

Clearly in control

Tube Lines Stratford

BACK UP CENTRE

Tube Lines works in partnership with London Underground to modernise the Jubilee, Northern and Piccadilly lines.

Under the thirty-year, public-private partnership (PPP), Tube Lines is responsible for the maintenance, renewals and upgrades of the infrastructure including track, trains, signals and stations.

systems



"Again Harp Visual delivers a system that works with the minimum amount of effort".

Ron Appana

secure

CASE STUDY

Challenge

Following the successful installation of the Tube Lines main operations centre at Canary Wharf two years ago a second phase was needed to provide a back up centre in the event of the primary site becoming unavailable for use. Harp were tasked to come up with a visualisation solution in their new back up centre that would mimic the large video wall of the primary centre but on a smaller scale. This would allow the operations team to move from one location to another seamlessly. As a back up centre it would spend most of its time turned off, but it would have to come to life immediately as soon as it is switched on and must work first time.

Strategy

With the smaller space available in the room rear projection units were not practical. A third of the available space would be taken up by the projection screen. Forward projection was considered but rejected because the room has a high natural light content. The image would wash out as the sun came in. The most practical solution was to use either plasma or LCD technology. Plasma can acquire image burn very quickly, sometimes in less than 100 hours, especially if they are new. Large screen LCDs are somewhat more robust but still need to be rested for a couple of hours each day to ensure image retention does not occur. As the backup centre is only going to be used occasionally LCD was selected as they way forward.

The video wall processor to be used was to be exactly the same build as the primary site but with fewer output channels. The back up system would need to drive six screens instead of fourteen. Screen control would be achieved through the Commandant touch screen panel and would work in exactly the same manner as the primary site. All the source information of the signalling system, works in progress, weather status, call statistics and other core information had to be immediately available when the system was switched on life.



Solution

As the display selection was mainly driven by the depth of the solution this was reflected in the choice of the large screen LCD. The number of screens was decided by the quantity of information that had to be viewed. The ideal solution was a 3 by 2 matrix of 40" LCD screens. These were mounted on dual poles with fixing brackets under the floor and above the ceiling, delivering a very clean looking visual display solution. Each of the screens could be adjusted so that they were aligned vertically and horizontally. All of the cables are hidden inside the poles so that only the last 200mm of the cable is seen from the back, no cables are seen from the front.

The controller was rack mounted locally within the comms room and all of the video cables were taken through the building containment. The system was easily connected onto the network to get access to the core applications and information feeds. Mouse and keyboard were operated wirelessly via USB extenders back to the display wall controller. Commandant the touch panel controller, was positioned on the supervisor's desk allowing window scenarios and salvos to be activated as and when required.

Result

Harp has delivered a back up control centre that can literally be turned on with a switch. Although basic in its construction it has all that Tube Lines needs to look after the Jubilee, Piccadilly and Northern lines in the event of their primary location becoming unavailable.



HARP

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