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| **To:** | **Corporate Policy Overview and Scrutiny Committee** |
| **Date:** | **8th April 2010** |
| **Subject:** | **ICT Strategic Plan** |
| **Classification:** | **Unrestricted** |


**Summary**

**This report provides an update to Members on the ICT Strategy and Broadband availability across the county**


## 1. Background

**1.1** The approach to information and communication technology (ICT) has been structured to reflect the strategic objectives identified in the 'Vision for Kent'. This ensures that the potential to impact on community and public service outcomes remains the primary consideration of ICT investment and activity throughout the council.

**1.2** This methodology identified the development of broadband infrastructure across Kent as an essential requirement in the delivery of the themes in the 'Vision for Kent'. The council has been at the centre of broadband initiatives since 2003 and this continues to be supported in medium term business and financial planning.

**1.3** The dependencies and balance between regeneration, digital solutions, community outcomes and efficient and effective delivery of public services remain at the core of ICT strategic planning. A brief summary of development and delivery of the organisational elements of the council's ICT strategy are given at the end of the report.

## 2. Broadband Delivery

**2.1** Digital strategy has evolved in response to both the success of the interventions by the council and the increasing national recognition, public and private, of the relevance of broadband. From the digital enablement of the first of Kent's 135 telephone exchanges in 2004 the pressure applied to telecommunications to increase the pace, quality and capacity of Kent broadband infrastructure has been continuous.

**2.2** The connecting Kent capital programme funded the digital enablement of the last 3 Kent telephone exchanges in April 2007. Since then the priority has been to reduce the number of Kent households without any access to broadband, the so called 'not spots' where the cable distance from the exchange is simply too far for broadband to be achievable over copper wiring.

**2.3** This programme of work has reduced the number of properties without broadband from 37,958 to 14,669 since 2007. The council continues to work with local communities to address these 'not spots' by identifying alternative solutions through tender and then providing parish councils with grant funding to support implementation.

**2.4** This initiative continues to attract extensive interest and support. When included on the agenda for meetings of the local parish council attendance is typically over 100 participants. An additional benefit has been that all parishes to have been through this process to date have awarded contract to Kent based companies.

**2.5** Analysis of areas with no or poor broadband access have been compared with priorities for regeneration and growth. Of most concern within this context has been the poor broadband provision to Kings Hill. Extensive lobbying by multiple agencies has not to date succeeded in inclusion of the West Malling exchange in the scheduled rollout of next generation broadband (NGB) by BT Openreach.

**2.6** To resolve the lack of response from the telecommunications industry who set the priorities, 'not spot' grant funding was made available to the parish council who invested in implementation of a wireless solution to increase broadband provision in the interim. Engagement of the stakeholder group continues for the West Malling exchange to be included in the next NGB investment cycle. If successful this would result in infrastructure investment from spring 2011. Although pressure was applied for the council to subsidise such future investment, as this would not impact on time scale for investment, it was concluded by the parish that greater benefit would be realised by the community though the investment in the interim solution identified.

**2.7** The opportunity to capitalise on the procurement capacity of the council has also been extensively exploited. The design and implementation of Kent Public Service Network (KPSN) has resulted in a 55% increase in availability of business broadband in Kent with the number of exchanges delivering this service having increased from 31 to 53.

**2.8** Availability of infrastructure is not the only consideration that needs to be addressed. Mapping of social deprivation shows a strong correlation with that of digital exclusion. These are typically most prominent in urban areas which are known to enjoy reasonable broadband capacity. Through public service network links and terminals in schools, libraries,

adult education centres and gateways it is estimated that over 30% of Kent's population, across all social groups, enjoy internet access through direct public service provision.

## 3. Broadband Development

**3.1** Pace of change and innovation within the telecommunications industry and around broadband provision should not be underestimated. It is less than six years since the first public broadband circuits became available in Kent. The core infrastructure used to provide those services, based on copper circuits, is already obsolete as it can no longer provide sufficient capacity (bandwidth) to support services which have developed as a consequence of broadband availability. The challenges for Kent associated with this analysis are identified in Appendix 1, the slide deck that accompanies this report.

**3.2** It is assessed that this cycle will continue and this conclusion needs to inform how the council further develops and evolves digital strategy for the region. This will need to sustain both the existing programme to resolve 'not spots' at the same time as setting more ambitious targets to identify how to manage the £1.1 billion cost of 'rural broadband' that it is anticipated that market forces will fail to address, **areas where 39% of properties and 30,096 Kent businesses are located.**

## 4.0 Broadband Action Plan

### 4.1 Kent Public Sector Network

**4.1.1** Increasing the number of public sector sites making use of KPSN has a direct impact on the business case for establishing a presence in the local telephone exchange, introducing the opportunity to improve business/community services at the same time. Discussions are underway with the cabinet office, DWP, Kent Fire & Rescue and Kent's 3 Primary Care Trusts to explore opportunities to extend this 'total place' approach to network infrastructure.

## 4.2 Not Spots

Proposed programme of grant funding for 2010/11

| Parish | Number of households | Number of businesses | Number of properties with no broadband | Number of properties below 1Mbps |
|---|---|---|---|---|
| Boughton Monchelsea | 1188 | 253 | 167 | 784 |
| Chilham | 725 | 119 | 36 | 165 |
| Crockenhill | 725 | 65 | 13 | 70 |
| Manston | 431 | 122 | 97 | 369 |
| Stockbury | 289 | 110 | 92 | 342 |
| Westerham (specifically Crockham Hill) | 322 | 56 | 22 | 246 |

## 4.3 Commercial Investment

**4.3.1** Work is being progressed with a number of private sector companies who have expressed interest and support for a strategy to encourage and develop commercial opportunities around future broadband services. Creating demand for such services will impact on the commercial rationale for broadband investment. There is particular interest in development of services that could be delivered across broadband that would benefit small and medium enterprises. This work is being undertaken jointly with the regeneration team.

## 4.4 Inter Authority Cooperation

**4.1.1** Joint discussions are held on a regular basis with East Sussex CC and Hampshire CC. A separate dialogue is also taking place with Surrey. Such discussions are useful in both sharing best practice but also in lobbying for beneficial outcomes with both industry and central government. On 7th January, The Secretary of State for Business, Innovation and Skills announced that rural communities and hard to reach areas that do not have access to next generation broadband will benefit from a share of £1billion of Government investment from the Next Generation Fund.

## 5. ICT Strategic Plan

## 5.1 Digital Strategy

**5.1.1** The increasing relevance of the digital agenda has prompted the development of what remains the primary objective of the council's strategic ICT plan, into a discrete strategy under the umbrella of the regeneration framework. A more extensive summary of the approach

to broadband are provided in appendix 2. Inter dependencies with the other tiers of ICT strategy must also continue to be maintained and from 27 January 2010 also consider the implications of the national ICT strategy published on that date.

## 5.2 Shared Services (Total Place)

**5.2.1** The potential for ICT to underpin the delivery of more effective public services through use of common infrastructure, has along with broadband, been a major component of ICT strategy since 2004.

- Since July 2009 Kent Local Authorities host one of only 4 aggregated public service network solutions in the UK, supporting 1,200 sites and linking 14 local authorities, Police, Fire and Rescue and central government.

- Discussions are well advanced with the Fire and Rescue Service for all 64 fire stations to be added to the network during 2010.

- The Joint Academic Network (Janet) which serves the 19 university sites across Kent already works in partnership with KPSN in the delivery of internet access. The intention for 2010/11 is to build on this partnership to unify the two networks.

- A joint proposal has been put forward with Kent & Medway NHS Trusts to unify KPSN and the health Community of Interest Network (COIN) when the existing COIN contracts expire in 2012.

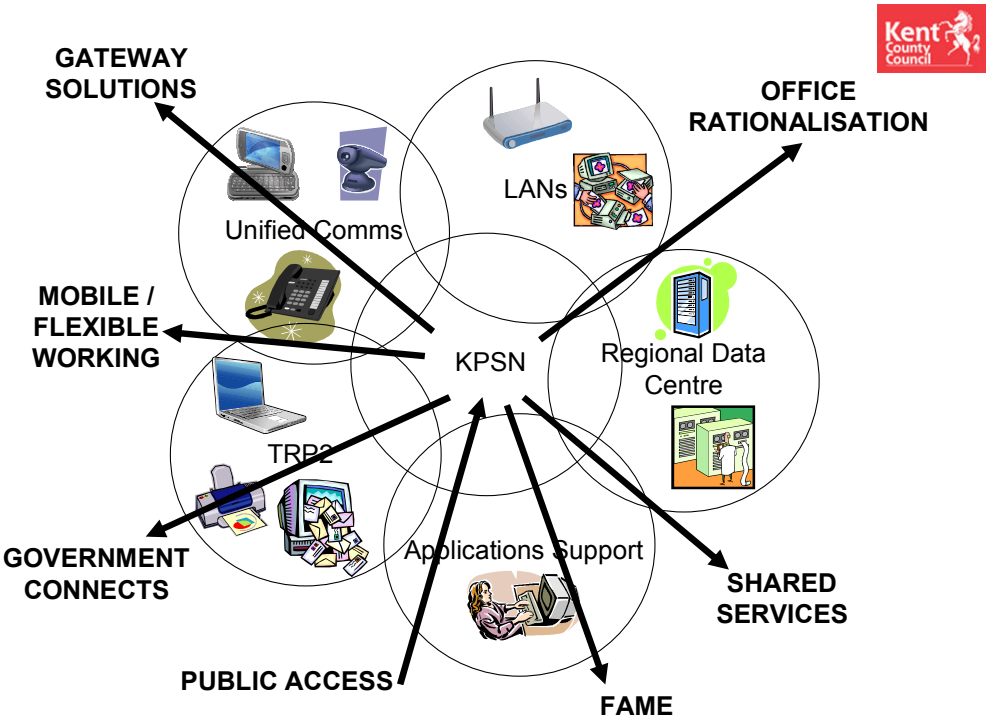
- KPSN has been put forward as an exemplar on how to deliver a national public service network through regional solutions, now adopted as part of national ICT strategy within the cabinet office ‘network of networks’ proposal.

- With connectivity provided by KPSN, the second phase of investment has been development of shared data centre facilities, based in Medway and Maidstone, which in turn will support unification of systems and inter agency working.

- Opportunities with neighbouring county and unitary authorities are being explored, where availability of common infrastructure would allow aggregation of non core functions reducing duplication and cost.

## 5.3 Organisational Efficiency

**5.3.1** The ICT capital programme is designed to both reduce ICT overheads while at the same time underpin the key corporate and directorate business improvement programmes.




**5.3.2** The programme also continues the strategy of moving towards sustainable, reliable technology base that supports service development and avoids technology becoming a constraint. This has consolidated:

- Desktop and email services – contract renewal in October 2010 to incorporate enterprise wide print solution.
- Single data network (KPSN) serving multiple public agencies – extension to include unified communications from spring 2011
- Rationalisation of public service data centres in Kent to be completed Autumn 2010
- 'Virtualisation' of hardware platform allowing multiple systems to be delivered from fewer servers and ultimately shared between multiple agencies – 2011 onwards

**5.3.3** The current capital programme will consolidate all aspects of ICT infrastructure delivering the most economic solution for ICT provision. Moving forward opportunities for further efficiency will need to consider:

- More ambitious infrastructure aggregation to support all agencies within a region and/or covering a wider geographic base.

- Investigate opportunities for consortia of local authorities to share systems and consider promoting these with central government as solutions to be deployed within the proposed 'G-Cloud', a pan government point of access for systems.

**5.3.4** As can be seen from appendix 3, Kent's local authorities are already well advanced in delivering 3 of the 4 core elements of the recently launched national ICT strategy.

## 5.4 Service Efficiency

**5.4.1** The ICT unit is separated into commissioning and operational activity. The activity of the commissioning unit has been the primary focus of this report. The final tier of the ICT strategy is focused on the effectiveness of operational activity and the teams responsible for delivering and maintaining the technology on which public service is now dependant.

**5.4.2** The discrete roles within ICT are themselves central to future outcomes. ICT support overheads can most effectively be reduced by aggregating activity across multiple agencies and authorities. Professional efficiency is the primary objective of the operational team which when combined with the exceptional low per capita costs of the service; provide a strong base with the capability to support multiple agencies.

## 6.0 Recommendation

Members are asked to note and comment on the content of this report.

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Appendix 1 – Broadband Slide Deck

Appendix 2

## Digital Strategy

The Digital Britain report proposes limited intervention for public funded investment in broadband infrastructure. The income raised nationally will be in the order of £150M per annum. With investment shortfall for Kent alone of over £1 billion, local initiative/intervention will be required if any significant progress is to be made within an acceptable time scale.

The digital strategy being developed as part of the regeneration framework comprises three primary elements:

- Encourage and facilitate private sector investment
    - This element of the action plan recognises the need to encourage investment in infrastructure based on the potential for commercial return. With the bulk of Kent's economy driven by SME's, the opportunities being considered are the development of services that could be consumed by these businesses as a means of reducing their overheads, at the same time as establishing a new market for the potential providers of such services.
    - Another approach considers Kent's commuter population. As environmental and considerations become increasingly sophisticated, London based institutions will become increasingly concerned with avoiding the overheads associated with city based accommodation, staff productivity and carbon trading. With transport estimated as accounting for 29% of carbon emissions, methods of enabling employees to work from home or near home locations are likely to increase in relevance and attract investment.
    - Engagement to achieve individual sign up for software services is becoming an increasingly competitive market. As avoiding digital exclusion across Kent's communities is another of our public service targets there is an opportunity when progressing this agenda to influence private sector investment for mutual benefit.
- Reduce investment cost
    - The most significant element of cost associated with delivery of next generation broadband is the dig cost of laying fibre. There are an increasing number of companies interested in developing innovative solutions to overcome the high capital cost of

traditional methods. Wireless and satellite are possibilities for the future, although currently utilising alternative utilities infrastructure offers the most promising options E.g. data over power of using existing sewage networks as fibre conduit.

- There is constant refresh and renewal of all elements of Kent's infrastructure. Outside of growth areas much of the planning for this investment is ad hoc and uncoordinated. A more comprehensive and inclusive approach across government and private sector has the potential to reduce the cost of laying down new infrastructure if more closely linked to existing unrelated works.

- Make better use of public infrastructure
    - The Kent Public Service Network (KPSN) delivers high quality/capacity bandwidth to 1200 public sector sites across Kent. The use of this purchasing power can be harnessed to influence the investment behaviour of telecommunications suppliers. The more extensive the use of this common solution across public agencies the greater the benefit to be derived by local communities and businesses.
    - Direct use of the KPSN in delivery of wider public broadband access where market failure can be identified.
    - Direct intervention through grant funding to resolve specific 'not spot' low bandwidth locations across Kent. Application of the proposal in both this and the previous bullet point has to be within the provisions of State Aide Regulation.
    - Kent's topology and the broadband challenges this gives rise to are not unique. By working in cooperation with other shire counties our joint lobbying and influence is increased.

None of these strategies are mutually exclusive and it is essential to recognise the relationships and interdependencies. E.g. Identifying an opportunity for reduced investment cost could be key to making the business case for development of a new service. Making use of reinvestment in associated utilities might only be viable where interim use could be made to a point of presence on the public service network in the short term.

Appendix 3

National ICT Strategy