Paul Brokkehurst’s a man with a mission. He aims to fundamentally change the way council people co-operate, to deliver better and more cost effective public services. Encouraging collaboration and eliminating duplication are vital elements. And business process innovation is a critical success factor.

Managed by BT Global Services, the UniCORN high-speed, PSN-certified Ethernet infrastructure shared by Surrey and Berkshire was designed for precisely that purpose. As a foundation for fundamentally re-engineering the way things are done, it puts powerful transformational tools straight into Paul’s hands.

The intent was to create a partnership of public and voluntary sector organisations across Surrey and Berkshire to aggregate demand and purchase networking services collaboratively. UniCORN lays the foundations for ever-closer public service integration and achieves scale benefits that each participant couldn’t achieve alone.”

Paul Brokkehurst, Chief Information Officer, Surrey County Council
Uniting agencies to realise a joint vision

Surrey County Council and the 11 districts and boroughs within Surrey, together with the unitary authorities of West Berkshire, Windsor and Maidenhead, Bracknell Forest, Reading and Slough have a joint vision for the future of public services. They plan to unite over 20 separate agencies (including emergency services, healthcare, and education) across 1,800 sites, replacing more than 40 separate networks with a high-speed Ethernet infrastructure known as UniCORN (unified communities over regional networks).

“We needed to find ways to deploy our people more flexibly, and unfailingly put in front of them the information they need to do their jobs,” says Steve Wragge-Morley, head of business systems at Guildford Borough Council.

UniCORN had to be certified to the government’s Public Services Network (PSN) standards, its Impact Level 2 security classification and GCF (the government secure intranet convergence framework). It also had to be able to interconnect with JANET, the education network, and GCN, the government conveyancing network.

A single, managed high-speed network for all

After a procurement process under stringent EU rules, BT Global Services was chosen to provide the UniCORN infrastructure. “BT put forward the most innovative solution,” says Paul Brocklehurst, chief information officer at Surrey County Council. “Its infrastructure-as-a-service offer meant we could avoid major capital investment and conserve cash.”

Under the contract a core BT Ethernet Connect platform running at 1Gbps sits at the heart of UniCORN. BT acts as a systems integrator for access connectivity from a choice of best-value service providers (including its own next-generation access technology).

Rolled out in an aggressive 12 months, UniCORN will reach two million citizens. As well as a wide area network (WAN), other UniCORN services include local area networks (LANs), internet access for all districts and boroughs via JANET, a PSN gateway, a hosted Cisco IP voice platform and BT Cloud Contact.

Managed and integrated by BT, PSN-certified Ethernet network enables private clouds for joined-up public services at less cost

Cost reductions with collaborative PSN connectivity

One of the first tasks was to replace the Surrey legacy point-to-point WAN with converged BT Ethernet Connect any-to-any connectivity linking 220 sites. With that vital core established, participating organisations started joining UniCORN. Each is able to choose network features like bandwidth and access speeds from a managed services catalogue to suit their needs and budgets.

Stuart Mitchenall, Head of Business Transformation at Tandridge District Council, says: “The UniCORN implementation of the shared PSN connectivity for Surrey authorities was conducted in a highly professional manner to a short timetable. The ability of the UniCORN team to pull together resources in a cost effective way has impressed us, and we expect to see greater exploitation of service-based solutions in all connected authorities.” The PSN gateway enables local authorities to reduce cost and collaborate via a UniCORN connection.

As local authorities sign-up to the UniCORN partnership they are assigned a logically-separate security domain called an eLAN. Unfettered access to all connections in the same eLAN is automatically allowed, while access to other security domains is through protocols (with bilateral agreement). It’s possible for a participant to have more than one eLAN. Each eLAN is secured to government standards up to RESTRICTED classification.

“We estimate that new UniCORN participants will each save around 20 per cent as soon as they sign up. Beyond that they’ll see the powerful benefits of things like more collaborative working and elimination of duplication in the delivery of public services.”

Paul Brocklehurst, Chief Information Officer, Surrey County Council
Hosted voice and contact centre platform

The cloud-based IP voice system uses the resilient BT One Cloud Cisco platform which is hosted at a BT data centre. At present serving thousands of users in 100 council offices across Surrey, it’s providing advanced features like multi-party audio conferencing and follow-me phone numbers, while the council is avoiding call charges by carrying its internal voice traffic over the UniCORN infrastructure. Meanwhile, SIP trunking will offer savings on phone bills and external phone number flexibility.

BT Cloud Contact is a hosted, web-based contact centre service requiring no additional onsite hardware, capable of flexing up and down depending on demand. Surrey County Council acts as the global tenant with the aim of supporting all Surrey districts and boroughs as autonomous queues on the platform. That gives the ability to optimise resources and overflow calls at busy times, and save significant set-up costs, without the need for numerous separate call centres.

Service management with strict SLAs

The BT Service Management wrap includes a dedicated 20-person team of technical designers, solutions architects, systems integrators and project managers located in Kingston. Rigorous traffic and event monitoring from a network operations centre, also in Kingston, ensures core capacity and security stays ahead of ever-rising demand. Meanwhile, a Thurso-based help desk manned from 08:00 to 18:00 offers fault resolution against stringent service level agreements (SLAs) like four-hour onsite response for LAN support. Failure to meet those SLAs would result in financial penalties for BT.

New UniCORN participants have a direct relationship with BT as the principal service provider, while Surrey County Council assures strong overall contract management. Most UniCORN products are provided on a flexible per-user basis, with contract duration determined by the participant within an overarching framework.

New services and features are ordered via a BT web portal, which also enables users to track progress on trouble tickets. Meanwhile a BT account management team advises on more complex orders, like extending the BT Cloud Contact platform to new sites.

Schools learn to double network power for two-thirds savings

One of the earliest UniCORN adopters was Central Surrey Health (CSH), which provides community health services for adults, children and their families in homes, schools, clinics and community hospitals in mid-Surrey.

Mike Davis, director of information management and technology at CSH Surrey, says: “With UniCORN we not only saw a 25 per cent cost saving compared to our previous network, but also most problems are fixed before we even know about them.”

Some 205 Surrey schools teaching a total of 40,000 pupils are now using the UniCORN high-speed Ethernet network. The schools are also provided with cloud-based web content filtering from BT partner, Smoothwall. Providing protection against all unsuitable site categories, this has now been extended to include Surrey corporate filtering requirements. The Smoothwall service is also managed through the UniCORN framework. Its functionality and filtering policies can incorporate public Wi-Fi access at locations such as youth centres and adult learning centres too.

Paul Brocklehurst says: “The schools that have joined so far claim they’ve doubled their network power for a third of the cost, compared to their previous arrangements.” With educational establishments working ever-closer with social services, the NHS and the police, UniCORN promises to provide the platform to enable the necessary secure interaction.

New partners coming on board for best value advantages

As well as the two examples described above, some 16 other agencies have signed accession and partnership agreements and are at various stages of on-boarding UniCORN services, among them the Royal Berkshire Fire Service.

New partners gain newfound flexibility and ease of procurement, knowing they are buying best value through the integrator model. For instance, they can add products and services through the UniCORN order management team in a timely fashion without the need for lengthy and resource-hungry procurement.

“In every town we have many different functions, from council tax to rubbish collection, each with its own systems and processes. With UniCORN we can give our customers more joined-up services, while eliminating costly duplication.”

Steve Wragge-Morley, Head of Business Systems, Guildford Borough Council
Case study

UniCORN

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Steve Wragge-Morley

Against the previous Surrey and Berkshire network arrangements, the innovative UniCORN infrastructure-as-a-service model gives a saving of more than £5 million over the seven-year contract. For example, the BT Cloud Contact service is offered on a pay-as-you-grow basis.

Local authorities adjacent to Surrey and Berkshire are taking notice. Encouraged by the existence of a high-speed Ethernet network right on their doorsteps, they’re considering the clear advantages of opting-in to UniCORN to get best value straightaway.

Paul Brocklehurst sums up: “We estimate that new participants will each save around 20 per cent as soon as they sign up. Beyond that they’ll see the powerful benefits of things like more collaborative working and elimination of duplication in the delivery of public services.”

Bob Thomas, Strategic ICT Manager, Mole Valley District Council

Core services

- BT Ethernet Connect
- BT One Cloud Cisco hosted voice services
- BT One Voice SIP trunking
- BT Connect broadband services
- BT Cloud Contact
- BT Service Management
- BT Advise professional services
- BT Assure security services