EADS TETRA network
goes for g

More than 15,000 performers took to the stage in Beijing's Bird's Nest stadium in 2008 for the opening ceremony of the world's biggest ever sporting event. This unrivalled spectacle was the culmination of more than 13 months of rehearsals, with the scale of the performance matched only by the behind-the-scenes organisation that supported it. With nearly 90,000 people involved in organising the smooth-running of the Beijing games, effective communication was the key. Over the following two weeks of outstanding sporting excellence, everyone relied on Asia's biggest TETRA network to provide them with secure and seamless communication services that handled up to 1.6 million calls a day.

In safe hands

Safety and security is paramount at any major event, but the sheer scale of the Beijing games was a huge challenge. For a start, this celebration of sport attracted some 10,700 athletes. Around eight times that many personnel were then needed to deal with the coaches and support staff arriving from 204 countries, 5,600 accredited press and photographers and staff from 12,000 broadcasters, not to mention hundreds of thousands of spectators.

It was a scenario guaranteed to set any organiser's pulse racing, and quality voice and data communication services were essential in order to manage the situation successfully.

The answer was provided by the Beijing Government Shared Radio Network, which was supplied by EADS and operated by Beijing JustTop Network Communications. Established network users include the police, fire, health, water conservancy and various government organisations in and around Beijing. During the Games the network was also used by 10,000 staff from the official event organising committee, known as BOCOG.

"Such a grand sports event requires the best communication flow. That is why we required utmost reliability and efficiency from our choice of TETRA digital radio network. The network and the technical support provided by EADS is outstanding, and this has played a vital role in the communication and event

management of the Beijing Olympic Games," says Pan Feng, director of the Beijing Government Network Administration Centre.

Optimum coverage

The network covered an impressive array of games-related venues, both indoor and outdoor, including 31 competition venues, 15 non-competition venues, 43 training venues and well over 100 hotels and other facilities.

EADS and JustTop also set up a Mobile Operation Centre (MOC), which was held in readiness at all times to provide temporary extra coverage outside the network or in case of an emergency.

Right from the start

The opening ceremony in particular placed exceptional demands on the communication system. The organising committee and public security staff were each assigned to their own dedicated base stations at the Bird's Nest stadium, so that any peaks in the organiser's traffic would not affect the base stations serving the authorities, and vice versa. A total of four

old in Beijing

TETRA in Beijing

2003: *Beijing JustTop Network Communications, Ltd., purchased the TETRA system from EADS and began trials in several areas of the city.*

2004: *The first government agencies began to join the network, with police organisations joining later that year.*

2005: *By September there were already 30,000 users in the network.*

2006: *April marked the decision to use the network for the games in 2008, and games organisers began staging test events in August.*

base stations covered both indoor and outdoor areas and served more than 20,000 users on the day of the ceremony.

Promoting teamwork

One of the big challenges during the games was co-ordinating the many different organisations involved. Both intra- and inter-agency talk groups needed to be flexible to cope with changing demands, while each user organisation also needed to maintain the privacy and security of its internal communications.

The EADS TETRA system enables talk groups to be set up flexibly. For example, they can be set up to cover particular geographical areas, so they could target personnel working in and around a particular venue. The system assigns network resources intelligently to each talk group to optimise perform-ance at all times.

Each user organisation on the shared network could also keep their internal communications confidential thanks to Virtual Private Network technology, which enables each agency to manage and control its radio users, talk groups and call rights independently.

Secure access rights management and radio authentication

also ensured that information exchanged over the TETRA net-work could only be accessed by authorised personnel.

EADS hand-portable and mobile radios complemented the network by providing a Chinese-language interface and excep-tional battery life. In addition, the intuitive user interface made it easy to introduce all the new users to the system.

A winning combination

The importance of the TETRA communication system in deliver-ing a successful Beijing games should not be underestimated, according to Su Zhenze, President of Beijing JustTop Network Communications Ltd: "An event of such importance demands a network that enables rapid, effective communication and coop-eration between public security officers, police, fire brigade and first-aid medical workers. The TETRA communication system provided by EADS is the answer. And to be prepared for the high risks associated with the event, EADS Secure Networks put together an experienced service team as support for Beijing JustTop. The all-round cooperation between both sides secured the smoothness of network operations."

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