



ASFOM Provides Straightforward Solution

Tianjin border control system

Background

Tianjin is located in northern coastal China, close to Beijing. It boasts an urban area that is the third largest in China and has a population of around 11 million. Its frontier defence department is responsible for entry and exit procedures at its ports and airports.

With one general control centre and a large number of sub-control centres spread throughout the region's border points, each centre uses video, data, audio and LAN systems for its internal and external communications. The customer needed to network the matrix systems within those centres in order to share all the video sources.

The project was split into phases - phase 1 involved networking four sub-control centres with the general control centre.

The Challenge

The available infrastructure offered just one singlemode fibre and the transmission distances extended to 70km. To complicate things further, the transmission requirement was complex and high volume:

Three sub-control centres transmitting: 32 video with 1 bi-directional audio channels, 1 bi-directional data and a 10/100M LAN over 30km.

One sub-control centre transmitting: 64 video with 4 bi-directional audio channels, 1 bi-directional data and 4 independent 10/100M LANs over 70km.

The Solution

Whilst a number of companies were invited to test in the field, only the KBC solution was capable of handling the high volume and complexity of traffic reliably. Our solution used CWDM (Coarse Wavelength Division Multiplexing) to increase the signal density and offered 8, 4U chassis-mount ASFOM units to give the greatest degree of flexibility over the limited fibre available.

Outcome

The system was put into operation in June 2007; today it provides high-quality video over the long distances and continues to perform well in the field.



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data delivered

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