As a major equipment supplier to BT, ADVA Optical Networking has spent many years perfecting its supply chain processes.

But when BT launched the Better Future Supplier Forum to enhance sustainability in its global supply chain, it was clear another level of innovation was needed. What the company came up with was stunning in its simplicity and staggering in its effect.

With a predicted impact of millions of pounds in cost savings and hundreds of tonnes of carbon avoided, the ADVA “End-to-End Supply and Re-Use” project is a worthy winner of the BT Game Changing Challenge 2014.

“Inspired by our learning from participating in BT’s Better Future Supplier Forum, and the upcoming Game Changing Challenge competition, we launched an initiative to refine our overall end-to-end logistics process for BT. As a result we expect the project to return three times its cost in terms of benefits to BT.”

Michael Huthart, Operations Director, ADVA Optical Networking
BT’s sustainable design and innovation framework spurs ADVA Optical Networking to invent radical supply chain process

Products moving around without purpose

Just because something’s near perfect, doesn’t mean it can’t get even better. That pretty much sums up the mindset of ADVA Optical Networking, a major BT network equipment supplier, when it came to tackling supply chain innovation as part of a Better Future Supplier Forum (BFSF) Game Changing Challenge.

The company, which ships equipment to BT for about 42,000 Ethernet circuits per year, was already hitting its delivery targets pretty much on the nose, with almost 99 per cent compliance. But that didn’t mean there wasn’t room for improvement in the end-to-end process.

The traditional model was to send equipment to a BT warehouse in advance of it being required for a customer. Inevitably orders would sometimes be cancelled or changed after equipment had been dispatched. In fact, annually up to eight per cent of orders were cancelled while equipment was on the way – and a further five per cent were suspended before installation – a total of 5,460 items.

Adding to the logistics challenge were 2,400 returns a year. All this equipment was transported to BT warehouses before being returned to ADVA. Clearly, a lot of products were being moved around without ever benefitting a customer. That was costing money and driving up carbon emissions.

BFSF Game Changing Challenge gives impetus to innovation

The logistics challenges didn’t end there. When installation was due, BT engineers had to first travel to a BT depot to collect the equipment. That added as much as 26 miles of travel and an extra hour for each installation. In theory none of this was the supplier’s problem. After all, it was only tasked with delivering equipment on time, not worrying what happened afterwards.

Nevertheless, ADVA felt it could improve things for all concerned. Michael Huthart, operations director, says: “BT asked us to step up to the BFSF Game Changing Challenge by inventing a way to get equipment closer to its engineers.” The company was sure it could succeed. “We’d always thought we could do more in terms of the end-to-end process,” adds Michael, “and this gave us the impetus we needed. We immediately got to work with the BT Openreach Business Connections team who really enabled an unprecedented collaboration, because both parties finally saw where it could lead.”

If not to a BT depot, ADVA had to be able to deliver its products somewhere. It examined the options. Customer sites were often under construction, so they couldn’t always be used as drop-off points. The use of post offices and other ideas were investigated. “We wanted to get the product as close to the point of use as possible; preferably within a mile of where the engineer needed it,” explains Michael.

What was needed was a secure holding point where equipment could be delivered for installation. The answer came following a debate with one of ADVA’s major logistics partners, United Parcel Service (UPS). It pointed out that it had a service called Access Point™, which allowed packages to be dropped at locations like local shops. Predominantly a business-to-consumer service, it was clear UPS Access Point™ could be adapted for business-to-business use.

“We got involved in analysing the UPS approach and it fitted hand-in-glove with what we were trying to do,” says Michael Huthart.

Benefits throughout the equipment lifecycle

Implementation of the so-called “End-to-End Supply and Re-Use” project, which is taking place during 2015 and 2016, allows products to be delivered to the UPS Access Point™ closest to site the day before installation.

This brings benefits to both BT, its customers, and ADVA. With shipment much closer to the install date, cancelled orders are far less of an issue, while stock levels are optimised because equipment is no longer held in BT depots. Over time this will eliminate the need for 3,000 stock items, valued at about £1.8 million, which are currently held at the BT central depot at Magna Park.

Product transport time and cost is reduced and travel time for BT engineers to collect equipment is all but eliminated. Estimates suggest the project can help cut 750 metric tonnes of carbon a year from the supply chain, while reducing BT engineer round-trip travel by an average of eight miles and 42 minutes per installation. This will help boost installations per day by around 30 per cent.

The concept could also be adapted to support returns, end-of-life replacements and all other stages of the equipment lifecycle. For example, unused equipment can be returned to ADVA via UPS Access Point™ and BT can be given a credit for it. Equipment purchased for large, temporary projects like sporting events can be more easily returned and reconditioned for use elsewhere. ADVA also believes the level of equipment that can be repaired or refurbished will rise from 0.36 per cent to four per cent, which equates to around 1,700 units per year.

Cash flow will improve, with lead-to-cash periods dropping from 30 to 28 days, while BT inventory will be cut by 50 per cent in year 1 and 75 per cent in year 2. And because cancelled equipment can be returned more easily, BT gets credits on products previously ‘lost’ in the system.

Finally, customers will see shorter lead times and fewer delivery problems. They also get greater flexibility, because items can be held at the UPS Access Point™ for up to 10 days while site construction is finalised, for example.

“...This project is a great example of what can be achieved by optimising the end-to-end process.”

Joe Phelan, Vice President of Operations – Trade and Logistics, ADVA Optical Networking
Winning ways and best practice sharing

It’s believed the project can return three times its cost in terms of benefits to BT, and there could be even greater benefits since the system need not be limited to ADVA products alone.

Joe Phelan, operations vice president for trade and logistics at ADVA, says: “The BT process we’ve developed is unique because of the capability for item return. We’re a total solutions provider. Our goal is to drive inventory out of the warehouse and offer lower overheads. This project is a great example of what can be achieved by optimising the end-to-end process.”

ADVA Optical Networking won the BFSF Game Changing Challenge 2014. Mark Shackleton, chief technologist, energy and carbon, at BT Technology Service and Operations, says: “Of all the applicants, ADVA presented by far the most compelling and thought-through case. The benefits for BT and its customers are very impressive.”

Highlights at a glance

- 300% return on investment
- Reduces BT engineer travel by an average of eight miles and 42 minutes per installation
- Boosts installations per day by around 30%
- BT inventory cut by 50% in year 1 and 75% in year 2
- Eliminates the need for 3,000 stock items, valued at about £1.8 million
- Lead-to-cash period drops from 30 to 28 days
- Increases rate of repaired or refurbished equipment from 0.36% to 4%, equating to around 1,700 units per year
- Helps cut 750 metric tonnes of carbon a year from the supply chain

About the BT Better Future Supplier Forum

For BT, the Better Future Supplier Forum (BFSF) is an essential ingredient in a long-term strategy to lead in sustainability by encouraging and helping suppliers to do the same. It’s all part of the company’s Net Good vision to help society live within the constraints of our planet’s resources through its people and products. The associated goal, called the 3:1 Net Good target, is to help customers reduce their carbon emissions by at least three times the end-to-end carbon impact of BT’s own business by 2020.

BT believes that a product or service can only be truly sustainable if the supply chain is equally sustainable from end-to-end. So the BFSF gives suppliers an environment in which they can collaborate with BT to identify, share, and implement sustainability best practice at every point in a product’s lifecycle. That runs from the sourcing of raw materials through the manufacturing process, to delivery of the finished product to the end customer, and maximum recyclability at end of life.