



# Smart Place Strategy 2022 [Draft]

# **Smart Place | Development Services**

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# **Executive Summary**

### The Aim of the Smart Place Programme

i. With a clear focus on generating local value, helping to tackle key challenges across Bournemouth, Christchurch and Poole lies at the heart of this Smart Place Strategy. Whether making it easier for people to go about their daily lives, improving the prospects of our local businesses or enabling communities to function more effectively, combining information, data and emerging digital technologies will deliver considerable benefits for our area.

The aim of the Smart Place programme is to generate significant local value, creating digital solutions to improve the lives of our residents, the vibrancy of our communities and the prospects of our local businesses.

### **Delivery Programme**

ii. This Smart Place Strategy sets out how the programme will continue to be funded and developed over the next five years. The Smart Place programme is being delivered in three key stages: (i) Lansdowne Pilot; (ii) Boscombe Demonstrator and (iii) Full BCP Roll Out.

### Progress to date

- iii. The programme is already having an impact. The proof of concept 'MyBoscombe' App has been launched to provide support for individuals, voluntary agencies and local businesses, to strengthen the Boscombe community. The Affordable Assistive Living use case trial examines how we can help people to live independently in their own homes for longer, reducing future demand on Adult Social Care services. Our community safety solution will make it quicker to monitor CCTV cameras and notify response agencies. The Beach Check App has helped to keep beach-going local people and visitors safe during COVID-19 and the Tip App is helping local people to plan their trips to local recycling centres. We are planning many more Smart Place applications and services that whilst helping to address the Council's Corporate Priorities, go beyond the statutory services traditionally provided by local councils, delivering solutions directly to people and places and supporting the government's Levelling Up agenda.
- iv. A key outcome from the Smart Place programme is the creation of local jobs to boost our economy. There are now over 60 private companies in our Smart Place Research & Development (R&D) Consortium working on addressing our key local challenges. Many of these are local small and medium sized enterprises (SMEs). Fourteen new jobs have already been created locally as a direct result of the Smart Place programme, delivering an annual benefit of £700k to the local economy. In regard to our digital networks, we have laid over 5km of ducting and high-speed gigabit fibre and deployed public Wi-Fi and highly cost-effective 5G private networks in Lansdowne and Boscombe. These 5G networks are amongst the most advanced in Europe and are now ready to be used by local digital companies and manufacturers to help the area to be at the forefront of advanced digital technologies. This economic aspect of the Smart Place Programme directly supports the Council's Big Plan ambitions as well as aligning strongly with government's recently published UK Digital Strategy.

### Challenges

- v. There is a need to deliver the benefits of the Smart Place programme across the whole of the Bournemouth Christchurch and Poole (BCP) Council area. This will help to address key local issues including social, health and economic challenges; including the £1bn annual local productivity deficit; value escaping from the local economy; the recovery from COVID-19 and pressures on public sector budgets.
- vi. A major barrier facing the full scale roll out of the Smart Place programme is funding. There is no statutory funding associated with Smart Place provision and there are considerable

budgetary pressures within the public sector. A new sustainable Smart Place business model has therefore been created which minimises the need for Council funding and aims to attract an initial £90m of private investment funding to accelerate the full roll-out of the Smart Place interventions. The 'Smart Place Investment Plan' has tested this model and indicates a strong return for investors whilst also generating a surplus that can be reinvested in further Smart Place initiatives. Delivered through effective public/private sector joint ventures this model can also be 'franchised' in other places across the UK and beyond, increasing the proposition for investors

### Smart Place Interventions

vii. Four key Smart Place Interventions have been identified to deliver our Smart Place ambition:

### a) Gigabit fibre networks

The creation of a 'core' gigabit network and establishment of a neutral host provider will help to accelerate gigabit fibre across the BCP area, delivering the affordable, high-speed digital connectivity that businesses and residents need.

### b) 5G and wireless networks

High-speed 5G mobile connectivity will help boost productivity, particularly in the digital and advanced manufacturing sectors within the BCP area and beyond. It will also help those businesses that want to exploit this latest technology by building hardware and software such as assistive living devices, drones, robotics, digital platforms etc.

### c) Place-based data insight platform

Comprehensive and coherent place-based data is essential to inform how to improve the wellbeing of our residents, businesses, and communities. A new Place-based Data Insight Platform will receive, analyse and share local data from multiple sources, securely and on a major scale. This will provide local insights and analytics that otherwise would not be available, helping to shape the services of tomorrow.

### d) Smart Place applications & services

The Place-based integrated suite of applications and services will allow residents, businesses and community groups to engage far more effectively with their 'place'. Tailored for local end-users and visitors, typical applications will support initiatives such as 'buy local', better access to learning and skills training, healthier lifestyles and access to support, increased security, better homes, more sustainable travel and much more.

### Stakeholder Support

viii. There is considerable stakeholder endorsement for the Smart Place Programme. The 2021 online consultation exercise demonstrated overwhelming local public support. Local businesses and businesses from away looking to build a presence in the BCP area are keen to play an active role in the Smart Place R&D Consortium. The launch of the MyBoscombe app has already generated major community interest. Importantly, the programme continues to attract significant government and political support with the programme becoming recognised in government circles as an exemplar for other places to follow. Investor conversations continue to be very positive as has engagement with other local authorities.

### Summary

ix. The Council's Smart Place programme is already responding to local needs and delivering positive outcomes for local people and businesses. This strategy sets out how even greater economic and social benefits will be delivered across the whole of the BCP area, mainly utilising private sector funding, thereby minimising costs to the Council whilst enabling major savings and generating new income streams for the Council and other local agencies.

### Introduction

With a clear focus on generating local value, helping to tackle key challenges within our area lies at the heart of this Smart Place Strategy. Whether making it easier for people to go about their daily lives, improving the prospects of our local businesses or enabling communities to function more effectively, combining information, data and emerging digital technologies within a Smart Place context across an entire area will deliver comprehensive benefits.

However, these benefits have to be realised in the climate of considerable budgetary pressures within the public sector. Being a non-statutory function, this Smart Place strategy therefore also sets out the new sustainable business model that need to be adopted to provide the funding necessary to support the significant Smart Place programme.

This Smart Place Strategy sets out how the programme will continue to be developed over the next five years to ensure that momentum is maintained in generating real value for local people, businesses and our communities.

### 1. Aim

The aim of the Smart Place programme is to generate significant local value, creating digital solutions to improve the lives of our residents, the vibrancy of our communities and the prospects of our local businesses.

# 2. Drivers for Change

2.1 Local people, businesses and communities are facing a series of major challenges. From an economic perspective, recovering from the COVID-19 pandemic, supporting local businesses, tackling low productivity levels, and preventing significant value escaping the local economy are all key priorities. From a social perspective, there is an urgent need to address the demands of an ageing population, to support good quality housing and tackle homelessness, to generate good employment opportunities for local people and to create safe and vibrant communities.

Figure 1. Drivers for Change

- 1. Social, health and economic challenges locally
- 2. £1bn annual local productivity deficit
- 3. Significant value escaping from the local economy
- 4. Pressure on public sector budgets
- 5. Recovery from Covid -19

# 3. Scope

- 3.1 The Smart Place programme is a major undertaking with an initial estimated value of £90m over the first five years, rising to £500m over the next 10 years. The programme seeks to introduce targeted, place-based digital interventions across the entire BCP area, consisting of four key elements:
  - 1) Provision of gigabit fibre networks;
  - 2) Deployment of wireless networks, including innovative 5G and public Wi-Fi;
  - 3) A substantial, secure place-based data platform
  - 4) Smart Place applications and services.



- 3.2 As a place-based initiative, the scope of the Smart Place programme is to use digital insights and technologies to provide a broader set of new innovative services to residents, businesses and community groups across BCP. These services will go beyond the traditional statutory services provided by the Council and will lead to greater engagement with users who may otherwise have limited contact with the Council or other public sector bodies. This broader interaction with people and the place will provide a much clearer view of how the area currently operates and what measures are necessary to improve how the area functions. This insight will continue to help inform the new 'smart' services to be provided.
- 3.3 The local insight gained, and innovative technologies deployed can also be used to support public sector delivery. Typically, this includes informing prevention and behaviour change agendas, helping to reduce demand on council and health services. The Smart Place programme therefore has an important part to play in supporting the Council's objectives, including contributing to its internal transformation programme.

# 4. Strategic Objectives

- 4.1 The following strategic objectives have been set for the Smart Place Programme:
  - (i) Using Smart Place solutions to improve the lives of our residents
  - (ii) Using Smart Place solutions to improve the prospects of our local businesses
  - (iii) Using Smart Place solutions to improve the vibrancy of our communities
  - (iv) Create a financially sustainable Smart Place business model
  - (v) Support local and national policies and priorities
- . [Smart Place solutions include gigabit fibre, wireless technologies and 5G, data insight and 'smart' applications and services]
- 4.2 Based upon stakeholder engagement and other research and evidence an initial set of deliverables have been identified to achieve the Smart Place strategic objectives. These deliverables are shown in Appendix A.

# 5. Strategic Fit

### Links to BCP Strategies

- 5.1 The Smart Place Programme supports BCP Council's Corporate Strategy (February 2020) and the five strategic priorities of Sustainable Environment; Dynamic Places; Connected Communities; Brighter Futures and Fulfilled Lives.
- 5.2 The strategy also supports BCP Council's 'Big Plan' which involves five major projects that will support the creation of 13,000 jobs across all sectors of the local economy.
- 5.3 One of the 'five big projects' that BCP Council is seeking to invest in is physical and digital infrastructure. This is to ensure that:
  - "... BCP has the best connectivity in the country... We will exploit the full potential of digital to make BCP a genuinely smart city region, where we use digital data to plan, manage and deliver better services for our residents and businesses and where digital natives thrive."

Figure 2. BCP Council's 'Big Plan'



5.4 The Smart Place programme supports many other Council strategies, including the Economic Development Strategy, the Community and Voluntary Sector and Volunteering Strategy and the High Streets and District Centres Strategy. In addition, it can enhance wider strategies around community safety, tackling homelessness and suicide prevention.

### Links to Government Strategies

5.5 The Smart Place programme supports a number of government strategies. This particularly includes the UK Digital Strategy published in 2022 and the 'Levelling Up' Agenda. The programme has strong links to government's security agenda and the Smart Place Team works very closely with the National Cyber Security Centre (NCSC) having contributed to the Connected Place Cyber Security Principles. The programme also supports the 'UK Industrial Strategy'; the 'UK Innovation Strategy 2021'; the Future Telecoms Infrastructure Review' and the '5G Supply Chain Diversification Strategy'.

### **UK Digital Strategy**

Levelling Up the United Kingdom

UK Industrial Strategy - Building a Britain Fit for the Future

UK Innovation Strategy - Leading the Future by Creating It

Connected Places Cyber Security Principles

Future Telecoms Infrastructure Review

5G Supply Chain Diversification Strategy

# 6. Challenges & Opportunities

### Improving productivity

6.1 **Challenge**: It is currently estimated that there is a productivity deficit of £1bn within the BCP area with poor digital connectivity (fixed and mobile) costing the local economy around £150m per annum due to lost productivity. In 2021, against a UK average of 15.1%, only 10.5% of homes and businesses in Christchurch and only 0.8% in Poole have gigabit connectivity. A 2017 Which report also cited the Bournemouth conurbation as having the worst 4G coverage nationally.

6.2 **Opportunity**: A key outcome from the Smart Place programme is to improve both gigabit fibre and mobile connectivity in support of the Council's ambition to create 21<sup>st</sup> century digital infrastructure. These are also key priorities for government. Wherever viable the programme will seek to install ducting and fibre to support the Smart Place programme. In terms of mobile connectivity, the programme has already made use of 'place-based' spectrum from Ofcom to deliver one of Europe's leading standalone 5G networks in Lansdowne and Boscombe. These networks are available to local companies to develop and test new 5G products.

### Retaining value in the local economy

- 6.3 **Challenge**: As online platforms and digital marketplaces continue to expand at considerable pace, this is having a major impact upon the local economy. Typically, disposable incomes that used to be spent within local shops are now being spent online, often with overseas digital companies with profits not only leaving the area but also the UK. This situation has worsened as a result of COVID-19. This is leading to significant value escaping from local businesses, which is clearly manifested within our declining high streets.
- 6.4 **Opportunity**: One of the main drivers behind the success of online marketplaces is data. A key theme for the Smart Place programme is to create a rich source of local data, hosted on a secure, place-based data platform. By holding information on products and services and, with their consent, local people, it is possible to begin to reshape this economic landscape. Typically, the creation of local digital marketplaces that promote both local virtual and physical businesses will help to ensure that more value is retained within BCP.

### Supporting local businesses

- 6.5 **Challenge**: Many small local businesses can struggle to compete with larger companies for business and often find market entry difficult, particularly for valuable public sector contracts. The impact of the COVID-19 pandemic has increased difficulties for local businesses.
- 6.6 **Opportunity**: Smart Place and digital technologies have the potential to grow significantly over the next few years. There are already over 60 companies in the Smart Place R&D Consortium, many of whom are local small and medium sized enterprises (SMEs). These SMEs have been working on a series of Smart Place proof of concept projects and already fourteen local jobs have been created over the past two years with an annual value of £700k to the local economy.

### Tackling social and environmental issues

- 6.7 **Challenge**: The Council's Corporate Strategy sets out many of the challenges that face the BCP region. These include addressing loneliness and isolation; addressing climate change; revitalising our high streets; improving the safety of our communities; encouraging more sustainable travel; empowering a thriving community and voluntary sector; enabling access to high quality education; supporting people to live independent lives; tackling homelessness and promoting active and healthy lifestyles.
- 6.8 **Opportunity**: The Smart Place programme will enable new innovative services and applications to be developed to help tackle many of these local challenges. Through co-design with stakeholders and businesses a series of proof-of-concept projects have already been developed as part of the Lansdowne and Boscombe Smart Place Projects. These include the launch of the <a href="MyBoscombe">MyBoscombe</a> community app as well as initiatives around <a href="affordable assistive living">affordable assistive living</a> technology, <a href="monitoring air quality">monitoring air quality</a>, <a href="monitoring revitalising the High Street">revitalising the High Street</a>, <a href="monitoring">asset monitoring</a>, and coordinating homelessness data. These and further Smart Place applications and services will be developed and rolled out across the whole of the BCP area.

### Addressing reducing Council budgets

- 6.9 **Challenge**: Local Authorities are facing unprecedented financial challenges, with a combination of increasing demand upon services against a background of real term reductions in central funding. Reducing ongoing revenue costs is therefore a priority for BCP Council.
- 6.10 Opportunity: As a place-based initiative the Smart Place programme can utilise technology to help reduce current and future demand upon services and associated costs to the Council, the NHS and other public sector bodies. The need to reduce ongoing revenue costs also applies directly to the Smart Place programme. By creating its own networks and infrastructure it is possible to control costs associated with transmitting, storing, managing and analysing place-based data, enabling innovation to thrive. Where appropriate the opportunity will be taken to make an 'Invest to Save' case for Council investment in Smart Place infrastructure.

### Sourcing funding

- 6.11 Challenge: Whilst being recognised as a major factor in the future success of places and cities, there is currently no statutory duty upon councils to deliver Smart Place programmes and no associated core government funding support. This is a major barrier to the expeditious roll-out of digital technologies and the delivery of accompanying social, environmental and economic benefits within local authority areas.
- 6.12 **Opportunity**: The Smart Place programme recognises the considerable latent value within the local area. The opportunity has therefore been identified to develop innovative new business models to harness this value in order to attract inward investment to help fund and accelerate the deployment of Smart Place technology solutions.

# 7. Innovative Digital Technology

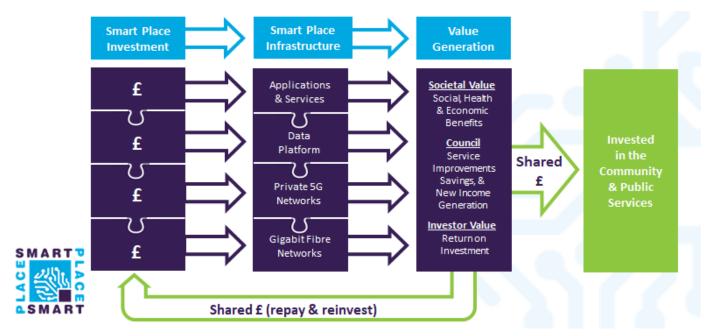
- 7.1 In order to ensure that the opportunities to address local challenges are taken, the Smart Place programme has identified four key innovative digital interventions that need to be delivered across the BCP region:
  - (i) Gigabit fibre networks
  - (ii) 5G and wireless networks
  - (iii) Place-based data insights platform
  - (iv) Smart Place applications & services
- 7.2 Details of these digital technology interventions are provided in Appendix B. Typical Smart Place applications & services can be viewed via the following link: <a href="Smart Place Applications & Services">Smart Place Applications & Services</a> (bcpcouncil.gov.uk)

### 8. Sustainable Smart Place Business Model

8.1 The aims of the Smart Place programme cannot be achieved without investment in digital technologies. Beyond occasional grant funding at present there is no statutory provision nor core funding for Smart Place development. To address this issue a financially sustainable, Smart Place, business model has been developed aimed at generating regular income that will be used to fund the ongoing development of the Smart Place Programme. With £380k of funding from Dorset LEP a Smart Place Investment Plan has been developed to examine the sources and level of potential revenue generation in order to attract inward investment for the four Smart Place products. The outcomes from this Plan are provided in Appendix C. Early market engagement is taking place with investors and the selection of preferred investor partners will take place between 2022 and 2023, subject to funding of the procurement process.

8.2 The projected financial returns from these four Smart Place products will be sufficient to make the Smart Place programme financially self-sustaining and has the potential to produce a surplus that can be reinvested in community initiatives and public services. The diagram below illustrates how the model works.

Figure 3. Smart Place Sustainable Business Model



# 9. Stakeholder Engagement

9.1 Engagement on the Smart Place Programme has taken place with local residents, the business Community, UK government, investors, external stakeholders and internal Council departments. There is overwhelming support for the programme from all stakeholders. A summary of the outcomes from this engagement is provided in Appendix D.

# 10. The Delivery Programme

10.1 The Smart Place Programme is effectively split into three phases. Phase 1 was the development of the Smart Place Pilot project at the Lansdowne. Phase 2 is the Smart Place Demonstrator Project at Boscombe which is funded through the 'digital connectivity' element of the Boscombe Towns Deal. Phase 3 is the full roll-out of Smart Place capabilities across the whole of the BCP area, which is dependent upon inward investment.

Figure 4. Smart Place Delivery Programme Overview



- 10.2 The outline of what is planned, what has been done to date and next steps for each phase of the programme are provided in Appendix E.
- 10.3 The outline delivery plan for the Smart Place Programme is shown in Appendix F. Ultimately the pace of delivery will be dependent upon the source and the level of investment secured.

# Appendix A: Smart Place Objectives - Deliverables

### (i) Using Smart Place solutions to improve the lives of our residents

- Providing affordable digital connectivity to all
- Improving personal digital skills
- Using technology to promote healthy lifestyles
- Creating 'apps' highlighting local services & products
- Using place-based data to enhance local services & products
- Creating digital innovations that support the Council's approach to tackling key social issues (e.g. loneliness, homelessness and suicide)

### (ii) Using Smart Place solutions to improve the prospects of our local businesses

- Building major on-line marketplaces to promote 'buy local'
- Digitally enabling the local supply chain and logistics
- Leading on digital connectivity and 5G innovation
- Developing new digital opportunities for industry
- Creating high-value digital technology jobs
- Increasing productivity through better digital connectivity
- Enabling new manufacturing and working methods
- Increasing local workforce digital capability
- Using local companies in the Smart Place programme

### (iii) Using Smart Place solutions to improve the vibrancy of our communities

- Improving digital connectivity including public Wi-Fi
- Enhancing the level of information available to support the voluntary sector
- Revitalising the high street, through augmented reality (AR) and virtual reality (VR) and other digital technologies
- Using Smart Place applications to enhance the leisure & tourism offer
- Using place-based insights to help reduce carbon emissions
- Improving community safety through digital functionality
- Providing live data to help manage assets (e.g. roads, car parks)
- Supporting major incident response

### (iv) Create a financially sustainable Smart Place business model

- Leading the UK in place-based innovation, enabling the attraction of major private sector investment
- Identifying and unlocking untapped financial value in places
- Developing an investment plan for the development of scalable and marketable digital solutions
- Developing new business models and the required company structures that enable a return on investment for investment partners and financial returns for BCP Council

### (v) Support local and national policies and priorities

- Generating and retaining value locally
- Securing major inward investment
- Generating financial returns through innovative business models
- Creating savings and delivering efficiencies
- Underpinning BCP Council's Big Plan
- Contributing to BCP Council's Corporate Strategy and other Council strategies
- Helping to tackle the Climate Emergency
- Aligning with BCP Council's Transformation Programme
- Helping to deliver government's 'Levelling Up' programme
- Delivering against the national and local Industrial Strategies

# Appendix B: Innovative Digital Technology - Details

### Gigabit fibre networks

- B.01 Businesses and residents require very high-speed gigabit fibre, however neither the existing telecoms market nor government support is delivering at sufficient pace to meet existing or future demand. The Smart Place programme therefore aims to accelerate the delivery of gigabit fibre within the BCP area through the creation of a 70km core gigabit network. A similar sized gigabit fibre deployment in Stoke on Trent is forecast to generate a 15-year economic (gross value added GVA) benefit of £568m.
- B.02 The Council has already approved £5.87m via the Futures Fund to deliver this core gigabit network. This core network will help to connect local town centres, major business parks, hospitals, the universities, proposed development areas and other centres of demand. A total of 210 points of interest have been identified and mapped. The network will allow far more devices to be connected which will enable new digital services to be developed by both the private and public sectors. A particular feature of the proposed network is to build a 'point to point' network enabling much greater upload speeds, which will address this perennial issue for businesses.
- B.03 Wherever possible to reduce costs and minimise disruption the ducting and fibre core will be installed during other construction works including the Transforming Cities Fund (TCF) transport corridors works. The fibre route will also leverage existing public sector owned ducting.
- B.04 To maximise the benefits from the gigabit network, it is proposed to procure a Neutral Host Platform provider. This will encourage new entries into the Internet Service Provider (ISP) market, helping to provide more cost-effective broadband and other wireless services to local businesses and residents.

### 5G and wireless networks

- B.05 The Smart Place Team has already secured its own 'place-based' 5G spectrum licences from Ofcom and deployed a highly innovative, standalone private 5G network as part of the Lansdowne Smart Place Pilot scheme. This is one of the most advanced 5G networks in Europe and the next step is to roll out this cutting-edge technology to key areas across BCP.
- B.06 Very high-speed mobile connectivity services will help to boost both the digital and advanced manufacturing sectors within the BCP area and beyond. This includes businesses that simply need to access this technology, typically to improve productivity, as well as those businesses that want to build hardware and software associated with the technology, such as assistive living devices, drones, robotics, digital platforms etc.
- B.07 As well as 5G networks it is intended to extend the latest version of other wireless technologies across other areas within the conurbation including Narrow Band Internet of Things IoT (NB-IoT) and Long-Term Evolution of Machines (LTE-M) networks as well as public Wi-Fi.

### Place-based data insight platform

B.08 Coherent, comprehensive place-based data is essential for the development and management of services that improve the wellbeing of residents, communities and businesses. The Place-based Data Insight Platform will receive, analyse and share data from multiple sources securely and at significant scale enabling local insights that would not otherwise be possible.

- B.09 Place-based data will be generated from digital applications and services via the Smart Place integrated applications suite (see below). Further local data can be leveraged from other secure sources from various sectors. Partner organisations including the public sector, private sector and voluntary sector can then all benefit from much richer local insights, helping local businesses and improving services. This data exchange will underpin many aspects of the Smart Place programme and be the foundation upon which Smart Place solutions are created.
- B.10 Security of the Place-based Data Insight Platform is fundamental. The Smart Place Team has been working very closely with UK security agencies who have been providing input and guidance. A standards-based approach is being taken to the system design and data governance with particular focus on the BSI Publicly Available Specification (PAS) standards. An essential aspect of the platform will be the ability to put individuals in control of their data.

### Smart Place applications & services

- B.11 The place-based integrated applications and services will deliver a unique digital portal that allows residents, businesses and community groups to engage far more effectively with their 'place'. Local knowledge and data will enable the Smart Place suite of applications to be tailored for local end-users and visitors. This will provide a much richer and better experience than apps that offer similar services but on a national or international basis.
- B.12 The Smart Place applications and services can either be software or hardware solutions. Central to the place-based focus of the Smart Place Programme will be the development of a series of 'one-stop-shop' community apps across the whole of the BCP area. The first proof of concept community app, 'MyBoscombe' was launched in May 2022 and covers community based activities such as volunteering, where to visit and eat, local travel information, wellbeing information and details of local independent shops. It already has significant support from local voluntary agencies and businesses. These place-based apps will also directly support initiatives such as better access to learning and skills training, healthier lifestyles, access to support agencies, increased security, better homes and much more. A Smart Place market research exercise conducted in 2020 indicated that there is significant local appetite for a trusted place-focused suite of applications.
- B.13 In addition to applications a range of Smart Place services will also be developed. Typically, these will be more 'hardware' focused and may include the provision of affordable monitoring devices in people's homes, improving security and air quality monitoring and interactive digital displays utilising VR and AR technologies to promote events or locations etc.
- B.14 In partnership with Council departments, Smart Place technology can also be adapted for Council purposes such as property asset monitoring, intelligent street lighting, traffic management and waste management.
- B.15 With appropriate governance, consents, data protection and security in place the Smart Place applications and services can ultimately be a rich source of local information for the data insights platform which can help to shape services provided to local people by both the public and private sector. This also opens up opportunities for generating income in support of the wider Smart Place Programme.
- B.16 A key aspect of the Smart Place applications and services is the ability to encourage local companies to help develop these solutions through their participation within the Smart Place R&D consortium. This will help to generate further value within the local economy.
- B.17 Typical Smart Place applications & services can be viewed via the following link: <a href="Smart Place Applications">Smart Place Applications & Services (bcpcouncil.gov.uk)</a>

# Appendix C: Smart Place Business Model Assessment

A Smart Place Investment Plan has been developed to examine the sources and level of potential revenue generation in order to attract inward investment for the four Smart Place products. The following details the outcomes from this Plan.

### Gigabit fibre network

C.01 With a minimum investment of £8m in a 100km gigabit fibre and ducting network, it is projected that there will be an Internal Rate of Return (IRR) of 13% over 20 years. Investment could either come from the private sector or from the Council, where an 'invest to save' case can be made, or a mix of both. The source and level of investment will influence the level of any return to the Council.

### 5G and wireless networks

C.02 Private investment of up to £27m is sought to deliver 5G and associated wireless networks to key areas around BCP. It is projected that there will be an IRR of 17% over 20 years on this investment. It would be necessary to set up some form of joint venture (JV) company between the Council and the private sector with the Council sharing in any returns created.

### Place-based data insights platform

C.03 Private investment of up to £24m is sought to deliver the place-based data insights platform. It is projected that there will be an IRR) of 17% over 20 years on this investment. It would be necessary to set up some form of JV company between the Council and the private sector with the Council sharing in any returns created.

# Smart Place applications and services

C.04 Private investment of up to £31m is sought to develop Smart Place applications and services. It is projected that there will be an IRR of 27% over 20 years on this investment. It would be necessary to set up some form of JV company between the Council and the private sector with the Council sharing in any returns created.

# Appendix D: Summary of Stakeholder Engagement

### **Local Residents**

Smart Place Strategy Objectives Consultation

- D.01 The Council undertook a public consultation exercise to receive views on the Smart Place Strategy aim and the detailed objective deliverables (as listed in Section 4). The consultation ran from June to July 2021 and 337 responses were received.
- D.02 The consultation demonstrated widescale support for the Smart Place Strategy's aim and objectives (see end of this Appendix). In regard to the aim of the Strategy, 78% of respondents were in support of the aim, 11% were neither in support or against and 12% opposed the aim.
- D.03 On the subject of the Smart Place objective of using Smart Place technologies to improve people's lives there was good support for all of the initiatives surveyed. There was particularly strong support for providing digital skills training for residents, creating digital technology solutions to help tackle key social issues and helping to provide affordable broadband and other digital connectivity.
- D.04 Regarding the Smart Place objective of using Smart Place technologies to increase the prospects of our businesses, there was widespread support in all areas surveyed. Support was very strong for using local companies in the development of Smart Place solutions and for providing digital skills training for the local workforce.
- D.05 In regard to the Smart Place objective of using Smart Place technologies to empower our communities there was generally widespread support for all of the initiatives surveyed. Support was particularly strong for using digital technologies to manage major incidents, manage transport and car parks, enhance community safety and support the voluntary sector. There was also strong support for improving broadband speeds and public Wi-Fi.
- D.06 Respondents were also invited to provide their own additional feedback. As well as general supportive comments a recurring observation from this feedback was the importance of the delivery of the Smart Place objective to provide skills training for people who may not be digitally confident to ensure that these people did not miss out on the Smart Place opportunities. In regard to people who opposed the strategy or its objectives, 21(6%) of the 337 respondents did not believe that digital solutions would make a major difference and eight people (2%) were concerned about the Council funding the programme.

Smart Place Use of Technology Questionnaire

- D.07 In 2020 a Smart Place 'Use of Technology' market research questionnaire survey was conducted to provide evidence in support of the Smart Place Investment Plan and the wider Smart Place programme. This postal survey took place between October and November and there were 1,288 responses to this survey.
- D.08 In regard to sharing of data, 97% of respondents felt that trust is important when deciding about sharing information, with just over three quarters (76%) reporting that trust is very important. Two thirds (66%) of respondents would trust BCP Council to keep their information safe and secure. Over 55% of respondents would be happy sharing information about community interests and involvement e.g. volunteering, use of public transport, health and wellbeing and shopping habits, if it could help to sustain local businesses and benefit the environment.
- D.09 If BCP Smart Place were to provide an online marketplace 86% of respondents said they would be likely to use it if it were the same price as alternative companies/websites and two thirds (67%) said they would be likely to use it if prices were 2% more expensive.

D.10 Of the 6% of respondents who did not use the internet 34% said that this was due to lack of skills or confidence, 33% had security concerns and 32% had no equipment. 97% of those with no disability use the internet at least once a day compared to 87% of those with an illness that limits their activities a little and 82% of those whose activities are limited a lot.

### The Business Community

D.11 There is significant support for the Smart Place Programme from local, national and international businesses. The Smart Place R&D Consortium now has over 60 partners many of which are local SMEs. Association with the Council's Smart Place programme is very important for these SMEs. Many companies benefited from being involved in the Smart City World Expo in 2020 as part of BCP Council's Smart Place participation.

### **UK Government**

D.12 There has been considerable engagement with various government departments over the past three years and there is a keen interest in BCP Council's Smart Place programme. These departments include the Cabinet Office, DCMS, the Department of International Trade (DIT), Department for Business, Energy & Industrial Strategy (BEIS), DLUHC, the NCSC and the Centre for the Protection of National Infrastructure (CPNI). There is particular interest in the innovative 5G networks and Smart City security. Cabinet Office and DCMS are also very interested in the new, financially self-sustaining business model, for levering in major private investment to accelerate the roll out of digital technologies to support communities and industry.

### Investors

D.13 Securing inward investment is critical to the future success of the Smart Place Programme. In February 2021 BCP was selected by the DIT to be its first UK showcase Smart City. This event, coupled with the launch of the Smart Place Investment Plan, has led to a series of early market conversations with investors interested in all areas of the Smart Place programme. These conversations continue to be very positive and there is sufficient interest to move forward with the investor selection process.

### External Stakeholders

D.14 The Smart Place Team has been actively engaging with various external stakeholders, including numerous community groups and voluntary agencies, the Dorset LEP, which provided the £1.9m funding for the Lansdowne Smart Place Pilot project; AFC Bournemouth; Bournemouth University, the Dorset Clinical Commissioning Group; Dorset Police and the local Business Improvement Districts (BIDs). There is considerable support for the Smart Place programme and the willingness to work together to optimise solutions.

### Internal Council Departments

D.15 Having showcased Smart Place capabilities many BCP Council departments have been working with the Smart Place Team to understand how the technology can help support their future digital ambitions. A number of departments have already been involved in the development of the Lansdowne proof of concept projects and the creation of the Beach Check app and Tip App. There is now the potential for more digital innovation to take place in support of the Council's internal Transformation Programme.

# **Local Residents Smart Place Survey Results**

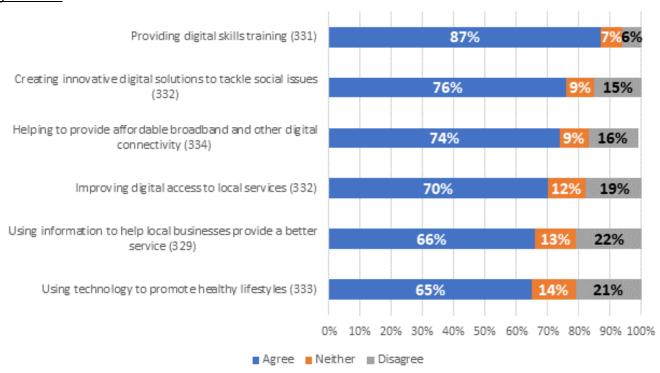
(337 respondents)

### **Smart Place - Overall Aim**

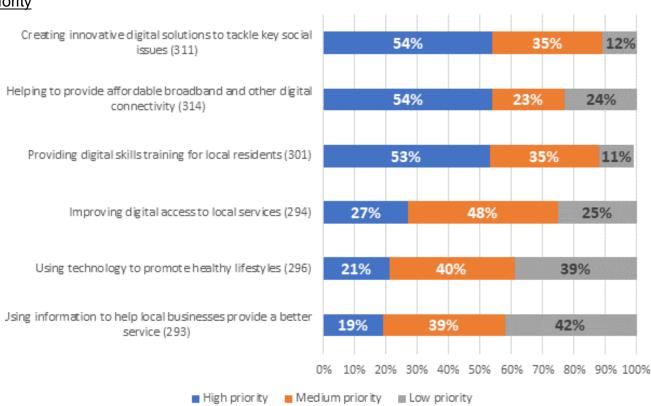
78% support, 12% oppose and 11% neither support nor oppose

## Smart Place Objectives - People

### Agreement

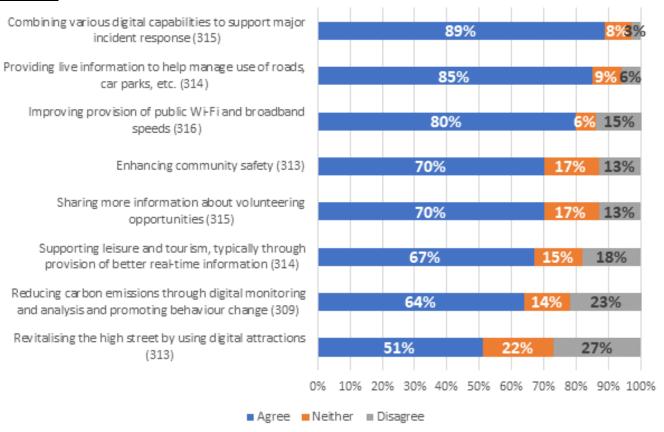


### **Priority**

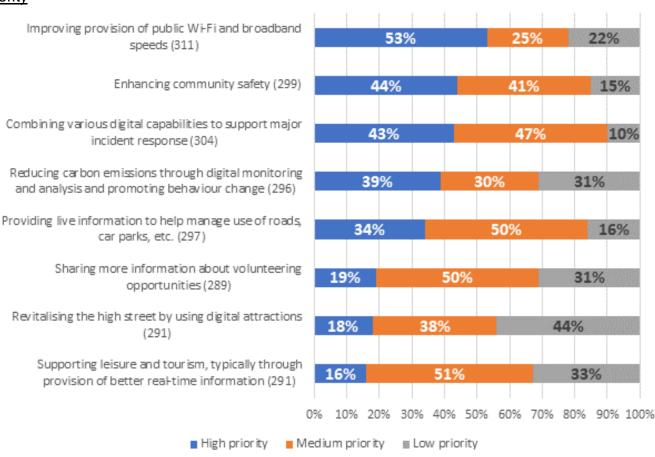


### Smart Place Objectives - Place

### Agreement

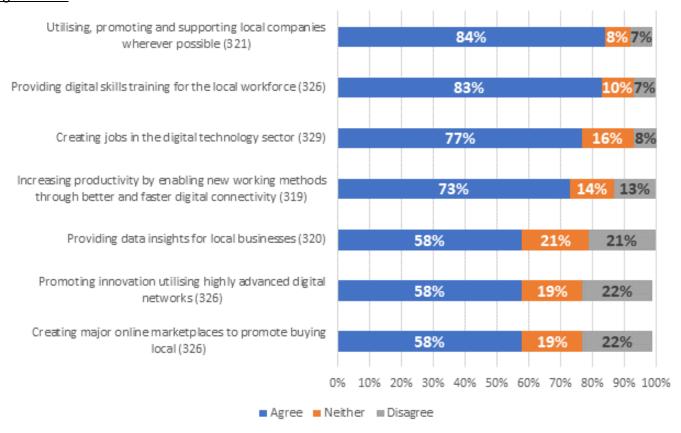


### **Priority**

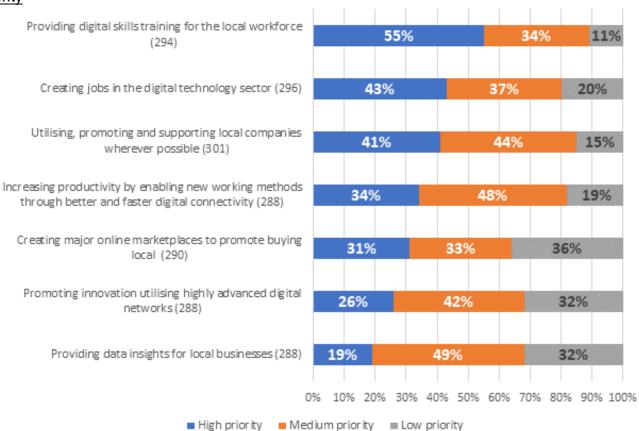


### **Smart Place Objectives - Business**

### Agreement



### **Priority**



# Appendix E: Delivery Programme - Details of Each Phase

### Phase 1: Lansdowne Smart Place Pilot

- E.01 The Lansdowne Smart Place Pilot represents phase 1 of the Smart Place Programme and was conducted from January 2020 to July 2021. This £1.9m pilot project was funded by Dorset LEP and involves the provision of digital connectivity around the Lansdowne area including the laying of a local gigabit fibre network and the provision of a variety of wireless networks. These wireless networks include a standalone 5G network, an LTE-M network, an NB-loT network and a public Wi-Fi network.
- E.02 In order to demonstrate the capability of these networks and to support local businesses in their recovery from the COVID-19 pandemic, a series of preliminary Smart Place proof of concept projects (Smart Place Challenges) were set up. Working with various client stakeholders and appointed Smart Place R&D partners, these Smart Place Challenges cover: Tackling Homelessness; Reinvigorating the High Street; Affordable Assistive Living Technology; Air Quality Monitoring; Improving Community Safety, Public Asset Monitoring and Highway Monitoring. As well as illustrating the potential value of the Smart Place solutions, nine local jobs have been created within the local R&D partners as a direct result of their involvement with this early stage of the Smart Place programme.
- E.03 Against a backdrop of COVID-19 and Brexit the highly innovative Lansdowne project has been completed successfully within an 18-month timescale. The next step is to take the innovative technology that has been developed, as well as the learnings, and to deploy these within Boscombe.

### Phase 2: Boscombe Smart Place Demonstrator

- E.04 The Boscombe Smart Place Demonstrator is the second phase of the programme and involves Smart Place technologies being rolled out more widely across a distinct neighbourhood area. This demonstrator project is funded from the Digital Connectivity element of the Boscombe Towns Fund provided by the Department for Levelling Up, Housing and Communities (DLUHC).
- E.05 In autumn of 2020, in response to the COVID-19 pandemic, MHCLG (now DLUHC) awarded £1m of emergency advance funding to BCP Council. £710k of this funding was set aside to accelerate the digital connectivity work in Boscombe. From February to July 2021ducting and gigabit fibre was installed between Lansdowne and the centre of Boscombe. In addition, public Wi-Fi units have been installed within Boscombe Precinct along with two innovative 5G units.
- E.06 A Full Business Case for Boscombe Digital Connectivity funding was submitted to government along with the Towns Fund Summary Business case in June 2021. Subsequently an additional £1.788m of capital funding and £160k of revenue funding was awarded by DLUHC in autumn 2021 which provides funding for Boscombe up until March 2024.
- E.07 This further funding extends the fibre and wireless networks, including 5G and public Wi-Fi, from the centre of Boscombe onwards to Pokesdown, Boscombe Seafront and Kings Park, including AFC Bournemouth's football ground.
- E.08 Phase 1 of an initial Smart Place App focused upon the Boscombe area and its specific community needs (MyBoscombe) has already been developed with local stakeholders using the advanced funding and this will be enhanced as part of Phase 2. Further demonstration use cases will also be undertaken including a wider roll out of assistive living technologies, further community safety initiatives, improved local sustainable transport information and supporting and promoting leisure and tourism experiences.

E.09 A key outcome from the Towns Fund project is to enable Boscombe to become a major centre for innovative digital technologies and businesses. To help facilitate this a digital innovation hub facility will be created within the centre of Boscombe. This hub will serve three main purposes. The first is to provide an environment where local companies can come and develop and test new digital products across the various wireless networks including 5G. It will also become a centre where local job seekers can come and learn new digital skills, interacting with local digital companies. Finally, the facility can also be a community hub for local people to come and learn basic digital skills to ensure that they do not miss out on the opportunities that digital knowledge allows.

### Phase 3: Smart Place Full Roll-Out

- E.10 The full roll-out of Smart Place capabilities across BCP will require significant inward investment. In recognition that the scale of funding required can neither be provided by the Council nor UK government new business models have been devised. Business models for each of the four Smart Place 'products' have now been developed further and analysed as part of the £380k, LEP-funded, Smart Place Investment Plan. In total it is now estimated that £90m is required over the next 5 years to complete a substantial element of full roll-out and to generate revenues that can then be re-invested to accelerate further roll out.
- E.11 The Smart Place Investment Plan, along with the Smart Place Pilot and demonstration work taking place at Lansdowne and Boscombe will help to attract investors and encouraging early discussions are already taking place.
- E.12 Having established that there are viable propositions in each of the four technology layers of the Smart Place Programme the next step is to undertake a formal investor partners selection process, taking account of all legal and financial requirements. Subject to confirmation of funding this will take place over the next two years and will include agreement upon the equitable share of revenues and the form of any JV companies where applicable.
- E.13 Work is already taking place on planning future digital network infrastructure delivery and the creation of the Smart Place Data Insight Platform and Smart Place applications. This work will move to a more detailed phase once investment has been secured and timescales with investors have been agreed.

# Appendix F: Smart Place Programme - Outline Delivery Plan

	Smart Place Programme - Outline Delivery Plan v 0.2										<u>,                                    </u>																		
	· ·	Pre-		20	20			20	21			20:	22	7		202	3	7		2024	1	T	2	025			202	6	
	Activities	2020	Q1			Q4	Q1			Q4	Q1			24				4 Q				14 Q1			Q4	Q1			Q4
	Preparation								П					T				Т	T		T		Т				T	$\top$	П
0.01	Bid for Lansdowne Growth Deal LEP Funding (£0.9m)								П					T				Т	T		Т		Τ				$\top$	П	
0.02	Bid for Lansdowne Smart Place Pilot LEP Funding (£1.0m)													T				Т	T		Т						T	П	
0.03	Bid for Smart Place Investment Plan LEP Funding (£380k)								П									T	T		T						T	П	
0.04	Bid for Boscombe Towns Fund Phase 1 - Advance Funding (£710k)																										T		
0.05	Bid for Boscombe Towns Fund Phase 2 - Full Funding (£2.0m)													1													T	T	
	Phase 1. Lansdowne Smart Place Pilot Project (LEP)																		1								T	T	
1.01	Install ducting and fibre around Lansdowne Area													T				Т	Т		Т		Т				Т	Т	
1.02	Install Public Wi-Fi													T				T	T		T						T		
1.03	Install 5G Network around Lansdowne																										T		
1.04	Install NB-IoT & LTE-M Wireless Networks around Lansdowne													1													T	T	
1.05	Complete 8 Smart Place Proof of Concept Projects								П					T					1				T				T	T	
	Phase 2. Boscombe Smart Place Demonstrator Project (Towns Fund)													T					T								T	T	
	Stage 1 - Advance Funding																										$\Box$		
2.01	Install ducting & fibre between Lansdowne & Pokesdown													$\prod$											$\Box$		$\bot$	$\Box$	
2.02	Install Public Wi-Fi in Boscombe Town Centre																								$\Box$			$\Box$	
2.03	Install 5G Network in Boscombe Town Centre		Ĺ																		$\perp$	$\perp$			$\Box$		$\Box$		
2.04	Install NB-IoT & LTE-M Wireless Networks in Boscombe Town Centre																												
2.05	Create Initial Demonstrator Smart Place App for Boscombe																												
	Stage 2 - Full Funding																												
2.06	Install ducting & fibre between Boscombe Centre & Kings Park																	L									$\perp$		
2.07	Install ducting & fibre between Boscombe Centre & Seafront										Ш							┸	$\perp$				$\perp$				$\perp$	$\perp$	
2.08	Install 5G Network in Kings Park & along Boscombe Seafront																										$\perp$		
2.09	Install NB-IoT & LTE-M Networks at Kings Park & Boscombe Seafront																										$\perp$		
2.10	Create Full Demonstrator Smart Place App for Boscombe																										$\perp$		
2.11	Run Smart Place demonstrator challenges - security; health; tourism etc.																										$\perp$		
2.12	Establish the Digital Innovations Hub for businesses and skills training																												
	Phase 3. Full Roll Out													_															
3.01	Complete Smart Place Investment Plan																										$\perp$		
3.02	Conduct Early Market Investor Engagement																										$\perp$		
	Smart Place Product 1 - Gigabit Fibre Networks															4		┸	1				$\perp$				4	4	
3.03	Council Approval for Neutral Host procurement (Member Decision)		L								Ш		_	4	4	4		┸	1	_	1	$\perp$	$\perp$	_			4	4	
3.04	Cabinet Decision on Council Investment in Gigabit Ducting & Fibre 'Spine'		L								Ш		_	4	4	4	$\perp$	┸	4	_	1	$\perp$	$\perp$	$\perp$	Ш		4	$\dashv$	
3.05	Conduct procurement for Gigabit Fibre Neutral Host																										$\perp$		
3.06	Installation of Gigabit Ducting & Fibre 'Spine' (subject to Cabinet Decision)																	L										_	
	Smart Place Product 2 - Private 5G Networks															4		1	1				$\perp$				4	_	
3.07	Council Approvals for investor selection & structure of JV								Ш		Ш					_		╀	4		4		_				4	$\dashv$	
3.08	Conduct investor selection process for 5G roll-out to key sites		L								Ш		_	4		_		┸	4	_	1	$\perp$	$\perp$	$\perp$			4	$\dashv$	
3.09	Set up JV for 5G roll-out								Ш		Ш			_					1		1		_				$\perp$	_	
3.10	Build 5G roll-out to key sites								Ш					_		4		L			1	1	┸				Ц	Ц	
	Smart Place Product 3 - Place-Based Data Insight Platform		_											4		_		+	4								_	_	_
	Establish Data Governance & Security Policies and Procedures		L	_										4		_		+	_								4		
3.12	Council Approvals for selection/structure of pilot investment		L	_									4	4	4	4	_	$\bot$	4	_	$\perp$	_	$\perp$	_		_	$\perp$	$\dashv$	
3.13	Conduct preliminary investment selection process for Pilot Product	1	_				Щ		Ш				_	4	_	+	$\perp$	+	4	_	$\perp$	_	+	1	$\Box$	$\perp$	$\dashv$	$\dashv$	_
3.14	Set up legal construct for Pilot Product	_	_			Ш	Щ		Ш		Ш			┙	4	$\downarrow$	$\perp$	L	1		1		L				$\perp$	$\perp$	
3.15	Build Place-Based Data Insight Platform Pilot Product	_					Ш		Ш		Ш				$\perp$	4	$\perp$	F	1				F	F			4	4	
3.16	Council Approvals for selection/structure of full investment	1	$\vdash$			Щ	Щ		Н		Ш	_	_	4		_	$\perp$	+	$\perp$	_	+	-	$\perp$	_	$\sqcup$	$\perp$	$\dashv$	$\dashv$	$\dashv$
3.17	Conduct investor selection process for full Place-Based Data Insight Platform	-	_	$\vdash$			Н	Ш	$\vdash$		Н		$\dashv$	4	4			1	+	+	+	+	+	+	$\square$	$\dashv$	+	$\dashv$	_
3.18	Set up JV for Place-Based Data Insight Platform	<u> </u>	_				Ш		Ц		Н		$\perp$	4	$\perp$	4			1			_					_	4	
3.19	Build Place-Based Data Insight Platform	_	$\vdash$				Ш		Ц		Н		_	_	4	4	_	F	1		1		F	F			4	4	
0.55	Smart Place Product 4 - Applications & Services	1	$\vdash$				Н		$\vdash$		Н		_		+	+	+	+	+	_	+	-	+	-	+	$\dashv$	+	+	_
	Council Approvals for selection/structure of full investment	-	$\vdash$	$\vdash$		H	Н	Н	$\vdash$	_	Н	_	_		_	+	+	+	+	+	+	+	+	+	+	$\dashv$	+	+	$\dashv$
3.21	Conduct investor selection process for development of SP Apps & Services	-	$\vdash$	-	_		Н		Н		Н	_	+	4		+		+	+	+	+	+	+	+	$\Box$	$\dashv$	+	+	_
	Set up JV for development and widescale roll out of SP Apps & Services	<u> </u>	_	-			Щ	Ц			Ш					1		1	1	_	4	_	L				$\dashv$	_	
3.23	Develop and roll out Smart Place Applications & Services	<u> </u>	L			(Lan	sdov	vne)		(	BOSC	mbe	Demo	nstr	ators)				I										