



Reference Case KCRC, Hong Kong

Progressive Hong Kong railway brings commuting standards to new heights



Facts & Figures

- 227 Ticket Vending Machines
- 163 Add Value Machines
- 24 Cash Vault Trolleys
- 125 Office Ticket Processors
- 54 Passenger Enquiry Processors
- 6 First Class Processors

Customer

Kowloon-Canton Railway Corporation (KCRC), Hong Kong
Contract award: December 1999
System into service: September 2003

Every day at least 340,000 people will pass through the electronic ticket gates to the trains of Hong Kong's West Rail, linking Sham Shui Po in West Kowloon with Tuen Mun in the fast growing North West New Territories. Whether fully mobile or handicapped, equipped with eagle vision or visually impaired, the Kowloon-Canton Railway Corporation (KCRC) are making sure that customer is king. "Travel must at all times, and for all of our passengers, be smooth, comfortable and affordable," explained Mr. Kwong Li, Automatic Revenue Collection Manager.

Since Hong Kong is one of the busiest and most frequently used railway

and metro systems in the world, long queues are out of the question and down time must be kept to a minimum, emphasised Mr. Li, who is responsible for KCRC's Automatic Fare Collection systems. "That is why 'user-friendly' is the key to the concept at every step of the way. All our systems must be easy to use and simple to run and maintain. In the event of a breakdown, they must also be fast to repair to guarantee smooth passenger flow at all times." Very quiet and tuned to environmental conservation, the West Rail trains will be travelling at a maximum speed of 130 km per hour taking no more than 30 minutes between the nine stations. With its

twin track layout the new railway links up with Hong Kong's existing metro and light railway systems. Intended to contribute to a more integrated overall transport network, the West Rail will also inject an additional boost to the development potential of the North West New Territories, already Hong Kong's most dynamic growth region.

Stringent overall demands

Mr. Li revealed that the most stringent demands have been placed on every detail of the West Rail project, spanning every field from technology and design to administration. "A state of the art railway, the selected equipment



must fully reflect the elegance and high quality of the general West Rail concept,” went on Mr. Li, explaining that each of the stations has been given its own special look and character. “One reason for this is of course the aesthetic appeal, the other is to make sure that both locals and Hong Kong’s numerous visitors can easily find their way around the system without getting lost.”

Cutting edge handicap facilities

As moving with ease is a general priority, special effort has also gone into helping people with different handicaps. Drop curbs and entrance ramps are now standard and a hearing aid system at the ticket offices has been installed. The layout between vending machines and platform has been optimized, and for people with diminished vision tactile routes, audible signals and colour contrasting signage help them find their way.

In fact, creating a system that simplifies travel for the visually handicapped has presented a real challenge. “Here Ascom Transport Revenue (now ACS¹) have helped develop some excellent solutions,” revealed Mr. Li, explaining that from now on, Braille maps are in

place to show them the quickest way to their intended destination, while neatly compacted Braille key-pads have been added to the Ticket Vending Machines and Add Value Machines. With digitised voice messages giving feedback on their input, or responding to questions, passengers with impaired vision will now be equipped to move as smoothly and independently around the Hong Kong Rail system as every-one else.

Proactive approach gives unique results

“We selected Ascom (now ACS) Ticket Vending Machines and Add Value Machines for the West Rail project thanks to their proven success on the Hong Kong underground; the Mass Transit Railway (MTR), explained Mr. Li. “We also deemed that their sophisticated design, and open and proactive approach to customisation and product development would also live up to the stringent demands of the KCRC. And we were not disappointed.” He disclosed that as part of the design review exercise, KRCR was presented with an intelligently designed demo kit, offering the users ample opportunity to try out and comment on functions and voice script. In addition to its speedy execution,

ACS’ mock-up proved unexpectedly compact, and easy to carry around and display. “Deftly combining our inputs with those of the test group, Ascom (now ACS) helped us create a system catering to the visually impaired that we believe to be unique in the world.” The new vending machines have also been given a larger, high resolution flat screen with interactive touch screen technology, benefiting all users.

Sharp administration boost

Another improvement specially developed for KCRC by ACS, this time serving to boost administration, is the new combined ticket processor unit able to read both prepaid smart cards and single fare magnetic cards. Besides creating more desk space for the ticket office operator, he or she from now on has only one computer interface to deal with. Fully networked, the system immediately consolidates the different data enhancing various administrative processes, offering up-to-date information on statistics and accountancy at all times. “Ultimately Ascom (now ACS) has gone far to help KCRC maximise its overall efficiency and cater for the special and complex demands of both staff and passengers,” concluded Mr. Li.

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¹ This project was executed by Ascom’s Transport Revenue Division. The Division was sold to Affiliated Computer Services, Inc. (ACS) in December 2005.