# **Telecommunications Services**

PCCW's Telecommunications Services (TSS) is the market leader of fixed-line telecommunications services in Hong Kong. Utilizing optic fiber, TSS has invested significantly to fully digitalize the network, enabling a full broadband reach.

TSS provides a full range of local and international premium products and services backed by world-class service level guarantees, a network availability rate of 99.999 percent and award-winning customer support. PCCW is focused on delivering value-added voice and data services to businesses and households throughout Hong Kong via our broadband network, which passes more than 95 percent of Hong Kong's homes and all major business areas.

Looking forward, TSS is focused on growth through investments in data transmission services, broadband access lines services and value-added services. The unit has also implemented efficiency improvements and improved marketing efforts to reduce costs and enhance customer service, considered a key feature that sets TSS apart from its competitors.

### BUSINESS OVERVIEW: TELECOMMUNICATIONS SERVICES

### **LOCAL TELEPHONY**

In January 2001 PCCW raised the monthly tariff rate for residential and business lines as part of its rebalancing exercise. With the tariff rise, PCCW expected some softening of market share with the net effect that local telephony revenues rose 6 percent.

The total number of PCCW direct exchange lines decreased by 6 percent year on year from 3,703,000 to 3,489,000, representing a total blended market share of approximately 89 percent.

To reinforce customer relationships, PCCW introduced a number of initiatives in 2001 to offer a range of non-monetary rewards. These include exclusive privileges for PCCW fixed-line customers such as meal coupons at participating fast-food chains, discounts with participating merchants, and special prices on newspapers and magazines at local 7-11 stores.

To maximize customer convenience, PCCW customers have been able to pay their phone bills at 7-11 and Hongkong Post Office outlets since January and April 2001 respectively.

#### **Local Data**

Serving customers with mission-critical data demands, year on year growth in traditional data products was strong with a 63 percent rise in bandwidth as customers relied on PCCW's coverage, quality and service for their business requirements. Wholesale broadband access lines leased increased by 43 percent due to strong marketing initiatives from Internet Services.

Hong Kong's total number of broadband access customers at year end 2001 was 623,302, according to OFTA (Office of the Telecommunications Authority). Of that, 402,000 were PCCW wholesale customers (including NETVIGATOR).

### INTERNATIONAL

PCCW maintained its IDD market share in a highly competitive environment. With liberalization of the China route, initial intense price competition was experienced. This followed a similar pattern seen on the deregulation of other major routes, which initially experienced severe price competition and subsequently more stable prices.

In 2001, PCCW increased its International Private Leased Circuit (IPLC) services to 16 global destinations with 100 percent service guarantees. After some sharp price competition early in the year, the IPLC market demonstrated price consolidation towards the end of 2001.

### **IDD Customer Loyalty Initiatives**

To encourage customer loyalty, PCCW introduced a number of initiatives to maintain market share and stimulate usage, such as offering a draw for three apartments in adjacent Guangdong province to customers using PCCW's 0060 and 001 IDD service between February 7 and March 31.

Other IDD related loyalty incentives in 2001 included bonus grants of free calls to users of PCCW's IDD services to 20 destinations globally including mainland China.

### **REGULATORY DEVELOPMENTS**

During the year, the Company's turnover mix and results of operations continued to be influenced by a number of structural changes resulting from the liberalization of Hong Kong's telecommunications market and the 1998 Framework Agreement between HKT and the Hong Kong SAR government on early termination of HKT's exclusive international license.

A large number of new tariffs and tariff changes were effected during the year. Rates were revised to meet competition, to enhance operations and to support further network investments. Promotions and loyalty programs were also introduced to increase revenues.

PCCW continued to provide interconnection capacity and unbundled local loops to our competitors on a non-discriminatory basis at cost oriented rates. Interconnection rates were modified during the year to take into account increased traffic flows, particularly for Internet, data and wireless voice services.

#### **Wholesale Tariff**

In November 2000, OFTA issued a statement on the regulatory framework for broadband interconnection including the circumstances for regulatory intervention, the principles underlying the determination of interconnection and interconnection charges. Following the approval of OFTA, on October 19, 2001, PCCW published a new wholesale tariff which sets out the terms and conditions upon which other network operators in Hong Kong can interconnect with PCCW's copper local loops to provide broadband services.

On January 11, 2002, OFTA announced details of the implementation of the Hong Kong government's policy to fully liberalize the fixed line telecommunications network services market starting January 1, 2003.

Under the full liberalization policy, there will be no pre-set limit on the number of licenses to be issued, and there is no time limit for license applications. However, OFTA will not consider granting any fixed carrier licenses to those applicants who intend to primarily rely on interconnection and wholesale services of other operators' infrastructure to roll out their network or provision of their services.

In support of the government's often-stated policy of promoting investments in telecommunications infrastructure and facilities-based competition, PCCW welcomes OFTA's decision to further liberalize the market in 2003. The Company is pleased that OFTA continues to draw a distinction between resellers and serious players who are committed to invest in Hong Kong and to provide service to the community as a whole.

### **ENABLING IP EFFICIENCIES FOR INSTITUTIONS**

When it came time to enhance Hong Kong Baptist University's telephone network, administrators decided not only to upgrade, but to replace the entire network of basic telephones. The university called on PCCW to help install more than 2,000 Cisco IP phones that plug directly into the university's local-area network, serving more than 5,000 students and faculty.

Users can transmit video and voice over the system and take advantage of a variety of value-added features such as personal assistant, directories and unified-messaging services. The platform also allows the flexibility to add additional features at low cost.

"PCCW enabled our university to efficiently deploy an IP telephony solution for our campus," said Professor Herbert Tsang, Vice-President (Research & Support Services), Hong Kong Baptist University.

"By combining different types of traffic on a single network, we reduced the cost of our communication network, saving about half of the equipmentmaintenance costs with phones that produce enhanced services and efficiency."

### BUSINESS OVERVIEW: TELECOMMUNICATIONS SERVICES



From PCCW retail shops in Hong Kong, customers can interact face to face with call center representatives

### **CONTACT CENTERS - TELESERVICES**

In 2001, PCCW transitioned its contact centers area into one of Asia's largest and most advanced 24-hour contact management businesses. Contact Centers handle approximately 10 million calls each month, and is comprised of Call Centers, which serves PCCW customers, and Teleservices, which handles design, build and maintenance of contact centers and provides outsourcing services for external customers.

Utilizing latest-technology software applications, Contact Centers offer e-CRM (customer relationship management) solutions, call management, computer telephony integration and best-in-class self-service options such as interactive voice response, short messaging, Internet mail and fax-on-demand.

Teleservices is a leading provider of customer contact management and CRM services and solutions in Asia, employing more than 3,000 agents conversant in 15 languages. Teleservices has a 74.5 percent share of the Hong Kong outsourcing market, according to the Frost & Sullivan Call Center Outsourcing Report 2001.

#### **2001 Contact Centers Highlights**

In September, Contact Centers was recognized by the Hong Kong Call Center Association and *Customer Contact World* magazine of Singapore for service excellence among Hong Kong utilities and outsource centers.

Key contracts for Teleservices in 2001 include HSBC Insurance (Asia) Limited, Hang Seng Bank, Hang Seng Insurance Company Limited, Standard Chartered Bank, Dao Heng Insurance Co. Ltd., AXA China Region Insurance Company Limited, the China Unicom branches in Shanghai, Shandong, Fujian, and Microsoft Taiwan.

In 2001, PCCW established a contact center consultancy business in Beijing to capture further business opportunities in China. PCCW covers the greater China market with contact centers in Guangzhou – also opened in 2001 – Taipei and Hong Kong. It will open a contact center in Kuala Lumpur in 2002.

### TAIWAN TELECOMMUNICATION NETWORK SERVICES CO., LTD. (TTN)

Focusing on its greater China market, PCCW owns a 56.56 percent equity interest in TTN, a data network service provider whose major products include high speed packet data utilizing ATM and information networks and Internet access supported by an extensive fiber-optic network.

TTN is well positioned to provide mission-critical services to customers across financial, manufacturing and service industries. TTN's major customers are key financial institutions and large-scale enterprises in Taiwan, including the Over-the-Counter Securities Exchange Center in Taiwan, the Taishin Bank and the Formosa Group.

### 2001 TTN Highlights

In January, TTN became Taiwan's first telecom network service provider to obtain an ISO9001 certificate of quality.

In April, TTN launched its Infonet Service, providing integrated corporate data solutions through its managed global network.



PCCW customers, from the trendy to the traditional, enjoy a network availability rate of 99.999 percent and award-winning customer support

Also in April, TTN launched an island-wide IP-VPN service, followed on October 16 by the launch of a Cross-Straits IP-VPN service, assisting Taiwan-based companies with offices and/or infrastructure in mainland China.

In November, TTN launched a systems integration suite of services, providing networking, infrastructure planning and implementation, IT outsourcing and related integration services.

### COST EFFECTIVE CONTACT CENTER SERVICES FOR NOKIA

With almost 7 million people, Hong Kong is one of the world's most densely populated cities. Of that number, more than 5 million are mobile-phone subscribers who demand top-quality customer service.

To serve this dynamic market, Nokia, the world's leading mobile-phone handset manufacturer, needed a tailored full-service customer-care center to serve its local customers. It looked no further than PCCW.

"We are very impressed by PCCW Teleservices' system infrastructure and professionalism in providing customer-care services," said Jimmy Chim, After Market Services, Manager, Nokia (H.K.) Ltd. "They have demonstrated their ability to provide cost-effective solutions to us while delivering quality services to our most valuable asset, our customers."

Teleservices provided Nokia with a multi-channel careservices platform that addressed the unique needs of the local population. Among these features are a 24-hour trilingual hotline in Cantonese, Mandarin and English; a sophisticated voice-response system for easy information retrieval; Internet support and email follow-up.



# Value-added Services

PCCW's transition to a leading integrated telecommunications services provider is underpinned by business units that enable PCCW to deliver solutions over and above connectivity to commercial customers through Business eSolutions, Internet Data Centers and to consumers through Internet Services.

### **Business eSolutions**

Leveraging on PCCW's network infrastructure, Business eSolutions provides end-to-end solutions from systems integration, application development, network integration, outsourcing and application management services, and enterprise applications to support enterprise customer requirements across Asia. Employing a seasoned team of information technology professionals, its service scope includes online security, payment platforms, business Internet portals and logistics and fulfillment services.

To support its focus on expanding into China, Business eSolutions established a software development center in the Shenzhen Special Economic Zone in China to provide enterprise solutions to customers across greater China. In 2001 the Company also expanded its base of external customers, with significant project wins against international competition.

### BUSINESS OVERVIEW: VALUE-ADDED SERVICES

Business eSolutions was awarded an ISO 9001 certificate for its Application Management and Services Center, which provides e-commerce and infrastructure technology services. As well, this unit earned 31 global vendor-independent project management certifications in 2001.

### 2001 Business eSolutions Highlights

Business eSolutions was chosen to implement the Derivatives Clearing and Settlement System hosted-end system platform for Hong Kong Exchanges and Clearing Limited (see customer testimonial this page).

Business eSolutions reached a 1.5 year consultancy agreement with the Planning and Lands Bureau of the Hong Kong government to conduct a consultancy study on data alignment involving 13 government departments.

A two-year contract went to Business eSolutions for the development of an integrated call center and related support services for the Hong Kong government's Efficiency Unit.

The Hong Kong Airport Authority granted a five year license to PCCW to provide flight information supplied from its systems to government departments, airlines, franchisees, licensees and tenants of the authority at the airport, as well as to users in other parts of Hong Kong. Since 1992, PCCW has distributed airport flight information to the general public.

In April, PCCW developed wireless local area network (LAN) broadband Internet access for Hong Kong International Airport travelers.

In early 2002, a PCCW-led international consortium won a HK\$163 million (approximately US\$21 million) contract from the Hong Kong government to provide hardware, software and services for the city's new computer-chip ID card.

### A VALUE INVESTMENT FOR HONG KONG'S STOCK MARKET

Kwong Ki-chi knows all about adding value and efficiency. He is the Chief Executive of Hong Kong Exchanges and Clearing Limited (HKEx), the public holding company of The Stock Exchange of Hong Kong Limited, Hong Kong Futures Exchange Limited and Hong Kong Securities Clearing Company Limited. HKEx brings together the market organizations that transformed Hong Kong's financial services industry from a domestically focused industry to the global player it is today.

Since the launch of the first generation of the automatic order matching and execution system, PCCW Business eSolutions has been working with HKEx to support its various systems and the Frame Relay network. When HKEx built the third generation of the automatic order matching and execution system (AMS/3), PCCW was chosen to develop and implement the order routing system, the multi-workstation system and the real-time AMS/3 trading network.

With increasing customer demands, HKEx must provide a seamless interface for trading and clearing. In 2001, HKEx accordingly selected PCCW to supply hardware and software for the host end platform to support its Derivatives Clearing and Settlement System (DCASS).

Services provided include installation and configuration, planning, control and management of various implementation tasks. DCASS is a fully electronic and automated clearing and settlement system capable of supporting different types of derivative products and trading environments.

"PCCW has played an important part in providing professional project management support to HKEx to ensure DCASS platform readiness," said Mr. Kwong. "The DCASS project will upgrade the quality and operational efficiency of derivatives clearing and settlement. It will enable HKEx to better respond to the market challenges ahead."



### BUSINESS eSOLUTIONS PARTNERSHIPS AND ALLIANCES IN 2001

In June, POWERLogistics, part of Business eSolutions, announced an alliance with Jardine Logistics Services (HKG) Limited to offer enterprises in greater China warehousing, logistics and fulfillment services to streamline their supply chains.

In August, Business eSolutions announced a 10-year teaming agreement with IBM China/Hong Kong Ltd. to provide a wide range of IT services to enterprises and organizations across various industry sectors in Asia, with an initial focus on the Hong Kong market.

### PCCW DIRECTORIES LIMITED (THE YELLOW PAGES)

PCCW Directories Limited (PCCW Directories), formerly known as Telecom Directories Limited, is a wholly owned subsidiary of PCCW, and is one of Asia's market leaders in directory

publications. PCCW Directories is the official publisher of the Hong Kong Yellow Pages, White Pages, Fax Directory and Hong Kong Business Web Directory. It also has a host of online services, including those operated at yp.com.hk. In 2001, monthly page views increased 129 percent year on year to 13 million, while monthly unique visitors for 2001 increased by 71.7 percent to 142,688 compared to 2000.

For the Yellow Pages Business 2002 edition, print advertiser numbers rose by 8 percent in 2001 to 11,204, while circulation of the 2002 edition rose 16 percent to more than 885,000 copies.

### **2001 PCCW Directories Highlights**

In January, an online tourist guide at www.YPTourist.com, was launched for visitors in Hong Kong. The tourist guide site features an updated and detailed "Virtual Tour" of Hong Kong.

In September, a new interactive site, www.YPExpat.com, was launched to cater specifically to the needs of Hong Kong's expatriate community members.

In November, PCCW Directories introduced new features on its YPMap site including Hong Kong's most-detailed point-to-point online transportation mapping service.

#### **Directory Interests in China**

In November 2000, PCCW acquired 37.65 percent of the issued share capital of ChinaBig.com Limited, which operates one of the largest directory businesses in mainland China. China United Telecommunications Corp. (H.K.) Limited is also a shareholder in ChinaBig.com Limited.

### **INTERNET DATA CENTERS**

PCCW has interests in a network of greater China Internet data centers through facilities located in Hong Kong, Beijing, Shanghai and Taiwan. These data centers are focused on providing a secure and reliable environment in managed hosting services, security services, network and facilities management and monitoring.

### BUSINESS OVERVIEW: VALUE-ADDED SERVICES

PCCW operates one of Hong Kong's largest data center facilities under the *Powerb@se* brand, which in 2001 had approximately 800 customers, including major corporate and public sector institutions requiring mission-critical solutions.

Power**b**@se, a premium-service brand, has earned a Sun Microsystems' SunTone(SM) Certification for service quality.

### 2001 Internet Data Centers Highlights

In January, a venture between *Powerb@se*, Sybond Venture Limited, the investment arm of Shell Electric Manufacturing (Holdings) Company Limited, and ASPEngines, Inc. was formed to deliver data center and related services through a Hong Kong company, *Powerb@se*Engines Company Limited.

In June, responding to an increasing number of companies concerned with managing risks to ensure business continuity, *Powerb@se* introduced Business Continuity Solutions, a comprehensive service ranging from consultation to recovery and resumption services for all business aspects.

In November, *Powerb@se* entered into customer referral agreements with a number of distressed data center operators with significant client bases.

#### **INTERNET SERVICES**

PCCW is one of Asia's leading Internet service providers. Following the 2001 restructuring of its customer sales channel, and an improved marketing and sales approach that segmented products to address household needs, the Company's total consumer Internet access subscriber base grew to 631,000, including 320,000 narrowband customers.

### **NETVIGATOR**

PCCW's Internet Services in Hong Kong are offered through its award-winning NETVIGATOR brand, whose consumer Internet broadband customer base reached 311,000 as of December 31, 2001, up from 194,000 at year end 2000.

The winner in the ISP category of the *Next* magazine 2001 Top Service Awards, NETVIGATOR broadband offers speed, quality and innovative services.

#### A DATA CENTER SOLUTION FOR EMERSON ELECTRIC

The best data centers free customers to focus on growing their businesses. Case in point: *Powerb@se* provides services for Emerson Electric Co., a Fortune 500 member with sales of US\$15.5 billion in its fiscal 2000-2001.

Emerson's operations in Asia Pacific employ more than 22,000 people in a fast-growing network of sales and marketing offices, manufacturing plants, research facilities, service centers and other offices. When this leading global provider of technology and engineering products and services decided to increase its Asia-Pacific presence, it turned to PCCW to assist with its expansion plans.

In handling Emerson's communications requirements in greater China and the Asia-Pacific region, PCCW's Powerb@se

helped establish a network hub, providing Emerson with robust network and Web solutions as well as hosting services in China, Hong Kong and Malaysia.

"By outsourcing our network hub to PCCW, Emerson has achieved significant savings and received 24/7 IT support during our regional expansion during the past year," said Peter Yam, President, greater China, Emerson Electric Co. "We regard PCCW as a reliable provider of IT solutions. We're very grateful that PCCW can add value by letting us focus on our business."

In Asia, Emerson serves customers from its regional corporate headquarters located in Hong Kong and from offices in China, India, Japan, Korea, Indonesia, Malaysia, Singapore and Taiwan.

### 2001 NETVIGATOR Highlights:

- First ISP in Hong Kong to offer a multi-user plan, enabling multiple individuals within the same household to simultaneously access the Internet.
- Launched an Internet family solution service, with access time control and content filter features.
- Offered wider broadband Internet choices, with dedicated bandwidth speeds ranging from 1.5 to 6 Megabits per second for faster downloads.

PCCW has also been assisting customers in their migration to broadband through special offers. In July, PCCW, Intel, and IBM teamed up to create Hong Kong's first integrated hardware, software and broadband connectivity package, offering consumers a convenient home PC solution.

### now.com.hk

In September, PCCW launched a broadband content service exclusively for NETVIGATOR broadband customers.

Branded now.com.hk, the service offers a variety of local and international content targeted at all members of the household.

Focused predominantly on Chinese content, now.com.hk offers mostly Chinese-language music, films, documentaries, games and local news, all at steady speeds of up to 800 Kbps. Channel-on-demand has recently been introduced to the service, featuring 24-hour live access to international news, financial, fashion and music content providers. The service had attracted approximately 81,000 subscribers at year-end 2001.

#### www.now.com

With broadband growth in Western markets not meeting immediate expectations, PCCW announced in 2001 a review of its Internet Services strategy to refocus on the markets of greater China and Asia. This included a review of the English-language NOW service at www.now.com to refocus on sports and online games to meet the burgeoning demand for such content in Asia.

In support of this strategy, PCCW and Trans World International, Inc. (TWI) entered a new agreement enabling PCCW to have continuing non-exclusive access to TWI's wholly owned extensive sports library for distribution throughout Asia.

TWI is to also make available its expertise in sports programming and sponsorship to assist PCCW to package sports content targeted at the Asian market.

### **GROWING CONTENT FOR A GROWING AUDIENCE**

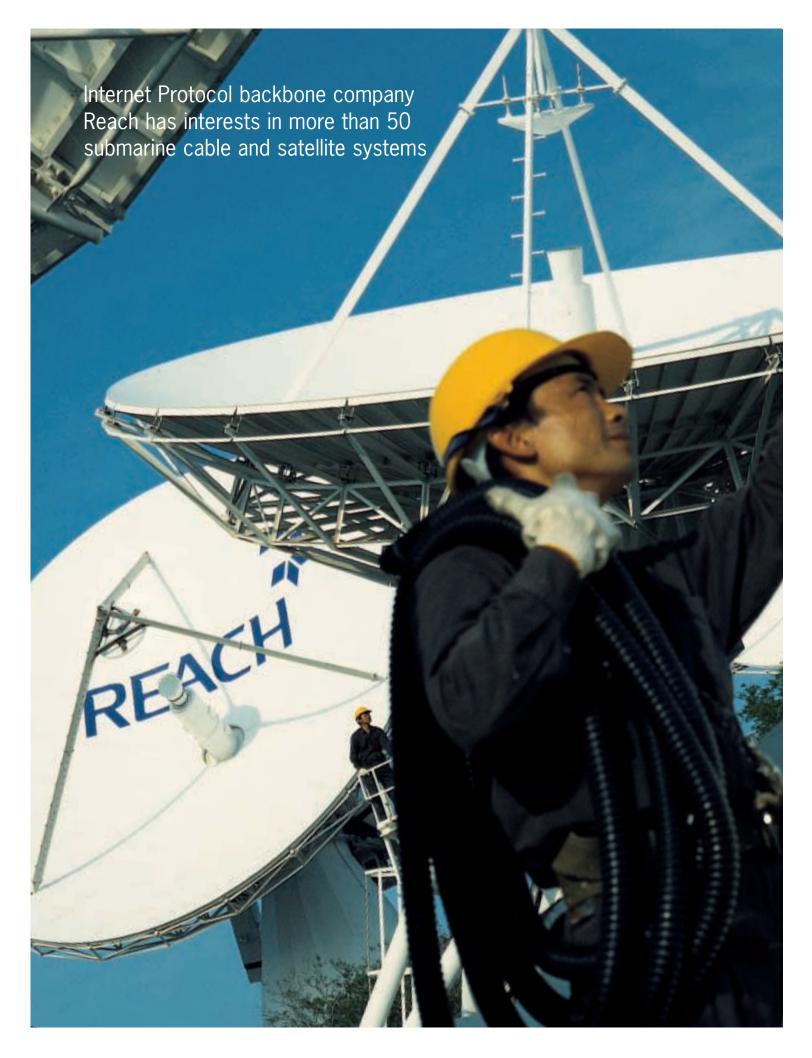
Living at home with her parents and brother, Esther Choi is a typical Hong Kong university student in that she increasingly relies on personal computers and the Internet for school assignments as well as for leisure.

In their free time, Esther and her brother surf the Net in their rooms. On now.com.hk, Esther finds music videos of her favorite local and international artists, while her brother plays Street Fighter and other online games with virtual contestants.

"I am very impressed by the growing variety of attractive content on now.com.hk, such as Fashion TV and the live webcasts of Hong Kong's two major annual music award events," said Esther, a third-year Health Studies student at the Hong Kong University of Science and Technology.

"Watching now.com.hk's high-resolution multimedia videos on my PC screen is easy and fun, and its getting better all the time."

Since March of 2002, Esther can enjoy even more quality content, with the addition of MTV, Nickelodeon, BBC World and Bloomberg Television.



# **Partnerships**

PCCW constantly evaluates the potential for ventures and alliances with leading companies that help the Group best serve its customers, while positioning it for long-term growth in the changing telecommunications environment.

In 2001, PCCW formed an Asia-Pacific strategic alliance with Australia's Telstra Corporation Limited (Telstra) to benefit from inherent advantages of scale. The alliance has created:

Reach, a 50-50 joint venture international network backbone company, and Asia's largest international carrier of combined voice, data, private line and IP data services.

Regional Wireless Company (RWC), a 60-40 (PCCW holds 40 percent) venture, using Hong Kong mobile operator CSL at its core.

Beyond the Telstra alliance, PCCW holds 45 percent of Petro-CyberWorks Information Technology Company Limited, an IT venture with China Petroleum & Chemical Corporation (Sinopec). The venture is 55 percent owned by Sinopec.

### BUSINESS OVERVIEW: PARTNERSHIPS

#### REACH

Reach's products and services include an extensive portfolio of voice, data, IP and satellite connectivity. The Company has interests in more than 50 submarine cable and satellite systems (including the largest satellite teleport in Asia).

Reach's regional backbone comprises 20 points of presence in 14 countries, and facilities-based licenses in Australia, Hong Kong, Japan, Korea, Taiwan, the US and UK, and other forms of operating licenses in several Asian countries. Reach also has bilateral relationships with more than 270 international carriers worldwide.

### 2001 Reach Highlights

International connectivity market conditions in 2001 were turbulent, with underfunded business plans, bandwidth over-capacity and softening prices taking their toll on several carriers. For the 11 months from February 1, 2001 to December 31, 2001, Reach generated total revenues of US\$1,279 million and EBITDA of US\$398 million due to a solid customer base.

In December, Reach entered into an agreement to acquire the Asian assets of Level 3 Communications, Inc. (Level 3). This transaction accelerated Reach's North Asian rollout by providing in-country licenses and additional Asian and trans-Pacific capacity at a much lower cost than self constructed assets.

The additional capacity and licenses enable Reach to deliver end-to-end services to new markets, such as Japan, Taiwan and, in the longer term, Korea.

Under the arrangement, which did not involve a cash payment by Reach, it acquired network facilities and operations including customers, in-country networks, data centers, US\$90 million of working capital and Level 3's ownership interests in the Tiger (now renamed RNAL – Reach North Asia Loop) and Japan-US cable systems.

Reach also assumed Level 3's capital and operating cost obligations of around US\$170 million over 12 months for the completion of the submarine cable system.

The management of Reach foresees that the market conditions prevailing in 2001 will continue in the short to medium term, but because of its strong customer base, Reach is well-positioned to withstand this market turmoil and expects that the market will stabilize as further industry consolidation occurs.

#### **REGIONAL WIRELESS COMPANY**

Regional Wireless Company (RWC), is a 60-40 (PCCW holds 40 percent) venture with Telstra, using Hong Kong mobile operator CSL at its core. CSL, with more than 1 million subscribers, is the most profitable mobile operator in the highly competitive market of Hong Kong, which has a mobile phone penetration rate of 83 percent of the population. CSL's market share was 20 percent as of December 31, 2001.

CSL also provides innovative multiple-platform applications such as email, financial news, stock trading, banking, wireless betting and entertainment games. It also supplies mobile handsets.

### 2001 RWC/CSL Highlights

Ace Satellite roaming service was launched in February, covering remote areas within Europe, Asia, the Middle East and Africa. CSL also became the first mobile operator in Hong Kong to offer "Roaming Caller Number Display" service in the greater China region, introducing this feature in October.

In June, CSL was named "Best Asian GSM Operator" by *Telecom Asia*, Asia's longest-running telecom industry publication, in 12 markets in Asia.

In October, CSL was one of four Hong Kong mobile phone operators to be awarded 3G mobile carriers licenses. The same month, CSL became the first mobile phone operator in Hong Kong to launch an international short messaging service.

### PETRO-CYBERWORKS INFORMATION TECHNOLOGY COMPANY LIMITED

In February 2002, Sinopec and PCCW signed an agreement to form a business venture focused on providing IT services in China. The agreement marks a significant step in the expansion of PCCW's IT services in this growing market.

Named Petro-CyberWorks Information Technology Company Limited (PCITC), the venture is 45 percent owned by PCCW, and 55 percent owned by Sinopec, one of China's largest integrated energy and petrochemical companies.

The business venture is expected to benefit from PCCW's expertise in systems design and development, as well as its experience in project management and operation systems maintenance. At the same time, Sinopec can leverage PCCW's technical expertise to promote PCITC's development.

PCITC's role is to fully support and facilitate the daily IT operations of Sinopec. To accomplish this, PCITC will leverage the resources and competitive advantages of its parents.

Based in Beijing, PCITC is also expected to strengthen PCCW's presence in China's telecommunications market, as well as facilitate Sinopec's strategy of driving its own competitiveness through the enhanced use of IT.

Drawing on PCCW's IT expertise, PCITC will operate in the areas of:

- Design and development of Enterprise Resource Planning systems, logistics and supply chain management systems, and customer relationship management systems;
- Provision of technology enhancement and process control;
- Design, manufacture and maintenance of IT-related products;
- Design and undertaking of information network, systems integration projects and e-commerce development.

With the parents' support, PCITC can strengthen its cooperation with large-scale local and overseas computer companies while fully supporting Sinopec's IT development and daily operations.

PCITC also aims to expand into the process manufacturing sector to become a competitive IT solutions provider and systems integrator in this area, both locally and abroad.

### OTHER ALLIANCES IN GREATER CHINA, ASIA AND BEYOND

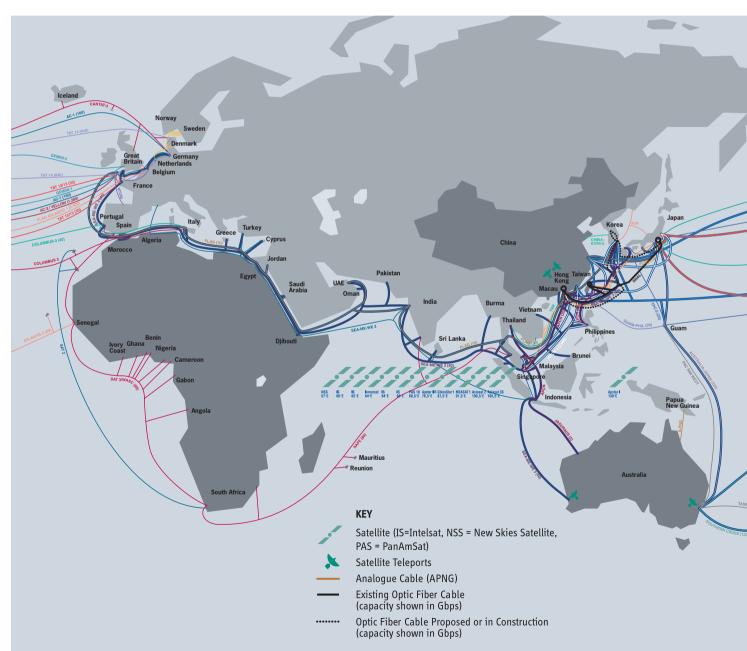
PCCW also currently works closely with Avaya, Cisco Systems, Fujitsu, Intel, Microsoft, NEC, Nortel Networks and Oracle, among others.

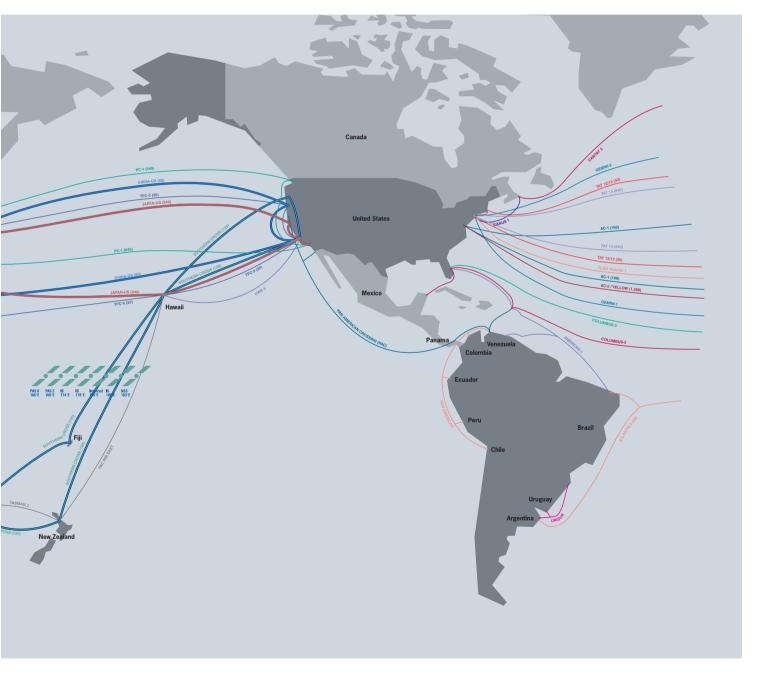


Using mobile operator CSL at its core, RWC offers premium mobility service brands, such as 1010

### BUSINESS OVERVIEW: PARTNERSHIPS









# Infrastructure

PCCW Infrastructure manages an infrastructure and property portfolio in Hong Kong and China. It is focused on increasing financial returns from PCCW's property assets while reducing the real estate costs of the PCCW Group business units. PCCW Infrastructure also engages in developments, such as the Cyberport project, now underway in conjunction with the government of the Hong Kong SAR.

Infrastructure revenues are principally derived from external property projects and rental from investment properties leased to third parties, including space leased at Pacific Century Place Beijing, as well as the Broadway and PCCW Tower in Hong Kong.

Infrastructure-related highlights from 2001 included the official topping-out ceremony of the first phase of Cyberport held in November, as well as the official opening of the final retail phase of Pacific Century Place Beijing in October.

PCCW Infrastructure also provides property management services to PCCW's other businesses, including corporate premises planning, occupancy cost management and project management assignments.

### BUSINESS OVERVIEW: INFRASTRUCTURE

### **CYBERPORT**

PCCW is the developer of Cyberport in Hong Kong, acting in partnership with the Hong Kong government. Cyberport is considered to be Hong Kong's IT flagship project, and will consist of specially designed commercial space dedicated to high-technology industries with related retail, residential, recreational and educational facilities. This technology-oriented project is being built to create a nurturing business environment with which Hong Kong can attract and retain technology related businesses.

Cyberport will contain a wide range of information technology facilities including a network operations center, digital media center and a central data exchange, all connected by an internal private network throughout the project.

The project is being developed in two portions:

- The Cyberport portion comprises office towers, a retail center, a hotel and ancillary facilities, which will be transferred to the Hong Kong government upon completion and leased to qualified IT companies;
- 2. The Residential portion comprises residential premises, which will be offered for sale. The surplus proceeds derived from the sale of the Residential portion will be shared between the Hong Kong government and PCCW in a ratio determined by the respective capital contributions to the project.

The initial phases of the Cyberport portion will be completed during 2002, with the balance due by the end of 2003. The Residential portion will be completed in phases between 2004 and 2007, although pre-sales of residential units are forecast to begin in Q1 2003.

#### PACIFIC CENTURY PLACE BEIJING

PCCW is the developer of Pacific Century Place Beijing, which held its grand opening on October 24, 2001.

PCCW is the majority owner of this prime 220,000 squaremeter business, retail and residential complex in the heart of China's capital city. It is held as an investment property, with IBM and Nokia constituting major tenants of the two office towers.

Pacific Century Place Beijing is home to multinational commercial tenants. Two apartment towers and an approximately 70,000 square-meter shopping arcade complete the development.

The final phase of the six-level retail podium was completed in 2001, and hosts multinational tenants and the Pacific Department Store Beijing.



In the heart of China's capital - Pacific Century Place Beijing



Cyberport's commercial section is scheduled for completion by the end of 2003, while its residential section is to be completed in phases between 2004 and 2007