–IP (VoIP)
- Flexible QoS and bandwidth assignment policies based on customers specification
Maritime VSAT Service

PCCW Global’s Maritime VSAT Service keeps the seafaring community in touch with the rest of the world via high speed, satellite-based access to data, voice and video applications.

Network diagram

Specifications
- Maritime antenna system for movable stations such as vessels, and VSAT for fixed stations such as offshore oilfields, plus RF ODU, satellite modem and cables
- SCPC data rates of 64Kbps to 155Mbps supported
- Broadband VSAT data rates of 64Kbps to 11Mbps supported
- Interfaces supported include V.35, G.703, RS-422, Ethernet, FE, HSSI and ASI

Features
- Quick implementation of reliable, dedicated capacity with clear channel circuits
- Both symmetric and asymmetric data rates supported in 1Kbps increments
- All Teleports interconnected to one network
- Single IP address to travel around the world
- Automatic Beam Switching (ABS) supported

Mobile Satellite Services

PCCW Global’s Mobile Satellite Services (MSS) include BGAN and FleetBroadband and Satellite Phone Service, offering unbroken connectivity with business contacts, friends and family regardless of location, time zone difference or scenario.

Key benefits to your business
- Truly global coverage and reliable broadband access even where telecoms are not advanced or non-existent
- Reliable connectivity from disaster areas, war zones, sports venues and remote construction sites
- Light and easy-to-deploy user terminals provide portability as well as highly reliable and secure communications
The satellite hub stations in Europe and Hawaii are interconnected with PCCW Global’s extensive IP backbone, which enables seamless extension to the corporate headquarters using our global MPLS backbone available in over 1,500 cities worldwide.

**BGAN and FleetBroadband Services**

Users can communicate freely via SMS, voice, ISDN, VPN to headquarters, high speed broadband Internet access and even video conferencing.

**Network diagram**

![Network diagram](image-url)

**Specifications**

<table>
<thead>
<tr>
<th>Service</th>
<th>Specs</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPLS VPN</td>
<td>MPLS VPN via PCCW Global’s Amsterdam and Hong Kong PoPs</td>
</tr>
<tr>
<td>Voice</td>
<td>4Kbps</td>
</tr>
<tr>
<td>SMS</td>
<td>To any GSM/3G network worldwide</td>
</tr>
<tr>
<td>ISDN</td>
<td>64Kbps</td>
</tr>
<tr>
<td>Email</td>
<td>To any IP-compatible client – e.g. MS Outlook, Lotus Notes and POP3</td>
</tr>
<tr>
<td>Broadband Internet</td>
<td>Tier 1, high speed</td>
</tr>
<tr>
<td>Video Streaming</td>
<td>IP streaming: 16, 32, 64, 128, 256 and 384Kbps</td>
</tr>
<tr>
<td>High-speed Data</td>
<td>Shared IP data up to 492Kbps</td>
</tr>
</tbody>
</table>

**Features**

- Interconnected with point-to-multipoint MPLS VPN
- Public or private, as well as dynamic or static IP addresses to suit individual needs
- Enables access to myriad services to simplify Broadband Global Area Network (BGAN) and FleetBroadband traffic management

**Service coverage**

![Service coverage](image-url)
Satellite Phone Service

Using a satellite phone, you can communicate from anywhere on the globe, even if on a ship, plane or in a polar region.

Network diagram

Specifications

<table>
<thead>
<tr>
<th>Service</th>
<th>Specs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voice</td>
<td>2.4Kbps</td>
</tr>
<tr>
<td>Data</td>
<td>2.4Kbps</td>
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<tr>
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</tr>
<tr>
<td>Email</td>
<td>To any IP-compatible client – e.g. MS Outlook, Lotus Notes and POP3</td>
</tr>
</tbody>
</table>

Features

- A constellation of more than 66 satellites covers the entire planet (including poles and oceans)
- Variety of satellite phone models available
Global Media Transportation Solutions

PCCW Global has over 30 years of experience in the provisioning of satellite television services dating back to 1969 when men landed on the moon, backed by a unique engineering and operations team in our International Television Center (ITC), a state-of-art integrated fiber and satellite contribution and distribution network, and extensive partnerships in strategic locations around the globe.

Media transportation services provided by PCCW Global are designed to meet the broadcasting needs of regional and international broadcasters and service providers. Leveraging on the geographic advantage of Hong Kong, PCCW Global established Asia’s largest commercial teleport with more than 30 operating earth stations in Hong Kong. Coupled with its Global Television Network (GTVN), a fiber-based video transportation platform, its self-owned teleport facilities in Europe and Africa and partnership with satellite and teleport operators worldwide, and also the interconnectivity with popular video switches in strategic locations around the globe, PCCW Global is the ideal partner for international broadcasters and television service providers for delivering video contents worldwide on both full-time and on-demand basis.

Network diagram
Global TV Network

Global TV Network (GTVN) is PCCW Global's video over fiber transmission platform. It provides a true managed end-to-end video transportation solution.

In addition to the connection to a video switch in Hong Kong, GTVN has major PoPs in Hong Kong, Singapore, the United Kingdom, Japan and the United States. PCCW Global is expanding the GTVN to strategic countries where we have a well-established presence. GTVN will be offered in conjunction with PCCW Global’s commercial teleports in Hong Kong and Belgium to meet the video contribution and distribution requirements of the market.

Network coverage
**Satellite TV Network**

With its global broadcasting teleport presence, PCCW Global operates a true global satellite video contribution and distribution network. Whenever there are breaking news, special global coverage events, or regular broadcasting segments, PCCW Global is able to provide ad-hoc and full-time access anywhere in the world via satellites in the Asia Pacific Region (APR), Indian Ocean Region (IOR), Pacific Ocean Region (POR) and Atlantic Ocean Region (AOR). Complemented with its fiber-based GTVN coverage, PCCW Global is dedicated to providing its users with the most reliable and cost-effective video transportation solutions.

**Satellite Video network coverage diagram**

![Satellite Video network coverage diagram](image-url)
International TV Centre & Hong Kong Video Switch

PCCW Global operates a 24/7 International Television Center (ITC) in Hong Kong. ITC is also an occasional service booking center that accepts calls and implement requirements from customers for ad-hoc and occasional services. ITC staff has extensive experience and is equipped with well-established working relationships with various local and international broadcasters, teleports and video switching centers, to ensure smooth and reliable operations of the live broadcast services.

PCCW Global also operates the most-connected-to video switch located at Telecom House in Hong Kong. Most local broadcasters, major financial institutes and regional service providers are connected to the switch. It is a convenient and cost-effective way to exchange HD, SD and analog video contents, as well as distribute their live programs globally via PCCW Global’s integrated fiber and satellite media transportation network infrastructure.

Key benefits to your business
- Up to 99.999% commitment on service availability
- One-stop integrated satellite and fiber solution
- One switch away from a global network
- A wide range of flexible satellite options
- Managed video equipment on the customers’ premises can be included as part of the solution
- Cost-effective point to multipoint video distributions enabled by multicasting features over GTVN
- Broadcast standard operational support
- Supports ad-hoc occasional use, short-term and full-time services

Features
- Reliability with redundant system design
- Robust global fiber network with integrated cable and satellite solutions
- Access to Hong Kong video switch
- Access to all key satellite systems in the region
- Truly end-to-end solution
- Video multicasting support
- V/A monitoring support
- Flexible contract terms

Hong Kong teleport setup diagram

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