British Transport Police CCTV Hub Olympics and Beyond: Upgrades and Enhancements
Customer: Network Rail

CLIENT BRIEF

Due to the success of the first phase completion of the BTP CCTV Hub stakeholders acknowledged its' value as an asset, and works were required at short notice for the Hub to support the London Olympic Games in 2012.

Also due to the perceived success of the Hub, a national BTP CCTV strategy emerged. This led to another business case by Sarax, post Olympics, securing funding for onboarding further CCTV systems, adding new forensic sites, increasing the operational capacity at the Hub, and providing a backup site, along with disaster recovery systems and processes.

WHAT WE DID

Specifically for the Olympics, Sarax provided integrations that allowed images to be received in a temporary control room, and the addition of CCTV from key train stations and lines to the BTP Hub. We also provided 24/7 service support during the games.

Building on the future-proofed designs incorporated in our original requirements, Sarax then delivered further significant upgrades and enhancements:
- Integration of new stations and train operators including, for the first time, live train onboard and forward-facing images
- New forensics sites, including building and health and safety works
- Implementation of network and site upgrades for disaster recovery
- Demolition and refurbishment of a ground floor custody suite to accommodate a new multipurpose forensics and control room, reception area and meeting room facility
- Design and delivery of a forensics room that could easily be converted to a control room in the event of a major incident
- Increased footprint and capability for the existing operations control room
- Proof of Concepts.

HOW WE DID IT

Sarax carried out the turnkey programme delivery throughout this period using strict day to day control of the plan, costs, building and technology sub-contractors and dependency stakeholders to deliver a successful project. Sarax used standard project management techniques, adapting and mixing agile and Prince2 methodologies as needed.

We acted as the technical authority in all matters, maintaining complete control over the works.

THE WORKS

Sarax carried out the design and delivery for the expansion of the system including further building works, network and system resilience, new forensics sites, improvements to existing sites and new system integrations along with significant updates and improvements to the Operations and Maintenance manual.

Sarax carried out system enhancements:
- Increased the hub network room footprint using future proofed spaces from earlier phases of work
- Replacement of servers to accommodate an Operating System update without loss of service
- Introduced an Ordnance Survey mapping system allowing precise placement of CCTV assets
- Enhanced security through the introduction of AES 256 hardware encryption
- Built a disaster recovery site and procedures
- Enhanced the backup capability
- Implemented OSPF for network failover.

Sarax developed and designed innovative proof of concept schemes:
- 3D mapping of stations allowing live tracking of assets
- Pulling and pushing video between mobile devices and the Hub
- Pushing recorded video to custody suites to facilitate early guilty pleas.

As the third-party maintainer was providing a service that was not to the standard expected by the client,

we took over responsibility for maintenance until such time as the client's own resources were ready. Our documentation, along with face-to-face mentoring and onsite support, allowed BTP to seamlessly move to using their own maintenance team as the final enhancement works were completed.

Throughout this complex and multidisciplinary programme of works Sarax was able to keep the force vision at the forefront of thinking and delivered practical and national transformational change for users. Further real cost savings were delivered for BTP, Network Rail and the Train Operators and a safer railway was provided for the travelling public.

TOP 5 BENEFITS
- Delivered to time, budget and quality standards
- Increased national footprint and capability
- Fixing pre-existing Health and Safety issues
- Backup and disaster recovery systems and enhanced security
- Onboarding of the client's own maintenance team.

VALUE ADD
- Maintaining the quality delivery of the client's vision without compromise, delay or additional cost
- Innovatory proof of concepts identifying 'art of the possible solutions' could be practically achieved using the system.