Market (Region) : **Malaysia**
Site Name : **KLIA MAS KARGO**
Project : **Turnkey project in design, integration and provision of parking and ground transportation system for the Malaysian Airlines Cargo Campus and Advanced Cargo Centre (ACC)**

HISTORY

MASkargo, the cargo arm of Malaysia Airlines, has launched an ambitious and aggressive plan to become one of the leading cargo operators in the world. Incorporated in 1972, MASkargo handled 30,000 tonnes of cargo. Today, completely computerised and mechanised processes have brought up the capacity to 650,000, with the vision to achieve 1 million tonne of cargo per year.

The state-of-the-art MASkargo Advanced Cargo Centre (ACC) at KLIA which is sited on a 72ha complex, takes the complex cargo handling operations into a new dimension of safety, speed, reliability and efficiency. It features, among others, up-to-date and sophisticated security systems with the latest technology, to fully automated procedures and processes that ensure the real time tracking of data, and the smooth flow of communication.

SITE

KLIA has become a primary international transportation hub for South East Asia. This turnkey project in 1998, involved processing the Cargo Centre Inbound and Outbound Vehicle traffic, thus optimizing the cargo processing, accessibility control, traffic flow guidance, security and monitoring to and from the freight forwarders dock. Interfacing to TAMS MHSC (Material Handling Cargo System) was an integral part of this project.

SCOPE

This project consist of implementing a Wide Area Network (WAN) fully automating Cardax Access Control and Digital Video Recorders for Cargo Vehicles that convey to and forth from agent docking areas to the disembarkation point. The system monitors all activity of these vehicles within the cargo centre. There are approximately 19 entry and exit points which are tracked and monitored using the latest RFID Technology. All exit and entry points are equipped with Long Range RFID Antennas which energizes the barrier gates, upon the signal received by the Passive Transponders Disk carried by the Cargo Vehicles. The RFID Technology was chosen due to its high processing speed. The activity is also monitored through digital video verification systems which encompasses digital video technology. The entire campus is operated on full fibre technology. The Video, Data and Voice are equally transmitted over fibre network.

CHALLENGE

Being a one of a kind system that has not been implemented anyway internationally as well, this turnkey project proved to be a true illustration of Innovative Technology, to prove the ability to adopt and develop new products and solutions as per the client's requirements.

To accomplish this feat, the project team had to design and develop various products and interfaces which constitutes of hardware and software. Some of the interfaces were for Pan-Tilt-Zoom controllers, Video-to-Fibre Converters and Multi-Drop Intercom Systems.