



## Great things are possible when industry leaders innovate

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### Co-operation between BT and Balfour Beatty transforms site communications using BT Enterprise Connect

#### Challenge

Balfour Beatty is a world-class infrastructure group operating in construction services, professional services, support services, and infrastructure investments. The company works in partnership with customers – principally in the UK, the US, South-East Asia, and the Middle East – who value the highest levels of quality, safety, and technical expertise. In pursuit of that ideal, Balfour Beatty employs more than 50,000 people around the world.

Key infrastructure markets for Balfour Beatty include transportation (roads, rail and airports); social infrastructure (education, specialist healthcare, and various types of accommodation); utilities (water, gas, and power transmission and generation) and commercial (offices, leisure, and retail). The company delivers services essential to the development, creation, and care of these infrastructure assets including investment, project design, financing and management, engineering and construction, and facilities management services.

In 2007, Balfour Beatty launched Project Janus to review its Master Services agreement with BT and mitigate potential risks to its supply chain. The project was one of the first improvement initiatives driven from the then new Balfour Beatty CIO, Darryn Warner and was led by David Neve (Mansell Director of IT) on behalf of Balfour Beatty's UK Operating Companies.

Project Janus had six key objectives: value for money, certainty of supply, proactive supplier management, shared services, overhead minimisation, and return on investment.

Both Balfour Beatty and BT engaged in a process of reviewing the service delivery in line with these key objectives, with an aim to deliver benefits for both parties. As part of this process BT was asked to review the solutions it provided to Balfour Beatty, and make recommendations for improved service and delivery.

Darryn Warner recalls “One of the first major challenges I faced was the pushback from our Operating Companies on the length of time it took to get communications services up and running on our job sites. There had to be a better way.”

Indeed times have changed from the days when the sole telecommunications service at a construction site was a temporary telephone in the foreman's hut. Today, leading organisations like Balfour Beatty demand that their sites have fast broadband connections for access to corporate applications such as ERP and CAD/CAM, as well as the use of email and other collaborative tools such as shared workspaces.

BT has historically used standard private network products to provide IP-based broadband services required with a full service wrap. However, the ultra-short lead times demanded by such unique construction industry needs were not always a practical proposition for standard BT network products as the lead times involved for delivery was usually far in excess of that required. Furthermore, their flexibility once installed was another issue.

Bob Dootson, Product Manager, BT Enterprise Broadband portfolio, explains: “It occurred to us that problems encountered on construction sites were not unlike those faced by mobile workers, an area in which we have world leading experience. It was simply a matter of applying established thinking in a new way.”

#### Solution

BT Enterprise Connect presented itself as an ideal solution. It is designed to support organisations that are taking a strategic approach to broadband home working, or remote site broadband networking, and want to centrally manage a large number of broadband connections.

“Providing a combination of flexible broadband network connectivity and strong service management capabilities, BT Enterprise Connect was originally intended to assure the productivity of home-based employees,” continues Bob Dootson. “Our eureka moment was to realise that it is just as powerful as a solution for people working in temporary offices, virtually anywhere.”

The idea immediately appealed to Balfour Beatty, and the solution was quickly tested in two of its operating companies: Balfour Beatty Engineering Services and Mansell. David Neve, IT Director at Mansell, says: “Spotting the opportunity offered by BT Enterprise Connect was the single biggest success to come from Project Janus. It scored against all six of the objectives we set.” The pilot installations identified two teething troubles, however.

## Case study

# Balfour Beatty

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The first concerned contention ratio (the maximum number of other parties sharing the connection infrastructure) and its possible effect upon data throughput. BT Enterprise Connect is normally provided using an ADSL broadband connection with a 50:1 contention ratio, but Balfour Beatty wanted the reassurance of a 20:1 contention ratio.

The second was due to the fact that the service was developed to support one home-based individual, but was now being asked to cope with 10 end users and their terminal devices. Balfour Beatty found itself unable to interact with such terminal devices at each site, for example to download software upgrades and to use networked printers. This was because, with BT Enterprise Connect, a BT server undertakes IP address management (IPAM). That saves users buying and managing their own IPAM servers. However, in the case of Balfour Beatty, it meant the IT team was unable to talk to terminal devices using framed routes (a networking technique that needs to know fixed IP addresses).

Bob Dootson recalls: “When I was alerted to these issues, I worked directly with the account team and Balfour Beatty to come up with solutions.” To overcome the contention problem a new connectivity package called BT Enterprise Connect Professional was specified and launched in 10 days flat. Bob adds: “The framed routes workaround was delivered very shortly afterwards.” Initially using the BT Enterprise Connect service desk to relay IP address details, this was later delivered as a self-managed option.

David Neve sums up the experience from the Balfour Beatty viewpoint: “It was utterly refreshing dealing with the BT Enterprise Broadband product team, it was a very collaborative relationship. Our requests coincided with planned evolution of the portfolio and were willingly embraced. The product team made the changes exceedingly quickly, unlike the six-month lead time that seems to be the IT industry standard.”

## Value

The results of the two pilot projects were shared with Balfour Beatty’s IT Directors across its operating companies. David Neve says: “We took a warts and all approach, and set expectations as to where and when it would be an appropriate solution. Commercial arrangements were agreed and we set out a migration path from existing services where appropriate.” The BT Enterprise Connect service provided to Balfour Beatty under that contract is detailed in the text box.

There is no fixed contract term for end users, which is highly valued by Balfour Beatty. “The financial flexibility of the BT Enterprise Connect service is a huge benefit,” says David Neve. “There is no minimum cancellation period, which you invariably get with other solutions, so the temporary nature of sites typical in the construction industry is not a problem and does not incur penalty charges. That is saving us substantial sums.” Traditionally sites would connect into an operating company head office before connecting into the core network. This increased core network transit costs and created a single point of failure at the head office. The BT Enterprise Connect service connects directly into the core and provides access to any permitted resource, simplifying the design and reducing disaster recovery requirements.

Delivery in the cloud, using the self-service online Workplace portal, means that BT provides single or bulk broadband orders in the fastest and most reliable way possible. “We don’t have to worry about how it all works,” says David Neve, “all we do is buy the service at a fixed charge and we connect the sites. Everything else is invisible – just as it should be. I now have very happy site managers because we can get broadband connectivity out to their sites quickly and effectively.”

A Balfour Beatty site agent provided that vital construction site perspective: “The earlier that we can get service installed, the quicker we can get the site up to full operational status. The BT Enterprise Connect solution has literally transformed construction site communications. It’s much more reliable and it gives us the bandwidth we need to do the job properly.”

BT Enterprise Connect uses a helpdesk-to-helpdesk service model enabling direct integration with the Balfour Beatty in-house IT team. This allows a single point of contact for end users, while the online diagnostic wizard allows onsite broadband lines to be remotely tested. Furthermore, there is an agreed escalation path straight to those who can deal with any problems. With telephone line provision always subject to survey and many Balfour Beatty temporary sites in remote and hard-to-access locations, this joined-up service approach reaps big dividends.

David Neve brings the value of that to life: “With our previous solution, we used to get at least one escalation a month to deal with, which was inevitably very time consuming. Since we launched BT Enterprise Connect in Mansell, I don’t think I’ve had a single escalation. That’s eliminated chasing service delivery or outages, for example, greatly reducing our overheads.”

The outcome of the BT Enterprise Connect project for Balfour Beatty shows the outstanding results that can be achieved when two industry leaders set out to innovate together. David Neve concludes: “At the end of the day we didn’t buy technology, we bought a service that provides exactly what we need in the field. As a result we have seen a step change in simplifying and speeding up how we deliver comprehensive site communications, whilst improving value for money. We are now in discussion with BT as to how we can take further advantage of the BT Enterprise Broadband portfolio.”

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## About the BT Enterprise Connect service for Balfour Beatty

Suitable for organisations that operate across multiple temporary or semi-permanent UK sites, BT Enterprise Connect puts comprehensive communications facilities in their hands as fast as possible anywhere in the country. Among others, such organisations may include construction companies, civil engineers, the military, emergency services, and exploration and extraction of natural resources.

BT Enterprise Connect offers full broadband-based network connectivity at speeds up to 20Mbps wherever it’s required, together with a comprehensive service management wrap. This ensures that customers can concentrate on what they need to do without worrying about the technology. Key features of the service include:

- Direct VPN connection, avoiding non-secure internet access and taking advantage of firewalls and other security provisions built into corporate systems
- Helpdesk-to-helpdesk service model for integration with existing IT teams to assure a single point of problem resolution
- Online diagnostic wizard to allow IT teams to remotely test and correctly categorise faults at first touch
- Self-service online Workplace portal integrated with BT ordering systems to provide the fastest and most reliable broadband provisioning possible
- No contract term commitment on individual end user accounts; together with a single, fully itemised bill for central control and simple cost allocation

For Balfour Beatty the service has been consolidated under a single master contract, with one BT Workplace portal per operating company. This means that the company enjoys a single management view and Group-wide discount benefits, together with user level flexibility. BT has provided online training on the use of the Workplace portal, so that Balfour Beatty operating companies can order and manage their own broadband lines. In addition BT provides Balfour Beatty with an upgraded help desk service designed to take account of different aspects of its needs.

The optional VIP Care package taken by Balfour Beatty provides:

- Clear flagging of priority orders to customer IT teams as well as the BT customer service centre, through the Workplace portal
- Priority handling of new trouble tickets through the BT customer service centre for the fastest problem resolution
- Inclusion of the BT IP Stream Enhanced Care service to ensure improved clear times through the BT Wholesale arm

At present, Balfour Beatty is providing BT Enterprise Connect service at around 629 sites across the UK through 10 Workplace portals. At each site some eight to 10 people use the service.



### Offices worldwide

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