

Radio control

HSA speaks to **Chen Qingzhou**, CEO and founder of the HYT Group.

Established in 1993, Shenzhen-based HYT Science and Technology Co. Ltd is a professional developer, manufacturer and marketer of wireless communication terminal and systems engineering. With nearly 1500 employees, HYT achieves sales of about US\$50 million of its main product per year, meaning it has been authorised as a high-tech enterprise by Shenzhen government agency for the last seven years.

As well as being the biggest supplier of two-way radios in China's domestic market, the company is also one of the five largest suppliers of analog radios in the world, with soaring growth maintained by a global coverage that extends to over 60 countries – including the US, Latin America, Canada, Eastern Europe, Russia, Southeast Asia and many others. Meanwhile, HYT's trunking system serves more than 20 provinces and municipalities in China.

So why has the company been so successful? Chen Qingzhou is CEO of the HYT Group, and has been involved in the field of radio communication equipment since the early 1980s, starting business in 1990. Today his radio products, under the HYT brand, have grown to be among the most celebrated in this field. He believes there are a number of key factors behind his company's high growth rates and the popularity of its products. "HYT maintains high investment in R&D, we have our own core technology and many intellectual patents, and we cooperate only with first-class enterprises worldwide," he says. "Guided by our management philosophy to focus on the customers and with a strategy of 'talent-based, jointly developed' (meaning that every one of our products has been well designed and carefully tested before being launched), HYT aims to be a first-class global professional radio communication equipment supplier."

An example of the company's success can be witnessed through its partnership with China's public safety sector. The HYT Tower, which is located in Shenzhen's high-tech north industrial park, is the biggest R&D base for two-way radio and police radio trunked systems. It comprises the advanced transceiver general standard lab, the environmental engineering lab and the police radio trunked system. In recent years, HYT has become the biggest supplier of trunked radio systems to the Chinese Police, the world's largest civil police force. Through close and continuous technical cooperation with the Chinese police force, HYT trunked radio equipment has achieved more than half the market share in China and obtained nearly 60 percent share in the Chinese public safety domain.

In 2001, HYT's trunked radio equipment was deployed for mobile communication amongst Guangxi's public safety community. Over 50 sets of the trunked system, which completes a three-level network among provinces, cities and counties, have been deployed since then. Today, all radio units are able to roam automatically and inter-system services (such as individual



call, group call and broadcast call) are all available.

The Guihai Expressway Trunked Network Dispatch System in Guangxi province represents a typical model. The project covers many cities and areas, such as Guilin, Liuzhou, Laibin, Nanning, Qinzhou, Fangcheng seaport and Beihai. Every city owns a multi-site trunked system, with the exchange controlling centres located in police departments. All systems are connected to a network through a police-used secondary communication network with some extending BS in blind zones. With the help of the project, Guihai Expressway helps achieve police departments' need for self-enabled command dispatching. HYT's trunked system has already covered 80 percent of the cities in Guangxi province, and the trunked system in Nanning has more than 80 channels.

"Guangxi has a complex landform with a great many mountains and this, combined with the time limitations placed upon the project, meant that the construction of the project was very tough," says Chen. "However, our constructors overcame torrid weather and semitropical jungle environment and accomplished the project on time to universal satisfaction."

Another successful rollout can be seen in Inner Mongolia, a province in northern China with an area of 1.18 million km² – around four times the size of the UK and twice as big as France in terms of area covered. HYT was selected to construct radio systems for all the police forces in the province in 2004. With existing IP LAN interconnection, an IP trunked network system was adopted for the Inner Mongolia trunked network project. Several advanced technologies have been applied in the project, such as LAN interconnection, IP softswitch, IGMP group call, network and large-scale database programming, etc. A high-end server is taken as the core of both signal and voice in the three-level network system. Information transmissions among each network centre are fully compliant with TCP/IP protocol, with IP LAN as the physical carrier. A centralised network system centre controls all relevant inter-system operations. It comprises a central control service programme, a softswitch processing programme, a system configuration and maintenance programme, and a network centre database.

So what's next for the company? "HYT is now among the top five biggest suppliers of analog two-way radio in the world, as well as the biggest in the China," says Chen proudly. "Further strengthening our capabilities in R&D and the manufacture of analogue products, HYT has been focusing on digital radio systems since 2004. We have established two individual project departments that will be devoted to deepening research into both the TETRA and APCO standards. HYT is an official member in both of these organisations, and the first TETRA product is estimated to be output early next year. Our target is to become a leading brand in digital radio communication equipment both in development and manufacture." ■