

CASE STUDY 1:

CLIENT: West Yorkshire Passenger Transport Executive (METRO) and Leeds City Council (LCC)

PROJECT TITLE: Upgrade of Leeds Community Safety and METRO CCTV Control, Monitoring and Recording Equipment

Location: West Yorkshire, England

Leeds community safety and METRO CCTV systems were very important and mission-critical applications. Their systems design and CCTV digital solutions were designed to operate 24 hours a day and 365 days a year. The systems were equipped with state of the art technology, fit for purpose, comply with all British and international standards and were designed with future expansion in mind over the entire lifetime of the system.

The primary goal of monitoring, for METRO, is passenger's safety and the system is mainly used to monitor the passengers and detect any related criminal activities within the bus stations and their vicinities.

The principal objective of monitoring, for Leeds Community Safety, is people orientated. The rationale of the Community Safety monitoring and recording CCTV images is to identify anti-social behaviour, criminal activities and public re-assurance.

A secondary objective of monitoring is vehicle descriptions down to vehicle registration index. The new Digital Recording System must be capable of providing recorded images to evidential quality.

The purpose of the project was the establishment of a modern integrated command and control centre to be used by local operators, police force, Urban Traffic management teams and all other council services. The design involved the move into a 'fit for purpose' building with associated transmission solutions (fibre optic, IP and wireless), a series of matrices, viewing monitors, the introduction of digital recording and control equipment with authorised and controlled access through management software; and more importantly the possibility to cost effectively expand the network to deliver new services in the future.

The joint partnership operations were monitored and controlled from a new state of the art CCTV control from within the Middleton Park Complex. The new building included, but not limited to, a new CCTV Control Room, a CCTV review suite, a meeting room and a communication and equipment room.

Over 550 CCTV cameras were monitored from the control room and several police radios were used by the operators to liaise with the police for rapid response. All incidents were recorded and archived by time, date, location, nature of the incident etc. The archived footages can be played back anywhere in the world provided the user has been provided with the right access level and a relevant authorisation to access the required incidents.

ICAS Ltd security, IT and fire consultants were appointed by Leeds City Council (LCC) and METRO to provide a feasibility study for the provision of a new 'Single Site' Control Centre capable of integrating the existing control room functions and personnel into one single state of the art control room with all the modern and necessary facilities. Following submission of our feasibility report, the project was given board approval.

ICAS Ltd commenced the design development phase of the project in July 2010. We adopted a design methodology which created a distributed 'Virtual Matrix' and Digital Recording Hub in a new secure server room to replace the existing control room on each of the old locations. Each Hub integrates to a metropolitan wide area fibre network for connectivity to the new centralized control room.

ICAS Ltd managed and coordinated specialist consultancy from Architectural, Mechanical, Electrical, Ergonomic, Acoustic and Technical Design Consultancy to prepare a detailed tender package which was invited to specialist contractors under Official Journal of the European Union (OJEU) procurement guidelines.

The £1.5 million project to construct the new centre is being managed by ICAS Ltd and is due for completion by April 2012.

Security Services Provided:

- Feasibility
- Control Room Design
- Outline & Detailed Design
- Vendor Qualification
- Tender Package Preparation
- Project Management
- Witness Testing
- Commissioning Plans

CASE STUDY 2:**CLIENT: Newcastle University****Project Title: Security Systems Review****Location: Newcastle upon Tyne**

Newcastle University is a City Centre complex which sprawls over a wide area and all but a small central core are open access from many directions and used by the general public for short-cuts.

The University were concerned at the efficiency and most of all cost-efficiency of there overall security provision and commissioned ICAS Ltd to carry out a detailed audit and produce costed recommendations. All faculties and departments were requested to cooperate fully.

An initial program of auditing, fact-finding and interviews established that a fundamental problem was in the method of funding security measures together with the organisation of manpower.

Security being taken as just another facet of faculty/departmental life then each of those entities had an autonomous budget into which Security was included.

Consequently throughout the entire university there were several separate individual CCTV, Access control and Intruder Alarm systems, with different rental/maintenance contracts from different companies, dramatically different states of serviceability and substantial differences in value for money in terms of protection delivered.

This widespread disparity extended to monitoring and general management of the various systems from reasonable to neglectful.

The University Police and manned security was heavily represented by older staff and the shift patterns, which were inefficient and wasteful, were jealously defended against any suggestion of change. The balance between Police and Security officers and the respective duties allocated to them was not either effective or justified in cost terms.

Finally, there was little or no Security Culture, quite rightly all focus was on academic achievement with most other considerations being regarded as an irritant but statistical reported crime and disorder was an increasing problem and a subsequent questionnaire issued to both the student and academic staff showed that that which went unreported was substantially greater. Most worryingly the fear of crime, especially by females, was considered an inhibiting factor to much activity.

These findings were reported and inter-faculty/departmental discussion was suggested to promulgate the principle that a collective financial and administrative re-organisation would offer a solution to the majority of problems and considerable financial, self financing, advantage

Approval was subsequently given to prepare proposals on that basis and a detailed survey and audit was undertaken, by ICAS Ltd, of all installed equipment as well as liaison with installers and maintenance companies

At the same time all users of security equipment and services were questioned to establish their actual security requirements rather than their presumed needs or those which “Have always been that way”.

A report was subsequently submitted and the following recommendations were proposed:-

- A revision of all CCTV which cut out all the dead-wood, brought everything up to the same standard of performance and serviceability, and which came under one large “economy-of-scale maintenance contract. Centralised monitoring from a central control room was proposed
- An identical revision was proposed for all intruder alarm systems with the added bonus that the centralised monitoring of alarms would be closely integrated with the CCTV and with Police/Security Guard communication
- A further, similar program for the various access control installations with a phased program of progressive compatibility between systems to facilitate more effective control of card issue and macro emergency response
- A complete reorganisation of manpower and shifts developed by Sir Stanley based on his decades of experience. This involved a re-allocation of duties and dealing with shift patterns head-on but in such a way that resulting benefits were available to all concerned
- A PR program was proposed aimed at all students, employees and academic staff that heightened security awareness and made clear how reporting and the correct use of security measures was to the benefit of all

Budgetary costings were included and it was estimated that even with the cost of re-engineering the first full year savings would be in the order of £50,000 to £100,000 thereafter.

There would also be changes in administration and management as well as budgeting but for obvious reasons details of these, together with the actual measures taken, cannot be included herein.

CASE STUDY 3:**CLIENT: Newcastle City Council****PROJECT TITLE: Control room design****Location: North East of England**

Newcastle City Council is a local authority serving the citizens, communities and businesses of Newcastle upon Tyne, the biggest city in the North East of England.

With 78 councillors and around 15,000 employed staff, the council is responsible for delivering services to a diverse range of customers across Newcastle upon Tyne which has a population of over 173,000.

The Council operates out of several locations with their main offices located in and around Newcastle and mainly the main building located within the city centre. This is a Grade 2 listed building and accommodates the Mayor, council officers and chambers, coroner's court, births & death registration together with council officials and associated administration.

Due to security breaches within the building and the fear for the staff well being, the client wanted a fully integrated security system comprising of CCTV, Access Control with interlocking system, Door Entry, Intercom system, staff personal attack and Car parking management comprising of controlled traffic barriers and bollards. The CCTV cameras were to be installed on a grade 2 listed building; therefore, making the system design more complex.

In particular an insurance lead project to develop a high-security Bullion Transfer facility where Armoured vehicles could deposit into the Treasurers Department money collected from car parks, Metro railway ticket machines and other money collecting systems.

ICAS Ltd associate was appointed by Newcastle City Council to undertake to review the security and design the system which will accommodate all the above requirements. ICAS Ltd was challenged to come up with a new system that will reassure the council employees that they are working in a safe and secure environment and their well being is well looked after. A new innovative design was developed and engineered by an ICAS senior security consultant, successfully completed and tested.

Security Services Provided:

- Feasibility
- Control Room Design
- Outline & Detailed Design
- Project Management
- Witness Testing
- Commissioning Plans

CASE STUDY 4:**CLIENT: North West Development Agency****Project Title: THE SPEKE-GARSTON PROJECT****Location: Liverpool - North West of England**

The Speke Garston Development Company (SGDC), which is part of English Partnership, took over the old Liverpool Airport site, after the new airport was put into service, with a mandate to develop it into a prestigious Enterprise park later named “The Estuary Enterprise Park”.

WSP Consulting were appointed to design all the services and as part of a formal service agreement employed an ICAS Ltd associate as sub consultants for all matters related to Security.

The first responsibility was to produce a Security Strategy and working in co-operation with the local Police a strategy for the initial and ultimately developed site area was developed which covered both Inner road and perimeter CCTV, a multi-service fibre network, perimeter fencing, site access control and night-time traffic restrictions, monitoring of tenant sub-systems, connection to adjacent commercial estates, several revenue generating methods, recommendations for manpower and the design and construction of the security gatehouse.

ICAS Ltd were appointed by the Client to carry out a feasibility study and come up with an audit report including recommendations. A consultancy report on the crime in the area of that city and the development of a strategy for countermeasures including CCTV, Site Access Control, Perimeter Surveillance and Landscaping, Road Layout and Traffic Management, integration with the systems of tenant businesses and the design of a controlling Gatehouse and its staffing was produced.

These having been presented and accepted in full for implementation the next phase was to design and write the specification for the comprehensive and extendable CCTV system, assist in the issue and evaluation of the tenders, supervise the contract and undertake the hand-over

Security Services Provided:

- Feasibility
- Recommendations
- System Design