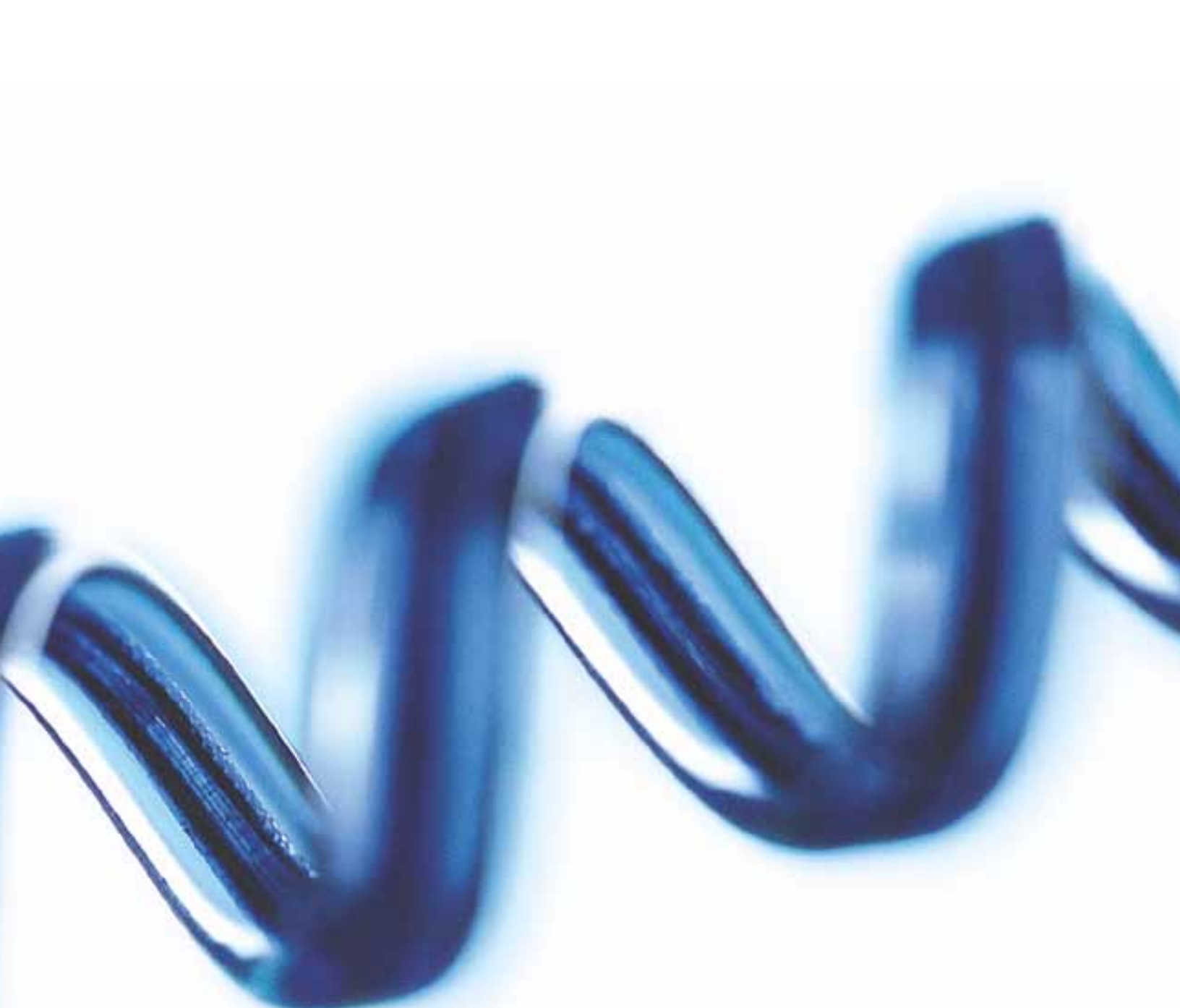


Business Overview

Telecommunications Services (TSS)

- ✓ Formed Cascade, one of Asia's leading technical services companies
- ✓ Broadband access line growth of 39 percent for 2002
- ✓ Established as a leader in Asia Pacific IP-VPN services by launching regional offerings in 2002
- ✓ Creation of more than 200 wi-fi (wireless LAN) hotspots
- ✓ Award-winning contact-center business maintains quality service with lower cost base
- ✓ PCCW's venture with Sinopec, PCITC, achieved revenue of Rmb166 million





shaping the line

PCCW has one of the world's highest home penetration rates in terms of numbers of households able to enjoy broadband services on their ordinary copper phonelines

Ken Ho General Manager, CPE, Commercial Group



PCCW's TSS is the market leader of fixed-line telecommunications services in Hong Kong.

Utilizing fiber-optic, TSS has invested heavily to build a fully-digital network.

Some US\$5 billion has been invested in infrastructure over the past 10 years.

The aim is to deliver value-added voice and data services to businesses and households throughout Hong Kong.

Our high-speed broadband capability is able to serve all major business areas and more than 95 percent of Hong Kong homes.

In fact, the PCCW Group has one of the world's highest home-penetration rates, in terms of numbers of households able to enjoy broadband services on their ordinary copper phonelines.

TSS provides a full range of local and international premium products and services, backed by world-class service-level guarantees and award-winning customer support.

In mainland China, PCCW holds 45 percent of PCITC, an IT venture with Sinopec.

Based in Beijing, PCITC's role is to support and facilitate the daily IT operations of Sinopec, as well as to seek other opportunities across mainland China's petrochemical industry.

PCITC strengthens PCCW's presence in the mainland China market, while helping Sinopec to boost its own competitiveness through better use of IT. PCITC achieved revenue of RMB166 million in 2002 and was instrumental in the implementation of Enterprise Resource Planning (ERP) systems for Sinopec.

Local Telephony

- **Maintained world-class customer service**
- **Retained 82 percent market share in a fiercely-competitive arena**
- **Improved customer win-back effectiveness.**

PCCW's fully-digital, 580,000-kilometre fiber-optic fixed network is seen as one of the most sophisticated and competitive networks in the world, and is an asset to Hong Kong.

The total number of PCCW direct exchange lines decreased by 10 percent year-on-year from approximately 3,489,000 to approximately 3,138,000, representing a total, residential-plus-business market share of approximately 82 percent.

With 120 years of telephone network-operating expertise behind it, PCCW intends to expand its telecommunications capability into Greater China and beyond.

International Telecoms Services

- **Retail IDD minutes dropped by 4 percent compared to 2001 but the PCCW Group maintained its IDD leadership position in market share with profit at healthy margins**
- **Achieved non-dominant status from local regulator, enabling greater flexibility in the packaging and pricing of products and services**
- **Launched new International Call Forwarding value-added service to expand to mobile phones.**

The international calls market continued to be fiercely competitive in 2002, but PCCW maintained its lead in terms of volume and revenue.

The market responded well to the promotions we launched to retain, and win customers back.

The Company generated customer trust when it refused to push up prices immediately after China's IDD rates soared in November 2002. PCCW's calm approach to the issue paid off when those IDD rate increases were eventually lowered.

The Group also provides international connectivity services through wholly-owned subsidiaries Corporate Access and Beyond the Network. Details can be found on page 29.

Local and International Data

Within Hong Kong, PCCW serves as a backbone for corporate data networks, providing broadband-based IP-VPN, frame relay and ATM (Asynchronous Transfer Mode) solutions.

Demand for wholesale and retail broadband Internet access continued to be strong in 2002, with the total number of broadband lines increasing 39 percent year-on-year, from approximately 402,000 to more than 559,000.

PCCW is the market leader in wholesale broadband, with more than 95 percent of Internet service providers using our services to connect their customers.

Bandwidth volume used by customers rose 23 percent over the previous year.

Outside Hong Kong, the Group provides International Managed Bandwidth Services and International Private Leased Circuits to more than 150 destinations. In 2002, it extended its 100 percent service guarantees to all these locations.

In April, the Group worked with Beijing Communications Corporation (BCC) to provide a 100 percent, door-to-door, service-level commitment for international leased lines, as well as ATM and frame relay services between Hong Kong and Beijing. This marked the very first alliance for BCC with a company outside mainland China to provide such a commitment to customers.

IP-VPN

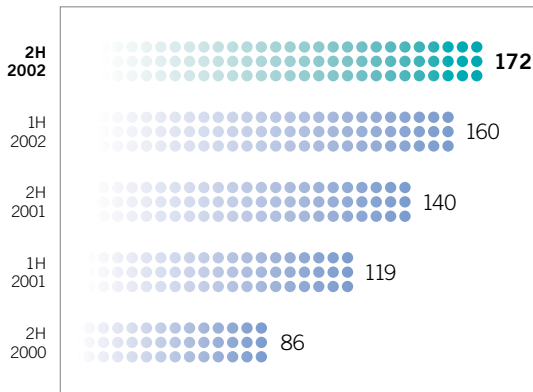
In March, PCCW launched its IP-VPN service in mainland China and throughout Asia Pacific.

Supporting multiple services with speeds of 64Kbps to 1Gbps, this provides customer organizations with a high-value, private IP network.

PCCW's IP-VPN and secure Managed Firewall offerings utilize PCCW's high-capacity and resilient global IP backbone, mostly supplied by REACH (see page 28).

PCCW's IP-VPN enables quick and efficient use of a wide range of applications including mission-critical Enterprise Resource Planning (ERP) and Customer Relationship Management (CRM), high-quality video-conferencing, voice over IP, email, intranet and web-based applications.

Data services: a PCCW growth engine
Local data Gbps (gigabits per second)



Internet Access Services

Hong Kong leads the world in high-speed Internet connections, and PCCW is one of Asia's top broadband providers. Hong Kong had an estimated 989,115 registered broadband Internet access customers from households and offices at year-end 2002, based on statistics from Hong Kong's Office of the Telecommunications Authority (OFTA). Of that total, more than 559,000 were PCCW's retail and wholesale customers.

NETVIGATOR

- **NETVIGATOR consolidated its position as Hong Kong's No.1 Internet service provider**
- **New value-added services in demand, including Parental Control, NETSee, Mailguard and NetAlbum**
- **NETVIGATOR wins the *Best ISP Award* from *Next Magazine*, plus the prestigious *Top Service Gold Award*, as well as being honoured by *Computerworld* magazine in its *Readers' Choice Award* in the **ISP category**.**

The Group's Internet access services in Hong Kong are offered primarily through high-speed broadband, plus more than 200 wi-fi hotspots. All these are provided under the award-winning NETVIGATOR Internet service provider brand.

NETVIGATOR broadband consumer customers increased from approximately 311,000 to approximately 424,000, up 36 percent from the

previous year. NETVIGATOR introduced value-added services such as: Parental Control, which filters undesirable Internet materials; NETSee, enabling video Internet communications; Mailguard, to block unwanted emails; and NetAlbum, which stores digital images.

NETVIGATOR's value-added services registered more than 250,000 subscriptions as of December 31, 2002.

now.com.hk

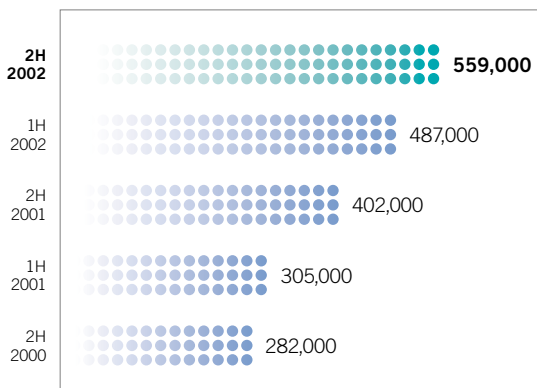
- **Customer numbers growth of 79 percent against 2001**
- **Content addition includes exclusive, local-based drama series and entertainment features, generating large viewership**
- **Added *pda.now.com.hk* to provide streaming content for PDA users in PCCW's wi-fi hotspots.**

The Group's now.com.hk has emerged as Hong Kong's premier broadband entertainment portal, offering steady speeds of up to 800Kbps.

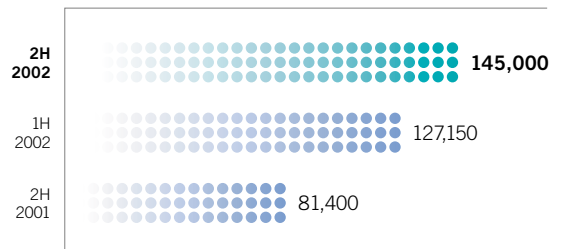
now.com.hk provides a wide variety of interactive local and international entertainment and information, on demand and round-the-clock.

Designed for NETVIGATOR users of all ages, this portal offers more than 2,000 programs to customers, displayed in a full-screen, high-quality format.

Service in growing demand
PCCW total broadband subscribers



Internet at the speed of life
now.com.hk subscriber growth



Since its launch in the second half of 2001, *now.com.hk* has grown its customer base from approximately 81,400 to approximately 145,000 as of year end 2002.

Hong Kong-sourced materials include local news, entertainment features, movies, drama, videos and games, as well as popular Asian music.

In 2002, *now.com.hk* broadened its appeal with a number of English-language channels featuring top international fashion, sports, variety shows, animation and 24-hour news and financial information. In February 2003, the service was made available to viewers using handheld devices, such as PDAs (personal digital assistants).

Creation of Cascade

Unlocking value within its Network and Services Business division (NSB), PCCW announced the formation of one of Asia's leading technical services companies, in terms of scale and experience.

Launched January 1, 2003, Cascade provides PCCW's telecommunications network operations with support and maintenance services, ensuring its world-class network availability of 99.999 percent.

Other Cascade services include network infrastructure design, build-out and maintenance, consulting solutions, customer installation and maintenance services, project management, operating systems development and maintenance and technical support.

Employing more than 3,000 highly-trained technical staff, Cascade serves a variety of clients, including Hong Kong Exchanges and Clearing Limited, LG.Philips Displays International Limited, the Airport Authority of Hong Kong and MTR Corporation Limited.

In addition, Cascade is pursuing new business opportunities throughout Asia Pacific.

PCCW believes this initiative places the Company in a very strong position to address the network support services sector – the fastest-growing part of our industry.

Before its transformation into Cascade, NSB achieved a number of significant achievements in 2002. For example:

- **NSB became the first technical services provider in Asia to hold TL9000 certification for excellence in technical support and network maintenance**
- **Achieved upgraded ISO 9001 certification**
- **NSB's field engineering service received the Silver Award in the 2002 Customer Service Excellence Awards staged by the Hong Kong Association of Customer Service Excellence**
- **In early 2002 it became the first provider of IP services in Hong Kong.**



Cascade people from left:
Chan Kwong Keung, Chan Pui-Sze,
Wong Kai Yin Edwin and Mak Wai Ting

Contact Centers

- **Named one of the world's top call-centers by US magazine *CallCenter***
- **Received the 2002 Market Engineering Award for Greater China, as recognised by Frost & Sullivan consultants**
- **Won eight call-center awards from the Hong Kong Call Center Association**
- **Opened a call-center in Guangzhou and another in Kuala Lumpur**
- **Signed several service contracts with leading companies and banks in the region.**

This unit serves PCCW's own customers, and provides outsourcing offerings to serve its customers' customers.

Expertise contained by this unit equips it to design, build and maintain call-centers for other companies. The net result is one of Asia's leading providers of customer-contact management and relationship-management solutions. In fact, PCCW operates one of Asia's largest round-the-clock call centers, with more than 3,000 agent positions providing customer management services and

solutions in 15 languages through service hubs in Guangzhou, Taipei, Kuala Lumpur and Hong Kong. Our agents handle approximately 10 million calls a month.

By bringing together customer-contact channels through our service hubs, we not only enable companies to expand their presence in the region swiftly, we also help them to take advantage of skills and cost benefits offered by each location.

Our professionals use the world's latest technologies, and best practices, which help ensure excellent customer-contact management. The bottom-line benefits here for the companies we serve include generating satisfaction among their own customer-bases and capturing additional business opportunities during the course of everyday customer contact.

Regulatory Developments

The Group's results are influenced by structural changes resulting from the liberalization of Hong Kong's telecoms market, the 1998 Framework



A PCCW Contact Center in action.

Agreement between the Group and the Hong Kong Government, plus other regulatory developments.

Wholesale services

PCCW continued to provide interconnection capacity to other telecoms providers in 2002. Per-minute interconnection rates were lowered to take into account increased traffic flows, particularly for Internet, data and wireless voice services.

PCCW has been providing competitors with access to phonelines into homes and businesses – known as ‘local-loop unbundling’ – since 1996.

Interconnection and unbundled local-loop services are provided to competitors on a non-discriminatory basis. The Group offers wholesale broadband unbundled local-loop service by way of a tariff. Determination proceedings, relating to broadband unbundled local-loop with other fixed-network operators are pending. PCCW will work with the Hong Kong Government on its broadband unbundled local-loop policy review in 2003.

2003 Fixed telecommunications network services market liberalization

Full market liberalization was implemented by Hong Kong’s OFTA on January 1, 2003 in the local and the external (cross-border) fixed-telecoms network service markets. In the local market, there is now no pre-set limit on the number of licenses to be issued and no time limit for license applications. OFTA will not consider fixed-carrier licenses for applicants who intend to rely on interconnection and wholesale services using infrastructure owned by other operators. In the external (cross-border) market, new licensees now have the option of being facilities-based or service-based.

Licensing regime

In-building telecommunications systems are now authorized under a class license regime, as of 2002. Under this regime, a building’s owner is

automatically licensed to establish, maintain and operate an in-building telecommunications system within the common parts of a building, and to provide telecommunications services within the building. No public telecommunications service can be provided. HKTC, as a fixed telecommunications operator, continues to enjoy the right to building access and to interconnect with in-building systems on a non-discriminatory basis.

The Wireless Local Area Network (wi-fi) class license was implemented in 2003, allowing operators meeting the license criteria to automatically provide wi-fi services that do not cross any public street.

Merger and Acquisition Bill

The Telecommunications (Amendment) Bill 2002 was tabled in May 2002 to deal specifically with merger-and-acquisition activities in Hong Kong’s telecommunications sector. The Bill proposes to give the Telecommunications Authority the power to review mergers and acquisitions concerning carrier licensees, and to take appropriate actions when it is of the opinion that the transaction would substantially lessen market competition.

Retail pricing flexibility

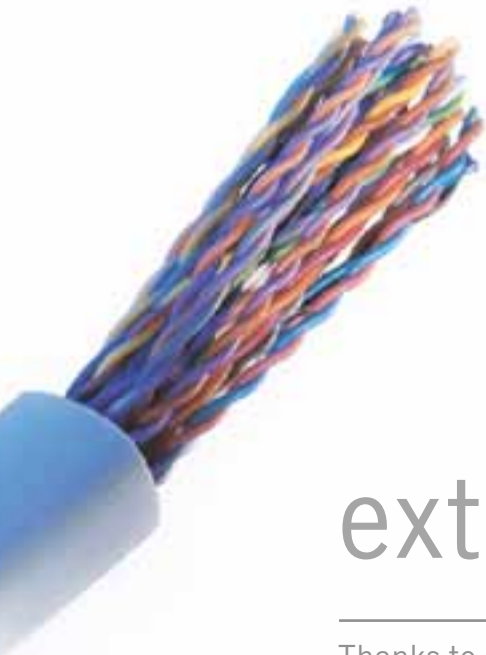
PCCW has been granted non-dominant status over all IDD routes and in the external bandwidth services market.

A large number of new tariffs and tariff changes were made during the year. Rates were revised to meet competition, to enhance operations and to support further network investment. These tariffs also included a variety of promotions and loyalty programs. PCCW continues to seek greater pricing flexibility for service offerings currently classified as dominant, as well as a streamlined tariff review process.



Business eSolutions

- ✓ Spearheads PCCW's IT business, with an emphasis on opportunities in Greater China
- ✓ Plays pivotal role in creating major IT&T alliances in mainland China
- ✓ Obtained agreements with Chongqing and Tianjin Manufacturing Information Productivity Council, and Hua Xia Bank, to promote and finance launch of ConXerto, a collaborative commerce application platform



extending the line

Thanks to a strong team of IT professionals, the overall Business eSolutions 'offer' spans the design, build and operation of tailored systems and applications

Joe Tam Chief Consultant, eProduct Development & Services



Business eSolutions

- **Business broadband numbers represented an approximate 70 percent market share, plus 41 percent year-on-year growth in revenue – to approximately HK\$531 million – and subscriptions of just under 52,000 at the end of 2002**
- **In early 2002, Business eSolutions helped a PCCW-led consortium win a major contract from the Hong Kong Government to provide hardware, software and services for the city's new computer-chip ID card**
- **China Mobile appointed Business eSolutions to build a nationwide enterprise resources planning information system to provide improved resource sharing, monitoring and control**
- **Business eSolutions was instrumental in PCCW being named one of *Asia's top-10 Most Admired Knowledge Enterprises* by independent knowledge-management company Teleos, and the KNOW Network of knowledge-based organisations. PCCW was the only telecommunications company in Asia to win this accolade**
- **In August 2002, Application Management Services of Business eSolutions qualified at Level-4 of the Carnegie Mellon Software Engineering Institute's Capability Maturity Model® for Software (SW-CMM®), a key benchmark for software engineering excellence.**

Business eSolutions offers integrated solutions and services, ranging from IT strategic planning and implementation to maintenance.

This approach provides premium benefits to enterprise customers, backed up by PCCW's unequalled connectivity.

Thanks to a strong team of IT professionals, the overall Business eSolutions 'offer' spans the design and build of tailored systems and applications.

Business eSolutions can also facilitate the outsourcing of a company's IT management and business processes, as well as to provide technical and engineering support services to government departments, public utilities, aviation and broadcast engineering operations.

In addition, the unit's brokerage solution links investors, securities brokers and banks with the AMS/3 trading system at Hong Kong Exchanges and Clearing Limited.

Data Center Operator Lam Woon-Kee works to support customers at the *Powerbase* Center in Hong Kong.



Business eSolutions has established relationships with some large corporations within mainland China, including China Telecom and the Chongqing and Tianjin Manufacturing Information Productivity Council. In 2002, the Group expanded its customer base, with significant project wins against international competition.

Internet Data Centers

■ **Premium service provider *Powerbase* won service contracts to design and build Internet data centers for a major telecoms provider (March 2002) and a major mobile provider in China (December 2002)**

■ **In November 2002, *Powerbase* built a new Internet data center at Hong Kong's Cyberport, positioning itself to serve tenants at one of Asia's premier IT developments.**

Internet Data Centers (IDC) is part of Business eSolutions and serves customers in Hong Kong and Greater China. These include major corporations and public sector institutions. PCCW also has interests in data centers in Beijing and Shanghai.

In Hong Kong, IDC is centered on its premium service brand *Powerbase*, which operates one of the city's largest data-center facilities. *Powerbase* is a high-performance provider offering full resilience for critical business applications. It offers reliable Internet-exchange connectivity for local, regional and international customers.

Powerbase has Sun Microsystems' SunToneSM Certification for service quality, and in 2002 added a British Standards Institution certificate on Information Security Management System (BS7799). As of year-end 2002, this unit served about 1,000 customers.

Telecoms Directories

■ **In April 2002, PCCW Directories Limited (PCCW Directories) joined with Unicom Yellow Pages Information Co., Ltd. (Unicom Yellow Pages) to launch three new trade and professional directories distributed mainly in mainland China**

■ **The Telecom and IT Directory was launched in December 2002 to be distributed to FTNS/Mobile/IVANs operators, ISPs, government bodies and large corporations in Hong Kong and mainland China.**

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

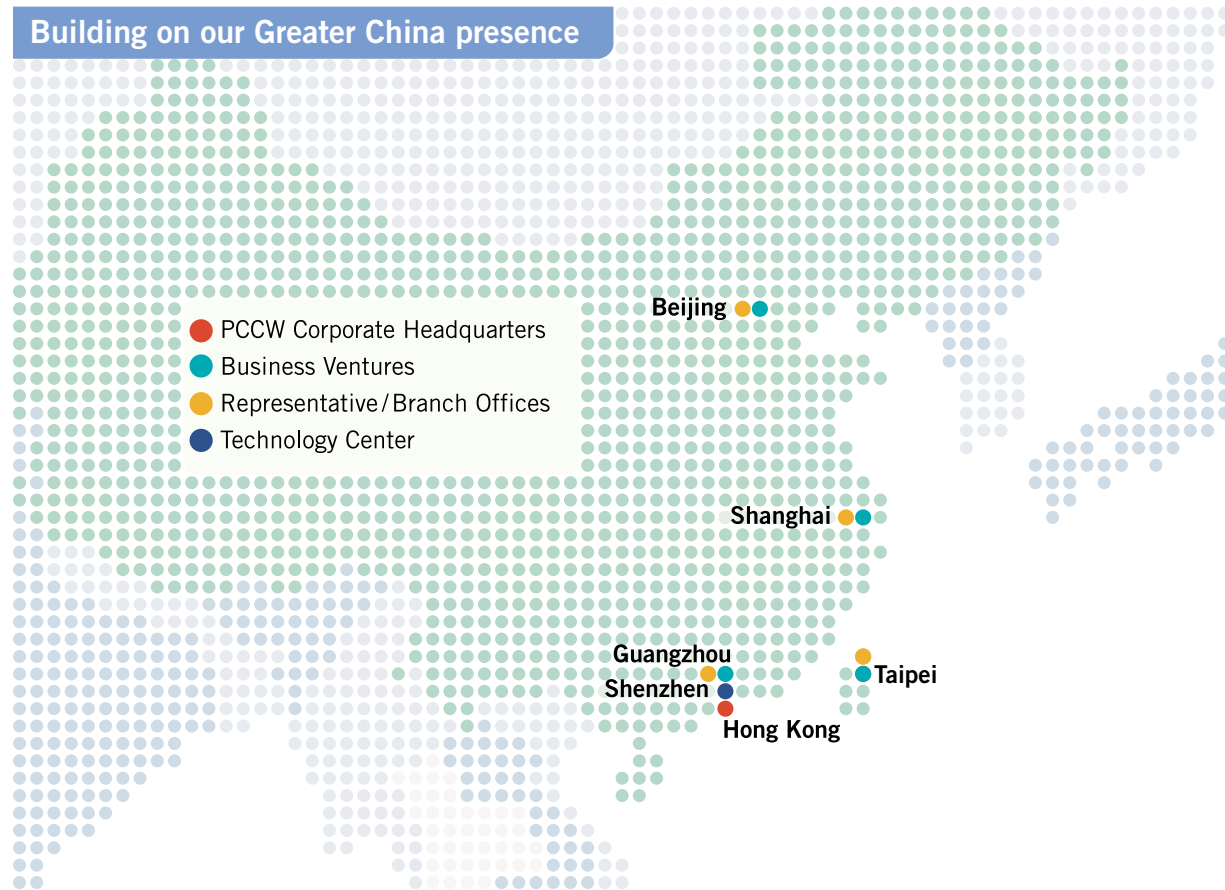
It is the official publisher of the Hong Kong Yellow Pages, White Pages, Fax Directory and Hong Kong Business Web Directory.

It also offers a host of online services, including those operated at *yp.com.hk*

In 2002, monthly page views were maintained at approximately 13 million, while the number of individual monthly visitors for 2002 increased by 21 percent to approximately 172,410.

Advertiser numbers in the print advertising business dropped by 9.6 percent to approximately 9,980 in 2002 due to the economic climate, while circulation of all print advertising publications rose 20 percent, to more than 1,562,000 copies.

In mainland China, PCCW indirectly owns 30.12 percent of Unicom Yellow Pages, one of the country's largest directory businesses. Since November 2000, Unicom Yellow Pages has expanded PCCW's online and paper directory business into mainland China.



Greater China

Led by Business eSolutions, PCCW has a number of alliances and relationships with large corporations within mainland China, as well as a growing customer base seeking to enter Greater China from all over the world.

PCCW's Telecommunications Services unit is also exploring opportunities in mainland China, with the 2002 opening of another call-center in Guangzhou and the launch of IP-VPN services.

In addition, PCCW Infrastructure operates Pacific Century Place Beijing, a two-million-square-foot office, retail and residential complex in China's capital.

The following is an overview of PCCW's Greater China operations (outside Hong Kong):

Mainland China

PCCW intends to create a venture with China Telecom to provide IT business solutions in mainland China's finance sector, including banks, insurance companies and securities firms. In September 2002, IT intelligence company IDC estimated mainland China's banking, insurance and financial markets to collectively offer an IT market valued at approximately US\$2,281 million by 2006, from a 2002 total of US\$564 million.

In addition, Business eSolutions established a software development center in the Shenzhen Special Economic Zone to provide enterprise solutions for customers across Greater China. Employing a team of experienced, local software developers, the center developed ConXerto, an innovative collaborative-commerce solution.

In 2002, PCCW entered into an agreement with the Chongqing and Tianjin Manufacturing Information Productivity Council to promote ConXerto, while Hua Xia Bank has developed a finance plan to assist manufacturing companies in mainland China to adopt the ConXerto system.

PCCW provides IT services for several mainland customers, including China Mobile and Huawei Technologies Co Ltd. Other contracts in mainland China include IT service agreements with Xiamen Airport, the Minsheng Bank Call Center and China Mobile's nationwide management information system.

PCCW representative offices in Beijing, Shanghai and Guangzhou serve to expand the Company's delivery of telecommunications solutions to other high-value customers in mainland China.

Taiwan

■ **In January 2002, Taiwan Telecommunication Network Services Co., Ltd. (TTN) launched a cross-straits VSAT (very small aperture terminals) satellite service, providing video-conferencing solutions**

■ **In September 2002, TTN launched the NetGAZE service, a network monitoring and management service providing best-in-class network assurance to customers.**

PCCW owns a 56.56 percent stake in data network service provider TTN.

TTN's major products include high-speed packet data, utilizing ATM (asynchronous transfer mode), and information networks, as well as Internet access served by an extensive fiber-optic network.

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

Infrastructure

- ✓ Cyberport's first phase completed on schedule, and is largely occupied
- ✓ Residential sales off to an encouraging start
- ✓ High occupancy maintained in investment assets
- ✓ Significant occupancy cost savings achieved



strengthening the line

The Cyberport project consists of commercial, retail, hotel, entertainment and residential facilities. It comprises a total of 5.7 million square feet and is designed to attract and nurture IT and multimedia related activities in Hong Kong

Kimmy Chan Contract Manager, Cyber-Port Management Limited





Early sales of the Residence Bel-Air luxury units (see picture, right) are very encouraging in Hong Kong's competitive residential market.



PCCW Infrastructure undertakes all property development, investment and facilities-management functions for the Group.

This has the effect of providing a physical environment for the IT and telecoms industry.

In Hong Kong, PCCW Infrastructure conceived the technology-themed Cyberport, now under development with the Hong Kong Government.

This campus-style, low-density project consists of commercial, retail, hotel, entertainment and residential facilities. It comprises a total of 5.7 million square feet and is designed to attract and nurture IT and multimedia-related activities in Hong Kong.

The first phase of Cyberport, consisting of office space, was completed on schedule in 2002. Response from the IT industry was encouraging, at a time of subdued market conditions, with the first block becoming largely occupied during the year.

The balance of the Cyberport campus, comprising office and retail space, and le Meridien Cyberport Hotel, will be substantially completed during 2003, with the final phase due to follow in mid-2004.

Construction work on the residential portion commenced in 2002. This will consist of approximately 2,800 units, which will be completed in phases between 2004 and 2007. The initial phase was launched in early 2003, with early sales of the luxury units exceeding expectation in Hong Kong's competitive residential market. Proceeds from the sales of residential units are expected to fund future construction at Cyberport.



Pacific Century Place in Beijing.

PCCW Infrastructure owns a portfolio of premium-grade investment properties, providing a stable revenue base. These include the two-million-square-foot office, retail and residential city-center complex, Pacific Century Place, in Beijing, and the PCCW Tower office complex in Hong Kong.

The office and retail premises in Beijing offer an attractive central location for multinational corporations and were almost fully let during 2002, while leasing of residential units continued steadily.

PCCW Infrastructure's facilities-management service provides essential support to the Group's IT and communications network, as well as to the investment property portfolio and other premises occupied by the Group.

During the year, PCCW Infrastructure achieved significant occupancy cost savings, realized through renegotiation of rental terms and by reorganization of the overall facilities-management operation in Hong Kong and mainland China.