10 November 2020		ITEM: 9
Corporate Overview and Scrutiny Committee		
Connectivity and Wi-Fi Improvements		
Wards and communities affected:	Key Decision: Non-Key	
Report of: Sean Clark, Corporate Director of Finance, Governance and Property		
Accountable Assistant Director: Andy Best, Strategic Lead IT		
Accountable Director: Sean Clark, Corporate Director of Finance, Governance and Property		
This report is Public		

Executive Summary

This report is to address questions on digital connectivity that came out of the June 2020 Corporate Overview and Scrutiny Committee.

As part of the Association of South Essex Local Authorities' (ASELA) evolving digital vision and strategy work is actively progressing on the implementation of improved digital infrastructure across the region with a clear focus to drive up full fibre rollout from the current level in Thurrock of 8% to near on 100%, prior to the government target of 2025. This is being addressed from a number of angles that are set out within the report.

- 1. Recommendations:
- 1.1 That the committee comments on and notes the report.
- 2. Introduction and Background

Public Sector Funding:

2.1 The Government Local Full Fibre Network (LFFN) programme is providing funding to upgrade public sector sites to Gigabit capable infrastructure. In ASELA this is a £4.4 million investment to provide full fibre connectivity to circa 130 public sector sites including schools, council care homes, libraries and fire stations - circa 80 of these sites are within Thurrock. The sites cover: Basildon, Brentwood, Castlepoint, Rochford and Thurrock. They do not include Southend as Full fibre has already been rolled out there in partnership with City Fibre. The fibre rollout will deliver over 130Km of fibre spine across the region (circa 60km of this within Thurrock), which is expected to encourage commercial investment to provide access to Gigabit capable infrastructure for other business and residential properties in these areas.

- 2.2 In addition to the above, ASELA, have just received approval from the South East Local Economic Partnership (SELEP) for an additional £2.5 million from the MHCLG "Getting Building" fund to expand the current LFFN deployment by circa 120 sites. This funding will enable ASELA to both extend coverage to public sites (GP Surgeries/Care Homes) primarily in rural areas, as well as stimulate further investment from the private sector to accelerate the deployment of Gigabit capable broadband to the surrounding communities.
- 2.3 ASELA are working increasingly closely with the Superfast Essex programme to map coverage and align the public sector investment to ensure it is correctly focussed and best value for money is achieved.
- 2.4 A new government initiative the "Outside in" Programme is focussed on driving improved broadband infrastructure to the most "hard to reach" locations of which there are some within ASELA that could meet this criteria (primarily Rochford and Brentwood). This is primarily an initiative driven and managed by Central Government that defines areas to address. However with ASELA's raised profile and close engagement with the Department for Digital, Culture, Media and Sport (DCMS) it is believed that ASELA will have a significant influence on this programme especially as we could provide DCMS with mapping data and from this evidence make a case for investment in certain areas.
- 2.5 Within Thurrock support is increasingly being provided to community forums who are striving to improve broadband connectivity in their area. In some cases this has involved direct grants and / or advice and guidance. This is proving increasingly beneficial with the engagement that ASELA has built up with the private sector providers.
- 2.6 A key part of the LFFN Programme is to drive forward "Barrier Busting" and "Market Engagement" workstreams to leverage private sector investment in digital infrastructure off the back of the public sector investment. Now that the "Rollout" has started these workstreams will be ramped up. Business parks and residential developments have been mapped, with interconnection points to the fibre spines aligned to this mapping. GP Surgeries and Care Homes have also been mapped and with Government focus on improving connectivity these will be prioritised. This has led to an increasing engagement with the NHS (Local Trust and CCG's) and Fire and Rescue across the region.

Engagement with Commercial Connectivity Providers

2.7 The majority of the enhanced digital fibre infrastructure is expected to be provided via commercially funded investment programmes from the likes of Openreach, City Fibre Virgin Media and other smaller providers known as Alternative Network Providers (Alnets). ASELA are already actively involved in engaging with the market and promoting ASELA as a place that encourages investment through partnership and the removing of barriers to investment. The LFFN programme has significantly raised ASELA's profile within government and has directly enabled and led to greater enagement and interest from private sector investment.

- 2.8 Openreach has already made a series of announcements regarding their investment to a Fibre to the Premises solution including Brentwood, Billericay and Rochford. In September 2020 Openreach announced full fibre investments for Thurrock in Grays and Purfleet which should be completed within the next 18 months. This should mean 26,000 residential and business addresses should have access to a full fibre capability. It is worth pointing out that the level of this announced investment is significantly greater across ASELA than the wider South East region.
- 2.9 Virgin Media intends upgrading large parts of its existing infrastructure to become Gigabit capable.
- 2.10 Hyperoptic have continued to make investments in social housing within Thurrock.

Wi-Fi

- 2.11 The market is changing in respect of Public Wi-Fi as increasingly the requirement and business model for open space public Wi-Fi is disappearing. That is because of the much wider 4G coverage availability and the fact that a large and increasing percentage of the population have smart phones with inclusive 4G data packages. Hence the value of duplicating this with open space public Wi-Fi will increasingly be negligible. It is a different situation in respect of internal Wi-Fi where there is still a high demand for this due to less "good" 4G coverage and more prolonged use of data by users. In these situations users expect higher performance / throughput and may be concerned about going outside of their mobile data bundle limits. Typically internal Wi-Fi is provided by the organisation working from that site and will advertise this as a selling point to customers. However viability of charging for the Wi-Fi is rapidly disappearing, indeed most if not all such Wi-Fi is now offered as a free and increasingly expected service by customers.
- 2.12 Essentially the requirement is for "mobile Data" to be available universally whether it be 4G / 5G or Wi-Fi. The common element for "good mobile data" coverage is full fibre connectivity whether it be as the fibre backhaul to the mobile operators or full fibre connection into sites that are providing Wi-Fi to users.
- 2.13 As part of the LFFN Programme "Market Engagement" workstream relationships are being built with the mobile operators to understand and influence their rollout plans around 4G / 5G and to provide input to them on the additional capability of backhaul fibre that will be rolled out as a result of the public sector investments.
- 2.14 "Market Engagement" will also involve building those relationships with the connectivity providers to leverage the LFFN fibre making it a cost effective investment for full fibre rollout to the local area and those sites that want to offer "good Wi-Fi" coverage or enable improved mobile coverage to their customers.

Timescales

- 2.15 To provide a best view of timescales:
 - The current LFFN programme is targeted to complete rollout by May 2021;
 - Additional sites from additional funding to be rolled out by March 2022;
 - Openreach announced fibre deployments to rollout within the next 18 months;
 - Ongoing improvements and upgrades taking place to 4G coverage;
 - 5G coverage to be focused on urban areas such as Grays, Basildon etc. Rural areas unlikely to be fully addressed with 5G within the next 2 to 3 years. Rural areas however will benefit from 4G upgrades (which will generally meet needs);
 - Engagement with other connectivity providers to start practical rollout to homes / businesses off the back of LFFN by the summer of next year;
 - Superfast Essex rollout complete by Dec 2021; and
 - Outside In for ASELA benefit next 18 months through to 2025.

3 Issues, Options and Analysis of Options

- 3.1 There are no options as this report is for information.
- 4 Reasons for Recommendation
- 4.1 The committee asked for an update on Connectivity and Wi-Fi Improvements.
- 5 Consultation (including Overview and Scrutiny, if applicable)
- 5.1 There has been no consultation as this is a for information report.
- 6 Impact on corporate policies, priorities, performance and community impact
- 6.1 Connectivity contributes towards the council's digital ambitions.
- 7 Implications

7.1 Financial

Implications verified by: Sean Clark

Corporate Director of Finance, Governance and Property

There are no financial implications as a result of this report.

7.2 Legal

Implications verified by: lan Hunt

Assistant Director Law & Governance, and Monitoring Officer

There are no specific legal implications set out in the report.

7.3 Diversity and Equality

Implications verified by: Natalie Smith

Community Development and Equalities

Manager

There are no diversity implications as a result of this report.

7.4 Other implications (where significant – i.e. Staff, Health, Sustainability, Crime and Disorder)

Not applicable.

7.5 **Background papers used in preparing the report** (including their location on the Council's website or identification whether any are exempt or protected by copyright):

None

8 Appendices to the report

None

Report Author:

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Corporate Director of Finance, Governance and Property