

Ref: New 1 gigabyte fibre network for the Borough

Background

The Councils' contract for its 'core backbone', the network which carries both voice and data traffic linking all council premises, schools and telephony exchanges in the Borough in a resilient figure of eight configuration, ended in 2015.

The 120 sites linked through this network have derived benefits from this interconnectivity for a number of years and its annual cost of £324k has been shared 50/50 between the council and connected schools.

More recently as demand for online services has increased dramatically, the limitations of the bandwidth available through this contract have become apparent and problematic. This has been a particular issue for secondary schools which typically have 100 MB connections and primary schools which typically have a connection of 4 to 12 MB, and need greater bandwidth. 1 GB is circa 1,000 MB, so the Borough will benefit from a quantum leap in capacity.

Across 2015/16 Officers in the Council's ICT team working with colleagues in Procurement explored a number of options.

This activity was set against the back drop of

- the clearly articulated aims and priorities of the Council
- the growing demand from Government for services provided by public bodies to be 'digital by default'
- the need for the Council to continue to deliver service efficiencies and savings
- the need to secure and grow the business base in Southend

Following extensive soft market testing and an OJEU tender exercise, ultimately the solution chosen was to engage City Fibre Infrastructure Holdings Plc to dig and deploy a new Dark Fibre network across the Borough providing high speed broadband (speeds of up to 1 GB) in the first instance to a minimum of 108 council and school sites.

City Fibre is a direct infrastructure competitor with BT Open Reach. The management of the service provision over this new infrastructure will move away from Updata and transfer into the Council's ICT team.

Within the contract, City Fibre has secured a 'minimum site guarantee' from the Council and its schools for a 10 year period, which means that the cost of the 50 km dark fibre deployment across the Borough will be 100% borne by City Fibre. In this relationship, the Council and the participating schools are considered the 'anchor tenant' from which City Fibre will begin to derive a revenue stream from network usage with immediate effect as each of the 108 sites becomes connected.

Ultimately, City Fibre's interest in the Borough is four-fold; it will seek opportunities with:

- The Public Sector (Councils, Schools and Hospitals)
- Small, medium and large businesses
- Mobile Network Operators by providing connectivity to masts
- Residents

Consequently, this approach also represents a solution for the borough's businesses and, in the longer term, residents as opposed to simply being a network for the Council.

For the moment however attention will be focused on Council premises and schools.

Benefits to the Council include

- meeting the immediate needs of schools and the Council
- immediate benefits for business which seek high speed broadband
- presents a positive image of the town as being 'open for business'
- underpinning the longer term SMART City aspirations for the Borough

Current Position

The contract for deployment of the 50 km network was signed in March 2016 and, for the past three months, officers of the Borough Council have been working alongside representatives of City Fibre in planning both the route and the timing of the 50 km dig.

The solution provides for fibre network connectivity directly to premises, by-passing both BT exchanges and roadside green cabinets. Points of Presence (POPS) connecting end sites to the internet will be provided in Council premises.

The digging of the trench to host the ducting to carry the fibre began on school premises over the summer holiday but will now continue on the public highway from October 2016. Wherever possible, City Fibre will try and host the fibre connection in existing BT ducting to minimise the impact of fresh trenching and its associated disruption on the public highway. It is envisaged that the 50km network will be in place by March 2017.

The City Fibre Team delivering the solution is based in 'The Hive', where the operational team will shortly be joined by marketing staff to promote the offering to businesses through 'Gig Up' campaigns.