

A large suspension bridge is under construction over a body of water. The bridge features a tall, white, A-frame pylon on the left side, with numerous stay cables extending to the deck. The bridge deck is visible, and a few vehicles can be seen on it. In the foreground, there is a construction site with various pieces of equipment, including cranes and storage tanks. The background shows a wide expanse of water with several small boats and distant hills under a blue sky with scattered clouds.

Hand in Hand with CSL to Create a Simple Life



Rapid Telecom Technologies Development along with New Difficulties

In Hong Kong, Oriental Pearl, there are 6 mobile operators competing for 6.9 million population. Today 5 operators can offer 3G services and grant the number portability after Hong Kong government issued 4 3G licenses in 2001. Hence “hand-to-hand combat” has been focused on network quality, services, charging packets, and so on. Up to now, mobile penetration has hit 140%. Hong Kong is indeed one of the fiercest competing regions around the world.

CSL, owning 3 million subscribers, is the largest operator in Hong Kong. With the state-of-the-art technologies and prominent engineering skills, CSL always attaches importance to its network construction to perpetually enhance users’ experience. First in Hong Kong, CSL has provided mobile telecommunication service since 1983; it is also the first one that launched GPRS service in 2000; and in 2003, it initially deployed EDGE technology in Hong Kong. The magic weapon of CSL to

win is to successfully commercialize the most advanced technologies ahead of its rivals.

At the end of 2005, CSL merged with NWM, New World Mobile, and replaced Hutchison to become the largest mobile operator in Hong Kong. The merger makes CSL occupy 2.65 million subscribers and four networks, including GSM900, UMTS2100 and two GSM1800 networks (one from NWM). The original intention of this merger is to save cost and improve competitiveness. However the dual-mode complex network at 3 frequency bands restrained CSL development:

- 2 GSM1800 networks waste resources at a very high cost
- Legacy 1.8Mbps HSDPA cannot upgrade to support higher data rate
- Existing equipment cannot realize the convergence of multi-mode and multi-band

Network Convergence and Smooth Evolution

After 17-year cooperation with its former

2G and 3G vendor, CSL had to change when facing new challenges. ZTE SDR solution was selected as a result of a long-period evaluation.

A customized convergent solution was provided for CSL:

- Integration of existing 4 networks, unified solution in network management, transmission, antenna and feeder, sites and equipment room etc.
- the first HSPA+ network in Hong Kong, software upgrading to LTE
- 2G/3G unified CN to save 60% cost
- Distributed BBU+RRU, multi-cell merge, triple-band antenna, IP resource management

CSL Satisfaction of Excellent Deployment and Services

Overcoming difficulties such as short construction period, ZTE cooperated with CSL closely and made a detailed project execution plan. ZTE equipped CSL with over 300 technical managers responsible for execution, supervision and management. CSL's recognition of ZTE's excellent deployment and services constitutes a good foundation for further cooperation.



Case Summary

Customer Requirements

- Integrated network, O&M cost reduction
- Smooth network evolution, technology leadership in industry
- Customized premium network, outrunning competitors
- High-performance multi-frequency antenna minimizing difficulties of network integration
- Dedicated and first-class engineering service

ZTE Solutions

- SDR soft base station, multi-mode, flexible configuration
- Distributed BBU+RRU networking, despite insufficient equipment room
- Combination of RRU cells fully guaranteeing good user experience
- Simplified network structure, maintenance cost reduction of 50%
- Seamless network integration, sustainable development
- Enhanced network performance
- Stronger market competitiveness with HSPA+ network deployment

Customer Values