Norfolk County Council

Digital Innovation and Efficiency Committee

Date: **Wednesday, 13 March 2019**

Time: **10:00**

Venue: **Edwards Room, County Hall, Martineau Lane, Norwich, Norfolk, NR1 2DH**

Persons attending the meeting are requested to turn off mobile phones.

Membership

Mr T FitzPatrick - Chairman
Mr E Colman
Mr S Eyre
Mr J Fisher
Dr C Jones
Mr G Middleton
Mr D Rowntree
Mt T Smith
Dr M Strong

For further details and general enquiries about this Agenda please contact the Committee Officer:

Tim Shaw on 01603 222948 or email committees@norfolk.gov.uk

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A g e n d a

1. To receive apologies and details of any substitute members attending

2. Dig IE Minutes of 23 January 2019 **Page 5**

3. Declarations of Interest

If you have a **Disclosable Pecuniary Interest** in a matter to be considered at the meeting and that interest is on your Register of Interests you must not speak or vote on the matter.

If you have a **Disclosable Pecuniary Interest** in a matter to be considered at the meeting and that interest is not on your Register of Interests you must declare that interest at the meeting and not speak or vote on the matter

In either case you may remain in the room where the meeting is taking place. If you consider that it would be inappropriate in the circumstances to remain in the room, you may leave the room while the matter is dealt with.

If you do not have a Disclosable Pecuniary Interest you may nevertheless have an **Other Interest** in a matter to be discussed if it affects, to a greater extent than others in your division

- Your wellbeing or financial position, or
- that of your family or close friends
- Any body -
    - Exercising functions of a public nature.
    - Directed to charitable purposes; or
    - One of whose principal purposes includes the influence of public opinion or policy (including any political party or trade union);

Of which you are in a position of general control or management.

If that is the case then you must declare such an interest but can speak and vote on the matter.

4. Any items of business the Chairman decides should be considered as a matter of urgency

5. Public QuestionTime

Fifteen minutes for questions from members of the public of which due notice has been given.

Please note that all questions must be received by the Committee Team (committees@norfolk.gov.uk) by **5pm Friday 8 March 2019.** For guidance on submitting a public question, view the Constitution at www.norfolk.gov.uk/what-we-do-and-how-we-work/councillors-meetings-decisions-and-elections/committees-agendas-and-recent-decisions/ask-a-question-to-a-committee

6. Local Member Issues/ Member Questions

Fifteen minutes for local member to raise issues of concern of which due notice has been given.

Please note that all questions must be received by the Committee Team (committees@norfolk.gov.uk) by **5pm on Friday 8 March 2019.**

7. Chairman's Update

Verbal update by Cllr Tom FitzPatrick

8. Finance Monitoring Report **Page 14**

Report by Executive Director, Community and Environmental Services and Executive Director, Finance and Commercial Services

9. Committee Performance Indicators **Page 22**

Report by Executive Director, Community and Environmental Services and Executive Director, Finance and Commercial Services

10. Electronic and Autonomous Vehicles **Page 36**

Report by Executive Director, Community and Environmental Services and Executive Director, Finance and Commercial Services

11. Use of mobile working across technology across council services **Page 41**

report by Executive Director, Community and Environmental Services and Executive Director, Finance and Commercial Services

12. Smart Lighting Upgrades **Page 45**

Report by Executive Director, Community and Environmental Services

13. Digital Skills for Business **Page 57**

Report by Executive Director, Community and Environmental Services

14. Mobile Phone Coverage **Page 62**

Report by Executive Director, Community and Environmental Services and Executive Director, Finance and Commercial Services

15. LoRaWAN bid to the New Anglia LEP **Page 66**

Report by Executive Director, Community and Environmental Services and Executive Director, Finance and Commercial Services

16. DCMS Local Full Fibre Bid **Page 69**

Report by Executive Director, Community and Environmental Services and Executive Director, Finance and Commercial Services

17. Forward Plan and Delegated Actions **Page 73**

Report by Executive Director, Community and Environmental Services and Executive Director, Finance and Commercial Services

Chris Walton
Head of Democratic Services
County Hall
Martineau Lane
Norwich
NR1 2DH

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Norfolk County Council

Item 2

Digital Innovation and Efficiency Committee

Minutes of the Meeting Held on 23 January 2019
10:00am, Edwards Room, County Hall, Norwich

Present:

Mr T FitzPatrick (Chairman)

Mr P Duigan (sub for Mr E Colman)
Mr S Eyre
Mr J Fisher
Dr C Jones
Mr G Middleton
Mr D Rowntree
Mr T Smith
Dr M Strong

Also in attendance:
Ms A Kemp

(For ease of reference, items appear in these minutes in the order in which they appear on the agenda. This was not necessarily the order in which these items were considered at the meeting).

1. Apology for Absence

1.1 An apology for absence was received from Mr E Colman (with Mr P Duigan attending as substitute).

2 **Minutes**

2.1 The minutes of the previous meeting held on 14 November 2018 were confirmed by the Committee and signed by the Chairman.

3 **Declarations of Interest**

3.1 There were no declarations of interest.

4 **Items of Urgent Business**

4.1 There were no items of urgent business.

5 **Public Question Time**

5.1 There were no public questions.

6 **Local Member Issues/ Member Questions**

6.1 There was one Local Member Question from Cllr Kemp.

Cllr Kemp asked:

"This Council needs to ensure that infrastructure in the west of the county receives as much attention as infrastructure in Norwich and Great Yarmouth. Norwich and Great Yarmouth already have a LoRaWAN network. When will this be introduced in King's Lynn? The benefit of the LoRaWAN network is that battery-powered devices, such as temperature and heat monitors, to keep frail older people, safe in their own homes, are low cost and the batteries can last for 5-10 years, compared to just a day for mobile phone batteries."

6.2 The following answer was given by the Chairman:

"The LoRaWAN network has now been deployed into King's Lynn as one of the initial highest priority locations. We have also submitted a bid to the New Anglia LEP to extend the network across the whole county."

6.3 Cllr Kemp asked as a supplementary question:

"How are King's Lynn residents able to access the LoRaWAN network (was there a telephone contact number) and would the network cover the whole of the town?"

6.4 The following answer was given by Mr G Connell, Head of IMT:

The LoRaWAN network was able to provide a long range, low power wireless platform that provided the necessary data coverage across the whole of King's Lynn. Those who were interested in finding out more should take a look at the following website address:
www.thethingsnetwork.org
For Twitter the public should take a look at:
@ttn_norfolk

This was a Norfolk wide community that met physically periodically, however, there was no telephone number to call as it was a voluntary online community, with the bulk of the communications happening on the website and twitter.

6.5 The Committee noted that Norfolk was at the forefront of LoRaWAN technology which brought the county up to the same standard as in other parts of Europe where the technology was already being exploited. The work that was being done in Norfolk added to the county's digital profile and would lead to new investment.

7 **Chairman's Update-- the purchase of a new Cabinet Office Fraud Hub System**

7.1 The Chairman reported that after engaging with other Local Authorities in Norfolk the County Council had proceeded with the purchase of a new Cabinet Office

Fraud Hub system at a cost of £36, 000. This system would strengthen existing data sets, address new risks and ensure the sharing of best practice.

8 **Finance Monitoring**

8.1 The annexed report (8) by the Executive Director of Community and Environmental Services and Executive Director of Finance and Commercial Services was received.

8.2 The Committee received a report by the Executive Director of Community and Environmental Services and Executive Director of Finance and Commercial Services that provided the Committee with information on the budget position for services reporting to Digital Innovation and Efficiency Committee. The report also provided information on the use of reserves and details of the capital programme.

8.3 The Executive Director of Finance and Commercial Services drew the Committee's attention to table 1 of the report and said that a balanced revenue budget was forecast for 2018-19.

8.4 In reply to questions, Members were informed that there was a strong possibility that the Committee would be able to make an addition to reserves for the next financial year of £56,000. The constraints on expenditure in the current financial year had more to do with staffing capacity issues than about the availability of financial resources. Emerging technologies could be used more effectively to support changes in special educational needs in 2019-20 than they could be used this financial year.

8.5 **RESOLVED**

That the Committee note:

1. **The 2018 - 19 revenue position for this Committee.**
2. **The 2017 - 18 to 2020 – 21 capital programme for this Committee.**
3. **The 2018 – 19 reserves position for this Committee.**

9 **Strategic and Financial Planning 2019-20 to 2021-22 and Revenue Budget 2019-20**

9.1 The annexed report (9) by the Executive Director of Community and Environmental Services and Executive Director of Finance and Commercial Services was received.

9.2 The Committee was informed that the proposals in the report would inform Norfolk County Council's decisions on council tax and contribute towards the Council setting a legal budget for 2019-20 which set its total resources targeted at meeting the needs of residents.

9.3 The Committee discussed how the digital transformation agenda was driving efficiency savings throughout the County Council. It was pointed out that there remained the potential to achieve savings targets in 2019-20 through further IT

service contract reviews and the full year effect of the savings on IT service contracts that were made in 2018-19.

9.4 In reply to questions, it was pointed out that the saving (at paragraph 6.5 of the report) from restructuring and management support costs came from a reduction in the number of staff working on IMT services to schools. This had resulted in eight members of staff being retrained/redeployed and two members of staff made redundant.

9.5 **RESOLVED**

That the Committee:

1. **Note the content of the report and the continuing progress of change and transformation of Business and Property services;**
2. **Agree the service-specific budgeting issues for 2019-20 as set out in section 5 of the report;**
3. **Note the Committee's specific budget proposals for 2019- 20 to 2021-22;**
4. **Note the findings of equality and rural impact assessments, attached at Appendix 1 to the report, and in doing so, note the Council's duty under the Equality Act 2010 to have due regard to the need to:**
    - **Eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under the Act;**
    - **Advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it;**
    - **Foster good relations between persons who share a relevant protected characteristic and persons who do not share it.**
5. **Agree the mitigating actions proposed in the quality and rural impact assessments;**
6. **After taking the advice of the Executive Director of Finance and Commercial Services recommend to Policy and Resources Committee that the Council's budget includes an inflationary increase of 2.99% in council tax in 2019-20, within the council tax referendum limit of 3.00% for the year;**
7. **Agree and recommend to Policy and Resources Committee the draft Committee Revenue Budget as set out in Appendix 2 to the report:**
    a. **including all of the savings for 2019-20 to 2021-22 as set out. Or**
    b. **removing any savings unacceptable to the Committee and replacing them with alternative savings proposals deliverable in 2019-20 and within the Committee's remit.**

For consideration by Policy and Resources Committee on 28 January 2019, to enable Policy and Resources Committee to recommend a sound, whole-Council budget to Full Council on 11 February 2019.

8. **Agree and recommend the Capital Programme and schemes relevant to this Committee as set out in Appendix 3 of the report to Policy and Resources Committee for consideration on 28 January 2019, to enable**

Policy and Resources Committee to recommend a Capital Programme to Full Council on 11 February 2019.

10. **IMT Performance Indicators**

10.1 The annexed report (10) by the Executive Director of Community and Environmental Services and Executive Director of Finance and Commercial Services was received.

10.2 The Committee received a report by the Executive Director of Community and Environmental Services and Executive Director of Finance and Commercial Services that provided operational dashboard information based on the eight vital signs performance indicators that fell under the remit of this Committee.

10.3 Members heard that future performance indicators would include the percentage of calls that were dealt with by digital means. Work continued to review what other data might be appropriate to report to committee. Items under consideration included digital inclusion indicators which continued to be developed as a vital signs indicator.

10.4 The Committee was informed that the Head of IMT was actively engaging with the Government on issues concerning mobile phone connectivity in Norfolk and that a report would be brought to the March 2019 meeting.

10.5 **RESOLVED**

That the Committee are content with the existing use of IMT Performance Indicators and note the information provided in the report.

11. **Digital Economy Development proposals**

11.1 The annexed report (11) by the Executive Director of Community and Environmental Services was received.

11.2 The Committee received a report by the Executive Director of Community and Environmental Services that brought Members up to date with current activity in the technology sector and explored options for further strengthening of the sector.

11.3 Members spoke about the role of the UEA and the Norwich University of the Arts in delivering innovation and economic growth and in supporting the technology sector in Norfolk. The Chairman said that these were two excellent universities that produced highly capable graduates. Both universities had an international reputation, were at the forefront of universities in the technology sector and able to provide the kind of innovative and technical support that local businesses needed. Members said that it would be helpful if specific examples of the work of these universities could be brought to the attention of the Committee.

11.4 The Committee noted the bid that a bid had been worked up to deliver a Full Fibre Network across rural Norfolk. This was a major project, led by the IMT team and

with the support of the Economic Development team, that focused on partner engagement and on gaining crucial business and community support. Over 100 letters of business support had been received.

11.5 **RESOLVED**

That the Committee note the information provided in the report and support the initiatives that are being taken.

12 **Agritech**

12.1 The annexed report (11) by the Executive Director of Community and Environmental Services was received.

12.2 The Committee received a report by the Executive Director of Community and Environmental Services that explained how the use of technology in agriculture was expected to evolve to embrace new technological opportunities and increase the competitiveness and profitability of Norfolk's agricultural sector.

12.3 The Committee considered it essential to the economic prosperity of the county (and the country) for Norfolk's farmers and landowners to be provided with every opportunity to adapt and adopt new technologically enabled approaches to their work.

12.4 Members heard that the County Farms Estate was the 2nd largest estate of its kind in the county after Holkham estate, and therefore agri-tech offered the County Council and its tenants with a unique opportunity to increase productivity and profitability. It was pointed out that "Brexit" might provide agri-tech with an opportunity to cope with the risk of a reduction in the availability of itinerant labour. Members suggested that those who applied to be County Farm Estate tenant farmers should be encouraged to explain as part of their business cases how agri-tech might help them achieve their goals.

12.5 **RESOLVED**

That the Committee:

1. **To note the information provided in this report.**
2. **To direct officers to further investigate the opportunity to promote the use of agri-tech across the County Farms estate.**
3. **To encourage potential newcomers to the County Farms estate to explain as part of their business case how the use of agri-tech might help them to achieve their business aims.**

13 **Cyber Security Update**

13.1 The annexed report (12) by the Executive Director of Community and Environmental Services and Executive Director of Finance and Commercial Services was received.

13.2 The Committee received a report by the Executive Director of Community and Environmental Services and Executive Director of Finance and Commercial Services that explained how cyber-attacks and the risk of cyber-crime against Norfolk County Council had continued to increase and how it remained essential that the Council's retained the ability to protect itself from these attacks.

13.3 Members suggested that the approach to cyber security being taken by the County Council might be of interest to Parish and Town Councils who might benefit from a wider range of information on this topic in helping them to reduce their own risks of a Cyber Security Breach. It was suggested that where the County Council was able to provide such information then this should be sent to the local County Councillor in the first instance.

13.4 **RESOLVED**

That the Committee note the information provided in this report and the importance of ongoing investment in the continuous improvement of our cyber security capabilities.

14 **Assistive Technology Update**

14.1 The annexed report (14) by the Executive Director of Adult Social Services was received.

14.2 The Committee received a progress report by the Executive Director of Adult Social Services that provided an update on work undertaken since the previous report in July 2018. The report provided an overview of the work in progress and planned work to support the development of a new strategy and approach for assistive technology in Adult Social Services.

14.3 Members heard that since May 2018, the Assistive Technology team had received an average of 46 referrals per week, an increase of approximately 12%. Further increases in the number of referrals and assessments for AT would necessitate additional investment in the AT team. Using more assistive technology (AT) was releasing resources to help those with more complex needs.

14.4 The delivery model for AT was seen to be efficient, cost effective and responsive to the needs of the service. Members asked for the monitoring process to record the ways in which AT was having the biggest impact in maximising peoples' Independence so that this could be measured at some later date.

14.5 Members drew attention to the smart flat at Rotary House and how this was proving to be an invaluable training and testing resource for new practitioners. An official launch (with host Rotary House and Deaf Connexions) was due to be scheduled for February or early March 2019.

14.6 The Committee welcomed the AT service plans to replicate the smart flat at the Acorn Centre in Great Yarmouth and to explore potential venues within Wells Hospital and in Cromer. The Committee also welcomed the search for potential venues for South or West Norfolk which had yet to be identified.

14.7 **RESOLVED**

That the Committee:

1. Note progress to date and work in progress.
2. Ask that further updates on progress continue to be made to future Council Committee meetings.

15 **Video streaming proposals for future NCC Cabinet Meetings**

15.1 The annexed report (15) by the Executive Director of Community and Environmental Services and Executive Director of Strategy and Governance was received together with a PowerPoint presentation.

15.2 The Committee received a report and a PowerPoint presentation about the progress being made by Norfolk County Council on possible options for webcasting of meetings if Members wished to proceed with this matter.

15.3 After discussion it was

RESOLVED

That the Committee:

1. **Note the information set out in the report and in the presentation by officers.**
2. **Agree that the County Council should video broadcast meetings live on the Internet and that the YouTube webcam service should be explored as a first step (there being no intention to incur a revenue-based hosting system at this stage).**
3. **Agree that the video streaming proposals should be applied for a pilot period and to Cabinet and County Council meetings only in order that Members might undertake a full assessment before any decision to roll out further was taken.**
4. **Note that in the pilot period the Council Chamber would look to broadcast Full Council meetings approx. 6 times a year and the Edwards Room broadcast Cabinet meetings) approximately 12 times per annum.**
5. **Note that soft market testing had indicated the initial purchase cost of the camera system for two rooms to be between £10,000 - £20,000 as a one-off capital cost.**

16 **Forward Plan and decisions taken under delegated authority**

16.1 The annexed report (16) by the Executive Director of Community and Environmental Services and Executive Director of Finance and Commercial Services was received.

16.2 **RESOLVED**

That the Committee:

1. **Note the forward work programme at Appendix A to the report and ask that updates on funding bids for the improvement of the LoRaWAN network and mobile phone connectivity be provided at the next meeting.**
2. **Note that no decisions were taken under delegated authority since the previous meeting.**

The meeting concluded at 12 noon

Chairman

Digital Innovation & Efficiency Committee

Item 6

Report title:	**Finance Monitoring**
Date of meeting:	**13 March 2019**
Responsible Chief Officer:	**Tom McCabe – Executive Director, Community and Environmental Services, Simon George – Executive Director, Finance & Commercial Services**

Strategic impact

This report provides the Committee with information on the revenue budget position for services reporting to Digital Innovation & Efficiency Committee for 2018 -19. It also provides information on the use of reserves and details of the capital programme.

Executive summary

The services reporting to this Committee are delivered by Community & Environmental Services, and Finance & Commercial Services.

The 2018-19 net revenue budget for this committee is £13.522m, an increase of £0.606m since the previous report due to cost neutral changes to cover capital charges. Details of the 2018 – 19 revenue position are shown in Table 1 of this report.

The capital programme relating to this Committee for the years 2018 – 19 to 2020 - 21 is £51.257m, unchanged from the previous report. Details of the capital programme are shown in Table 2 of this report.

The balance of reserves and provisions relating to this Committee as of 01 April 2018 is £0.857m and is forecast to be £0.978m at 31st March 2019, previous report £0.931m, Details are shown in Table 3 of this report.

Recommendations:

Members are recommended to note:

a) **The 2018 - 19 revenue position for this Committee**
b) **The 2017 - 18 to 2020 – 21 capital programme for this Committee**
c) **The 2018 – 19 reserves position for this Committee**

1. Proposal

1.1. Members have a key role in overseeing the financial position for the services under the direction of this committee, including reviewing the revenue and capital position and reserves held by the service. Although budgets are set and monitored on an annual basis, it is important that the ongoing position is understood, and the previous year's position, current and future and performance are considered.

1.2. This report reflects the financial position relating to this Committee as at the end of January 2019.

2. Evidence

Revenue budget 2018-19

2.1. The services reporting to this Committee are delivered by Community & Environmental Services, and Finance & Commercial Services.

2.2. This report reflects the forecast outturn position for the Services that are relevant to this Committee, which are:

- Information Management Technology (IMT)
- Better Broadband for Norfolk

2.3. The 2018-19 net revenue budget for this committee is £13.522m, an increase of £0.606m since the previous report due to cost neutral changes to cover capital charges.

The outturn forecast is a breakeven position after adding back underspends of £0.121m to reserves (previous report balanced position after adding back £0.074m to reserves), as shown in Table 1 of this report, (see also paragraphs 2.4 and 2.5).

2.4. **IMT -** continues to allocate available budget to changing activities and demands.

The principal activities supported by the IMT budget lines are as follows –

- Infrastructure – the Infrastructure budget supports the delivery of services relating to Voice and Data, and the Managed Print Service, in addition to the provision and support of the corporate servers. Effective cost control and the

capital programme are enabling a forecast underspend of £0.475m.

- Technical Programme, DNA – this budget supports the programme and project staff, in addition to the current payments due within the HP contract, which terminated in November 2018. Staff savings and lower than anticipated DNA final year payments are enabling a forecast underspend of £0.260m.

- Applications, Places, People – this budget supports key corporate applications, e.g. Oracle, IMT Services to Schools, key external customers, and holds the budget for the IMT Management Team. Effective use of capital funding and identification of additional income opportunities are enabling a forecast underspend of £0.190m.

- Information Management – this budget is almost entirely staff costs relating to compliance management and the development of improvements to information access by way of portals. A breakeven outturn position is forecast.

During 2017 – 18 IMT made significant savings in excess of those planned resulting in a small addition to reserves at year end, when a usage of £0.824m was budgeted.

The revenue budget reduction in 2018 – 19 is now £0.573m after allowing for the recent budget addition to cover cost neutral capital charges, of which £0.281m relates to the cost neutral transfer of the budget held by IMT in relation to Liquid Logic support to Adults Services.

An underspend of £0.101m is forecast for 2018 – 19, (previous report £0.056m underspend), shown as being added back to reserves. Effective use of capital funding and the identification of additional income opportunities have contributed to the underspend, alongside savings from the termination of the existing DNA contract in autumn 2018, and the full year savings realised from the Voice & Data contract.

2.5 Better Broadband for Norfolk – the programme is funded by both NCC funding and government grant funding, allocated over the life of the programme.

The 2018 – 19 budget consists of £2.950m net for BT costs, and £0.268m for staff and overheads.

The BT costs are revenue expenditure funded by capital budget, hence this line of the revenue account shows no variance from budget.

The 2018 – 19 underspend is forecast as £0.020m, previous report £0.018m, shown as being transferred to reserves to support the future programme, hence this line of the revenue account also shows no variance to budget.

Table 1: Digital Innovation & Efficiency Committee: Net revenue budget and forecast outturn 2018 – 19

	2017 - 18 Outturn	2018 – 19 Current Budget	2018 – 19 Actual Year to date	2018-19 Outturn Forecast	2018-19 Outturn Variance
	£m	£m	£m	£m	£m
Information Management Technology					
Infrastructure	3.770	4.170	2.947	3.695	(0.475)
Technical Programme, DNA	1.479	1.196	0.851	0.936	(0.260)
Applications, Places, People	3.081	2.559	2.428	2.369	(0.190)
Information Management	1.145	1.184	1.115	1.184	0.000
Capital charges	1.395	2.019	2.019	2.019	0.000
Use of reserves	0.007	(0.824)	0.000	0.101	0.925
	10.877	**10.304**	**9.360**	**10.304**	**0.000**
Better Broadband for Norfolk					
Agency & Contracted Services, net of recharges	3.765	2.950	1.160	2.950	0.000
Staff / Overheads	0.234	0.268	0.185	0.268	0.000
	3.999	**3.218**	**1.345**	**3.218**	**0.000**
	14.876	**13.522**	**10.705**	**13.522**	**0.000**

3. Capital Programme

The capital programme for the services reported to this Committee is currently profiled to be delivered as detailed below.

Table 2: Digital Innovation & Efficiency Committee: Capital Programme

	2017 – 18 Actual spend	2018- 19 Budget	2018 – 19 Spend to date	2019 – 20 Budget	2020 – 21 Budget
	£m	£m	£m	£m	£m
IMT					
Server hardware	1.264	1.323	0.080	1.335	1.335
Software licensing	0.033	1.000	1.007	2.500	0.000
Device refresh rolling programme	2.382	0.900	2.725	1.795	1.795
LAN, Wi Fi, security	0.451	2.400	0.000	0.000	0.000
Website, portal and BI	1.164	0.555	0.494	0.555	0.555
Data centre, disaster recovery	0.000	1.503	0.085	0.000	0.000
Skype for Business	0.000	0.700	0.080	0.000	0.000
	5.294	**8.381**	**4.471**	**6.185**	**3.685**
Better Broadband	4.195	2.154	3.988	20.958	9.894
	9.489	**10.535**	**8.459**	**27.143**	**13.579**

3.1. **Server hardware and devices -** the proposed future capital requirements are predominantly needed to refresh the Councils existing computer hardware estate (this is usually a recurring cost on a 4-year cycle). However, the “rolling” refresh of PC and mobile phones is designed to ensure each worker type in the council has access to the right technology package to enable them to work efficiently and flexibly. A quarter of the workforce is planned to be provided with new equipment each year. Having access to up-to-date, easy to use mobile and flexible working technology will improve staff efficiency, reduce travel costs and enable better use of council office accommodation. This investment also underpins planned property related savings.

3.2. Bringing currently outsourced services associated with management of the PCs back in house will save approximately £1.000m per annum.

3.3. **Data Centre -** the relocation of the data centre and disaster recovery facilities will enable better use of the Councils property assets and supports their savings objectives while also improving the resilience of the council’s technological infrastructure.

3.4. **Website, portal and BI -** the website, portal, BI and online transactions development funding will enable customer services to achieve its channel shift savings, enable new social care transactions to go online for both residents and businesses and provide staff with access to business intelligence tools and data to improve operational and strategic decision making.

3.5. The available funding for **Better Broadband** for Norfolk relates to the planned improvements to broadband services throughout Norfolk.

4. Reserves and provisions

4.1. The Council holds both provisions and reserves.

4.2. Provisions are made for liabilities or losses that are likely or certain to be incurred, but where it is uncertain as to the amounts or the dates which they will arise. The Council complies with the definition of provisions contained within CIPFA's Accounting Code of Practice.

4.3. Reserves (or Earmarked Reserves) are held in one of three main categories:

4.4. **Reserves for special purposes or to fund expenditure that has been delayed, and in many cases relate to external Grants and Contributions -** reserves can be held for a specific purpose, for example where money is set aside to replace equipment or undertake repairs on a rolling cycle, which can help smooth the impact of funding.

4.5. **Local Management of Schools (LMS) reserves that are held on behalf of schools –** the LMS reserve is only for schools and reflects balances held by individual schools. The balances are not available to support other County Council expenditure.

4.6. **General Balances –** reserves that are not earmarked for a specific purpose. The General Balances reserve is held to enable the County Council to manage unplanned or unforeseen events. The Executive Director of Finance is required to form a judgement on the level of the reserve and to advise Policy and Resources Committee accordingly.

4.7. The reserves falling under this Committee would fall into the first category. Additionally, balances may relate specific grant income where we have received the income but are yet to incur the expenditure, or the grant was planned to be used over a period of time, not related to a specific financial year.

4.8. We will continue to review the reserve balances to ensure that their original objectives are still valid and would identify any reserves that could be considered available for re-allocation.

4.9. The Committees' unspent grants, reserves and provisions as at 1st April 2018 totalled £0.857m and is estimated to be £0.978m at 31st March 2019, previous report £0.931m. The increase is due to increased underspends in both IMT and Better

Broadband being added back to reserves.

4.10. Table 3 below shows the balance of reserves and the estimates usage during 2018 - 19.

4.11. **IMT -** the reserves will only be used as necessary to support the corporate technology platform to achieve savings in the next budget planning period.

4.12. **Better Broadband –** the reserves are not currently planned to be used in 2018 – 19.

Table 3: Digital Innovation & Efficiency: Reserves & Provisions			
Reserves & Provisions 2018 - 19	**Balance at 01 April 2018**	**Forecast Balance at 31 March 2019**	**Change during 2018 - 19**
	£m	**£m**	**£m**
Information Management Technology	0.831	0.932	0.101
Better Broadband for Norfolk	0.026	0.046	0.020
Committee Total	**0.857**	**0.978**	**0.121**

5. Financial Implications

5.1. There are no decisions arising from this report. The financial position for the Digital Innovation & Efficiency Committee is set out within this paper.

6. Issues, risks and innovation

6.1. This report provides financial performance information on the range of services responsible to the Committee.

Officer Contact

If you have any questions about matters contained in this paper, please get in touch with:

Officer name:	**Graham Jermy**	**Tel No.:**	**01603 638091**
	Andrew Skiggs	**Tel no.**	**01603 223144**
Email address :	**graham.jermy@norfolk.gov.uk**		
	andrew.skiggs@norfolk.gov.uk		

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Digital Innovation & Efficiency Committee

Item 9

Report title:	**Committee Performance Indicators**
Date of meeting:	**13 March 2019**
Responsible Chief Officer:	**Tom McCabe – Executive Director, Community and Environmental Services** **Simon George – Executive Director, Finance and Commercial Services**

Strategic impact

Robust performance management is key to ensuring that the organisation works both efficiently and effectively to develop and deliver services that represent good value for money and which meet identified needs. This report provides an update to the Digital Committee for the IMT Department (and other service areas related to web and broadband) performance monitoring and management. It also provides the Committee with an update on current trends, some of which were previously reported to the Policy and Resources Committee.

Executive summary

This performance management report to this committee incorporates elements of the revised Performance Management System, which was implemented as of 1 April 2016.

There are currently eight vital signs indicators under the remit of this committee which are reported monthly.

Two further indicators are recorded at this committee periodically and then passed onto Policy & Resources Committee. These are Better Broadband for Norfolk Coverage and 4G Mobile telephony coverage. These indicators are currently at 92.1% (against a target of 91% rising to 92% at the end of March 2019) and 83% respectively (the latter is the baseline measure, subject to imminent re-measuring).

Work continues to review what other data may be appropriate to report to committee. Items under consideration include digital inclusion indicators which continue to be developed as a vital signs indicator.

Performance data reported is for the period up to the **26th February 2019**.

Recommendations:

1. **Note the information provided in this report.**
2. **To advise if any further performance information should be added or if any of the measures should be removed.**

1. Introduction

1.1. This paper presents up to date performance management information for those 'vital signs' performance indicators that were agreed previously by the P&R Committee for the day to day operational service in IMT, as well as other vital signs identified as having relevance and/or significance to the remit of this committee.

1.2. The paper highlights any key issues or trends for members to note with more detail in the Appendices. This report contains:

- A Red/Amber/Green rated dashboard overview of performance across all 8 vital signs indicators
- Report cards for all vital signs

2. Performance dashboard

2.1. The performance dashboard provides a quick overview of Red/Amber/Green rated performance across all 8 monthly vital signs. This then complements the exception reporting process and enables committee members to check that key performance issues are not being missed.

2.2. The vital signs indicators are monitored during the year and are subject to review when processes are amended to improve performance, to ensure that the indicator correctly captures future performance.

2.3. The current exception reporting criteria are as below:

- Performance is off-target (Red RAG rating or variance of 5% or more)
- Performance has deteriorated for three consecutive periods (months/quarters/years)
- Performance is adversely affecting the council's ability to achieve its budget
- Performance is adversely affecting one of the council's corporate risks.
- Performance is off-target (Amber RAG rating) and has remained at an Amber RAG rating for three periods (months/quarters/years)'.

2.4 Digital Innovation and Efficiency Committee "Vital Signs" performance dashboard.

Norfolk County Council

Digital Innovation and Efficiency Committee - Vital Signs Dashboard

NOTES:

In most cases the RAG colours are set as: Green being equal to or better than the target; Amber being within 5% (not percentage points) worse than the target; Red being more than 5% worse than target.
'White' spaces denote that data will become available; 'grey' spaces denote that no data is currently expected, typically because the indicator is being finalised.
The target value is that which relates to the latest measure period result in order to allow comparison against the RAG colours. A target may also exist for the current and/or future periods.

#	Monthly	Bigger or Smaller is better	Feb 18	Mar 18	Apr 18	May 18	Jun 18	Jul 18	Aug 18	Sep 18	Oct 18	Nov 18	Dec 18	Jan 19	Feb 19	Target
320	{CIL} Number of active My Norfolk accounts	Bigger	18,033	19,504	20,944	21,958	22,905	23,848	24,615	25,308	25,972	26,526	27,003	27,760		34,005
323	{CIL} Customer satisfaction with web access	Bigger	68.5%	60.8%	52.5%	56.2%	57.1%	56.2%	54.5%	57.4%	57.0%	60.2%	63.5%	60.8%		60.0%
			841 / 1227	1358 / 2233	939 / 1790	2701 / 4807	2688 / 4705	2366 / 4213	2592 / 4755	1748 / 3047	1755 / 3079	1881 / 3122	1488 / 2344	2299 / 1483		
608	{IMT} Abandonment Rate - % of calls abandoned on the ICT Service Desk	Smaller	35.0%	19.9%	8.5%	13.4%	4.5%	7.6%	15.9%	6.3%	7.8%	6.2%	7.4%	8.6%	10.4%	10.0%
			1231 / 3482	758 / 3818	260 / 3051	484 / 3621	134 / 2987	241 / 3187	585 / 3676	221 / 3489	276 / 3525	186 / 3017	168 / 2264	275 / 3206	251 / 2410	
609	{IMT} ICT incidents per customer per month	Smaller	1.1	1.1	1.2	1.2	1.1	1.2	1.1	1.1	1.2	1.1	0.8	1.1	0.8	1.5
610	{IMT} First line fix	Bigger	33.0%	33.8%	35.6%	32.9%	32.8%	31.2%	32.0%	33.3%	30.4%	28.8%	27.5%	26.3%	21.6%	28.0%
			1362 / 4133	1577 / 4659	1601 / 4492	1561 / 4742	1440 / 4386	1290 / 4132	1359 / 4253	1388 / 4172	1277 / 4200	1111 / 3856	712 / 2592	1073 / 4084	714 / 3305	
611	{IMT} Incidents resolved within SLA	Bigger	79.93%	87.6%	87.6%	88.1%	89.4%	84.0%	82.0%	84.0%	79.5%	84.1%	73.9%	85.3%	84.0%	80.0%
			2079 / 2601	3311 / 3778	3131 / 3573	3302 / 3747	2995 / 3351	2691 / 3197	2745 / 3330	2725 / 3242	2675 / 3366	2367 / 2813	1562 / 2113	2548 / 2988	2030 / 2418	
626	{IMT} Customer satisfaction with ICT services	Bigger	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.5	6.6	6.6	6.6	6.4	6
636	{IMT} Systems availability	Bigger	99.0%	99.3%	98.2%	98.7%	99.0%	99.3%	97.4%	99.0%	99.0%	99.9%	99.3%	100.0%	100.0%	99.0%
			80.7k / 81.0k	112.6k / 113.4k	111.3k / 113.4k	112.0k / 113.4k	113.1k / 113.4k	118.0k / 118.8k	115.7k / 118.8k	107.3k / 108.0k	123.7k / 124.2k	118.6k / 118.8k	101.9k / 102.6k	118.8k / 118.8k	97.2k / 97.2k	

3. Report Cards

3.1. A report card is produced for each vital sign. These provide a succinct overview of performance and outlines what actions are being taken to maintain or improve performance. The report card follows a standard format that is common to all committees.

3.2. Each vital sign has a lead officer, who is directly accountable for performance, and a data owner, who is responsible for collating and analysing the data on a monthly basis. The names and positions of these people are clearly specified on the report cards.

3.3. Vital signs are reported to committee on an exceptions basis. Report cards will be included in this report whenever there are exceptions. The report cards for those vital signs that do not meet the exception criteria are not normally reported but are collected and are available to view. The IMT report cards have been included at Appendix 2 & Appendix 3 this month for information as the committee has expressed interest in seeing the cards even while on target.

4. IMT programme of work

4.1. A list of current priority projects along with information about new projects added and projects closed is included in Appendix 1.

5. Review of Provided Information

5.1. Committee Members are asked to:

- Review and comment on the performance data, information and analysis presented in the report cards and determine whether any recommended actions identified are appropriate or whether another course of action is required.
- Advise if any further performance management information would be of interest.

6. Financial implications

6.1. There are no significant financial implications arising from the development of the revised performance management system or the performance management report.

7. Issues, risks and innovation

7.1. There are no significant issues, risks and innovations arising from the development of the revised performance management system or the performance management report.

Officer Contact

If you have any questions about matters contained in this paper or want to see copies of any assessments, eg equality impact assessment, please get in touch with:

Officer Name:	**Tel No:**	**Email address**:
Simon George	01603 222400	simon.george@norfolk.gov.uk
Geoff Connell	01603 222700	geoff.connell@norfolk.gov.uk

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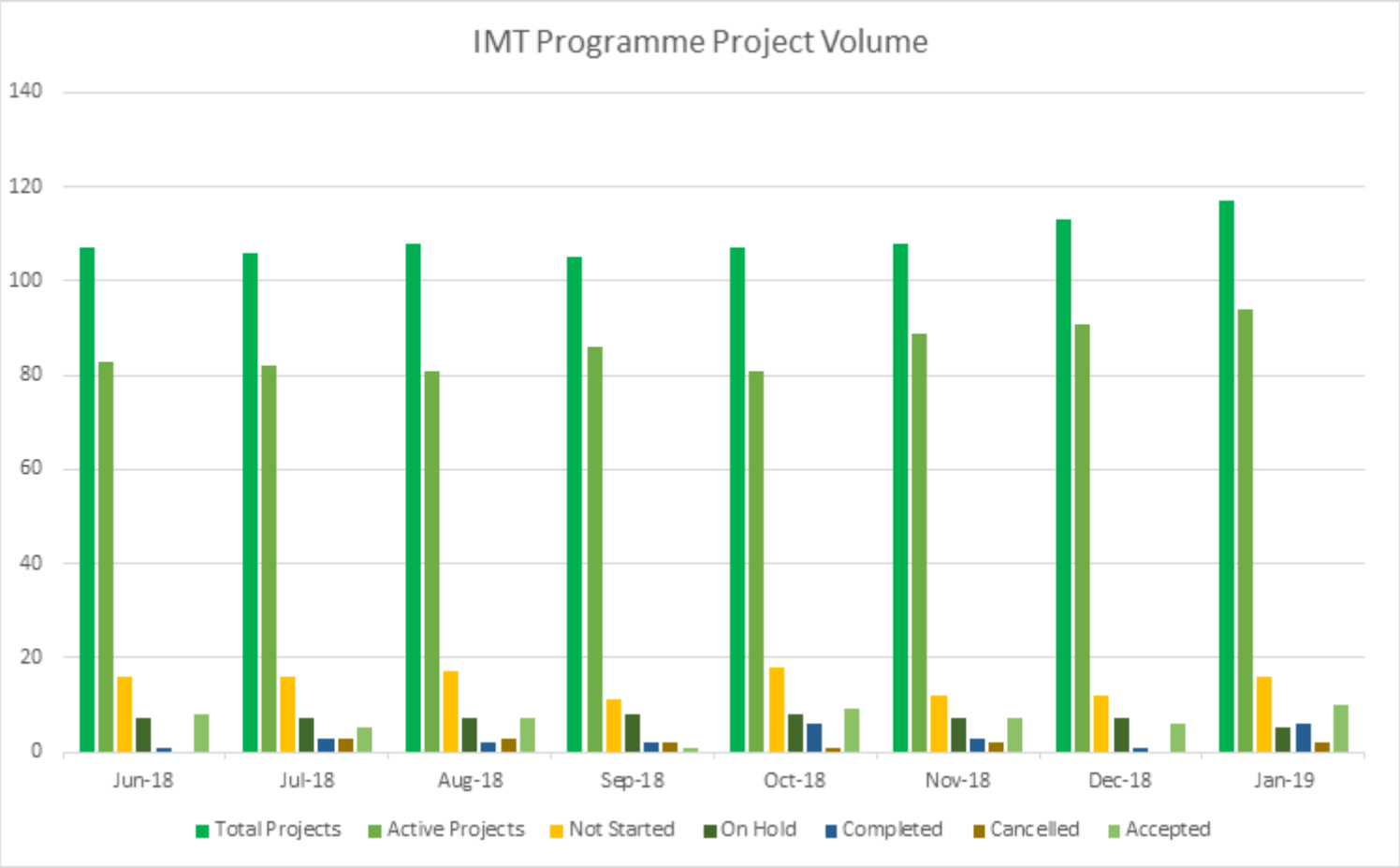
Appendix 1

IMT Programme Information

The graph below shows the volume of projects that IMT is currently working on and also tracks the status of the overall programme, including how many projects are active, how many new projects have been added each month and how manty have been closed.



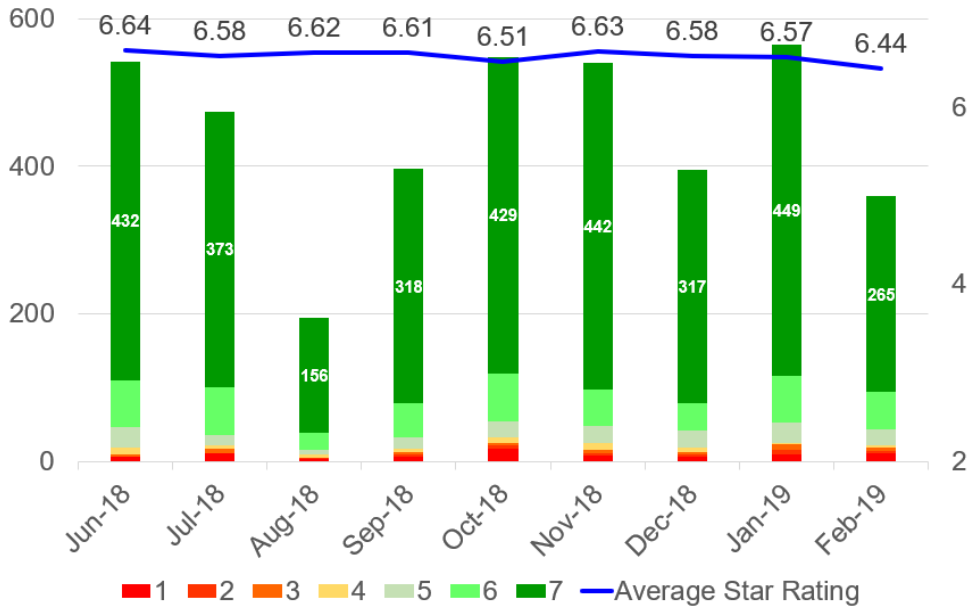
The table below lists the highest priority projects currently being worked on by IMT.

Priority Projects January 19 – March 2019

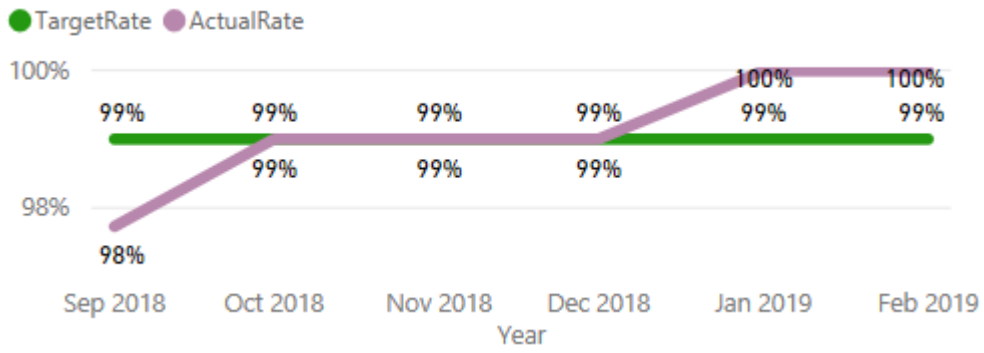
Priority Projects for IMT
January - March
• Social Care System Delivery Phase 2
• Technology Improvement Programme – Windows 10 Upgrade for whole estate
• GDPR
• Norfolk Futures Programme
• Corporate Property Programme
• Windows Server Re-Platform
• Risk Stratification for Children's Services and Adult Social Services
• PSN Compliance Upgrades; SMIS Upgrade and Windows 2008 Server Upgrades
• LAN Refresh
• Technology Improvement Programme – Skype for Business Pilot
• Oracle Infrastructure Refresh
• Reducing Service Desk Call Backlog
• Libraries move to Open + Phase 2 and 3
• N3 Migration to HSCN
• Improving Digital Access in Libraries
• Improvements to IMT Asset Reporting
• Reviewing the starters, movers and leavers processes
• Sustainability Transformation Programme
• IMT Customer Satisfaction

IMT: Customer satisfaction

Why is this important?
Every customer deserves to feel valued and experience an excellent journey through the IMT process

Performance:	What is the background to current performance?
	• 11% of our customers returned our survey with an average score of 6.44 out of 7 • 94% of our customers have awarded IMT 5 to 7 stars • 6% of our customers have awarded IMT 1 to 4 Stars
What will success look like?	**Action required:**
• Score greater than 6	• To continue to review the low rated feedback • Customer feedback around our low scores relates to IMT improving our communication. High volume areas will be focused on to reduce the number of 1-4 stars
Responsible Officers:	Lead: Rob Price, Service Delivery Manager Data: Jo Carey, Service Delivery Analyst

IMT: Systems availability

Why is this important?	
Users expect systems (Care First, Oracle, Tribal, Spydus, Email, Internet Access, Intranet Access and Telephony) to be available and reliable when they want to use it, within the agreed service level agreement	
Performance:	What is the background to current performance?
	• Services availability until 26th February for 2019 have exceeded the target
What will success look like?	Action required:
• Systems to be available to users 99% of the time	• To identify and add more business-critical systems to the measure, and to review resilience and maintainability for those already measured • The LAN Refresh Project due to be delivered during 2019 will update our Network supporting the mitigation of these issues.
Responsible Officers:	Lead: Rob Price, Service Delivery Manager Data: Jo Carey, Service Delivery Analyst

IMT: Abandonment Rate – Percentage of calls abandoned on the IMT Service Desk

Why is this important?
The inability for an IMT Customer to progress with an incident or service request hinders the Customer and the Council from working effectively and efficiently.

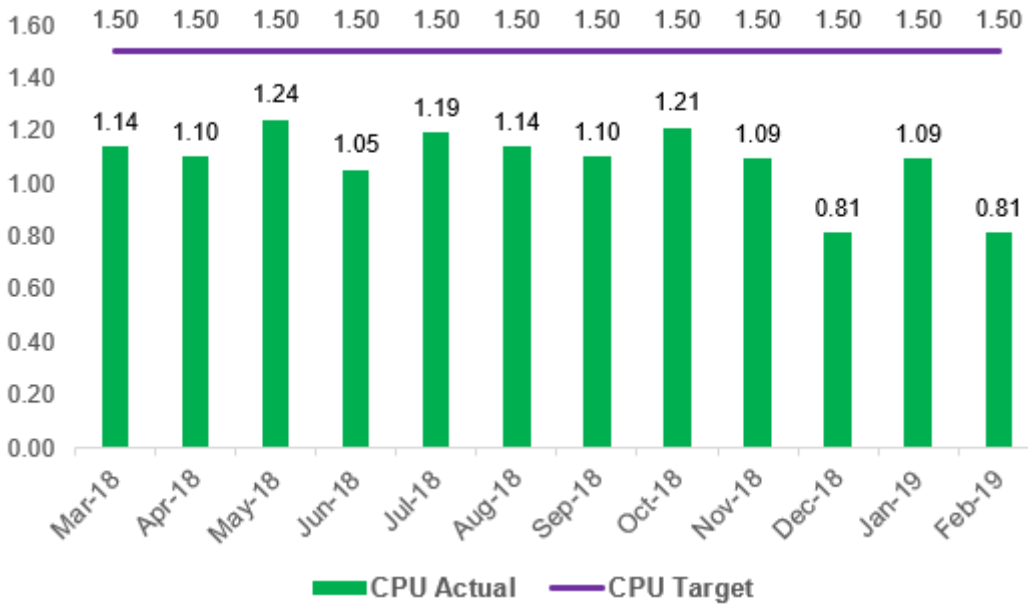
Performance:	What is the background to current performance?
The Percentage of Customers (excluding Schools) that abandon their call to IMT service desk 	• 10% - on target for February 19 • myIT the IMT Self Service Portal was introduced as per the IMT Service Improvement Plan on 21st January 2019. We are working to improve use of online self-service functionality by staff (in the same way we ask residents to self-serve online).

What will success look like?	Action required:
• IMT Service Desk call abandonment rate to fall below the target of 10% • Users routinely using the new Assyst IMT Service Desk system self-service (myIT) functionality rather than calling or emailing the Service Desk.	• To promote the self-service facility

Responsible Officers:	Lead: Rob Price, Service Delivery Manager Data: Jo Carey, Service Delivery Analyst

IMT: IMT incidents per customer per month

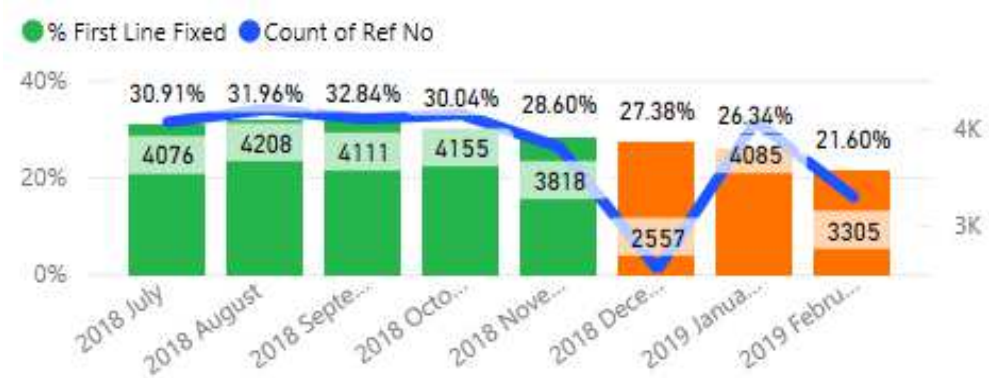
Why is this important?
Excessive Customer Contacts to the IMT Service Desk indicates a high level of day-to-day IMT problems being experienced by IMT users, which hinders the Council from working effectively and efficiently.

Performance:	What is the background to current performance?
How many times within a month the customers contact the Service desk, (by any method) 	• 0.81 contacts per user within target of 1.5

What will success look like?	Action required:
• The contacts per user per month to align with an industry (Gartner) best practice baseline of 1.5 or below • Fewer Priority 1 Incidents (i.e. significant IMT problems affecting multiple users).	• The level of contact correlates to the availability of systems • IMT to be mindful of user impact when implementing any changes to ensure stability of Service

Responsible Officers:	Lead: Rob Price, Service Delivery Manager Data: Jo Carey, Service Delivery Analyst

IMT: First Line Fix

Why is this important?	
The inability to address the customer's incident on first time contact with IMT (so called “one and done”) can impact the Council in working effectively and efficiently.	
Performance:	**What is the background to current performance?**
The percentage of customers that have their incidents resolved by the First Line support (Service Desk)  This graph shows the first line fixed performance against the target of 28%	• Continued trend below target expected due to a decline in simpler calls as the overall services continue to be more reliable and standard requests are processed through the myIT online self-service portal.
What will success look like?	**Action required:**
• To maintain the first line fix rate and improve IMT Customer Satisfaction.	• IMT are working to increase their Technical Knowledge base to enable the Service Desk to resolve a higher number of queries at First Line
Responsible Officers:	Lead: Rob Price Service, Delivery Manager Data: Jo Carey Service, Delivery Analyst

IMT: Incidents resolved within Service Level Agreement

Why is this important?
This measures our ability to achieve and manage IMT customer expectations for the resolution of an incident they have experienced to an agreed standard.

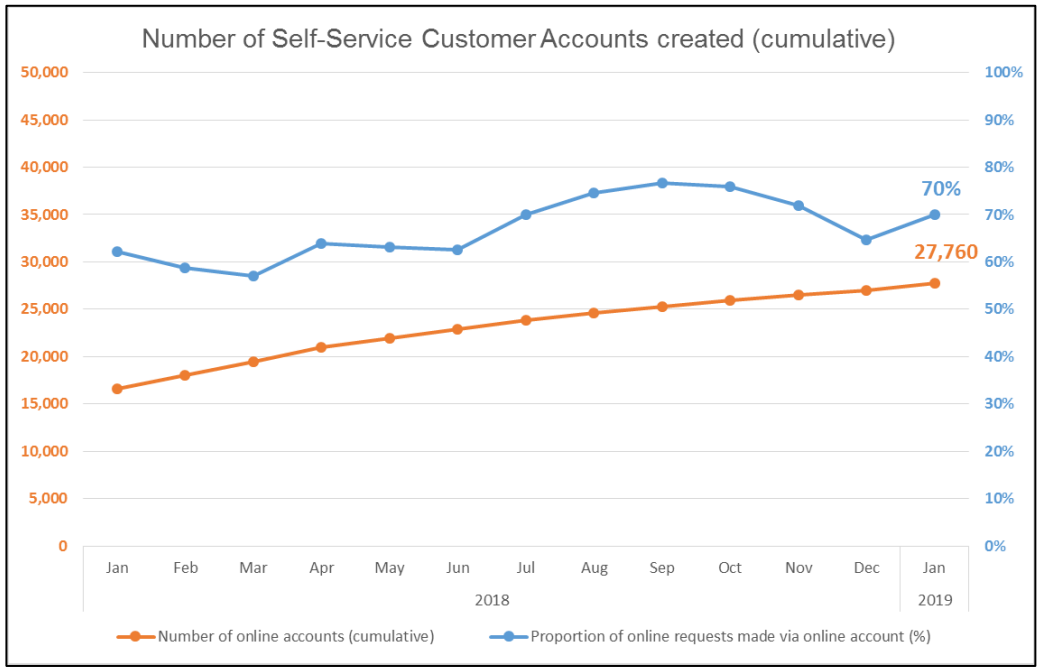
Performance:	What is the background to current performance?
The Incident Resolution Performance and Target (80%) 	• Exceeded target for 2019 to date
What will success look like?	**Action required:**
• Reduction in our outstanding calls in the short term. • Achieve 80%Target	• Review of internal Processes to identify time saving and increase throughput • Complete recruitment of 4 x FTE to the Desktop Service Team
Responsible Officers:	Lead: Rob Price, Service Delivery Manager Data: Jo Carey, Service Delivery Analyst

320 Channel Shift: The number of online accounts (starting from a baseline of 0 at 1 April 2016)

Why is this important?

Delivery of 'channel shift' enables cost reduction, internal digital transformation and digital inclusion. Residents who have registered for an online account will also be able to receive early help / marketing and promotional information from NCC, if they choose to do so.

Performance



What is the background to current performance?

Channel shift: The number of Norfolk Households with an online account (starting from a baseline of 0 at 1st April 2016).

- There were 27,760 online accounts at 31 January 2019.
- 70% of online enquires recorded in CRM during January were made using an account (1044 of 1490).
- New 'apply and pay' services launched during the second half of 2018, whilst not generating a significant increase in account numbers (due to the niche, limited customer base) have secured and maintained steady growth
- A new 'Identity Provider' (Microsoft Azure B2C) was installed during January to verify and authenticate customers registering and accessing a My Norfolk account; this is a significant enabler for a step change in account numbers because the additional functionality it provides will enable a broader range of services to be accessed via the account including social care interactions
- Whilst the growth in account numbers is not currently 'on-target' against the existing phased profile, projects are in train which will deliver numbers which significantly exceed target October onwards. These include Adult Social Care, NCLS leisure course booking and education services online (expected March earliest, March and September 2019 respectively).

What will success look like?

- The overall ambition for the Customer Service programme is to have 75% of Norfolk Households registered for an online account by 2020.
- This figure is based on the Newham figure of 85%, which has been adjusted for the higher digital exclusion rates for Norfolk.
- There is a shorter-term target of 40,000 customer accounts by 31 March 2019.

Action required

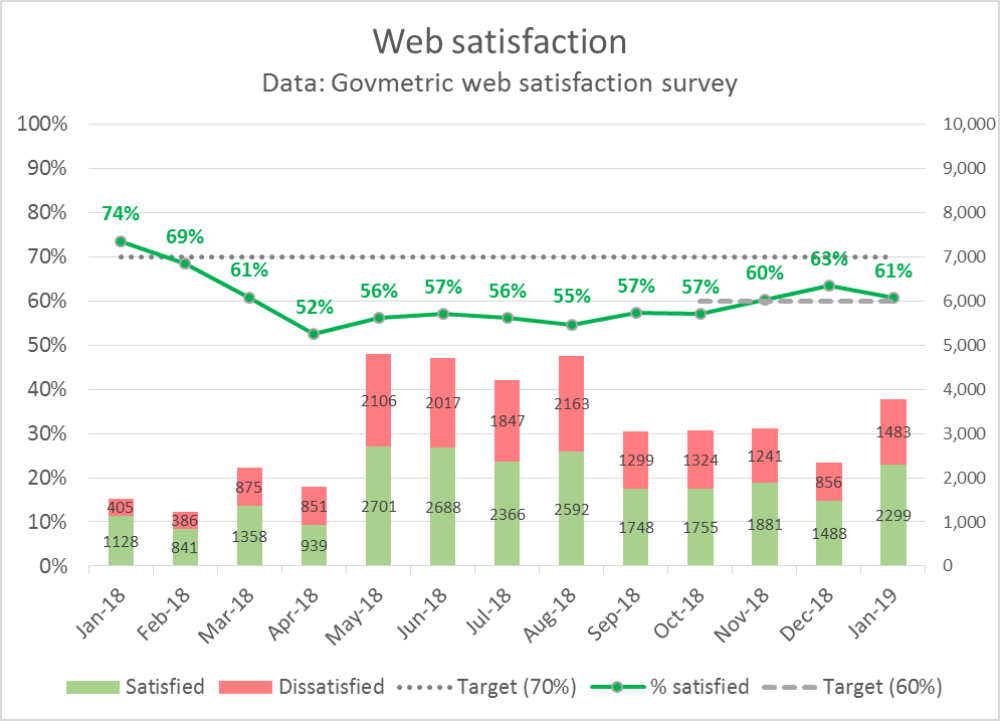
- Develop and launch new online services available via My Norfolk account – book and pay for a leisure course, adult social care services, education services
- Monitor and respond to customer feedback so the customer experience relating to the online account is continually improved

Responsible Officers	Lead: Michelle Carter, Customer Services Transformation Consultant; Data: Paul Green– Customer Services Reporting Officer

323 Customer Satisfaction with Web Access

Why is this important?
This measures the organisations ability to shift customers towards web access and deal with them effectively. Web access reduces the demand for and cost of customer services.

Performance



What is the background to current performance?

- **Customer satisfaction**, as measured by Govmetric, provides NCC with real time data on customer experience and perception with the service provided.
- **Web satisfaction has decreased to 61% for January 2019.**
- In January we moved our MyNorfolk customer accounts to a new sign in process using a Microsoft product. In the future this will allow our customers to have one single sign in across more of the services Norfolk County Council provides. As part of moving our existing customers to the new platform, they had to reset their passwords in order to validate accounts, and this generated some negative feedback. We will monitor and then improve this process wherever possible.

What will success look like?

- Over 60% of customers are satisfied with the service they receive
- As the customer service programme progresses the number of avoidable customer contacts by service should reduce, as customers are more able to self-serve online.

Action required

- Drive forward delivery of customer account covering multiple transactions
- Use webchat to keep customers online wherever possible

Responsible Officers	Lead: Fran Grimmer, Digital Experience Manager. Data: Paul Green, Customer Services Reporting Officer

Digital Innovation and Efficiency Committee

Item No.

Report title:	**Electronic and Autonomous Vehicles**
Date of meeting:	**13th March 2019**
Responsible Chief Officer:	**Tom McCabe – Executive Director, Community and Environmental Services, Simon George – Executive Director, Finance & Commercial Services**

Strategic impact

Use of Electric Vehicles (EVs) is increasing in Norfolk and trials of Autonomous Vehicles (AVs) and autonomous features are progressing rapidly. The impact of these emerging and mainstreaming technologies should be considered in the Norfolk context.

Executive summary

In July 2017 the Government announced that "it will end the sale of all new conventional petrol and diesel cars and vans by 2040."

In May 2018 the Prime Minister announced a further target for 2040, that all new cars and vans should be "effectively zero emission."

The Electric Vehicle industry is moving very quickly with all manufacturers offering electric or hybrid electric vehicles in their range and charging points across the country increasing year on year.

At the same time developments in autonomous vehicles are progressing significantly.

These developments are likely to have numerous impacts from how we manage highways to how people move around and therefore we need to monitor to ensure we inform our own strategies.

Recommendations:

1. **Continue to closely monitor industry developments.**
2. **Monitor relevant funding opportunities to help maximise Norfolk's suitability for use by electric and autonomous vehicles.**

1. Background

1.1. In July 2017 the Government announced that "it will end the sale of all new conventional petrol and diesel cars and vans by 2040."

1.2. In May 2018 the Prime Minister announced a further target for 2040, that all new cars and vans should be “effectively zero emission.”

1.3. The *Road to Zero Strategy* (July 2018) set an aspiration for “at least 50%, and as many as 70%, of new car sales and up to 40% of new van sales being ultra-low emission by 2030.

1.4. The market share of electric vehicles in the UK is growing: SMMT data shows over 1,300 battery electric vehicle registrations in January 2019, compared to just over 600 in January 2018 (not including hybrid vehicles).

2. Electric Vehicles

2.1. An electric car / electric vehicle often referred to as “EV” is a plug-in electric car that is propelled by one or more electric motors, using energy typically stored in rechargeable batteries.

2.2. Electric vehicles and Hybrid electric vehicles (engine + electric) are becoming more prevalent in the market place with most manufacturers offering at least one in their range.

2.3. Currently electric vehicles are limited by the distance they can travel due to the size of battery and efficiency of the car; where Hybrid electric vehicles provide greater range as they also have a traditional engine.

2.4. A number of vehicles use the engine and braking of the car to top up the battery whilst driving.

2.5. **Charging**

2.6. To charge an Electric Vehicle it can be plugged in at home and / or at one of the 13,000+ public charging stations across the UK.

2.7. Government grants have been available to encourage the take up and provide financial support for the installation of home charging stations. However, they typically cover the upfront installation costs, but not the ongoing running costs.

2.8. A typical Electric Vehicles takes between 40 minutes and 5 hours to charge at home and has an electric range of approximately 100 – 200 for pure electric (20 – 50 miles for hybrid)

2.9. Public charging stations allow quick charging to 80% of the battery over much shorter periods of time.

2.10. Norfolk County Council accessed a government grant in the mid-2000s for the installation of charging points for electric vehicles. This resulted in four charging points being installed;

Two at Harford Park and Ride
Two at the Airport Park and Ride

2.11. There are various commercial applications showing locations of charging stations, such as https://www.zap-map.com/live/.

2.12. From this, it can be seen that there are numerous chargers across the county, provided by the commercial market, mostly sited in the urban centres.

2.13. The stance of the county council to date has been that the market will provide the necessary infrastructure to support the transition to electric vehicles.

The main reasons for this are:

- The county council is not in the business of running a system of charging points
- Grants typically cover only the capital funding for installation of charging points
- The county council does not have the budget to support ongoing revenue costs including back-office systems for management of the points, or maintenance and replacement and running costs.

2.14. To date no charging points in Norfolk have been provided on the public highway. This has been due to the issues above, together with concern about the liabilities that might arise from, for example, trailing leads on the highway that might present a hazard.

2.15. The council does however need to recognise some of the issues related to this position. This includes that the market might not provide sufficient charging points in rural areas; that people who do not have off-street parking facilities at home might find it difficult to charge their vehicles (most people charge them overnight at home); and the council is not influencing the take-up of electric vehicles.

2.16. In June 2018, the county council, in partnership with Norwich City, Broadland District and South Norfolk councils, submitted a bid to the Department for Transport for a share of the Transforming Cities Fund (TCF). We have been shortlisted as one of 12 city areas to be eligible for a share of £1.2bn capital funding. A more detailed bid needs to be submitted in the summer for this funding, and the council is currently working through priorities for this with the other partners. We remain in discussion with bus companies and others about whether electric vehicles and associated infrastructure form an element of the bid.

2.17. The council would expect private sector investment to install rapid charge points at service stations and public parking spaces at pubs, offices etc.

3. Autonomous Vehicles

3.1. An autonomous vehicle also known as a self-driving car, or driverless car, is a vehicle that is capable of sensing its environment and moving with little or no human input.

3.2. Autonomous vehicles combine a variety of sensors to understand their surroundings, and then advanced control systems interpret sensory information to identify a path of navigation signs and obstacles.

3.3. Autonomous vehicles have the potential to increase opportunities for people to connect; particularly those unable to use traditional vehicles.

3.4. They also can potentially lead to other benefits such as a reduction in casualties or an increase in the efficiency of the road network, eg through HGV platooning.

3.5. Government has supported the development of Connected and Autonomous Vehicles (CAVs) including trials of fully autonomous vehicles.

3.6. To date the county council has not participated in trials of autonomous vehicles.

3.7. The existing vehicle fleet includes vehicles with some level of autonomy, for example vehicles with adaptive cruise control or lane control; or which have self-parking capabilities.

3.8. The authority should be aware of a number of matters when considering the further development and roll-out of CAVs:

- Implications of maintenance of the road network: Will CAVs place demands on the quality of the infrastructure and require for example road markings or other traffic-management interventions to navigate the network?
- Streetscape and Public realm: Is the authority implementing measures within town and city centres (eg multi-modal spaces) that will meet safety requirements for future fully or semi-autonomous vehicle operation?
- What standards should the local authority be working to in its design of highways or traffic management infrastructure to ensure they are fit for the future?
- In the longer-term, will fully autonomous vehicles lead to additional vehicle movements on the network (because some will be circulating empty to pick up passengers; or there will be additional movements being made by people who currently don't travel alone in a vehcile, eg children).

4. Financial Implications

4.1. None at this time.

5. Background

5.1. Wikipedia Electric Vehicles
https://en.wikipedia.org/wiki/Electric_vehicle

5.2. Wikipedia Autonomous Vehicles
https://en.wikipedia.org/wiki/Self-driving_car

5.3. Automotive revolution – perspective towards 2030
https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/disruptive-trends-that-will-transform-the-auto-industry/de-de

5.4. Highways England has launched a competition to support the development of 'digital roads' and improve air quality.
https://www.ukauthority.com/articles/highways-england-calls-for-digital-roads-ideas/?utm_source=alert&utm_medium=email&utm_campaign=11feb19

5.5. Warwickshire County Charging Strategy
https://www.warwickshire.gov.uk/driveelectric

Officer Contact

If you have any questions about matters contained in this paper or want to see copies of any assessments, eg equality impact assessment, please get in touch with:

Officer name :	**Kurt Frary** **David Cumming**	**Tel No. :**	**01603 223856**
Email address :	Kurt.Frary@norfolk.gov.uk David.Cumming@norfolk.gov.uk		

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Digital Innovation and Efficiency Committee

Item No.

Report title:	**Use of mobile working technology across council services**
Date of meeting:	**13th March 2019**
Responsible Chief Officer:	**Simon George, Executive Director of Finance & Commercial Services and Fiona McDiarmid, Executive Director of Strategy and Governance**

Strategic impact

Mobile working technologies are already used by Norfolk County Council to enable the efficient delivery of council services. However, there is potential for further benefits to be derived and it is essential that these digitally enabled new ways of working are adopted at pace and fully exploited in order to maximise the effectiveness of local authority funding.

Executive summary

Use of mobile working technologies across the County Council is mature in some areas but ready to be scaled up corporately and can be considered under two main headings.

1. Enabling almost all staff to work from a variety of locations using laptops, tablets, IP Desk phones, Skype functionality and smart or talk and text mobile phones. This flexibility allows County Hall to operate on a 7-10 desk to staff ratio today, helps staff work flexibly and reduces travel time and costs.

2. Enabling specific business systems and functions to be carried out more effectively at remote locations. Examples include Highways staff accessing their line of business systems while out and about via tablet computers. It will also include Social Care staff at hospitals, schools and in people's homes.

These capabilities have been in operation across the council for years, however there have been recent developments which will allow the efficiency and effectiveness of staff using mobile working technology to increase significantly. These are as follows.

1. A new Windows 10 laptop tablet build which incorporates a number of new technologies which make mobile and flexible working much easier for staff to use.

2. The introduction of Govroam Wi-Fi which allows easy and secure access to Wi-Fi access at hundreds of sites around the county and thousands of sites nationally.

3. A significant increase in the numbers of staff with access to smart phones and secure email / calendar access on "bring your own" mobile phones.

4. A mobile working module of the Liquid Logic Social Care System, deployed in conjunction with the above technology, 4G connectivity, plus training, support and

new business processes and policies.

It should be noted that new technology alone will only provide a limited increase in staff productivity. To really exploit the technology, it must be combined with staff training, review of working processes, office accommodation, parking, travel, policies and effective communications leading ultimately to widespread changes in ways of working.

The Councils Information Management and Technology staff have therefore been working in close collaboration with Human Resources, Communications and Property colleagues under the sponsorship of the Executive Director of Strategy and Governance to create a Smarter Working Programme. This Programme has been set up to enable staff to maximise their productivity through the effective use of mobile working technology. This will ultimately evolve into a council wide business transformation programme which will be tasked with achieving significant annual savings.

Recommendations:

1. **To note the contents of this report and consider opportunities to further exploit mobile working technologies across the Council.**

1. Background

1.1. The council has been using laptops, mobile phones and flexible office accommodation including roaming printing and IP phones for many years. This has allowed many staff to work from a variety of locations for business efficiency reasons and their own work life balance.

1.2. Some line of business applications such as Mayrise in Highways have been configured (along with the Councils website and Customer Relationship Management system) to allow highways engineers to perform most of their duties while out and about around the county using Android tablets.

1.3. Norfolk's elected members have all used Apple tablets to perform their duties and access the democratic services systems from any location (over Wi-Fi or using the built in 4G cellular SIM).

1.4. Over recent years, all social workers have been allocated mobile phones (generally Android smartphones) to aid their mobile working productivity. The councils mobile phone estate is currently composed of around 2,000 smartphones, a further 2,000 talk and text phones and 300 data only SIM cards enabling laptops and tablets to operate over cellular networks.

1.5. The council manages over 6,000 Windows laptops – almost all of which are now on a standard optimized Windows 10 build with direct access, Office 365 and a variety of other tools provided to increase productivity and improve ease of use. (This will be 100% Windows 10 with a standard build by April 2019). There are also a small number of desktop devices used for specialist applications such as GIS mapping and data analytics power-users.

1.6. Mobile and flexible working has been used to increase office occupancy rates and reduce the size of the council's office accommodation estate.

2. Current Developments of Corporate Mobile Technology

2.1. The council has been evaluating user experience and the associated business case of replacing desktop IP telephony with Microsoft Skype and Teams technologies for voice (in addition to the already available video conferencing and presence functionality). This enables the laptop to act as the users "office" phone and so enable it to work from any location with a fixed or Wi-Fi connection. In addition, it provides the user with much more flexibility over how they handle calls on their laptop and/or mobile phone.

2.2. Bring your own mobile phone trials have also been conducted and it is expected that this approach will become the standard offer for most staff as mobile contracts come up for renewal from summer 2019/20 onwards, potentially replacing the majority of the existing council provided mobile smart-phones.

2.3. The council's LAN refresh programme will replace the aging Wi-Fi equipment across all council sites during 2019/20 improving voice and video performance across the entire NCC office estate. When combined with Govroam, this will allow staff to work simply and securely over Wi-Fi networks in any Council site, but also across many NHS sites and district council sites. The planned addition of eduroam compatibility will also enable the same connectivity at hundreds of schools and university sites.

3. Use of Mobile Working Technology in Adults & Childrens Social Care

3.1. Following completion of a successful pilot in 2018 and approval of the business case, the Adult Social Services mobile working project is in the later stages of preparation for roll out to around 800 frontline workers and managers over a 12-month period. The draft roll out plan is in an approval round aiming for an early April start. The corporate IT refresh contract has been let and the Lenovo X1 tablet device has been selected. Procurement of new SIM cards is also in progress.

3.2. An initial round of testing of the Childrens Services apps (LCS and EHM) is nearing completion to support a similar roll out to front line workers in Childrens Services from August 2019.

3.3. The pilot in Adult Social Services was carried out with 80 staff in six different teams located across the county over the period from July to October 2018. The pilot was set up to test:

- different device types
- connectivity options
- offline working with a new mobile app
- better user of existing productivity tools (including SKYPE, OneNote, etc)
- seek out the greatest opportunities for improving delivery to service users and efficiency by changing ways of working.

3.4. Weekly surveys and regular face to face feedback was sought. The pilot was able to demonstrate opportunities for worthwhile efficiency savings, for example,

by reducing the need to handwrite notes with a service user and then later type them up in the system back at the office, by capturing signatures electronically, etc. It also showed a number of scenarios where connectivity via mobile data enabled staff and managers to work away from office locations where previously they would have been unable to, for example, when waiting with a service user for an ambulance, performing approvals when out of the office, etc. Despite initial concerns about a device being a barrier to working with service users, the pilot also demonstrated a wide range of improvements to the quality and speed of delivery of service

3.5. Over the period of the pilot, based on responses received, 516 hours were saved averaging 1.3 hours per person per week. At the end of the pilot, higher performing staff were achieving two or three times this level. Also, as the pilot progressed, time savings were showing an increasing trend, which it is reasonable to conclude, continued after the end of the survey period. By increasing levels of engagement, it is anticipated that more significant time savings will be made.

4. Financial Implications

4.1. None specifically arising from this report as the current activities are incorporated under existing or planned budgets. However, the savings targets associated with the various projects and programmes referenced in this report are very significant.

5. Issues, risks and innovation

5.1. There is a risk that the full adoption and exploitation of mobile working technologies will not be achieved if cultural change issues are not considered in conjunction with the introduction of the technology. This is why the combination of people, property, process and technology together is essential in this case to achieve the desired outcomes.

Officer Contact

If you have any questions about matters contained in this paper or want to see copies of any assessments, eg equality impact assessment, please get in touch with:

Officer name : **Geoff Connell** **Tel No. :** **01603 222700**

Email address : **Geoff.Connell@norfolk.gov.uk**

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Digital Innovation and Efficiency Committee

Item 12

Report title:	**Smart Lighting Upgrades**
Date of meeting:	**13 March 2019**
Responsible Chief Officer:	**Tom McCabe – Executive Director, Community and Environmental Services**

Strategic impact

One of the key principles in our strategic approach is 'being business like and making best use of digital technology to ensure value for money.' Teams across highways are always looking to make best use of emerging technologies to save money and create efficiencies. One such initiative, the installation of smart street lighting, is outlined in this report.

Executive summary

Norfolk County Council is responsible for over 52,000 street lights which have been maintained by Amey as part of a PFI contract. Since 2008 when the contract began, we have made over £3 million in energy savings, despite accruing more streetlighting assets through developments etc.

Norfolk County Council has been able to reduce energy used and reduce costs in street lighting due to a variety of initiatives. One such approach is through the installation of Light Emitting Diodes (LEDs) which can be further enhanced by installing a Central Management System (CMS). We have almost 10,000 LED streetlights at present and a programme of upgrades is underway to install a further 13,500 LED streetlights on residential roads.

Smart technology such as CMS allows us to manage these assets remotely. We can identify faults, monitor usage and increase (or decrease) lighting levels without leaving the office.

This month, a Streetlighting Review report has gone to the EDT Committee which provides more details of these initiatives including how they help us reduce our CO2 emissions and save money in the long run. A copy of this report has been attached.

Recommendations:

To support the proposals outlined in the attached report in Appendix A, which provides an update on our initiative to install more smart lighting to save energy and reduce costs.

1. Proposal

1.1. To receive an update and note the content of the attached report, which has been recently been taken to EDT Committee.

1.2. To acknowledge the progress made with regards to the adoption of smart street lighting and support future installation.

2. Evidence

2.1. New technology in Street lighting

2.1.1. LEDs (Light Emitting Diodes)

Many of us will be familiar with LEDs as they are now readily available for use in our homes. Often marketed as 'energy efficient' bulbs this technology has a longer life and is more energy efficient than traditional bulbs. This is no different for our streetlights and using them helps reduce energy and maintenance costs. The light they provide can also provide better contrast in lit areas, so a lower intensity light can be used without sacrificing visual quality or safety.

Although not new technology it is becoming more accessible. The main barrier to the use of such technology is the initial cost. However, over the years the price has reduced significantly to make the technology more accessible to local authorities as they make their case to 'invest to save'.

2.1.2. Central Management System (CMS)

A Central Management System allows us to connect remotely to our street lighting assets. It allows us to control street lights using computer software enabling us to control the way a light or groups of lights operate.

Connecting to our assets in this way allows us to identify issues, help with maintenance and have better control over when lights can be dimmed or switched off. It can help us reduce our energy usage and costs. It also saves time and money in maintenance costs.

2.1.3. Future Rollout

The EDT Committee previously approved the proposal to install a further 13,500 LED streetlights in residential areas, agreeing in the invest to save approach. The programme is currently underway and is being carried out by Amey as part of the PFI contract. Please see attached EDT Committee report in Appendix A for more details.

3. Financial Implications

3.1. There are no financial implications to this report. Please see attached EDT Committee report in Appendix A for more details on financial implications.

4. Issues, risks and innovation

4.1. The adoption of this new technology is not unique to Norfolk and we closely monitor what is happening in the industry. This includes developments to both hardware and software which could potentially improve the way we work.

4.2. We have been able to mitigate the risk by monitoring approaches taken elsewhere and by rolling out the technology in certain areas. This has allowed us to minimise the cost of initial investment and better evidence the savings and efficiencies that can be made before rolling out at a larger scale.

5. Background

5.1. Our Street Lighting - YouTube video

Officer Contact

If you have any questions about matters contained in this paper or want to see copies of any assessments, e.g. equality impact assessment, please get in touch with:

Officer name:	**Grahame Bygrave**	**Tel No.:**	**01603 638561**
Email address:	**grahame.bygrave@norfolk.gov.uk**		

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Environment Development and Transport Committee

Item 12

Report title:	**Streetlighting Review**
Date of meeting:	**8 March 2019**
Responsible Chief Officer:	**Tom McCabe – Executive Director, Community and Environmental Services**

Strategic impact

Street lighting energy accounts for a significant proportion of the Council's total energy use. The Council has made a commitment to reduce its total Carbon Emissions by 50% (from 2008 base line), by 2020. Therefore, managing the Council's Street Lighting portfolio plays a significant part in contributing to achieving that target.

As well as the environmental benefits, there is also a considerable financial impact as the revenue cost for highways related streetlighting energy use is around £2.1m per year.

Despite a change in the Council's policy in 2016, growth in the number of street lights as a consequence of new developments continues to be a significant issue as does the potential general increase in wholesale energy prices.

Executive summary

The County Council is responsible for 52,960 street lights, 7,440 illuminated signs, 1,960 illuminated bollards, and 620 beacons such as zebra crossing beacons. All street lighting operations, including upgrade and maintenance are covered within a 25-year Private Finance Initiative (PFI) contract, let to Amey in 2008. The PFI contract excludes electricity costs which are paid directly by the County Council.

In 2014 and 2016, EDT Committee discussed a broad range of street lighting options and approved the introduction of new technology including computer-controlled LED (light emitting diode) street lighting and the removal of redundant lighting on main roads. As a result, currently there are 9,876 LED streetlights, with a programme of upgrades currently underway to install a further 13,500 LED's on residential roads in Norfolk.

This report provides an update on initiatives that have cumulatively saved over £3m in energy costs and approximately 19,000 tonnes of CO2 emissions since 2008.

This report updates Committee on the following:

- The existing approach to streetlighting in Norfolk;
- The management of streetlighting by using new technology, including LED & CMS;
- Change of policy with regard to the design standards used;
- Options for future environmental and financial improvements.

Recommendations:

1 Members discuss the progress made in delivering environmental benefits and financial savings by introducing new technology and other streetlighting initiatives.

2 Members approve the adoption of the latest streetlighting design standards for use in the Norfolk Streetlighting PFI contract.

1. Existing approach to streetlighting in Norfolk

1.1. The PFI contract started in 2008 and was based on the improvement of lighting through the replacement of columns and streetlights with traditional units, mainly high-pressure sodium (white light). Since then a number of changes have been made which have helped reduce energy consumption.

1.2. The current approach to street lighting is based around:

- Reducing energy consumption through initiatives such as part night lighting, dimming and trimming, and removal of redundant lighting;
- Reducing energy consumption through removal;
- Implementation of new Technologies such as LED / Central Management Systems (CMS) which are more energy efficient;
- Only adopting new streetlights on developments if there is a defined Highway need.

1.3. This approach has been delivered through a number of initiatives:

- Part night lighting (PNL) has been introduced to 18,649 street lights;
- 5,235 residential street lights in the PFI core investment period were changed to LED (with part night lighting where appropriate);
- 4,000 main road street lights have been changed to LED with CMS;
- The next phase to change 13,500 residential street lights to LED is currently underway.

2. Management of streetlighting by using new technology

2.1. The County Council has invested significantly over the last five years into technological advances and implementing invest-to-save opportunities where there is a clear business case.

2.2. The first phase of this approach was to change residential lights in the core investment period to LED lights. 5,235 LED's have been installed in residential roads, some with PNL. The benefit of doing this was that it maximised the energy saving and we did not have the cost of revisiting the area at a later date for PNL.

2.3. The second phase was to change 4,000 main road streetlights to LED, many with a Central Management System (CMS). CMS allows the lamps on street lights to be controlled and dimmed. This is more effective on LED units with dimming possible down to 0%. CMS has been installed on the main road streetlights where we have installed LEDs and a dimming profile applied. This dimming generates up to a 48% energy saving. The annual savings from this initiative have been £110,000 in energy costs, 850,000 kWh in energy and around 460 tonnes of CO2. In addition, to these figures are the reduced maintenance cost from installing LED's.

2.4. A third phase to install 13,500 residential street lights to LED is currently underway. The programme of installation is expected to be completed in summer 2020. The annual savings from the introduction of this initiative is expected to be around 1,528,930 kWh on energy, £162,372 on cost and 827 tonnes of carbon emissions per year. An additional annual saving due to reduced maintenance costs are estimated at £204,000, bringing the total predicted annual saving to around £366,000.

2.5. Once this current phase has been completed, 23,376 or 44% of the County's highway lighting asset will be LED. The table below illustrates the significant financial savings and environmental benefits since the start of the PFI contract.

Year	Energy savings	Total Energy savings - kWh	Total Emissions savings – in Tonnes	Reduced maintenance costs	Comments
2008/09	£84,369	1,053,732	570	£0	Start of Core Investment Period - replacing old SOX (Low Pressure Sodium) units with SON-T (High Pressure Sodium) units.
2009/10	£83,773	1,248,294	675	£0	
2010/11	£100,303	1,701,746	921	£0	
2011/12	£112,721	1,694,745	917	£0	
2012/13	£266,292	3,603,175	1,949	£4,533	Completion of Core Investment Period. Start of first phase LED rollout
2013/14	£377,619	4,598,612	2,488	£20,281	
2014/15	£422,618	4,829,591	2,613	£43,597	
2015/16	£444,608	4,959,576	2,683	£61,667	
2016/17	£517,281	5,294,827	2,865	£88,443	Start of second phase LED rollout to main roads
2017/18	£654,228	5,983,949	3,237	£125,709	
2018/19	TBC	TBC	TBC	£132,516	Start of third phase LED rollout to residential roads
Total	**£3,063,812**	**34,968,248**	**18,918**	**£476,747**	

Table 1 – Savings since the start of the Norfolk Streetlighting PFI

3. Change of policy with regard to the design standards used

3.1. The 25 year Norfolk Streetlighting PFI contract started in 2008. At this time, as well as there not being any LED technology available, the national streetlighting design standards were different.

3.2. The previous streetlighting design standard BS5489 was amended in 2013 to take account of the new developing LED technology and other technological advances.

3.3. As the PFI contract is based on the 2003 version of BS5489, there needs to be a formal change to the contract to reflect this new design standard revision. It should be noted that the principles of the new standard have been applied to the more recent improvements / investments by Norfolk County Council, however, this formal contract change will ensure that all sides fully comply with the latest requirements and that there is full clarity.

3.4. It is recommended that the 2013 British Standard is applied only where existing Norfolk County Council policies on lighting allow or require lighting. Previously approved policies specify that highways in Urban Areas will generally be lit whilst highways in Rural Areas will not generally be lit, except where problems of road safety exist. Further to this there is also the 2015 policy to stop adopting lighting on new residential / retail developments unless there is a highways safety need. To clarify, the road being part of a traffic route (ie a higher use, non-estate road) or the inclusion of an introduced obstacle constitutes a highway safety need.

3.5. Within this new streetlighting design code there is more flexibility around the standards of lighting required in different circumstances, known as the lighting classes. To achieve consistency and clarity in Norfolk, the report in Appendix B has been produced. This provides a recommendation as to what lighting classes should be adopted in Norfolk and explains the justification for doing so. It is recommended that the proposal summarised in Appendix B is implemented in full as this offers further energy savings by reducing energy costs as well as positively impacting on the environment through further carbon reduction and reduced light pollution in Norfolk.

4. Options for future environmental improvements and financial benefits

4.1. As highlighted above, the next phase of LED installation will be complete on site in early 2020. At that time, 44% of the County's highway lighting asset will be of the most energy efficient LED type. However, that still leaves just under 30,000 lights of the old high-intensity discharge lighting such as low or high pressure sodium.

4.2. The next phase of potential upgrades would be the 15,000 remaining non-LED lanterns which are on Traffic routes. As explained in 3.4, a Traffic route is a higher use, non-estate road. As these tend to be the higher classification roads (A, B and well used C class roads), these tend to be the higher level light units that are the next highest use of energy. Any improvements to this lighting asset will deliver reduced electricity consumption and therefore deliver cost savings and cut carbon emissions.

4.3. Being located on traffic routes and given the higher usage of electricity (when compared to residential lights), as part of any LED upgrade, it would also be prudent to install a CMS (Central Management System). As highlighted above, previous use of this system in Norfolk has achieved up to 48% savings in energy.

4.4. Given the location of these lights on traffic routes it would also be prudent to future proof the new lanterns to include sockets for the latest digital technology. This will help with any new emerging Smart Cities technology (such as sensors to help monitor and improve traffic flows, monitoring pollution levels or real time temperatures, rollout of Wi-Fi or extension of existing Long Range Wide Area Network (LoRaWAN) networks etc). This will need to be explored further with the Council's Information Management and Technology (IMT) team and the additional cost for future proofing sockets are not included in the cost estimate below.

4.5. The estimated cost of upgrading all 15,000 traffic route lights to LED with CMS is estimated at £10.5m based on a detailed business case. Although a significant investment, if all 15,000 traffic route lanterns are upgraded, the reduction in energy is estimated to be approximately 5m kWh per year, the energy cost saving is estimated at £820,000 per year (at current market rate) and carbon emissions

would be reduced by around 2,700 tonnes of CO2 per year. In addition, the annual saving due to maintenance would be £80,000, bringing the total annual saving to £900,000 at the current contract rates. The application of dimming profiles through CMS are predicted to bring an additional 20% saving to ongoing energy costs, over and above the £900,000. The payback period for this option would be 11.7 years.

4.6. An alternative funding scenario has also been considered. This option focusses on the Norwich Strategy area traffic routes only and would involve upgrading around 6,000 units to LED with CMS. The total estimated cost for this option would be £4.5m which would achieve an expected £409,000 annual revenue saving. The payback period for this option would be 11 years. Funding options are currently being explored and one potential option may be to secure funding through the Transforming Cities award for the Norwich area. If so, it could be further expanded to include non-LED residential areas too, generating further financial and environmental benefits.

4.7. The two options detailed in 4.2 and 4.6 are summarised in Table 2 below. It should be noted that funding for both options is not secured.

Option	No. of LED's	Approx Cost	Approx Annual Revenue Saving	Payback Period
A	15,000	£10.5m	£900,000	11.7 yrs
B	6,000	£4.5m	£409,000	11 yrs

Table 2: Summary of Improvement Options

4.8. Officers will continue to explore the options for future upgrades and if a realistic business case emerges, we will bring this back to Members for consideration.

5. Financial Implications

5.1. Street lighting is a significant energy user, accounting for a significant amount of the County Council's total use and costing around £2.1m each year for highway related lighting alone.

5.2. The Table in section 2.5 of this report details the financial and environmental savings achieved since the start of the Norfolk Streetlighting PFI contract in 2008. In total, to date cumulative financial savings of over £3m have been achieved in terms of energy reduction, nearly 35m KWh of energy savings have been achieved against the 2008 baseline, equating to a carbon saving of nearly 18,900 T. A further £500,000 has been saved through reduced maintenance costs for LED's.

5.3. As outlined in section 4, the next phase of initiatives would be the upgrade of 15,000 Traffic route streetlights to LED with CMS, combined with additional sockets for future proofing. This would cost £10.5m and as an invest to save initiative, would have a payback period of 11.7 years (given the annual revenue savings of £900,000).

5.4. An alternative option focusses on the Norwich Strategy area traffic routes only and would involve upgrading around 6,000 units to LED with CMS. The total estimated cost for this option would be £4.5m which would achieve an expected £409,000 annual revenue saving. The payback period for this option would be 11 years.

5.5. The funding sources for the options outlined in 5.3 and 5.4 above have not yet been identified. Options currently being explored are corporate invest to save funding, central government loans (such as Salix), or specific external funding opportunities such as Transforming Cities funding from the Department for Transport.

5.6. The extent to which each of the initiatives are able to deliver a cashable saving, as opposed to just mitigating the increased cost pressure to the service due to increasing energy prices, depends largely on the future prices in the energy market. This continues to be a significant pressure for the authority.

6. Issues and Risks

6.1. Regarding the legal implications; the provision of new street lighting is a discretionary power, not a duty, and the Courts have held that no liability arises where a local authority decides to withdraw street lighting for reasons of economy. However if there are non-natural obstructions in the highway introduced by the Council, such as street furniture, crossings or traffic calming features, then reasonable care is required to see that they are not a hazard to users of the highway.

6.2. Street lighting forms part of the local street scene. As such, the provision of street lighting can be an emotive issue. Consultations with local communities were carried out in advance of implementing part night lighting and there was a split between those in favour and those against. Further resistance to initiatives have been encountered when consulting on and implementing the removal of redundant street lights.

6.3. Some of the initiatives we have implemented have required a change to the existing PFI contract. To date, we have been able to reach agreement about amendments to enable new approaches/trials and initiatives to be delivered which were not originally identified when the contract was let, for example, part night lighting. In addition the government (HM Treasury) is committed to reducing the PFI revenue cost to local authorities through a centrally co-ordinated savings programme. The code of conduct for operational PFI contracts seeks to foster agreement between local authorities and their PFI partners to deliver efficiencies and savings on a voluntary basis.

Officer Contact

If you have any questions about matters contained in this paper or want to see copies of any assessments, e.g. equality impact assessment, please get in touch with:

Officer name: **Grahame Bygrave** **Tel No.:** **01603 638561**

Email address: **grahame.bygrave@norfolk.gov.uk**

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The terminology of street lighting technology

LED
A Light-Emitting Diode (LED) is a semiconductor device that requires less energy, lasts longer and it also requires less maintenance than the lights that were originally approved for the contract. They are more expensive to buy although the price has reduced in recent years. They are now an economic alternative over the long term.

CMS
A Central Management System (CMS) is a method of remotely controlling street lights using computer software to determine the way the street light or groups of street lights operate. The software is usually hosted by a commercial organisation that provides the end user with a computer control interface via the internet. The end user can then readily program, at any time, how they want the streetlights to operate. The communication between the CMS and the street lights utilises the internet and the mobile phone networks.

Trimming
Trimming refers to turning on road lights later in the evening and switching them off earlier in the morning commonly by the use of photo electric control units (PECU). Trimming takes advantage of shorter warm up times and greater brightness of modern lanterns to reduce lighting hours at the start and end of the night.

Dimming
Dimming refers to reducing the light output of a lamp by adjusting the amount of energy supplied to it. The older types of lamps are less dimmable than modern LED ones because there is a threshold where if the energy is reduced, the lamp will extinguish. LED lamps are capable of being dimmed down to 0%. Some dimming was included in the original contract but dimming can be substantially increased with LED's and CMS.

Part Night Lighting
This is when the street lights are turned off during the night for a period of time. (12am to 5am GMT)

Briefing note

Review of Street Lighting Standards/Lighting Classes

Background
As the Standards and best practise guidance documents have been updated to reflect the performance of modern lighting equipment. The standards written into the Norfolk Streetlighting PFI contract, development specification for street lighting works and Norfolk County Councils policy on environmental lighting zones are now largely outdated.

WSP were commissioned to review Norfolk County Council street lighting policies to see if any operational savings could be made by updating the development specification for street lighting works and PFI contract. The Norfolk County Council Electrical Services team have reviewed this along with further analysis of the 2013 British Standard for highway lighting.

Current Situation
The County Council's development specification for street lighting works and Norfolk County Council's PFI Contract with Amey both currently reference the following standards:

- BS5489-1:2003
- BS5489-2:2003
- BS EN 13201-2:2003
- BS EN 13201-3:2003
- BS EN 13201-4:2003

These are all now superseded. The current revision of BS EN13201 was released in 2015, the current BS5489-1 was released in 2013 and BS5489-2 in 2016. The standards (and associated best practise guidance) were updated largely due to the mass adoption of LED lighting across the public and private sector. Of particular note within the updated standards are the application of S/P ratios. S/P ratios allow the lowering of lighting levels to differing degrees dependant on how well a specified light source renders colour.

Proposal
The WSP report "NCC 5168 – Norfolk County Council – Street Lighting Policy Review" recommends that traffic route lighting classes are reviewed in line with the current BS 5489. This enables reduced lighting levels where appropriate. The application of BS5489:2013 also allows lower lighting levels on subsidiary roads while still being compliant with applicable standards. This is achieved through the application of Scotopic/Photic ratios, where high quality white light sources, such as LED, provide good colour rendering values. Through these measures further energy savings can be made, reducing energy costs as well as positively impacting on the environment through further carbon reduction and reduced light pollution in Norfolk.

It is also recommended that the development specification for street lighting works is revised to ensure that its requirements align with savings initiatives implemented since the last update. In turn future developments which require lighting will be more efficient in their use of energy through the use of LED luminaires, 'Part Night Lighting' (where appropriate), Central Management System (CMS) Nodes and the application of current British Standard.

Digital Innovation & Efficiency Committee

Item 13

Report title:	**Digital Skills for Business**
Date of meeting:	**13 March 2019**
Responsible Chief Officer:	**Tom McCabe – Executive Director, Community & Environmental Services**

Strategic impact

The ICT Digital sector is recognised both nationally and regionally for its importance in delivering innovation and economic growth. It is identified in the Norfolk and Suffolk Economic Strategy (NSES) as one of the 3 priority sectors to enable the growth of higher value businesses and jobs.

Executive summary

This report builds upon the Digital Economy – Business Development & Skills paper presented to this committee in January 2019 and provides further information on the work that the Council is engaged in to help Norfolk's businesses acquire the technological skills and capacity they need to grow and prosper.

The New Anglia Local Enterprise partnership (NALEP) commissioned a series of sector skills studies aiming to articulate the skills needs both now and in the future. The ICT Digital Plan was one of the first to be published in November 2017.

It recognised that digital skills are needed not just for the digital and technology industries, but also impact on all sectors within the economy. As technology continues to develop at a fast pace these skills will become even more important to economic growth and prosperity.

The paper provides a summary of a range of activities and interventions taking place to address the skills needs of the sector at various levels and demonstrates how they link to the key priorities within the sector skills plan

Recommendations:

Members are requested to

- **Note the progress to date with various skills initiatives and interventions**
- **Endorse the direction of travel to address the skills needs of the sector at various levels**

1. Background on Current & Planned Initiatives

1.1. A paper submitted to this committee in January 2019 entitled 'Digital Economy – Business Development & Skills' provided detail on the work that Norfolk County Council is doing on interacting and supporting the digital sector.

1.2. This paper provides more detail on a number of digital skills interventions in Norfolk and links them to the key priorities within the ICT Digital sector skills plan.

1.3. The skills system is complex with a myriad of skills providers and initiatives all of

which will have their own funding parameters and aims and objectives. Influencing the players to coalesce around a set of commonly agreed goals is challenging. In general, the development of sector skills plans, which have to be owned by the sector, has created a series of recommendations or priorities around which employers and skills providers can work together to create a system where the current and future skills needs are able to be met. In responding to the skills challenges for the ICT Digital sector highlighted in the sector skills plan a skills task force was formed by Tech East in January 2018. This group, chaired by Chris Sargisson, CEO Norfolk Chamber of Commerce, combines knowledge and expertise from business, education and public sector and aims to oversee the implementation of the plan developing distinctive local skills initiatives, activities and interventions to address the identified needs at various levels.

1.4. The plan identified the following three key priorities that will deliver a major contribution to the growth of the sector in the NALEP region:

Priority 1	**Priority 2**	**Priority 3**
Local Employer Skills Leadership	**New and broader talent pipelines**	**In-career learning and development**
What the goal is		
Develop closer collaboration between Digital tech sector business and skills providers to improve the responsiveness, accessibility and value of skills outcomes for local employers and residents	Stimulate the pipeline for talent for the sector to overcome skills shortages in higher technical and management skills, create alternative pathways for graduate-level talent and raise awareness in schools of sector career choices	Ensure existing sector employees and competent, enterprising, adaptable and able to apply leading edge solution in a rapidly changing industry through effective co-ordination of bespoke in-career technical and professional learning and development
What success looks like		
New Digital Skills Task Force to develop investment and excellence in the sector's skills offer, articulating and responding to employer needs and maximising opportunities for New Anglia residents	Sector has access to sufficient, diverse talent to fulfil employer business growth aspirations, attract talent from elsewhere and provide exciting opportunities for residents	A dynamic, local learning and enterprise development environment facilitating high quality continuing technical and general professional development for the specialist and wider business community
Where will it have impact		
Increasing Digital Tech Competitiveness Nationally Growing Digital Tech Economy Jobs, Business and Value	Increasing Digital Tech Competitiveness Nationally	Growing Digital Tech Economy Jobs, Business and Value

1.5. There are a range of skills interventions taking place and although they have not

been specifically designed to respond to the priorities within the plan they aim to increase skills at various levels and to increase awareness of the opportunities within the sector and the wider economy where digital skills are increasingly at a premium.

1.6. Skills provision and interventions delivering against **Priority 1, Local Employer Skills Leadership:**

- UEA Internships – supporting local businesses to engage UEA students / graduates for 3 – 12 months on tangible projects. The interns bring skills and energy and the host employer helps develop the student / graduate.
- NUA is innovating to meet regional skills deficits, and in 2017 launched 3 new BSc awards in Creative Sciences.
- NCC, through an ICT Digital Employer Engagement project will undertake an analysis of vacancies across the ICT Digital sector to create a detailed understanding of the skills and qualifications that employers typically seek

1.7. Skills provision and interventions delivering against **Priority 2, New and Broader Talent Pipelines:**

- UEA Award – for more information visit https://www.uea.ac.uk/business/talent/uea-award - Based on a Duke of Edinburgh model it provides a framework for students to develop their skills / attributes across both curricular and extra-curricular activities. The framework is based around graduate attributes which includes Digital Literacy and IT. There are currently 1,200 students registered.
- UEA Digital Voyager – four week on-line digital literacy programme available to UEA students
- UEA Sync the City – 54 hour hackathon. >150 people involved includes computing / business students, tech sector – programmes, designers, business mentors. https://syncthecity.com/ organised this in conjunction with SyncNorwich for the past 5 years.
- NUA also continues to innovate in their approach to employment readiness, through an in-house gamified programme, NUA Profile aimed at building the top 10 skills identified by businesses as desirable in a new graduate team member. Its success as a game in engaging students is evident in that 2 years ago, before the start of the programme, only 30% of NUA students used Careers resources during their degree, and that has now risen to 78%. Currently NUA are bidding to Digital Catapult for monies to develop a new AR based Escape Game based on resilience skills. The Profile project has been shared with other regional educators and businesses, both within the creative sector and the wider regional economy
- Step into Tech (SiT) runs the Norwich Tech Club, a fortnightly meet up where young people discover a range of technology, skills and potential careers, as well as building relationships with other like-minded members. Club sessions help them develop both digital and soft skills, build confidence and identify clearer pathways to higher education and careers.
- SiT has also arranged two ‘Techathons’, two-day events where young people aged 8-18 come together to use tech to work on ideas for solving a problem. Teams of kids invent, design, code and have fun. It is a fantastic way for young people excited by technology to develop skills, receive mentoring and make links with potential employers.
- Norfolk County Council has sponsored a SiT event via social value

funding from large contracts by:

- Funding equipment for the event
- Setting a challenge to monitor air pollution

1.8. Skills provision and interventions delivering against **Priority 3, In-Career Learning & Development:**

- The ICT Digital Employer Engagement project will undertake research to understand in greater detail the skills gaps within SME's, identify barriers to training the existing workforce and identify specific courses which are not currently being delivered in Norfolk and the scale of demand for those courses
- Apprenticeships are a less well recognised route to in-work progression within the ICT sector than in many other sectors. This tends to be because an apprenticeship will last for at least a year and often between 18-24 months which does not always meet the skills requirements of the sector that requires shorter more specific interventions in developing skills. A line of enquiry within the ICT Digital Employer Engagement Project will be to establish from an employer perspective the role of apprenticeships within the sector and how we might work with providers to make the approach more employer friendly.

2. Evidence

2.1 The NALEP Digital Tech Sector Skills Plan https://newanglia.co.uk/sector-skills-plans/ identified the need for the Digital tech sector to respond to replacement demands of approximately 6,000 vacancies by 2024 plus the TechEast sector growth aspiration to create an additional 4,000 jobs in New Anglia by 2024.

2.2 Nationally, the 2018 TechNation Report https://technation.io/insights/report-2018/key-findings/ highlights that the digital sector is continuing to grow twice as fast as the economy as a whole making it clear that technology is a critical component of UK growth, both now and in the future.

2.3 The report goes on to state that the number of jobs is increasing and that between 2014 and 2017 employment in the digital tech sector increased by 13.2% with workers being more productive by an average of £10,000 per person per annum that those in non-digital sectors. Jobs requiring digital tech skills command higher salaries at an average of £42,578 compared to £32,477 for those that do not.

2.4 Additionally, employer demand is increasing with non-digital tech companies becoming more reliant on digital tech workers as the use of technology continues to grow.

3. Financial Implications

3.1. There are no financial implications currently.

4. Issues, risks and innovation

4.1. There is a risk that the skills provision and interventions detailed above are either the wrong interventions that will not deliver the skills required or that the interventions are insufficient to deliver the volume of skills required to enable businesses to grow and thrive in Norfolk.

Officer Contact

If you have any questions about matters contained in this paper or want to see copies of any assessments, eg equality impact assessment, please get in touch with:

Officer name: **Jan Feeney** **Tel No.:** **01603 222178**

Email address: **Jan.feeney@norfolk.gov.uk**

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Digital Innovation and Efficiency Committee

Item 14 **Item No.**

Report title:	**Mobile Phone Coverage**
Date of meeting:	**13 March 2018**
Responsible Chief Officer:	**Tom McCabe – Executive Director, Community and Environmental Services, Simon George – Executive Director, Finance and Commercial Services**

Strategic impact

While the successful Better Broadband for Norfolk Programme has dramatically improved the availability and performance of fixed internet connectivity, the coverage of good mobile voice and data connectivity lags some way behind.

The availability of ubiquitous, fast, reliable mobile voice and data coverage would provide significant benefits for economic development and improved quality of life for the people who live, visit and work in Norfolk.

The committee is committed to working with mobile network operators to improve coverage

Executive summary

The focus of Norfolk County Council and its partners on broadband provision in the county has seen Superfast coverage improve from 43% just a few years ago to 92% today, with firm plans to rise to at least 95% by April 2020. The council is also pursuing opportunities to increase availability of Ultrafast connectivity via fibre to the premise (FTTP), support alternative network providers and low power wide area networks (LoRaWAN).

Meanwhile mobile telecommunications facilities have failed to improve at anywhere near the same pace, not least because government funding has only been available to support fixed broadband.

In February 2018 an independent study of mobile coverage across the county was carried out as directed by this committee. The overall availability of 4G across the county was established to be 84%.

This report a year later summarises progress made to date along with future expectations for improvement and options open to the committee to drive improvements.

Industry and government feedback on Norfolk's collaborative and proactive approach to improving coverage remains that Norfolk is leading national best practice. This included being referenced by MobileUK in their Building Mobile Britain campaign and in publications and events from the Local Government Association, the Department of Culture, Media and Sport as well as the Chambers of Commerce in their no more not spots campaign.

Since the drive study was undertaken, the Council has engaged to varying degrees with each of the four main mobile operators and their industry body MobileUK.

Vodafone has demonstrated the greatest level of improvements, which is impressive given that they already held a coverage advantage according to our 2018 study. EE is currently in active discussions with the council regarding access a number of sites to mount their equipment and O2 have demonstrated active support but to a much more limited extent.

So far, Vodafone has also provided the most compelling plans for ongoing investment in improving county wide coverage over the next 6 months.

Progress has been limited to optimising the use of existing sites rather than taking advantage of new sites based on the Council's offer to host equipment. However, this shows signs of changing now that test cases have established the appropriate "code powers" based rental rates for equipment on roof tops and towers. The rulings have been negative in terms of commercial rental values, but positive in terms of creating a more compelling business case for using council (and other sites) in rural areas.

The recently announced £8m DCMS funding to upgrade 372 council managed sites to full fibre connections could provide mobile network operators with fibre backhaul at these locations, further increasing their attractiveness in terms of cost and performance.

The Ofcom Connected Nations 2018 UK Report states that.

- 9% of UK landmass has no good 4G coverage from any operator. This has improved from 21% a year ago but rural areas are still badly affected.
- 23% of homes and businesses do not have good indoor 4G coverage from all operators.

The council is in discussion with Ofcom in the context of working together to measure the improvements that have been made since the 2018 drive study was undertaken. Use of up-to-date Ofcom coverage maps which take learning from Norfolk's drive study would be beneficial in terms of measuring improvements to date and targeting future improvements. If this is not possible, then repeating the drive study for the areas that had poor coverage last year should be considered.

Recommendations:

1. **That the committee note the information regarding progress with coverage.**
2. **To direct officers to investigate options to measure current coverage via Ofcom or through recommissioning a drive study of the areas that lacked coverage in 2018.**
3. **To direct officers to continue to work with mobile operators and other infrastructure companies to access NCC and other public-sector buildings.**

1. Background and Context

1.1. The current mobile phone coverage levels across Norfolk leave much to be desired and are a source of considerable frustration to residents, visitors and local businesses

Norfolk county council therefore wishes to use its assets and its influence to improve the consistency and quality of mobile voice and data coverage across the county. The February 2018 survey results and engagement with the four main suppliers (and their industry body MobileUK) is intended to enable use of council and other public-sector structures to host equipment to fill current gaps in coverage. Where possible, fibre backhaul will also be provided to improve mobile data capacity. The recently announced £8m of funding from DCMS to upgrade 372 Norfolk sites will help.

2. Progress to Date

2.1. As the survey has not been repeated and comparable Ofcom data is not currently available it is difficult to quantify what improvements have been made. However, the council has seen evidence that investments have been made my mobile operators over the last year. Vodafone has shown by far the greatest level of improvements (based on their data and coverage maps). EE is also actively engaged with the Council at present though evidence of their improvements is not available to share with the committee at this time. We are aware that O2 has done some work to optimise coverage but as with EE very little evidence is available. EE have however been very active in promoting 4G based Broadband alternatives so there appears to have been some level of investment made.

Last month saw the first Tribunal decision on the rental price payable by an operator to a site provider under the new Electronic Communications Code (often referred to as" code powers"). In this case of EE vs LB Islington Tribunal ruled that the value of the Code rights is just £50 in a decision that will be viewed as a victory for operators and sets the sort of precedent that site providers had been fearing, and many of their agents had been assuring them would not happen.

While this is bad news in terms of commercial income, this committee has always been clear that it values improved coverage more than rental incomes for telecommunications equipment. This is therefore good news in terms of improving the business case for rural mobile phone coverage.

2.2.

3. Financial Implications

3.1. There may be a risk that site rental income may reduce as a result of recent court rulings, however this is not a large figure for Norfolk County Council. Business rates increases generated by better mobile phone coverage improving business growth would be likely to be far greater. There may be a cost associated with re-measuring mobile signal coverage, but that is not know at this time.

4. Issues, risks and innovation

4.1. There are no specific items to highlight in relation to this report.

Officer Contact

If you have any questions about matters contained in this paper or want to see copies of any assessments, eg equality impact assessment, please get in touch with:

Officer name: Geoff Connell **Tel No.:** 01603 222 700

Email address: geoff.connell@norfolk.gov.uk

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Digital Innovation and Efficiency Committee

Item No.

Report title:	**LoRaWAN bid to the New Anglia LEP**
Date of meeting:	**13th March 2019**
Responsible Chief Officer:	**Tom McCabe – Executive Director, Community and Environmental Services, Simon George – Executive Director, Finance & Commercial Services**

Strategic impact

Networks of connected devices and associated systems provide new opportunities to achieve savings for the Council and improve outcomes in Norfolk.

Executive summary

The Digital Innovation and Efficiency Committee have previously approved support for trial deployments of a LoRaWAN network and the associated Things Network conference held in Norwich on the 15th/16th October 2018. The committee also received an update about the Hackathon and Winter Gritting Sensors deployment in November 2018.

Norfolk County Council has led the submission of a joint bid with Suffolk County Council into the New Anglia Local Enterprise Partnership for funding to implement the largest single public LoRaWAN network in the UK.

This network will provide the foundation infrastructure for the public sector, schools, entrepreneurs and businesses to experiment, pilot, learn and develop digital skills and solutions based on connected devices, also known as the Internet of Things (IoT) across the whole of Norfolk and Suffolk counties.

Recommendations:

1. **To note the contents of this report and consider opportunities to further promote exploitation of the network.**
2. **If the bid is not successful, to continue to support the slower roll out of the LoRaWAN network across Norfolk using social value funds from NCC's WAN contract with Capita Updata.**

1. Background on the LoRaWAN bid

1.1. The Digital Innovation and Efficiency Committee approved support for trial deployments of a LoRaWAN network and the associated Things Network conference held in Norwich on the 15th/16th October 2018.

1.2. The committee also received an update about the Hackathon and Winter Gritting Internet of Things (IoT) initiatives in November 2018.

1.3. Building on the success of these committee initiatives and working closely with colleagues in Economic Development we have submitted a bid into the New Anglia Local Enterprise Partnership (LEP) to seek funding to implement the largest single public LoRaWAN network in the UK.

1.4. The bid is a joint bid working with our Suffolk colleagues to procure, implement and test 270 LoRaWAN gateways.

1.5. The infrastructure provides the foundation for a whole ecosystem that could contribute to the transformation of our digital economy and educational opportunities.

- Enabling new ways of delivering council services and outcomes
- Teaching school children and students about the technology, increasing interest in coding careers
- Enabling entrepreneurs to develop and demonstrate their ideas, at minimal cost
- Creation of new businesses in Norfolk and Suffolk based on innovation
- Enabling business growth across the counties based on new ways of working enabled by connected, low cost sensors
- Enabling agri-tech solutions where mobile phone networks are inadequate or cost prohibitive

1.6. This project has potential to open new market opportunities to develop new products across Norfolk and Suffolk

1.7. If the bid is successful we will implement

- 110 external LoRaWAN gateways across Norfolk
- 25 Internal LoRaWAN gateways in Norfolk to be deployed in business centres, schools and other buildings
- 110 external LoRaWAN gateways in Suffolk
- 25 Internal LoRaWAN gateways in Suffolk to be deployed in business centres, schools and other buildings

1.8. The network would be promoted through existing local groups, briefings, social media tools and through future hackathons and similar events.

1.9. This IoT infrastructure would support the national government's aim to improve connectivity and productivity across the UK, as stated in the national Industrial Strategy: "The aim of the Industrial Strategy is to boost productivity by backing businesses to create good jobs and increase the earning power of people throughout the UK with investment in skills, industries and infrastructure"

1.10. NCC is expected to learn if the bid has been successful on the 27th March 2019

2. Background References

2.1. **New Anglia Local Enterprise Partnership**
https://newanglia.co.uk/

2.2. **The Things Network (TTN)**
https://www.thethingsnetwork.org/

2.3. The Things Network is building a network for the Internet of Things by creating abundant data connectivity, so applications and businesses can flourish.

The technology used is called LoRaWAN and it allows ‘things’ to talk to the internet without cellular mobile or Wi-Fi networks.

It features low battery usage, long range and low bandwidth. No Wi-Fi codes and no mobile subscriptions.

Officer Contact

If you have any questions about matters contained in this paper or want to see copies of any assessments, eg equality impact assessment, please get in touch with:

Officer name: **Kurt Frary** **Tel No.:** **01603 223856**

Email address: **Kurt.Frary@norfolk.gov.uk**

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Digital Innovation and Efficiency Committee

Item 16

Report title:	**DCMS Local Full Fibre Network Bid**
Date of meeting:	**13 March 2019**
Responsible Chief Officer:	**Tom McCabe – Executive Director, Community and Environmental Services, Simon George – Executive Director, Finance & Commercial Services**

Strategic impact

Building upon the successful Better Broadband for Norfolk Programme, Norfolk County Council has led a county wide bid into the Department for Digital, Culture, Media & Sport (DCMS) Local Full Fibre (LFFN) Programme Challenge Fund. This funding bid is intended to improve access to gigabit speed fibre for public sector service delivery (including Education and Health) but is also expected to stimulate business growth through greater availability of ultrafast fibre across the county.

Executive summary

As a County we are seeking to use LFFN funding to improve the efficiency of our local government, educational and health operations. We believe these actions will also stimulate the market to enable tangible and sustainable economic growth and community benefits.

Government has announced that it will invest £200m in locally-led projects across the UK to help provide the fastest and most reliable broadband possible.

Starting in late 2017 the Local Full Fibre Networks (LFFN) programme has invited bids into a Challenge Fund from local bodies who can leverage local investment and activity to stimulate more fibre connections in their local areas.

The DCMS programme will include: harnessing long-term public-sector internet demand, providing gigabit connection vouchers to increase business take-up, upgrading connections into public buildings with fibre and improving access to publicly-owned infrastructure. These activities will thereby improve the business case for the private sector to invest in fibre networks to connect even more homes and businesses.

Building on extensive support from the wider local public sector across the county as well as local businesses Norfolk County Council has worked very closely with DCMS to refine and submit a bid. In February 2019 following a final presentation to the DCMS Investment Board the Norfolk Bid was approved and the full £8 Million grant value submitted was approved to proceed.

The £8M from DCMS will be combined with £3M of Norfolk County Council (NCC) funding to upgrade 372 NCC, Fire and Schools sites to full fibre connections enabling much higher connection speeds at lower ongoing annual costs. This will enable faster access for the Council's services including enabling multi-agency hubs, as well as faster access for the public in libraries and for students in schools.

NCC will also re-invest 50% of its savings which arise because of this funding on further

investments into upgrading even more sites and locations to Fibre to the Premises (FTTP).

NCC and the districts, borough and city council's will invest officer time on the delivery of the programme and relevant activities to promote the expected resultant opportunities to local businesses.

In addition, thousands of Norfolk's businesses will be likely to benefit from being closer to the new fibre network connection points as it is rolled out. Businesses will be able to bid for up to £2.5k each from DCMS to connect to the growing ultrafast fibre network, helping them to also benefit from faster speeds and lower costs.

The project to roll out the network to public sector buildings will also promote the DCMS Local Full Fibre Voucher Scheme to help businesses take advantage of this excellent opportunity.

It should be noted that the County's bid was supported by over 100 letters of support from local businesses, the Chamber of Commerce, the New Anglia LEP, the wider public sector and academia. Developing this successful bid was very much a partnership activity between numerous stakeholders across the length and breadth of the county.

It should be noted that Norwich & Kings Lynn were excluded from the bid due to DCMS eligibility criteria for these urban areas on the basis that the market should provide without the need for further stimulation.

The funding is expected to be made available early in the new financial year and must be spent by April 2021.

Recommendations:

1. **To direct officers to progress the funding approval into an operational delivery programme with all appropriate resources and governance.**
2. **To direct officers to promote the opportunities to benefit from the LFFN Gigabit Voucher Scheme to Norfolk's business community.**
3. **To direct officers to pursue private sector funding opportunities to improve full fibre connectivity in Norwich & Kings Lynn.**

1. The Background and Context

1.1. To help provide the fastest and most reliable broadband available, Government will invest £200m in locally-led projects across the UK. Starting in late 2017 the Local Full Fibre Networks (LFFN) programme will invite bids into a Challenge Fund from local bodies who can leverage local investment and activity to stimulate more fibre connections in their local areas.

The LFFN programme will have capital funding available from FY18/19 to FY20/21. Bids must be planned such that all LFFN funding is disbursed no later than March 2021. No revenue funding, or contribution to admin costs will be eligible.

It is not a condition for support that bidders must provide match funding, however DCMS are more likely to support proposals which either have co-investment from bidders (either capital funding, or committed service charges over several years), or those projects that are most likely to encourage additional investment from other parties.

2. Scope of the bid

2.1. Norfolk County, on behalf of the wider public sector, academia and business development groups submitted an expression of interest in preparation for a full bid against the LFFN Programme. This was upgraded to a full written submission, leading to final presentations to DCMS commercial and investment panels in January and February 2019. The final bid was for £8m to upgrade 372 local authority, fire and school sites to full fibre connections. 230 of these sites are schools which will directly benefit from faster connections and lower costs.

NCC's financial contribution will be the redirection of £3m (over the next 4 years) of existing wide area network expenditure onto the new fibre connections as they become available. The county will also fund staff time to manage the programme and promote the expected resultant opportunities. NCC will also reinvest 50% of its savings generated through the deployment of cheaper (and faster) fibre connections to its buildings into further fibre related investments.

All schools due to be upgraded will be contacted by the NCC Schools IT team.

A full map and list of locations will be published after the NCC and DCMS teams have completed final due diligence and formally agreed allocation of funding.

2.2. The Norfolk LFFN programme is based on harnessing long-term public-sector internet demand, upgrading connections into public buildings with fibre. This will be carried out in such a way that local businesses should also be able to benefit from access the fibre infrastructure once it has been deployed. This private sector investment in extending the fibre network further can also benefit from access to DCMS LFFN Gigabit Connection Vouchers (targeted at increasing business take-up). These vouchers are currently available at up to £2,500 per applicant.

Norfolk County, city, borough and district councils will also work together to promote further uptake of the voucher scheme as fibre availability increases.

The NCC bid is focussed on improving access for public sector service delivery across the length and breadth of the county and this "outside-in" approach to fibre deployment is very much in line with the latest DCMS thinking regarding improving full fibre access in rural areas.

This bid should be seen in the wider context of Norfolk's plans to improve connectivity and is in addition to the Better Broadband for Norfolk Programme which is primarily aimed at providing superfast broadband access to residents. The County Council remains committed to improving mobile coverage (including 5G) and rolling out low power wide area networks (such as LoRaWAN) for use with sensors.

3. Financial Implications

3.1. The final bid was for £8m which DCMS has indicated it will fully fund. £3M over 4 years of existing NCC WAN expenditure will be used to buy fibre connectivity, which will generate a saving, from which 50% will be re-invested into further fibre deployment.

4. Issues, risks and innovation

4.1. There are no major risks at this stage. However, the risks associated with the commissioning of the upgraded infrastructure for the 372 sites has been documented as part of the bid. This will now be refined in partnership with DCMS as part of the due diligence required to formally initiate the project. Lessons learnt from the Better Broadband for Norfolk Programme (BBfN) formed the basis of the risk register and the BBfN Programme manager will form part of the LLFN programme assurance function.

Officer Contact

If you have any questions about matters contained in this paper or want to see copies of any assessments, eg equality impact assessment, please get in touch with:

Officer name: Geoff Connell **Tel No.:** 01603 222 700

Email address: geoff.connell@norfolk.gov.uk

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Digital Innovation and Efficiency Committee

Item 7

Item No.

Report title:	**Forward Plan and decisions taken under delegated authority**
Date of meeting:	**13th March 2019**
Responsible Chief Officer:	**Tom McCabe – Executive Director, Community and Environmental Services, Simon George – Executive Director, Finance and Commercial Services**
Strategic impact Providing regular information about key service issues and activities supports the Council's transparency agenda and enables Members to keep updated on services within their remit. It is important that there is transparency in decision making processes to enable Members and the public to hold the Council to account.	

Executive summary

This report sets out the Forward Plan for the Digital Innovation and Efficiency Committee. The Forward Plan is a key document for this committee to use to shape future meeting agendas and items for consideration, in relation to delivering communities issues in Norfolk. Each of the Council's committees has its own Forward Plan, and these are published monthly on the County Council's website.

This report is also used to update the Committee on relevant decisions taken under delegated powers by the Executive Director (or his team), within the Terms of Reference of this Committee.

Recommendations:
1. To note there is no forward plan as this is the final meeting of the Digital Innovation and Efficiency Committee.

2. To note any delegated decision detailed in section 2.1.

1. Proposal (or options)

1.1. **Forward Plan**

1.2. The Forward Plan is a key document for this committee in terms of considering and programming its future business, in relation to Digital issues in Norfolk.

1.3. The current version of the Forward Plan is not attached this month as this is the final meeting of the committee.

1.4. The Forward Plan is published monthly on the County Council's website to enable service users and stakeholders to understand the planning business for this Committee. As this is a key document in terms of planning for this Committee, a live working copy is also maintained to capture any changes/additions/amendments identified outside the monthly publishing schedule. If any further changes are made to the programme in advance of this meeting they will be reported verbally to the Committee.

2. Delegated Decisions

2.1. There were no delegated decisions taken.

3. Financial Implications

3.1. There are no financial implications arising from this report.

4. Issues, risks and innovation

4.1. There are no other relevant implications to be considered by Members

5. Background

5.1. N/A

Officer Contact

If you have any questions about matters contained in this paper or want to see copies of any assessments, eg equality impact assessment, please get in touch with:

Officer name:	**Geoff Connell**	**Tel No.:**	**01603222700**
Email address:	**Geoff.connell@norfolk.gov.uk**		

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