

## Cellular Backhaul Service

Made possible by the most advanced voice-optimization technology coupled with our systems integration expertise, network bandwidth savings by a factor of up to 12 are enabling cellular operators to slash operating costs.

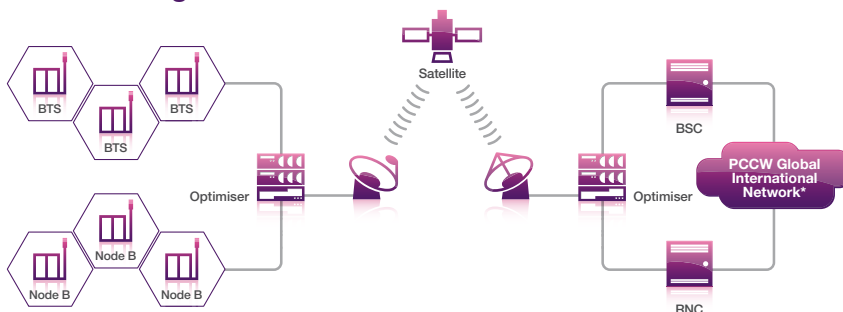
This popular cellular backhaul solution is also proving very attractive to new service providers wanting to enlarge their subscriber bases.

Our total package includes a highly-efficient satellite-based service that supplements an operator's terrestrial backhaul infrastructure and extends reach into markets where deployment of optical-fiber or microwave networks would not be viable. This enables mobile players to offer services to populous yet previously-unserved wireless markets.

### Key benefits to your business

- Traffic compression yields bandwidth efficiencies to ensure low total cost of ownership
- Significantly reduces opex and capex by consolidating 2G, 2.5G and 3G networks
- Extends your network coverage to remote areas at an attractive cost
- One-stop-shop solution for voice, data and roaming services, plus scalable bandwidth with a pay-as-you-grow option

### Network diagram



BSC = Base Station Controller  
BTS = Base Transceiver Station

Node B = 3G Base Station  
RNC = Radio Network Controller

\*including value-added services



Service Provider Solutions

## Specifications

- A and E interface specifications:
  - Mobile switching centre (MSC) to base station controller (BSC) backhaul link
  - Codecs supported: G.711, G.723 and G.729
- Abis and Ater interface specifications:
  - Base station controller (BSC) to base transceiver station (BTS) and transcoder rate adapter unit (TRAU) to base transceiver station (BTS) access links
  - GSM codecs supported: FR, EFR, HR and AMR (both FR and HR)
- Supports both CDMA\* and GSM cellular networks
- Traffic types supported: 3G (UMTS, CDMA), 2.5G (EGDE), GPRS data, 2G, IP data, SS7 signaling, PCU signaling and Signaling Connection Control Part Service (SCCP)

## Features and value-added services

- A and E interface optimization ratio: Up to 16:1 & up to 8:1 SS7 traffic optimization
- Voice and data aggregation and compression
- Abis and Ater interface optimization ratio: Up to 3:1 (2G) and up to 4:1 (2.5G)
- Powerful bandwidth management tools
- Vendor independence – our solutions are proven to work with GSM equipment from Ericsson, Nokia, Huawei, Alcatel, Nortel, Motorola, Interwave and Airnet
- Customized system design
- Equipment procurement and systems integration with GSM equipment
- Space-segment procurement and satellite-link installation and commissioning
- Ground support with centralized monitoring at our 24/7 network operations centers (NOC)
- International Voice Termination – Premium service for roaming and CLI guaranteed terminations and Standard service for price-sensitive terminations
- Internet access
- Mobile messaging and signaling services
  - Global roaming with more than 400 partners worldwide
  - iSMS (international text messaging) – real-time text messages of up to 160 characters
  - Fully-redundant bi-directional signalling network
  - Simple and customized pricing
  - ANSI-to-ITU signalling conversion

\* No voice optimization offered on these networks.

Employing approximately 18,200 staff worldwide, PCCW Limited is the holding company of HKT Group Holdings Limited (HKT) and serves customers as Hong Kong's premier telecommunications provider and a world-class player in Information & Communications Technologies. Operating as a wholly-owned subsidiary of HKT, PCCW Global provides integrated global communications solutions, runs a fully-meshed IP, fiber and satellite network and serves the voice, data and multimedia needs of enterprises worldwide, plus the operational requirements of service providers.

## Why PCCW Global

### Resilient global infrastructure & robust network

- End-to-end solutions incorporating a range of aspects from network design and planning, technical assistance and network integration services to technical support at remote sites to maintain a fully-redundant and high-availability network
- Satellite neutral – benefit from our long-standing working relationships with all major regional and international satellite players, including ABS, APT, AsiaSat, IntelSat, SES – NewSkies, China DBSat, Telesat and SKY Perfect JSAT

### Service excellence

- Dependable workforce and 24/7 network operations center with proactive network management
- Robust SLA and ground support in remote regions of the world
- Toll-free services with multilingual support

### Innovative solutions based on leading-edge technology

- Integrated global communications solutions
- One-stop shop for integrated satellite, optical-fiber and IP voice solutions

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