

COAST TO CAPITAL

Growth is Digital

Coast to Capital

Full Business Case

Purpose

"Successful project delivery starts with a good business case"

- A Business Case is used to obtain commitment and approval by the Coast to Capital Board for significant new projects and commitment of resources, by setting out clearly:
 - the issue or problem being addressed
 - the rationale for public funded intervention
 - the objectives to be achieved
 - the fit with Coast to Capital Strategic Economic Plan
 - a long-list of possible options for intervention
 - a short list of least 3 options for meeting the stated objectives with, for each, a cost-benefit analysis; an analysis of risks; the proposed delivery route; and their affordability
 - the preferred way forward, with the optimum balance of costs, benefits, affordability, deliverability and risk
 - delivery plan including a project timetable with key milestones, project and programme Management arrangements to ensure successful delivery
 - Risks and mitigation
- The ongoing viability and success of the project will be monitored against the Business Case.
- All spending decisions need to be backed by a robust Business Case. However, the amount of work and detail put in to a Business Case should be proportionate to the scale of the project or programme, and the expenditure involved.

1. Executive Summary

Introduction

Future competitiveness in the Coast to Capital area is tightly linked to the digital economy. To secure an economy which is able to compete with the best in Europe and internationally we need to maximise the return we get from digital businesses and doing business digitally.

We have a recognised competitive advantage in the creative digital and IT sector (CDIT), with its heart in Brighton but linked through the Gatwick Diamond to London Tech City South in Croydon, London Tech City itself, and to strongly growing CDIT companies in all parts of our region. This sector needs to be further developed, supported to remain at the leading edge of developments and to have access to international class digital infrastructure.

But we also need to make sure that every business in our region has access to the right kind of digital infrastructure they need. As a minimum, in time we want all businesses in all areas to have access to Superfast connections (24Mbps, symmetrical); for some clusters and locations Ultrafast will be required (1Gbps). Businesses and partners have consistently told us that this base level of digital infrastructure is a key driver and enabler of growth. It is also critical for the attraction of inward investment, both domestic and overseas.

In the same way that transport connections can either make or break the economic prosperity of a city, town or region, increasingly digital connectivity will determine the growth trajectory. We intend to use enhanced and leading edge digital connections to drive regeneration of some of our less prosperous areas.

What we are going to do

Our programme of support for the Digital Economy and Digital Infrastructure has two strands:

Strand 1 - develop the next wave of digital economy innovation

We will support a nationally important CDIT cluster and invest with regional and national partners in the Digital Catapult Centre Brighton, together with 5G mobile research and innovation.

- Building on Brighton's existing strengths and reputation in the creative economy, we will develop 'Digital Catapult Centre Brighton', one of just three regional Catapult centres in the UK which will be a collaborative innovation and research platform for SMEs, large companies and the universities.
- To maximise the innovative impact of the Digital Catapult Brighton, Coast to Capital will also invest, with other GTV7 LEPs, in the national 5G Research Centre at Surrey University, linking that research to the Brighton centre and engaging CDIT related SMEs in the C2C in early access to the technology. We will have a two lab based 5G 'Brains' in New England House and at the University of Brighton at Moulscomb. There will also be an external 5G demonstrator in the city of Brighton.

Strand 2 - Digital Infrastructure for Business

In 2015/16 we will develop pilot schemes of digital connectivity to provide a competitive edge for the region, attracting inward investment and delivering business growth. Learning and outcomes from these pilots will inform the future way forward for delivering our Growth is Digital strategy.

1. Ultrafast connectivity – this pilot will explore two aspects: i) using Ultrafast connectivity as a catalyst for change in a coastal town; ii) deliver creative cluster driven regeneration in Bognor Regis.
2. Business Clusters/ industrial estate – providing Superfast or Ultrafast connectivity to business hubs on a self-initiated and managed model.

3. Rural connectivity – to address the white spots and address digital exclusion for businesses and communities (including home working) in rural areas and provide symmetrical Superfast Connections for business.

There will also be further initiative to improve the skills and capacity of small businesses to exploit the digital economy through a development programme so that all businesses can have the opportunity to grow via e-commerce and international connections. This strand will be supported by ESIF funding and the proposal is not developed in this business case.

Timeline

The programme will start on 1st April and run through to March 2021.

Total Investment

Funding for the programme will be provided through the **Local Growth Fund of £3.35m and £17.375 million from the public sector. The programme will lever in £20.701m from the private sector.**

Subject to national ESIF procurement processes, we will also use **£1.2m from ESIF** to support the Digital Catapult Centre in Brighton.

	15/16	16/17	17/18	18/19	19/20	20/21	Total
LGF	650,000	650,000	650,000	700,000	500,000	200,000	3,350,000
Public	6,323,000	3,930,000	6,522,000	250,000	200,000	150,000	17,375,000
Private inc. HEI	6,567,000	6,767,000	6,767,000	250,000	250,000	100,000	20,701,000
ESIF (tbc)	50,000	100,000		100,000	50,000	200,000	500,000
Total	13,590,000	11,447,000	13,939,000	1,300,000	1,000,000	650,000	41,926,000

This broken down as follows:

Strand 1 – Total Budget over the six years

	Public/other	Private	LGF	ESIF (tbc)	Total
5G Research	£300,000		£1,200,000		£1,500,000
Digital Catapult Centre Brighton	£800,000	£1,000,000	£500,000	£1,200,000	£3,500,000
Total	£1,100,000	£1,000,000	£1,700,000	£1,200,000	£5,000,000

Strand 2 – Total budget over the six years

	Public/other	Private	LGF	ESIF	Total
Superfast broadband rollout (BDUK & local authority)	£16,275,000	£19,401,000			£35,676,000
Coast to Capital Ultrafast and		£300,000	£1,650,000		£1,000,000

Superfast for business					
Total	£16,275,000	£19,701,000	£1,650,000		£36,676,000

The programme will directly **create 200 jobs** for the Coast to Capital area.

In this business case:

Superfast - means a connection speed of at least 24Mbps

Ultrafast - means a connection speed of 1 Gbps

Symmetry - means that upload speeds are equal to download speeds - an essential requirement for many businesses

BDUK - Broadband Delivery UK - a Government investment of £1bn which aims to:

- Provide superfast broadband coverage to 90% of the UK by 2016
- Provide basic broadband (2Mbps) for all by 2016
- Provide superfast broadband to 95% of the UK by 2017
- Explore options to get near universal superfast broadband coverage across the UK by 2018
- Create 22 'SuperConnected Cities' across the UK by 2015 (Brighton is included)
- Improve mobile coverage in remote areas by 2016

2. Strategic Case

Future competitiveness in the Coast to Capital area is tightly linked to the digital economy. To secure an economy which is able to compete with the best in Europe and internationally we need to maximise the return we get from digital businesses and doing business digitally.

We have a recognised competitive advantage in the creative digital and IT sector (CDIT), with its heart in Brighton but linked through the Gatwick Diamond to London Tech City South in Croydon, London Tech City itself, and to strongly growing CDIT companies in all parts of our region. This sector needs to be further developed, supported to remain at the leading edge of developments and to have access to international class digital infrastructure.

But we also need to make sure that every business in our region has access to the right kind of digital infrastructure they need. As a minimum, in time we want all businesses in all areas to have access to Superfast connections (24Mbps, symmetrical); for some clusters and locations Ultrafast will be required (1Gbps). Businesses and partners have consistently told us that this base level of digital infrastructure is a key driver and enabler of growth. It is also critical for the attraction of inward investment, both domestic and overseas.

In the same way that transport connections can either make or break the economic prosperity of a city, town or region, increasingly digital connectivity will determine the growth trajectory. We intend to use enhanced and leading edge digital connections to drive regeneration of some of our less prosperous areas.

2.1 Business need – the problem that needs to be addressed

Creative Digital and IT businesses make a vital contribution to the UK economy. There were a total of 1.68 million jobs in creative industries in the UK in 2012, up by 133,000 from 2011. With a GVA of £71.4 billion, the sector accounts for 5.2% of the UK economy. More broadly, there are a further

866,000 creative jobs outside of the creative industries and digital technology is influencing all aspects of the economy. For example, recent research from the Boston Consulting Group calculates that the size of the UK's internet economy was worth 8.3% of GDP in 2010.

The South East has over 17% of the country's creative enterprises and there are nearly 9,000 creative industries businesses based in the LEP region, including significant clusters of activity in Brighton & Hove with Lewes (3,344 companies) and the Gatwick Diamond (2,855 companies).

As evidenced in the widely referenced Brighton Fuse research, the Coast to Capital region is probably more advanced than anywhere else in the country in integrating technology, data and creative activity. Crucially, this knowledge resides in both its businesses and its universities. It is therefore the ideal location to come up with fresh perspectives on data and value in place-based contexts.

Brighton & Hove has built a strong and deserved reputation as a centre for programmer and developer talent and has established itself as one of the leading data-centric economies in the UK. The tech and creative industry now represents 15% of all employment in the city and generates around £720m of GDP per year. The Fuse research demonstrated that there is a core of 500 businesses in Brighton that base their commercial model on a highly sophisticated integration of technology and creativity. These businesses demonstrate a strong propensity to innovate and are, on average, growing at 20% per annum (thus demonstrating the commercial imperative behind their approach).

We have a clear understanding of the challenges around the Creative Digital and IT (CDIT) sector and especially supporting its shift from value creation to value capture, which is how it will really take off as a cluster. While the Coast to Capital region is home to a number of significant creative firms, we recognise that the sector is particularly fragmented, with nearly one in five (17%) of the web and internet workforce and one in ten (11%) of the electronic games workforce in freelance positions.

Ultrafast and Superfast Connectivity for Business

This growing and important part of the economy needs digital infrastructure that is as good as any to be found internationally. Coast to Capital has consistently backed the need for high speed broadband connections to all parts of the region. The need for international business class digital infrastructure has been backed by businesses and all our partners and stakeholders, including most recently the Coast to Capital Forum in March 2013. Partners from all sectors have consistently put digital infrastructure at the top of the priority list of key enablers and drivers of growth.

"The country gains £20 in net economic benefit for every £1 of public investment in digital infrastructure"

DCMS

The Government defined the area that would be covered by the commercial roll-out of broadband infrastructure i.e. not to receive any public funding. This is generally the area where it considered that there would not be market failure and there would be sufficient market demand for the telecom companies to invest in their own infrastructure.

It has now become apparent that gaps have appeared within the commercial roll-out area where the telecom companies have not deemed it commercially viable to invest in fast or superfast infrastructure. This is often because the number of potential superfast subscribers is estimated to be below their commercial break-even point.

Inadequate broadband access has consistently been highlighted as a concern for the significant number of remote business parks in West Sussex. The issue is often amplified in remote locations

due to the limited availability of good transport links. This has resulted in increased vacancy rates and a reluctance of existing businesses to expand within their current location.

Coast to Capital has supported the implementation of the BDUK approach to broadband, and the procurement by upper tier authorities. However, there are indications that it is time for Coast to Capital to further develop our approach to ensure connections to the whole of our region.

The BDUK/County roll-out is predominantly a roll-out into areas of market failure outside the commercially defined area. Therefore more sparsely populated urban areas and peri-urban areas are included within the allowable intervention zone as well as the genuine rural areas.

Local roll-out's have had to concentrate on the higher-density areas that can produce the best 'price- per-premises' output figures. Although there is certainly economic logic in rolling-out from high-density to lower-density areas, this methodology will inevitably result in the available public funding running out well before the infrastructure is deployed into many true (i.e. more expensive) rural areas.

However, there are two remaining issues:

1. The network will not reach 100% of the area, leaving some rural areas unconnected, which are an important location of home based and other businesses.
2. BDUK will not necessarily deliver international class business connections – in particular the connection is not symmetrical and upload speeds will be much slower than download – it is in many ways a domestic/residential network.

Further, BDUK roll-out is taking place at a measured pace. If we view digital connections as a competitive factor, we need better connectivity than other areas and countries, and sooner.

Coast to Capital needs Superfast/Ultrafast broadband for businesses at the highest international standards sooner than BDUK can deliver it for two main reasons:

1. We are positioning ourselves as a significant international location for business, one of the most attractive and productive areas in Europe. We must have digital connectivity for business at the highest levels for this to be credible.
2. The Creative Digital and IT sector is one of our fastest growing sectors; our research and technology future will rest in part on connected digital technologies. Both these require businesses to be able to connect with researchers, innovators, customers, suppliers, and collaborators via a top class digital infrastructure. Our creative digital and IT sector can only be sustained against increasing global competition by ensuring that the region is able to supply "future-proofed" infrastructure, particularly regarding vital high speed communication and internet access. In addition, SMEs and larger companies need to be given the opportunity to form support networks to share innovative practice, encourage new start up and also to connect to national hubs of innovation such as Tech City and the Connected Digital Economy Catapult (CDEC).

We also regard it as important to fill in the not-spots in the rural areas which will be left by the BDUK roll-out to ensure all businesses can benefit from baseline connectivity and to tackle rural isolation and digital exclusion. By increasing the scope for people to work from home and reducing the need to travel, access to broadband also has benefits for the wider environment and supporting sustainable development.

Future growth of commerce will rest in part on the adequacy of the digital infrastructure. International trade and connections are as much dependent on digital connectivity as they are physical connections. The future growth of the Coast to Capital economy will be driven by growth in international trade and collaboration.

The Creative Digital and IT sector is one of the strongest competitive advantages of the Coast to Capital area and Connected Digital Economy is a key focus for our research and technology future.

The successful implementation of our Strategic Economic Plan is therefore dependent on securing digital connections and infrastructure for all residential and employment areas which will allow all businesses to compete internationally.

There are alternative connectivity technologies and Coast to Capital needs to be advanced and competitive in the front runners – particularly mobile technology.

Access to employment, learning and economic inclusion is increasingly dependent on access to digital connections. In Coast to Capital we have the highest current concentration of “not-spots” in England. Poor broadband connectivity in rural areas is exacerbated by poor mobile connections. The reality of 4G in rural areas has not met expectations. The new masts are expensive ‘intelligent’ masts with a smaller range than the older 2G/3G masts and need availability of a huge broadband backhaul (i.e. high-volume commercial fibre pipe) therefore the telecom companies will only be rolling these masts out in areas they can guarantee high-levels of consumer use i.e. urban areas and along key road routes.

We need to ensure CDIT businesses are well tied into our wider proposals for internationalisation and access to finance. Ultrafast digital capacity is an essential pre-requisite for the international competitiveness of the digital sector.

If we do not support the CDIT sector then the Coast to Capital area will miss out on the opportunity to use its competitive strength to great the most business growth and jobs in the short and medium term.

The Coast to Capital area may also lose its research, innovation and knowledge transfer capability to other areas if we do not have the business infrastructure to take full advantage of this expertise and our universities’ centres of excellence.

5G

The advent of 5G technologies and ICT networks signify the coming next wave of a globally connected Digital Society. All over the world, mobile access to the internet is becoming wholly fundamental to doing business in all industries. Flexible working practices facilitated by mobile networks and devices are already essential, and are allowing enterprises to conduct operations across boundaries that previously inhibited growth.

Growing mobile access to the internet, cloud-based services and Big Data analytics is allowing anyone, anywhere to leverage on a whole new kind of globally connected and shared knowledge base.

The continuing rise in the relevance of social media as an important part of how we interact with the internet is also opening up new kinds of intelligent analytics ready to be harnessed for tangible business and everyday life benefits.

Growth in importance and number of internet connected devices has and will continue to grow. It is essential to stay at forefront if business is going to thrive and benefit from the opportunity. 5G is not an evolution of 2, 3 and 4G. It is completely new. It is always-on, potentially extremely fast (up to 54Mbps – 3G is up to 2.8Mbps) communications.

Many individuals and businesses are increasingly accessing their data via mobile devices via the 3G and 4G mobile networks. The cost of accessing data via a mobile device has dramatically fallen and speeds significantly improved. Worldwide data trends show the inexorable rise in use of mobile devices such as smartphones and tablets, and a slow but steady decline in use of desktop and laptop computers. It is estimated that by 2018 UK ownership of a smartphone will have risen to 92% of the population (currently 65%). In February Nielsen reported that US users were spending 34 hours per month accessing mobile data via their smartphones, it is estimated that UK usage levels could be higher.

The creation of an International Centre for Future Generation Mobile Broadband Internet and Communications Research – the 5G Innovation Centre (5G IC) - at the University of Surrey will enable the UK to position itself as the global market leader in a game changing technology. It will

provide the industry with a world-leading real-time experimental facility for testing and optimising advanced technologies, underpinning the development of new mobile broadband Internet products and services. This will give the UK the opportunity to be a major influence in critical standardisation and radio regulatory bodies in the emerging 5G arena.

With 5G standards only just at concept level, the creation of the 5G Centre is perfectly timed not only to drive innovation in this emerging technology but also to place the UK in an ideal position to exploit the economic opportunities that will be created. Links are already being forged with the Connected Digital Economy Catapult, focusing on opportunities to develop Internet of Things and Digital Media applications.

The 5GIC also presents an opportunity to become the model for how the University interacts with business through the provision of incubation space and the support of virtual incubation (providing the same level of support for companies but not the office space) and a link to the business development team to provide a one stop shop for business support and advice. It will also link through to the Surrey Business School for assistance at all levels (e.g. student projects and internships up to sponsored PhDs and contract research).

Coast to Capital along with LEPs in the GTV7 group are committed to investing in the 5G research centre at the University of Surrey with the agreed intention that the LEPs will focus on engagement of SMEs.

Spatial priorities

In the Strategic Economic Plan, priority areas were identified. These were either those areas where growth will happen strongest and fastest, or those where there is greatest potential for future growth. Coast to Capital has also adopted a Rural Statement setting out both how the rural economy is important to the either regional economy and also how we intend to support growth in rural areas.

In 15/16 and 16/17 we will focus our investment in the digital economy in three spatial areas:

- Brighton and Route 23 - the arc of concentration of the CDIT businesses in the area. However, all SMEs across Coast to Capital will be entitled to engage with the activities of the Digital Catapult Centre and to learn from the innovation projects.
- Coastal regeneration - the Coast has lower performance on a wide range of indicators, including business formation, growth, productivity and skills. However, the coastal areas represent some of our best spatial areas for accommodating future growth. We will therefore locate one of the Ultrafast pilots in 15/16 & 16/17 in one of the Coastal towns. This is likely to be Bognor Regis as West Sussex County Council is investing in creating a new creative cluster and it will maximise impact to co-invest in the same locality.
- Rural areas - we will identify a location where the roll out of BDUK will not deliver Superfast connect speeds for businesses.

2.2 The Project/Programme

2.2.1 Description

Strand 1 - develop the next wave of digital economy innovation

Following the success of Coast to Capital's Digital Catapult competitive tender, and building on Brighton's existing strengths and reputation in the creative economy, we will deliver a leading edge Digital Catapult Brighton providing innovative data solutions and innovations in business models, products and services. The catapult will be a collaborative innovation and research platform for SMEs, large companies and the universities.

To maximise the innovative impact of the Digital Catapult Brighton, Coast to Capital will also invest, with other GTV7 LEPs, in the national 5G Research Centre at Surrey University, linking that research to the Brighton centre and engaging CDIT related SMEs in the C2C in early access to the technology. We will have a two lab based 5G 'Brains' in New England House and at the University of Brighton at Moulscumb. There will also be an external 5G demonstrator in the city of Brighton.

EM3 is the lead LEP in the GTV7 group for the overall LEP investment.

*Our detailed proposal for Digital Catapult Brighton is attached in **Appendix 1** and should be seen as an integral part of this business case.*

While the Digital catapult Centre will be located in Brighton, the project is designed to allow large and small companies from across the Coast to Capital area to be involved. Throughout the project there will be regular engagement with business and it is a requirement of the National Digital Catapult that we fully engage SMEs from the whole region.

Strand 2 - Digital Infrastructure for Business

In 2015/16 we will develop pilot schemes of digital connectivity to provide a competitive edge for the region, attracting inward investment and delivering business growth. Learning and outcomes from these pilots will inform the future way forward for delivering our Growth is Digital strategy.

1. Ultrafast connectivity – this pilot will explore two aspects: i) using Ultrafast connectivity as a catalyst for change in a coastal town; ii) deliver creative cluster driven regeneration in Bognor Regis.
2. Business Clusters/ industrial estate – providing Superfast or Ultrafast connectivity to business hubs on a self-initiated and managed model. This will be based on a digital exchange to serve a very tightly located business community, a high proportion of who will need Superfast or Ultrafast connectivity for essential competitiveness, and who would expect to pay a premium for the service as an acceptable cost of being in business.
3. Rural connectivity – to address the white spots and address digital exclusion for businesses and communities (including home working) in rural areas and provide symmetrical Superfast Connections for business. An intervention to help businesses in rural/ white areas not covered by the BDUK programme and where a mix of business, residents and home based businesses do not have Superfast connectivity.

Landowners on estates and the National Park may also invest in digital infrastructure to test out solutions for rural areas.

Each of these approaches is based on a business model which buys digital capacity upstream from a market of well established suppliers and sells it downstream, with a suitable means of distribution, which might be fibre, wireless, infrared, LED or satellite or other emerging technology. The business model works because it is based on a small area, tightly located consumers who have a pre-identified wish to buy-in to the service, whereas BDUK has to cover 90% of the whole area for potential customers not yet identified.

For rural communities we would develop a model for clusters of businesses that wish to collaborate to deal with not-spots. Either extending the fibre network or use of wireless, microwave, infrared transmission would be considered.

2.2.2 Objectives

Our overall long term objectives are to:

1. Support an internationally important CDIT sector
2. To be a pioneering region in adoption of 5G mobile technologies - the UK's first "5G super-region"
3. Boost the competitiveness of digitally dependant businesses in the C2C area

4. Ensuring all businesses have access to at least 24mbs symmetrical broadband.
5. To regenerate areas with lower economic performance

Our objectives for this business case are:

Strand 1

- To have a high profile Digital Catapult Hub in Brighton that will achieve innovative data solutions and innovations for new business models, products and services.
- Working with the national 5G Research Centre at Surrey University and to have two 5G 'Brains' linked to the Digital Catapult centre, one based at New England House, one at the University of Brighton at Moulscumb, and with a city wide external demonstrator from 2017/18.

Strand 2

To pilot different models to bring digital interventions to improve business competitiveness:

- One ultrafast cluster based on a Coastal town
- One superfast/ultrafast business cluster based on an industrial estate or other tight location.
- One rural cluster which will deal with one of the existing not-spots

2.2.3 Outputs (first three years)

- Jobs created - 200
- SMEs engaged - 1,000
- SQM employment/learning space created - 500 sq m

2.2.4 Key Strategic Benefits

Strand 1

- Giving the United Kingdom a clear competitive advantage in CDIT expertise.
- Creating new products for existing businesses – specifically in the Digital Catapult Brighton, also across the C2C region and nationally.
- Innovations in business models, products and services that are transferable to other locations.
- New business starts and business growth for SMEs in the digital/ innovation sector.
- Attracting new employment opportunities in digital/ innovation sector.
- Business growth for SMEs in other sectors benefiting from the new technology.
- The development within businesses of new skill sets, and activity by FE and HE to support that.
- New employment opportunities from business growth in the area through strengthening the local economy across a range of sectors.
- New talent attracted to the digital sector and the use of placement programmes to help develop the talent pool for local business.
- Our Digital Catapult project can share innovation across the UK and internationally through communication channels and existing networks.

Strand 2

- Addressing rural areas and 'not spots' (not covered by BDUK programme) and creating access to superfast connections across the region and addressing disadvantage in some of our business, residential communities and home based businesses.

- To provide ultrafast digital connectivity to cluster areas as a catalyst for change and bring new investment.
- To bring improved connectivity to our industrial areas/ clusters (outside BDUK delivery).
- Coastal regeneration
- New employment opportunities from business growth in the area through strengthening the local economy across a range of sectors.

2.2.5 Key Stakeholders and their roles and responsibilities

Strand 1 – Investment in the Brighton Digital Catapult and 5G Technology

Partner/ Stakeholder	Role
Coast to Capital LEP	Strategic expertise and the capability to draw in significant funding to take forward project ideas. C2C can also use its regional and national connections to add value. Key partner and funder for the 5G 'Brain' - Condition of LEP investment is that SMEs get access to the technology and that there is a 5G 'Brain' in New England House, Brighton.
Wired Sussex	An independent, Brighton-based company that provides business support to the digital, media and technology sector. With strong connections to around 2,000 SMEs, Wired Sussex has a proven track record in bringing innovative businesses into projects like these and connecting them effectively with HEI's.
University of Brighton.	Via both its School of Computing, Engineering and Mathematics and its Faculty of Arts, the University of Brighton brings expertise, experience, research, development and existing facilities and resources that can be integrated into this programme.
Science Policy Research Unit (SPRU) at the University of Sussex	A partner around the experience of the marginalised in the Internet of Place. SPRU also provides advice and expertise on models of business innovation.
University of Chichester	Specifically support data skills development in the non-specialist SMEs who are involved in the collaboration – e.g. retailers and service providers.
SMEs	SMEs to contribute their ideas and support and, crucially, have identify ways for the SME sector to engage with it. These include 2 large international data businesses both headquartered in Brighton, - iCrossing and Brandwatch – plus Hexology, Tag-Points, Meta Eggs, LeapFrog, No Pork Pies and Datanauts.
American Express	Employs 400 specialist technologists at the Amex Campus (its European HQ located in Brighton), and this large employer will provide our programme with access to big data and data as well as commercial insights culled from its worldwide operations.
Gatwick Airport Ltd	An associate partner and will be providing access to the airport and its big data and APIs, which will form the basis of our initial project
EM3	Leading negotiations with Surrey University to develop the 5G technology on behalf of the GTV7 LEPs
5G Research Centre – Surrey University	Development/ delivery partner for 5G

Strand 2 – Improving Digital Connectivity for Business and Business Clusters

Partner/ Stakeholder	Role
Coast to Capital	Strategic expertise and the capability to draw in significant funding to take forward project ideas. C2C can also use its regional and national connections to add value.
West Sussex County Council	WSSCC will co- develop the model for Ultrafast hubs, exploring Digital Coast or 1Gig Coast.
Gatwick Diamond	To bring connectivity to businesses/ business clusters and business parks not covered by the BDUK roll out.
West Sussex Rural Partnership, and South Downs National Park	To focus interventions to address digital exclusion in rural and coastal areas. To seek match funding and co-investment.
Coastal West Sussex Partnership	To bring regeneration to Coastal towns through improved digital connectivity.

2.2.6 Strategic Options for Delivery

For the two stands of activity we have looked at different options for achieving the objectives to ensure the chosen delivery model will offer best value for money.

Strand 1 - Investment in the Digital Catapult Brighton and 5G Technology

- Option 1 - Do nothing
- Option 2 - Invest widely in the CDIT sector
- Option 3 – Invest in Digital Catapult Brighton
- Option 4 – Standalone 5G investment
- Option 5 – Combined Digital Catapult Brighton and 5G

Strand 2 – Improving Digital Connectivity for Business and Business Clusters

- Option 1 - Do nothing
- Option 2 – Create fund for ultrafast loans allocated on a competitive basis
- Option 3 – Targeted investment on single identified issue (eg industrial estates, rural etc)
- Option 4 – Targeted pilots to test approaches to tackle different issues

2.2.7 Risks of Strategic Options for delivery

Strand 1 – Investment in the Digital Catapult Brighton and 5G Technology	
Options	Strategic Risks
Option 1 – do nothing	Loss of opportunity to enhance Brighton cluster reputation and build on the expertise of the CDIT sector and the job creation

	<p>opportunities.</p> <p>Potential loss / movement of businesses to areas outside the C2C region where there are innovation and creative clusters.</p>
Option 2 - invest widely in the CDIT sector	Lack of focus and low impact. Very high deadweight - sector thrives in absence of any intervention.
Option 3 – Standalone Digital Catapult Brighton	Delivers high impact and focus but available resources thinly stretched and will not deliver maximise Catapult capabilities to deliver innovation potential.
Option 4 – Standalone 5G investment	May not be sufficiently focused on SMEs in the C2C area. May not benefit from the business and university capabilities to develop the best use of 5G investment. Investment is thinly spread.
Option 5 - Combined Digital Catapult Brighton and 5G	<p>Maximises impact and investment.</p> <p>Reliance on the 5G technology and investment from other LEP areas</p>

Strand 2 – Bringing Superfast/Ultrafast Broadband to Business Clusters	
Options	Strategic Risks
Option 1 – Do nothing	<p>Loss of international competitive position</p> <p>Businesses continue to struggle to use technology to support business growth and will result in loss of business growth and job creation opportunities.</p> <p>Businesses fall behind their competitors with the risk of failure.</p>
Option 2 – Create fund for ultrafast loans allocated on a competitive basis	<p>Open competition reduces state aid risks. Businesses & communities with most desire/match are supported.</p> <p>Superfast may be a more pressing priority in some areas.</p> <p>However, may not target key areas and problems.</p> <p>High deadweight. High administration costs.</p>
Option 3 – Targeted investment on single identified issue (eg industrial estates, rural etc)	<p>May only benefit specialist/ niche market where ultrafast is critical to their business needs.</p> <p>Will need to ensure EU state aid rules are applied where applicable.</p>
Option 4 – Targeted pilots to test approaches to tackle different issues	<p>Disparate spread of technology and lose opportunity to raise the profile of specific business locations/ business clusters.</p> <p>Potential for deadweight if businesses and other users of the town centre but do not use the technology to deliver business and local economic growth.</p> <p>Will need to ensure EU state aid rules are applied where applicable.</p>

2.2.8 Constraints

Internal factors

Both strands of the programme will need staff resources with appropriate skills and expertise to deliver effectively and on time. There is no management fee attached to any of the Local Growth Funding. Support from partners is required.

External factors

Strand 1

Strand 1 activities are heavily reliant on the expertise of partners, stakeholders and the private sector. Specifically:

- Surrey University for 5G.
- Private sector (both large and small businesses) through innovative ideas sharing and expertise.
- Availability of ESIF funding for the SME engagement element of the Catapult.

Strand 2

Strand 2 will be dependent on the availability/ability of suppliers to deliver digital connectivity (voice and data as well as broadband). Strand 2 is also dependent on the expertise of partners and stakeholders to help identify the most appropriate projects and to engage businesses.

EU State Aid Regulations may restrict public sector investment although Superfast and above has exemption from State Aid rules that changed in July 2014.

The programme must not duplicate any of the activity planned as part of the BDUK roll-out.

The digital infrastructure backbone may not be adequate in all locations to support Ultrafast connectivity

2.2.9 Initial Affordability Assessment

Strand 1 - Investment in the Brighton Digital Catapult and 5G Technology

Estimated costs

Activity	Cost
Physical Node <ul style="list-style-type: none"> • Physical space remodelling / presentation • Equipment • Dedicated connectivity • Rent / rates • Set up project management 	£500,000
Project management / core staffing and engagement <ul style="list-style-type: none"> • Project/ Centre Management • Measurement & Evaluation • Associated project costs 	£200,000 £15,000 £15,000
Development costs <ul style="list-style-type: none"> • Technical expertise (hardware, software, engineering) • Innovation facilitation • Project development resources • Research 	£1,000,000 plus in-kind resources from universities
Events and engagement <ul style="list-style-type: none"> • Event costs • Outreach activity with SMEs 	£160,000

<ul style="list-style-type: none"> Promotion costs 	
Digital connections for project development and links to UK Digital Catapult Nodes	
<ul style="list-style-type: none"> Mobile 5G Ultrafast clusters/Digital exchange, I-beacons & wireless 	£1,200,000 £945,000
TOTAL	£4,035,000

Sources of funding:

• National Connected Digital Catapult	£500,000
• University expertise and research	in kind
• ERDF - subject to procurement process	£1,200,000 (£225,000 in 15/16)
• Local Growth Fund – 5G investment	£1,200,000 (£200,000 in 15/16)
• Local Growth Fund – Digital infrastructure	£500,000
• Greater Brighton City Deal – Digital Exchange	£635,000
• TOTAL	£4,035,000

Strand 2 – Improving Digital Connectivity for Business and Business Clusters

Estimated Costs:

We would expect to achieve a significant contribution from the private sector (£19,701,000) and public sector (£16,275,000) to contribute to the cost of installation.

We must consider how we can best achieve the highest level of impact in terms of business competitiveness and jobs created for the financial investment and budget available.

	Public/other	Private	LGF	Total
Coastal ultrafast cluster pilot	£50,000	£20,000	£115,000 in 15/16 and 16/17	£170,000
Ind. estate pilot		£20,000	£55,000 in 15/16 and 16/17	£70,000
Rural pilot	£20,000		£55,000 in 15/16 and 16/17	£70,000
Total	£16,275,000	£19,701,000	£225,000 in 15/16 and 16/17	£310,000

NB:

- These are figures for the first two pilot years
- BDUK investment excluded

2.2.10 Long term sustainability

Ongoing sustainability of the digital infrastructure will be on the basis of selling the connectivity on normal commercial terms.

3. Economic Case and Option Appraisal

Long-listed Options

Strand 1 - Investment in the Digital Catapult Brighton and 5G Technology

Option	Description	strategic fit	achievability	acceptability	affordability
1	Option 1 – do nothing	Does not meet needs and damage to current business base and reputation.	Unable to deliver requirements to target	Unacceptable to all stakeholders	No cost
2	Option 2 - invest widely in the CDIT sector	Meets priority sector focus	Low impact High deadweight	Will not satisfy sector leaders	High admin costs Will lever in ESIF
3	Option 3 –. Standalone Digital Catapult Brighton	Concentrates sector input on high added value.	Catapult already secured via competitive bid to CDEC. Funding spread very thin.	Concern from some partners of excessive Brighton focus. need to ensure all C2C SMEs can get access Does not maximise impact	Deliverable in funding available
4	Option 4 – Standalone 5G investment	Meets some requirements to have 5G available to meet business growth needs. However, the investment will not be matched by the innovation development to optimise the potential of 5G,	Able to deliver some benefits but will not realise the potential without business innovation and innovation input from the Digital Catapult and universities. No focus for engagement of SMEs.	Not acceptable to most stakeholders including businesses.	No ESIF funding Potential to use all the funding allocation but unlikely to deliver the leverage needed from the private sector.
5	Option 5 - Combined Digital Catapult Brighton and 5G	Meets strategic needs for Coast to Capital and partners, including the private and public sectors.	Meets requirements to achieve the objectives of the Digital Catapult and deliver economic growth.	Acceptable to sector stakeholders. Concern from some partners of excessive	Can be delivered within funds available. Likely to achieve the most leverage from the private

			Good focus for engagement of SMEs	Brighton focus. need to ensure all C2C SMEs can get access	sector.
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Strand 2 - Improving Digital Connectivity for Business and Business Clusters

Option	Description	strategic fit	achievability	acceptability	affordability
1	Option 1 – Do nothing	<p>Loss of international competitive position</p> <p>Businesses continue to struggle to use technology to support business growth and will result in loss of business growth and job creation opportunities.</p> <p>Businesses fall behind their competitors with the risk of failure.</p>	<p>Unable to deliver requirements to target</p>	<p>Unacceptable to all stakeholders</p>	<p>No cost</p>
2	Option 2 – Create fund for ultrafast loans allocated on a competitive basis	<p>Open competition reduces state aid risks. Businesses & communities with most desire/match are supported.</p> <p>Superfast may be a more pressing priority in some areas.</p> <p>However, may not target key areas and problems.</p>	<p>Would achieve strategic ambition in a limited number of clusters/ businesses.</p> <p>Risk of low take up</p> <p>High deadweight</p>	<p>Not acceptable to all stakeholders due to limited numbers that would benefit and it would not have capacity to address digital exclusion in rural areas.</p>	<p>High admin costs</p>
3	Option 3 – Targeted investment on single identified issue (eg industrial estates, rural etc)	<p>May only benefit specialist/ niche market where ultrafast is critical to their business needs.</p> <p>Fills the gap where the BDUK roll out will not deliver coverage.</p>	<p>Achievable for business individual businesses.</p> <p>Will need to ensure EU state aid rules are applied where applicable.</p>	<p>May not be acceptable to some stakeholders – will not address the need for Ultrafast or rural not-spots.</p>	<p>Demand and need likely to exceed budget so will have to be controlled.</p>

Option	Description	strategic fit	achievability	acceptability	affordability
4	Option 4 – Targeted pilots to test approaches to tackle different issues	<p>Targets most important issues and tests solutions</p> <p>Meets strategic requirements for enhancing business clusters and supporting inward migration and new businesses in business clusters.</p> <p>Disparate spread of technology and lose opportunity to raise the profile of specific business locations/ business clusters.</p> <p>Potential for deadweight if businesses and other users of the town centre but do not use the technology to deliver business and local economic growth.</p> <p>.</p>	<p>Achievable for business businesses clusters.</p> <p>Reliant on businesses in the target locations to maximise use of technology.</p> <p>Fills the gap where the BDUK roll out will not deliver coverage.</p> <p>Funding spread more thinly</p>	Gains most partner support	<p>Demand and need likely to exceed budget so will have to be controlled.</p> <p>Maximises co-investment</p>

3.1 Short listed options

Set out which options you have shortlisted, and why.

Strand 1

The only option acceptable and that will deliver the required outcomes is the combined Digital Catapult and 5G - Option 5. This is the only option that would deliver the impact and economic growth required and which would be acceptable to all stakeholders. The implementation of 5G alongside the Digital Catapult is the only option for successfully delivering the innovation and leading edge outcomes for this proposal and one will not be successful without the other.

Strand 2

To do nothing is not an option as the market failures will not be addressed and the need for digital connectivity to support business growth and competitiveness will not be met.

Option 4 would all deliver benefits towards the objectives of the Coast to Capital Growth is Digital strategy.

- Ultrafast connectivity has the greatest potential to be a catalyst for a step change in business competitiveness.
- Digital exclusion in rural areas is a significant issue for resident and business communities in the Coast to Capital area. In the South Downs National Park alone there is estimated to be around 7,000 SMEs. 'White areas' are not covered in the BDUK programme so rural areas are likely to remain at a significant disadvantage
- Targeting business clusters around industrial estates / business parks is likely to achieve greater impact than providing improved connectivity to individual businesses. Targeting clusters will have the benefit of providing an improved digital service for a critical mass of businesses in one location and to improve the offer that will achieve inward investment potential through businesses moving to better connected locations.
- A Coastal town centre location has the advantage of improving digital connectivity for town centre businesses, and also of using mobile technology to better connect town centre businesses with the customers and local community.

3.2 Cost benefit analysis

3.2.1 Affordability

Strand 1

The Digital Catapult Brighton and the 5G development will require initial public sector investment to underpin the costs of developing the innovative infrastructure that has the potential for significant competitive advantage for the Coast to Capital region and for the UK. Funding has been secured through a variety of sources:

Connected Digital Catapult	£500,000
ERDF - subject to procurement process	£1,200,000
Local Growth Fund – 5G investment	£1,200,000
Local Growth Fund – Digital infrastructure	£500,000
Greater Brighton City Deal – Digital Exchange	£635,000

The project will lever significant resources from University expertise and research (in kind and in cash through potential funding bids to research Councils).

The project will also lever resources from the private sector estimated to be in the region of £1,000,000.

The most significant benefits will be through the project bringing unique ideas, leading edge innovation and intellectual property from both the public and private sector. The organisations involved in the development of the Digital Catapult Brighton include some of the best university R&D, expertise from the National Digital Catapult and some of the most technically advance CDIT businesses in south east England.

It is not possible to put a value on this intellectual property but the outcomes will be far-reaching in terms of the possibilities of commercialising the integration of multiple data sets. The project has the backing, and will gain contribution and input from, large multinationals such as Gatwick Airport and American Express as well as the networks of digital expertise from SMEs, not just in the Coast to Capital region, but from inviting business contribution across the UK, Europe and international.

The programme will engage with SMEs, start-ups and with large companies to bring ideas and expertise, to test with technology experts and University R&D. Through project activities SMEs will have the chance to be at the forefront of how new uses of data can enhance customer experience, service delivery and business potential. Accessing shared business data (free or at reduced cost) and resources and ideas from research and practice insights based on the latest research activity in the university sector.

Through the programme, we will focus on supporting commercial gain from the research. We would expect commercial gain to include reputational and brand enhancement, increased repeat business, marketing and sales advantages, new product development, new commercial partnerships and reduced costs of customer acquisition.

Strand 2

The emphasis for the Strand 2 activity is to provide business with improved digital connectivity to improve their business competitiveness. We want to encourage businesses to bring forward their investment in digital connectivity to bring business benefits earlier and to increase their competitive advantage to bring new business and employment to the Coast to Capital region.

Through the regional growth fund we will provide an incentive to businesses to bring forward their investment and we expect a significant contribution from the private sector and from the public sector to improve the local infrastructure.

In year one we will invest around £225k of LGF grant funding to pilot the impact of improved digital connectivity in our key locations.

For every £1 invested from LGF we aim to achieve around £36 from public and private sector investment.

Risk**Strand 1 – Combined Digital Catapult Brighton and 5G Technology**

Shortlisted Option	Risks	Impact	Likelihood	Mitigations (including cost where appropriate)
Combined Digital Catapult Brighton and 5G Technology	Potential for slippage in timescale if developments take longer than planned.	medium	medium	Up front investment in project set up from Coast to Capital, Wired Sussex and BHCC. Monthly review of progress and close engagement with partners throughout development. Initial location will be in Brighton Fusebox
	Technical difficulties.	medium	medium	Seek expertise of partners in Digital Catapult and universities and private sector.
	State Aid implications.	medium	low	Catapult Bid was an open process. Clarify State Aid rules prior to contract. Assets purchased will be the property of the Digital Catapult Centre, not any one organisation. Open innovation platform with shared IP.
	Digital Catapult Brighton does not maintain its innovation and leading edge.	high	low	Sufficient and sustained challenge from the Steering Group to ensure the Catapult does not become mundane.

Strand 2- Improving Digital Connectivity for Business and Business Clusters

Shortlisted Option	Risks	Impact	Likelihood	Mitigations (including cost where appropriate)
Ultrafast Connectivity in Coastal town	Project cannot be delivered in timeframe	High	Low	Locate where there is well advanced planning Proposal already advanced and agreed with local partnership. Commissioning and delivery to be monitored and

Shortlisted Option	Risks	Impact	Likelihood	Mitigations (including cost where appropriate)
				reviewed. Lessons learned from other areas.
	State aid issues			24Mbps plus All downstream sales at full commercial terms
	Digital infrastructure backbone may not be adequate to support Ultrafast	High	Medium	Baseline infrastructure (to the town) will be a criteria for selection of the final location.
Superfast connectivity in rural locations	Clash with BDUK rollout	high	low	Regular review of postcode mapping to identify where BDUK will install.
	Solutions for rural locations exceed budget.	medium	low	Ensure realistic costs in proposals and secure appropriate levels of matched funding/ leverage.
	State aid issues			24Mbps plus All downstream sales at full commercial terms
Superfast connectivity on business estates/ industrial parks	Clash with BDUK rollout	high	low	Regular review of postcode mapping to identify where BDUK will install.
	Potential for deadweight if businesses take up the offer but do not use the technology to deliver business growth.	medium	low	Commitment and matched secured from business as part of proposal for funding.
	State aid issues			24Mbps plus All downstream sales at full commercial terms

3.3 Key Findings

Strand 1

The combined Digital Catapult Brighton and 5G technology delivers the strategic fit to take a significant competitive edge in the digital and creative economy.

The benefits are difficult to quantify in terms of financial gain but we would expect to see commercialisable products, new services and new businesses developing. The innovations will be transferable to other locations bringing benefits, employment growth and international potential to the Coast to Capital region and to the UK.

Funding to cover the cost of development has already been secured.

The risks can be mitigated at little or no cost.

Strand 2

Piloting three options in the first year will provide Coast to Capital with a better understanding of how high speed connectivity will impact on all parts of the region. Partners from all sectors have consistently put digital infrastructure at the top of the priority list of key enablers and drivers of growth.

Demand from business (in rural and in industrial locations) is likely to be high and we will put criteria and controls in place to ensure we deliver our strategic objectives. We will seek private sector contribution as well as private investors to provide cost effective solutions.

The risks can be mitigated with little or no cost as the controls can be implemented through the targeting and assessment of applications (for best value for money).

3.4 Recommendations and preferred option

Strand 1

The only option acceptable and that will deliver the required outcomes is the combined Digital Catapult Brighton and 5G. This is the only option that would deliver the significant impact and economic growth required and which would be acceptable to all stakeholders.

Strand 2

Considering the merits for the shortlisted options, and the potential for cross-over between them, it is concluded that there is potential to deliver three pilot schemes in the first year. Pilot schemes would enable the project to test innovations, demand and economic benefits that would provide a way forward for future years. Pilot schemes that include an element of all the shortlisted options would also enable our programme to deliver across the different needs and priorities of the Coast to Capital region.

4. Delivery

4.1 Project management arrangements

Strand 1 - Investment in the Digital Catapult Brighton and 5G Technology

Wired Sussex as the lead sector body, and founder and manager of Brighton Fuse, will be the lead delivery body.

This brings together the strategic overview and C2C lead on the 5G project, Wired Sussex access to CDIT SMEs and the business contribution to the project and the research and capabilities of the University of Brighton.

Full project governance arrangements are set out in Annex 1. There will be a project steering group, including the key local partners (Coast to Capital, University of Brighton and Wired Sussex, together with the national Digital Catapult and CDIT companies).

Strand 2- Improving Digital Connectivity for Business and Business Clusters

We will seek a lead delivery organisation for each of the three pilots. We expect this will be a local authority (including the national park). We will consult all partners about the selection of the lead delivery bodies. A key factor will be the ability to co-invest and to provide some management resources.

4.2 Procurement Strategy

Strand 1 - the competition for the regional catapults was an open process and there were 17 bids. There is only one national 5G research centre.

The involvement of SMEs will be by open invitation. All IP generated will be on a shared basis.

Any procurement of bandwidth and/or technology & equipment suppliers will be by open procurement, meeting the requirements of Coast to Capital.

Strand 2 -

Rural Businesses

- Open Competition to select the area for the pilot
- Any procurement of bandwidth and/or technology suppliers will be by open procurement, either meeting the requirements of the lead local authority or Coast to Capital.
- Closely defined criteria for what we want to achieve in terms of economic impact/ jobs plus leverage/ matched funding.

Business Parks

- Open Competition
- Any procurement of bandwidth and/or technology suppliers will be by open procurement, either meeting the requirements of the lead local authority or Coast to Capital.
- Closely defined criteria for what we want to achieve in terms of economic impact/ jobs plus leverage/ matched funding..

Coastal Ultrafast hubs

- Selection of location will be by consultation and criteria will include co-investment
- Any procurement of bandwidth and/or technology suppliers will be by open procurement, either meeting the requirements of the lead local authority or Coast to Capital.
- Closely defined criteria for what we want to achieve in terms of economic impact/ jobs plus leverage/ matched funding

4.3 Implementation Timescales

Strand 1

A full project timetable is at **Annex 2**

The key milestones will be:

Jan 15	Business Case approved Procurement of initial capital fit out 5G agreement in place First meeting of the Steering Group
Feb 15	Agreement with national CDEC agreed Downstream agreement with Wired Sussex agreed
March	9th March - launch event Fit out begins
April onwards -	Digital Catapult Centre Brighton open for business

Strand 2

Date achieved by:	Milestone activity
End January 15	Business case approved and Options for Year 1 agreed by Coast to Capital Enterprise Committee
End February 15	Specifications and template for bidding developed and agreed with partners. Invitations to bid sent out.
End March 15	Bids received and reviewed.
April – June 15	Review of quarterly milestones and targets. Review by C2C Regional Growth Fund Steering Group
July – Sept 15	Review of quarterly milestones and targets. Review by C2C Regional Growth Fund Steering Group
Oct – Dec 15	Review of quarterly milestones and targets Review by C2C Regional Growth Fund Steering Group
Jan – March 16	Review of quarterly milestones and targets Review by C2C Regional Growth Fund Steering Group

4.4 Contract Management Approach

Coast to Capital will operate a thin client management process.

There will be an agreement between C2C and the delivery bodies. The agreement will include arrangements for quarterly monitoring of milestones and outputs.

Coast to Capital will maintain a Programme Reporting Book and will report to the Coast to Capital Board at every meeting.

Arrangements to improved digital connectivity to rural businesses and businesses on industrial estates will be delivered through a criteria based process to ensure fair access by businesses. A specification setting out the criteria and guidelines will be produced along with application forms and a transparent assessment process.

We will ensure that applications for grants must demonstrate that they are meeting certain criteria before an application project will be considered for funding. For example:

- The application will have to bring additional economic benefit to the C2C area.
- The application must demonstrate viability.
- The application must have the potential to increase employment in the C2C area.

5. Financial Case - the cost to the public purse, and budgeting

5.1 Budget Profile

Funding of Project costs

	15/16	16/17	17/18	18/19	19/20	20/21	Total
LGF	650,000	650,000	650,000	700,000	500,000	200,000	3,350,000
Public	6,323,000	3,930,000	6,522,000	250,000	200,000	150,000	17,375,000
Private inc. HEI	6,567,000	6,767,000	6,767,000	250,000	250,000	100,000	20,701,000
ESIF	50,000	100,000		100,000	50,000	200,000	500,000
Total	13,590,000	11,447,000	13,939,000	1,300,000	1,000,000	650,000	41,926,000

5.2 Budget Arrangements

West Sussex County Council will act as the Accountable Body for the whole of the Growth Deal funding.

The arrangements for funding draw down will operate within the Assurance Framework Guidelines issued by BIS/CLG and agreed in detail between WSCC and Coast to Capital. The requirements for how projects are set up in terms of budget and funding will be set out in a Service level Agreement between WSCC and Coast to Capital. The key features are:

C2C will make the provision of all grants conditional upon the following;-

- Receipt of C2C from a Delivery Body of an assurance that they have robust information systems in place and can capture and report on relevant spend and delivery data in a timely and accurate manner.
- That the Delivery Body will allow C2C and the Council access to internal and external audit statements relating to the grant funded projects and will provide signed audit statements or equivalent stating that spend is in accordance with grant conditions
- That the Delivery Body will allow C2C and the Council access to the Delivery Bodies financial records and statements relating to the grant funded expenditure.

C2C will put in place procedures and attach conditions to all grants in connection with the recovery (or claw-back) of grant money where it is reasonably believed that expenditure is not in accordance with the agreed terms or agreed outcomes are not met.

PAYING A GRANT

For each draw-down from the Funding C2C will supply to the Council written authorisation for the grant to be made from the Council to the Delivery Body. Said written authorisation to comprise of;-

- A checklist showing the evidence provided by the Delivery Body signed by C2C

- Authority to make the grant signed by either the C2C CEO or Board Director stating that the required conditions for the milestone payment have been satisfied
- Evidence that a business case for the project was approved by the C2C Board or sub-committee or local transport committee
- Evidence of a formal contract or agreement with the Delivery Body setting out the total funding for the project, the required outcomes and the necessary requirements for use of public funding. This contract or agreement should also include the recovery (or claw-back) provision referred to in paragraph 1.5 above.

PROJECT DETAILS

Prior to issue of each grant and renewed annually (on the 15th April each year), C2C will provide to the Council the following information;-

- The Delivery Body to whom the payment of the grant will be made
- The project title
- The total amount of funding to be provided
- A schedule and amount of staged draw-downs based on common quarterly claim and payment dates and a final annual claim date being;- 15th April, 15th July, 15th October, 15th January and 15th March each year.
- Evidence that will be supplied in for each draw-down

6. Management Case

6.1 Project Dependencies

Strand 1 is dependent for full delivery on securing ESIF funding which is subject to nationally managed procurement processes. The Coast to Capital ESIF strategy includes priority for the CDIT sector and for SME and HEI joint research and innovation. In so far as it can be locally determined, the investment of ERDF to the Catapult project has been identified as a priority.

Strand 1 involves aligned investment by the University of Brighton in the facilities in the Watts Building at Moulscumb.

All activity under this programme must be State Aid compliant.

There may be some planning issues related to digital infrastructure - masts, cabinets - and it is expected that project sponsors will need to show they have these issues in hand.

The coastal pilot is dependent on co-investment by the relevant local authority to maximise impact.

6.2 Project/Programme Governance, Organisation Structure and Roles

The Coast to Capital Enterprise Committee will have oversight of the whole Growth is Digital Programme.

The Coast to Capital Board will be accountable for the overall Local Growth Fund programme.

Strand 1 - Investment in the Brighton Digital Catapult and 5G Technology

Governance Arrangements

A Project Advisory and Development Group (PADG) will be established for the Digital Catapult strand. All partners to have one place and that a Coast to Capital Board Member chairs this Group. We will have a Vice Chairman elected by the PADG itself.

Terms of reference will be developed for the first meeting of this PADG and will be expected to cover:

- Receive reports from Wired Sussex
- Overview of project delivery
- Strategic direction
- Advice and guidance to the project delivery team
- Identifying and addressing risk
- Development of quarterly reports for the Coast to Capital Board
- Data projection compliance
- Evaluation and Monitoring of financial project milestones and
- KPI's

PADG will meet quarterly, produce meeting and action notes that should be transparent and readily available to all stakeholders through the Coast to Capital website and other means.

Members will include:-

- Coast to Capital LEP (permanent)
- CDEC (permanent)
- Wired Sussex (permanent)
- University of Brighton (permanent)
- 2 independent, relevant and high profile individuals (permanent)
- University of Sussex ((co-opted)
- Chichester University (co-opted)
- American Express (co-opted)
- Gatwick Airport Ltd (co-opted)
- Brandwatch (co-opted)
- iCrossing (co-opted)
- Other SME's to be recruited (co-opted)

Strand 2- Improving Digital Connectivity for Business and Business Clusters

The governance arrangements for the three pilots will make use of existing structures and will be as follows:

- Industrial estate/business cluster - Coast to Capital Enterprise Committee, who will also have oversight of the whole programme.
- Coastal towns - Coastal West Sussex Partnership
- Rural area - Rural West Sussex Partnership

6.3 Communications and Stakeholder Management

We will develop a communications and dissemination plan for the project that will include:

- Channels to raise awareness of the project ideas and objectives – this will be across all stakeholders – tailoring messages for different stakeholder groups.
- Information to facilitate understanding and to educate the stakeholders about the potential of the projects.
- Engagement activities to get input and feedback from the community and stakeholders.
- Promotional activity to ‘sell’ the outputs and results of project activities as they progress. This will include case study materials through written and video examples.

The partner and stakeholder members already have established networks which can be used to disseminate project information, learning from the project and outputs to their network communities on an on-going basis. Learning from the established networks will also be used to feed back into the project development. The role of Coastal West Sussex Partnership and Rural West Sussex Partnership will be critical in dissemination and communication.

Project Steering/ Management Groups will bring and share their learning on a regular basis – through meetings and bringing external presentations as appropriate

Local dissemination will primarily be designed to deliver and maximise engagement from SMES. We will supplement that with engagement with other business engagement organisations including Local Authorities, the chambers of commerce, and business support groups. We will use existing and purpose-built social media channels.

6.4 Project/Programme Reporting

All programme reporting will be to Coast to Capital who will include progress in the Growth Deal Programme Reporting Book.

KPIs have been agreed with BIS for each project in the Growth Deal.

6.5 Risk Management Strategy

A risk register for the project implementation will be drawn up and reviewed monthly as part of the project management and reporting arrangements. Risks and mitigating measures will be identified in terms of likelihood and impact, and regularly reviewed by both the project management team and the project partners. Each risk will have an identified ‘owner’ responsible for monitoring and managing it within an effective risk management framework including relevant risk registers, response and control and appropriate reporting and decision making mechanisms.

The major risks are summarised as:

- Technical issues which could result in delay or developments not delivering as planned.
- Supplier issues – the project is reliant on procuring external suppliers for the installation of digital connectivity
- Match and co investment
- State Aid

6.6 Project/Programme Evaluation

Our approach to the evaluation of the programme will be governed by the LGF evaluation framework.

We will ensure our evaluation covers the following top three impacts for the Growth is Digital programme:

- To ensure that a broad range of businesses obtain significant commercial benefit from the activities and innovations that this programme delivers.
- To contribute significantly to a growth in the economic impact and international reputation of the CDIT sector in the Coast to Capital (C2C) region more generally, realising high skill employment growth and a quantifiable increase in innovation activities.
- To be able to measure a marked improvement in the value that the business community regionally derives from university research activity.
- To stimulate Coastal regeneration

We will set up a robust system of evaluation which includes feedback monitoring, surveys, case studies and data collection.

We can measure how the proposals and related creative and digital sector impacts on the C2C LEP area economy. The C2C LEP has baseline data and measures changes that show overall improvements in:

- Businesses in the CDIT sector – with current projected growth potential;
- People employed in the CDIT sectors
- Contribution to the economy of the creative/ digital sectors
- Improved skill base for CDIT innovation sector

Coast to Capital undertakes business surveys from time to time to capture changes in the baseline data to measure business growth, new/ additional jobs created and new companies established. In addition, the LEP uses national data sources to assess its economy and economic growth.

This we will enable us to monitor the following areas at regional level:

- R&D activity in SMEs
- Increased levels of innovation (IP, TSB and other funding, new products)
- Increased in levels of international trade
- Internal innovation activity (pivoting, new business models)
- Growth in local business base
- Increased utilisation of local and national expertise – use of the universities, peer to peer learning and expertise (particularly from the Brighton Digital Catapult)
- Increased private sector investment
- Newly developed supply chains

Other impacts that we will measure are:

- New products services developed as a direct result of the project activities.
- The value of additional funds and resources brought to the area (to businesses and to the universities and public sector) as a result of raised reputation and experience in CDIT technologies.

Case study information will be provided as part of the awareness raising and will help drive innovation for the project proposals.

We will work with SPRU to ensure that we develop a model which allows us to measure the impact of our activity at a national level.

APPENDIX 1

The Internet of Place: Creating new forms of value using data generated from real-time, place-based activities and relationships

Project Overview

Our proposal intends to generate innovation and create new forms of value from the Internet of Place.

The Internet of Place is the evolution of the Internet of Things. It is recognition that context is king. Things (whether connected or not) really become useful when they are understood in context. The connectivity of things will be followed by the connectivity of place.

“Data and information is being created and recreated in real time through on-going processes and multiple relationships. The Internet of Place is the Internet of context. Context isn't necessarily fixed, it can be constantly changing and the only way to understand and create value from that is to be able to collect data in real time.

Consequently, to generate insight and hence value from the data you need skills not from just from data crunching, mathematical experts, but crucially from the arts, humanities and social sciences too. And to impact on the data (i.e. make new things or do things differently as a consequence of your analysis) you need design skills.”
Phil Jones, Wired Sussex

So, our proposal stems from the recognition that data and big data have further massive potential that is yet to be fully realised - because approaches are often framed within industrial, linear and binary models. The **Internet of Place** is a networked and real-time approach to integration of data, a foregrounding of 'technology-in-use'. As such, it has enormous potential to generate fresh ways of creating value and improving people's lives.

We see a real opportunity for the United Kingdom to take a significant competitive advantage in this area. It builds on an existing recognised strength, that of expertise in the creative economy, and uses it to harness new sources of value from more effectively creating ways to interrogate, understand and leverage multiple datasets that are being generated in real-time.

Through this innovative emphasis on the real-time, experiential dimension of data, we expect to enable the development of new businesses and business models and generate a whole range of opportunities, including new products and services, delivering commercial gain and enhanced customer/service user experiences.

We will consequently explore and develop solutions in all four of the Catapult's Challenge areas:

1. Addressing issues around personal data privacy and trust:

- Privacy issues resulting from real-time data sharing
 - Trust issues in experiential contexts – models beyond the zero sum approach
 - Privacy and trust issues resulting from the horizontal sharing of data between users
2. Accelerating the integration of diverse data sets:
- Integrating highly diverse data sets in real time
 - Human relationships as a perspective on connecting datasets
 - Links between user held data horizontally/ and in networked environments
3. Building next generation connectivity labs and city demonstrators in which data innovators can develop new products and services:
- Support / investment in 5G mobile technology test bed
 - Use of university secure “off web” test facilities
 - CDEC Node, complimented by existing Gvt funding, in heart of fast growing ‘Tech City South’,
4. Accelerating digital creative content innovation in the reuse of content and access to collections and catalogues:
- Harnessing Brighton’s creative expertise to generate new data insights
 - Using Brighton’s large Arts Festival and Digital Festivals as an opportunity for data creation and interpretation
 - Engaging with ‘superfused’ SMEs to accelerate commercial opportunities

To achieve this, we have assembled a compelling and proactive partnership. All partners listed in this proposal - universities, large businesses and SMEs - have been involved in its development. The partners have prior, successful experience of working together and so are able to ‘hit the ground running’.

Our regional consortium is led by Coast to Capital LEP with the University of Brighton and Wired Sussex as senior partners. It also includes American Express, Gatwick Airport, the Universities of Sussex and Chichester, the Arts & Humanities Research Council and a range of innovative, high growth businesses including iCrossing and Brandwatch. With the added value of the resources and expertise from the Connected Digital Economy Catapult, we are confident we have the organisations and the experience to deliver.

As evidenced in the widely referenced Brighton Fuse research, the Coast to Capital region is probably more advanced than anywhere else in the country in integrating technology, data and creative activity. Crucially, this knowledge resides in both its businesses and its universities. It is therefore the ideal location to come up with fresh perspectives on data and value in place-based contexts.

Coast to Capital has worked hard to deliver a proposal to CDEC that is aligned with our strategic objectives (and, we believe, yours), will generate value and innovation for the UK economy and has a partnership behind it able to deliver. We believe we have succeeded,

we hope you do too.

If you require additional information or clarification on anything detailed in this proposal, please contact

Ron Crank. Chief Executive, Coast to Capital LEP

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Partners

The lead partner is **Coast to Capital Local Enterprise Partnership**, which includes Brighton & Hove, London Borough of Croydon, Gatwick Diamond, Lewes and West Sussex. The proposal has been approved by the Chief Executive Ron Crank and the Board of Coast to Capital and its development has been overseen by a member of our Board.

Our approach to partners for this project, like that in our LEP's Government-approved *Strategic Plan*, is based on creating successful Networks of Innovation, which combine, realise and reward the innovation capacity across universities, businesses and the public sector. The Networks of Innovation approach is closely associated with advisor to HMG and the EU, Mariana Mazzucato, a professor at the University of Sussex's Science Policy Research Unit and a partner to this bid.

The delivery partners for the bid are:

- **Coast to Capital LEP** will bring strategic expertise and the capability to draw in significant funding to take forward project ideas. The Local Enterprise Partnership can also use its regional and national connections to add value.
- **Wired Sussex** is an independent, Brighton-based company that provides business support to the digital, media and technology sector. With strong connections to around 2,000 SMEs, Wired Sussex has a proven track record in bringing innovative businesses into projects like these and connecting them effectively with HEI's
- **University of Brighton**. Via its both its School of Computing, Engineering and Mathematics and its Faculty of Arts, the University of Brighton brings expertise, experience, research, development and existing facilities and resources that can be integrated into this programme.
- **Science Policy Research Unit (SPRU) at the University of Sussex** – SPRU will be a partner for at least one of our primary projects, possibly around the experience of the marginalised in the Internet of Place. SPRU also provides advice and expertise on models of business innovation.
- **University of Chichester** will specifically support data skills development in the non-specialist SMEs who are involved in the collaboration – e.g. retailers and service providers.
- **SMEs** have contributed their ideas and support to this proposal and, crucially, have identified ways for the SME sector to engage with it. These include 2 large international data businesses both headquartered in Brighton, - **iCrossing** and **Brandwatch** – plus Hexology, Tag-Points, Meta Eggs, LeapFrogg, No Pork Pies and Datanauts.
- **American Express** employs 400 specialist technologists at the Amex Campus (its European HQ located in Brighton), and this large employer will provide our programme with access to big data and data as well as commercial insights culled from its worldwide operations.
- **Gatwick Airport Ltd** is an associate partner and will be providing access to the airport and its big data and APIs, which will form the basis of our initial project
- **SITA Laboratories** is an associate partner providing expertise in I-beacon technology and wearable devices (and already working with Gatwick Airport)

- **Kent, Surrey and Sussex Academic Health Network (KSSAHN)** will be a partner and will engage with how the Internet of Place might deliver learnings and opportunities for 'the marginal', such as early stage dementia sufferers.
- In addition, CEO of **The Arts and Humanities Research Council** (who supported the Brighton Fuse research) called this 'an exciting and interesting project' and, whilst unable to commit to partner status, is keen to engage with us should this bid be successful.

We have a combination of university excellence, large company engagement and innovative SME involvement, which it is clear will become far more than the sum of its parts.

The Coast to Capital Consortium will also be linked with a wider group of projects and collaborations in the South East region. In particular, Coast to Capital is partnering with five other LEPs (**Thames Valley Bucks, Thames Valley Berks, EM3, Oxfordshire, Hertfordshire**) to support the national 5G Research Centre at Surrey University, thus enabling us to utilise it within our programme

As well as the partners listed above, we will draw in expertise from other organisations that have an interest in participating. We will leverage partners' national and international relationships to this end, and also see collaboration with the Connected Digital Economy Catapult as a way of achieving this aim.

Specifically, were we to be successful with this proposal, we would look to engage other national organisations around specific projects. Senior partners named in this bid have a strong track record in working with Nesta, the BBC, Sky, the NCUB, Creative England and many others.

The activity will be regionally focused in terms of initial end users and beneficiaries. However, we will work to ensure that the models, products and approaches developed are transferable and, since we expect our Node to become a recognised leader in the creation of value from the Internet of Place, we anticipate attracting worldwide interest.

Activities will be open to any UK business (not just those in the Coast to Capital region) with well-distributed invitations to collaborate, to share knowledge and ideas and to learn. Businesses will be able to work together on projects and/or receive regular communications regarding the Internet of Place and our individual projects. This will include local, national, European and international developments, ideas and best practice. (NB We have listed some of the channels that we intend to use in the section 'Learning and Dissemination' below).

This programme is intended to give the whole UK a competitive advantage in this area.

The credentials of the Brighton region and the track record and expertise of the key partners:

The **Internet of Place** focuses on data / information which is being created, shared, presented and then recreated in real time through on-going processes and multiple relationships. To unlock commercially useful knowledge and insights and to act on them, a

range of skills is required from data mining to programming, from the arts and humanities to design.

To create the required innovation platform, we need a tightly defined geographical area – ‘Route 23’, the corridor from Brighton to Gatwick (and possibly north to Croydon), is ideal in this regard.

Brighton & Hove has built a strong and deserved reputation as a centre for programmer and developer talent and has established itself as one of the leading data-centric economies in the UK. The tech and creative industry now represents 15% of all employment in the city and generates around £720m of GDP per year. The Fuse research demonstrated that there is a core of 500 businesses in Brighton that base their commercial model on a highly sophisticated integration of technology and creativity. These businesses demonstrate a strong propensity to innovate and are, on average, growing at 20% per annum (thus demonstrating the commercial imperative behind their approach).

Data is the bedrock of the most successful companies in Brighton and has seen high-growth, international success stories like Brandwatch, iCrossing and DC Storm emerge in recent years.

Brighton has a number of highly active groups engaged in the digital economy and Big Data:

- **Wired Sussex** has 2000+ active member businesses and delivers a wide range of services, initiatives and networks designed to support the digital sector both individually and collectively. It organises and hosts hackathons, community data groups and provides ongoing support to tech businesses from start-ups to international enterprises.
- **Imagine Brighton** is a City Data project which aims to integrate open data from multiple sources into a centralised platform and provide a data utility for others to develop, explore and build upon. It already tracks social media, transport and policing real time data sets in the city.
- **Open Data Institute Node** in Brighton is one of only 13 global city ODI nodes.
- **Brighton Digital Festival** is a month-long, citywide festival attracting over 40,000 visitors to over 120 events including industry conferences, hackathons, exhibitions and coding workshops.
- **Big Data Brighton Group** has 300+ members
- **Open Data Brighton & Hove** has 130 members
- **Hacks/Hackers Brighton** has 200 members
- **Functional Brighton** Group has 165 members

In fact, the city has the highest number of tech and data community groups per head in the country.

Central to developing our proposal will be the strengths of our university partners’ expertise and research. We have senior executive support from our university partners (letters can be provided on request) and we have had specific and detailed input on this proposal from Professor Miltos Petridis (Head of the School of Computing, Engineering and Mathematics: U of Brighton) and Professor Gillian Youngs (Professor of Digital Economy, School of Arts and Humanities: U of Brighton)

Examples of our university partners' experience and expertise include:

- Two recent research projects by the University of Brighton, *Ubinote*¹ and *10 Most Wanted*², investigated the issue, from an audience perspective, of how data privacy complies with legislation, minimising the risk of legal challenges and avoiding negative publicity. They explore audiences' views on acceptable uses of data, legal and moral ownership of data and suitable mechanisms to obtain informed consent.
- The University of Brighton has expertise in accelerating digital creative content - exploring game-based crowd sourcing with a view to engaging new audiences with museum collections while helping to improve the collection metadata.
- The University of Sussex's Science Policy Research Unit specialises in the economics of innovation and technical change and this area is led by Professor Mazzucato, whose recent research on the subject was published as *The Entrepreneurial State* and made the Financial Times' books of the year list.
- The University of Chichester focuses on small business innovation and accelerated growth activity. It provides extensive enterprise development opportunities to its students and incubates both student and local businesses.

Collaboration between our key partners, universities and business is already well advanced. The Universities play an extensive role in supporting SMEs to commercialise and develop their ideas. There are many examples, some include:

- Coast to Capital is experienced in overseeing multi-partner projects and currently manages a large Regional Growth Fund project whose delivery partners include Wired Sussex, the universities of Brighton, Sussex and Chichester and a number of Local Authorities.
- The AHRC-funded Brighton Fuse research was a 2-year collaboration between the universities of Brighton and Sussex and Wired Sussex and included the active participation of nearly 500 creative, digital and IT businesses. Government Minister David Willets called it "a example to all of how to marry research excellence to commercial value"
- The FuseBox24 start-up programme for innovators is delivered by Wired Sussex and was developed by them in partnership with American Express Technologies and the University of Brighton's Faculty of the Arts. CEO of the National Centre for Universities and Business (NCUB), David Docherty said "Every city in the UK should have its FuseBox"
- Since 2004, over 1,200 founders and chief executives of businesses in the UK and abroad have devoted 40,000 hours of their time in attending 'Profitnet', a business collaboration and learning network developed by the University of Brighton.

¹ Ubinote: Research into the user experience of social object annotation. Develops a pervasive display application for annotating objects and places.
<http://ubinode.wordpress.com>

² 10 Most Wanted: Complex game-based crowdsourcing to enhance collections meta data. Funded by the Digital R&D Fund for the Arts.
<http://10most.org.uk>

- For the Adaptive Systems project (supported by the Digital R&D Fund for the Arts), the University of Brighton was research partner, contributing expertise in crowd sourcing and user-generated content, informing the development of the platform and carrying out formative and summative evaluations
- For 'AGOGO: Authoring Games On the Go', the University of Brighton was the research partner working with local company Locomatrix (supported by the Technology Strategy Board), contributing expertise in informal learning and location-based games, informing the development of the platform and carrying out formative and summative evaluations. Outcomes of the project have since been developed into a commercial offering for schools.
- University of Brighton collaborated with local serial-inventor David Baker on the Crocodile Keyboard, which features triangular keys for better 'targetability' and reduced error rates in text input on mobile devices. A first version of the Crocodile keyboard for Android devices, enabled David Baker to test the feasibility of the concept. Outcomes of the project have since been developed into a commercial offering
- University of Sussex's Science Policy Research Unit has recently completed an extended international study of grassroots digital fabrication spaces and what they can teach us about innovation practices.

Coast to Capital LEP is already supporting innovation in creative and digital technologies. "Growth is Digital" is one of C2C's six priority strands for economic development. The LEP commits to invest in the development of connected digital technologies as an area where it has the opportunity to lead nationally and internationally by:

- Supporting the development of ultrafast broadband clusters in key locations on a financially self-sustaining basis.
- Improving the skills and capacity of small businesses through a development programme so that all businesses can have the opportunity to grow via e-commerce and international connections.
- Supporting digital inclusion and ensuring the complete coverage in our area by the "retail" superfast network, including addressing hot-spots.

Over six years from 2015/16 to 2020/21, partners in the Coast to Capital area will invest the following to ensure its digital infrastructure is fit to drive growth:

- £17.4 m from local authorities and other public sector sources;
- £20.7m from the private sector;
- £1.2m from EU funding
- £3.3m Local Growth Fund

We have a consortium of partners who have the expertise, the commitment and the resources to successfully deliver on this project. Their existing relationships mean they are able to make this a practical and effective programme of activity from day one.

Project Ideas

Overview

Our programme will be exploring and identifying how we can commercialise the “Internet of Place”. That is, the integration of multiple data sets generated in real time in a specific context for commercial gain and enhanced customer/service-user experience.

In the construction of this proposal, we have discussed a number of exciting projects around our theme which we would be keen to advance. However, we have detailed below one project that, we believe, begins to illustrate the wide range of opportunities that our overall approach can generate. With CDEC support, we will be able to commence quickly.

Each project initiated through this programme will be extensively publicised and made known to a wider group of potential collaborators using the wide range of local, national and (where appropriate) international contacts at our (and our partners) disposal. New ideas and new project collaborations around our theme will be encouraged. If any project proves to be lacking traction, it will close and participants will be supported to find another approach. Technical and engineering issues and problems will be logged and the universities and technical partners (including CDEC) will help solve them.

As requested, we have focussed on one initial project that illustrates the opportunities available. We have formulated additional projects that we would like to start to discuss seeding should this bid be successful:

1. Gatwick Airport: The Internet of Place takes Flight

An airport is a perfect initial location to test out the integration of multiple data sets for commercial gain and to enhance the passenger and customer experience. A large number of people have to progress through the same processes and locations, each following more or less the same path. However, each wants to follow this path as a unique experience, tailored to their individual preferences and destinations. Outgoing passengers have time on their hands. Incoming passengers want to pass through simply and rapidly. The opportunities to enhance quality of delivery and experience through data-sharing are on a significant scale.

Gatwick Airport has agreed to provide full access to their API for anonymised data to allow further exploration of how combining multiple data sets in a defined geography can be exploited for commercial and user gain.

The airport as a defined and focused environment provides an ideal setting for experimentation in Big Data sharing. There are multiple retailers, hospitality outlets and service providers on the airport campus, each creating data on individual transactions, and some with a profile and history with customers. **American Express** would engage with this element of this project contributing their data and data expertise.

Additionally, from a passenger perspective, airlines, public bodies, baggage handlers, service providers all have data on passengers and their planned movements.

How can the data sets that are held by retailers, airlines, service providers, public bodies and, importantly, the personal dataset that every Smartphone user carries around with them, be integrated to create new services with commercial value and which enhance the customer experience? Can a unique, personalised, customer experience be created for millions of users of the same service and same space?

What can sentiment and emotional data analysis tell us and what opportunities and challenges does generating and using such data in real time create? How can we measure sentiment as it shifts and evolves as the various airport users go through engagement processes there: working, meeting, arriving and leaving? It is in this area that **Brandwatch** and **iCrossing** are likely to become involved.

The resources of this programme and CDEC's support will enable us to build on the existing *Emotable* project (an emotional and topical text analysis engine) currently being developed by **Datanauts** for use at Brighton Digital Festival in September.

Additionally, we could explore building on the data architecture created by Imagine Brighton, bringing the data held by various players in this Airport including leisure and hospitality providers and making the combined set open to them for development and exploitation of new services

With 36.9 million passengers per year and 23,500 people employed directly and 7,900 indirectly, Gatwick Airport is a massive generator and consumer of data on the campus itself, and the passengers bring data with them and leave with it through their mobile devices. Time also dominates as an experiential concept in the airport setting where people are queuing repeatedly, waiting and watching. Effective and creative big data experimentation could add improvements across all of these where customer/service user attention is a readily available resource. Our Big Data experimentation will work to create business frameworks that go beyond the current advertising models into customer-oriented data-rich responsive environments.

The Gatwick Project provides us with all the key elements to commence building and enhancing value from our Internet of Place theme. We have access to the location, to data produced within it and we have the specific expertise in both business and higher education to create a broad set of opportunities from it.

Additionally, it will enable us to fully codify and explore the core elements of the Internet of Place: multiple data sets, data produced through experiential activities, and new 'horizontal' approaches to key 'data issues' such as trust and privacy; as well as introducing new ways of making sense of the information collated and creating value propositions from it.

Other projects that we have discussed within the consortium include;

- a) A major £50m+ development in the Brighton – the i360 seafront vertical pier - and the opportunity to explore how data generated from the very early stages of the project (construction, etc) through to full operation can be brought together and exploited; and
- b) A project which will map and combine data held by people with early stage dementia and the service providers they are in contact with and work on how this data can be combined with other data in ordinary everyday contexts – shopping, travel and

leisure - to create new services and added value for the end user.

We would be happy to discuss and expand on those if required.

Addressing the Digital Catapult Challenge Areas

Enabling the creation of commercial opportunities from the Internet of Place requires exploring the impact of different ways to capture data and we will both utilise and test a full range of technologies including wireless, 5G mobile technologies, the internet of things and I-beacons to do this, as well as accessing data currently collected by partners and stakeholders such as Gatwick Airport. A test rig for 5G mobile is planned for all collaborators to explore its capability.

However the Internet of Place suggests it is people, not technologies, which need to take centre stage if we are to really maximise the opportunities that digital technology brings.

This requires additional perspectives to generate insights and knowledge from data and datasets. A core insight that the Fuse research made evident was that businesses which take techniques and practices developed in the arts, conceptual approaches from the humanities and a design-led approach to challenges were able to develop innovative ways to understand and create benefit from information streams.

We have seen this general approach gain a foothold in the gaming sector (where sculptors' appreciation of form has aided graphic artists and an understanding of theology has generated effective videogame narratives); this is our opportunity to ensure that it delivers value to the world of data too.

Such a (necessary) approach opens our projects to a much wider range of SMEs and provides us with further opportunities to connect them up.

We see this process of bringing a broader range of creative skills to bear on the data relationships our work generates as contributing to the development of new value-based market cultures around shared data which unlocks fresh ways to engage with issues such as privacy, trust, etc.

We will create and use a new open innovation platform - a set of partners and processes which will allow large and small firms and public sector organisations to test an idea and try out different approaches to new products and services, linked to the shared use of data sets. Subject to some rules on openness and collaboration contributions, there will be no barriers to entry - any firm can join and contribute to the project. It follows that any intellectual property created will be shared.

We will connect users and product and service providers in creative new ways that emphasize the real-time experiential dimensions of Big Data and Internet of Everything. It addresses the challenge (articulated in the recent Design Commission report *Designing the Digital Economy*) that we are not yet thinking sufficiently horizontally about Big Data - how it can transform the relationships between customers and product and service providers to enrich real-time activities, and make them more useful and responsive.

We will explore creating data rich environments where customers/users share their opinions with other customers/users as well as businesses as part of the experience in environments such as shops, cafes, restaurants, leisure and entertainment venues and the

care sector. Data becomes part of the social/experiential character of particular locations, businesses, services and performances.

The following data sets will be involved – others may be added as the project develops:

- Transaction data held by retailers, leisure and hospitality outlets
- Customer profile data held by retailers, leisure and hospitality outlets
- Transaction and customer profile data held by card issuers and finance providers
- Personal data held by individual users on their mobile devices
- Service use and user profiles held by service providers
- Passenger data held by airlines
- Passenger access/movement data held by the airport, handlers etc
- Locational data of people, places, events and things held in real time
- Device to device data – Internet of Things – e.g. check-in terminals, security scanners, vending machines, ticket check terminals, barrier gates – linking to each other and to user mobile devices
- Creative data produced and held by artists, musicians, performers etc.
- Real-time experiential data shared by customers, service users and audiences

How university R&D will be used

The University of Brighton has expertise in place-based technologies collecting experiential data from audiences, which can complement broader sentiment analysis based on social networks data. For example, *Ubinote* develops small pervasive displays for social annotation of physical objects and places. The system supports place-based social exchange between visitors and organisations. It can be combined with an analytics backend to help organisations better understand their audiences.

The University of Brighton has expertise in the empirical evaluation of mobile and ubiquitous computing technologies, which poses specific challenges and requires specialist equipment and practices. Several recent research projects, including *Ubinote*, *10 Most Wanted*, *ARISE*³ and *AGOGO*⁴ evaluate the user experience of post-desktop technologies in-situ. Furthermore, the University has recently acquired mobile eye tracking equipment that puts it into a unique position to support data-driven approaches in the project with empirical user experience data.

Both the Universities of Brighton and of Sussex have experience in connecting knowledge sets across rigid disciplinary boundaries. Sussex, in particular, was founded on that very principal and it is still very much in evidence today.

The Universities will provide technical, research and innovation support. Businesses will share ideas and work together to deliver experimental new services, and will be supported to commercialise them. The universities will also allow safe “off-web” testing of new ideas and uses of data interested people and businesses from the data community can come and experiment through a ‘safe net’. This facility lifts the security issues.

³ ARISE: Developing and evaluating Augmented Reality platforms and applications in school environments. Funded by the European Commission’s Sixth Framework Programme (FP6). <http://www.arise-project.org/>

⁴ AGOGO: Authoring Games on the Go: Development and in-situ evaluation of location-based games. Funded by the Technology Strategy Board, Creative Industries Fast Track.

Engaging business and collaborating

Our open platform approach goes beyond linear 'Universities research and businesses commercialise' models. Our Node will be based within a digital business hub not a university campus (see Space Provision below), and will be designed to enable businesses to undertake research and development within a cultural setting with which they are already familiar.

Businesses already use a wide range of R + D techniques, many of them 'informal' in nature and we believe that results are more effective when you engage with and build on (rather than simply attempt to replace) those approaches.

We are confident that we will be successful in ensuring businesses engage with our programme and our Node. Work-shopping our programme approach with SMEs in the development of this bid and placing our Node at the heart of the region's tech sector will help that happen.

In addition, primary programme partner Wired Sussex has a long and successful history of engaging businesses in research and innovation projects such as this, and connecting them with university expertise. They have advised various universities on a consultancy basis including the University for the Arts, the University of Sussex, Cambridge University and others. They have a close working relationship with a large number of regional businesses and they also engage with other regional clusters through formalised affiliations with organisations such as Tech City, Manchester Digital and Bristol Media. They have an on-going relationship with the National Centre for University and Business which would help inform their activity in this regard.

The programme will engage with SMEs, start-ups and with large companies to bring ideas, expertise, to test with technology experts and University R&D.

Through project activities SMEs will have the chance to be at the forefront of how new uses of data can enhance customer experience, service delivery and business potential. Accessing shared business data (free or at reduced cost) and resources and ideas from research and practice insights based on the latest research activity in the university sector.

Through the programme, we will focus on supporting commercial gain from the research. We would expect commercial gain to include reputational and brand enhancement, increased repeat business, marketing and sales advantages, new product development, new commercial partnerships and reduced costs of customer acquisition.

The Coast to Capital area already has many formal and informal active digital networks that would be used to stimulate new collaboration and innovation opportunities. We have also identified a rich source of end users that could benefit from new digital innovations:

- Retailers – multiples and independents
- Retail environment operators – malls, shopping centres, town centre partnerships
- Hospitality and leisure operators
- Any business that can imagine a service and is willing to create and collaborate
- Service providers – airlines, handlers, concierge services
- Transport providers
- Finance providers – card issuers, banks

- Public service providers
- Digital service providers
- Mobile connectivity providers
- Digital artists, performers
- Emergency and security services

Importantly, end users will also be collaborators. As they all carry their own rich dataset in their hand, we will want to involve them in how they use the data they hold, how they understand the data they can access, how they create value from both and how they share data. These possibilities will be offered on an opt-in basis with clear communication so that customers and service users make their own choices about whether they want to dip their toe in data sharing or go deep. The macro statistics from this work will provide valuable data about data-sharing sensitivities and limitations connected to evolving attitudes to privacy.

Measuring success

Each of our activity areas will bring new collaborations between the universities, SMEs and large companies – both in the private and public sector. We will evaluate the benefits of these collaborations.

We would expect our proposed project activities to directly involve around 100 SMEs in a meaningful way and who would have the potential to commercialise products and services as a result of the activity.

A further 250 SMEs would be involved in other research and development opportunities.

We will also measure private sector investment and the ability and amount of other funding – for example from university R&D sources – that would be leveraged to the project development.

In the medium to long term we would expect to see commercialisable products and new services and potentially new businesses developing. We would expect impacts of the project to include:

- Give the United Kingdom a clear competitive advantage in Internet of Place expertise
- Creating new products for existing businesses – in Brighton, the C2C region and nationally.
- Innovations in business models, products and services that are transferable to other locations.
- New business starts and business growth for SMEs in the digital/ innovation sector
- Attracting new employment opportunities in digital/ innovation sector.
- Business growth for SMEs in other sectors benefiting from the new technology.
- The development within businesses of new skill sets, specific to creating value from the Internet of Place, and activity by FE and HE to support that.
- New employment opportunities from business growth in the area through strengthening the local economy across a range of sectors.
- New talent attracted to the digital sector and the use of placement programmes to help develop the talent pool for local business.

The project can share innovation across the UK and internationally through communication channels and existing networks – as well as through CDEC:

- C2C LEP – nationally through LEP networks and European networks through funding sources such as ERDF;
- Universities – nationally through university networks and their European and international reach;
- Brighton already attracts international interest through its reputation as a leader in Digital Technology – its existing networks now extend across the globe.
- The involvement of some key international businesses – CisCo, SITA Labs, American Express, Gatwick Airport who help the developments and transfer learning to the wider communities.

The CDEC Node based in Brighton will bring benefits to the local area through:

- Further raising the profile and reputation of the city;
- Attracting new creative and digital businesses;
- Increasing the capacity for collaborative working across the business community;
- Qualitatively enhancing collaboration between university R&D and business;
- Attracting new sources of finance that the Universities have access to for further research and development expertise related to the project activities;
- Raising local skill levels to support recruitment needs and achieving business growth;
- Through the Node, providing an easily accessible facility in the centre of Brighton to test propositions and provide a hub of expertise.

Project organization and delivery

Core Development Team and Project and Advisory Group Members

Key:

Consortium member

- Deliverables
 - Capacity

Coast to Capital LEP

- Governance
- Engage with other LEPs.
- Attract a national and international platform.
 - Lead Contract holder
 - Match funder

Wired Sussex (2,000+ business members)

- Engage business support networks.
- Communication and networking.
 - Lead SME engagement partner
 - Day to day project and Node management

University of Brighton

- R&D
- Skills and expertise
- Centre for Research Laboratory
- Digital Centre for safe digital experiment.
 - Lead development Partner
 - Resources in-kind

University of Sussex

- R&D
- Skills and expertise
 - Development Partner
 - Resources in-kind

University of Chichester

- Skills development for SMEs
- Expertise in service interface
 - Development partner
 - Resources in-kind

Gatwick Airport

- Data supply
 - Development Partner

SITA Lab

- I-Beacon expertise and wearable technology
 - Development Partner

American Express

- Big data expertise
 - Development Partner

SMEs:

- Brandwatch
- iCrossing
- Hexology
- Tag-Points
- Meta Eggs
- Leap Frog
- No Pork Pies
 - Input from digital SME community
 - Representation of data innovation SMEs
 - Resources in-kind

Connected Digital Economy Catapult

- Access to technology and expertise
- Support R&D
- Create a critical mass of activity
- Skills development

The Lead Partner for the programme - overseeing governance and providing overall programme supervision – is Coast to Capital Local Enterprise Partnership. Day-to-day project and Node management will be led by Wired Sussex.

Coast to Capital (C2C) LEP has the management expertise to ensure the programme is delivered as planned, to ensure financial management is robust, and, as the provider of the majority matched-funding, ensure the requirements of all funding sources are met.

Wired Sussex has considerable experience of delivering innovative and successful projects in the creative, digital and IT sector. Wired Sussex will also lead business engagement, ensuring the wider SME community across the area participates. It will provide a central communications function to the consortium and the wider LEP area and to national audiences.

A Project Advisory and Development Group (PADG) will be formed of the Core Partners (C2C, Wired Sussex, University of Brighton, and CDEC) plus two high profile external advisors with other delivery partners co-opted onto the PADG when specific projects that involve them are in progress.

The PADG will identify and oversee the proposed activities and be responsible to identifying where resources will be allocated for the development activities.

We have identified additional sources of funding that will be leveraged for this programme. The sources of funding are already identified and confirmed:

ERDF - £1,200,000 (Coast to Capital) – (subject to nationally defined procurement processes)

Local Growth Fund (5G investment) - £1,200,000

Local Growth Fund Digital Infrastructure - £500,000

Greater Brighton City Deal – Digital Exchange - £635,000

The University of Brighton can supply subsidised access to closed web facilities, subsidised access to Profitnet (providing knowledge transfer groups and peer to peer learning support) and access to other development funding. For example, Janet Reach funding – available from September 2014 (state aid rules apply).

The physical element of the project – the Node - will be located at The FuseBox within New England House, an innovation incubator building in the centre of Brighton (see Space Provision below). We anticipate that the Node will operate 24/7 and deliver:

- Additional facilities for start-ups with the support of on-site technical expertise;
- High profile events, showcase exhibitions and workshop / meeting space (a busy, creative and accessible physical node);
- The ability to work closely with the Wired Sussex network and its members (Wired Sussex is already based in the building) providing accesses to world leading technology and expertise;
- The integration of existing networks to create a critical mass of activity.
- A hub for skills development – both from the Catapult; the Universities and peer-to-peer support and learning.

Proposed project budget and funding

Sources of funding and resources over three years:

• National Connected Digital Catapult	£500,000
• University expertise and research	in kind
• ERDF - subject to procurement process	£1,200,000 (£225,000 in 15/16)
• Local Growth Fund – 5G investment	£1,200,000 (£200,000 in 15/16)
• Local Growth Fund – Digital infrastructure	£500,000
• Greater Brighton City Deal – Digital Exchange	£635,000
• TOTAL	£4,035,000

Set out below is our initial estimates of costs needed to set up the Digital Catapult Node and to provide resources for initial activities over the first three years.

Please find a top-line budget below. We would of course develop a more comprehensive and detailed budget should CDEC wish to proceed with our bid.

Activity	Cost
Physical Node <ul style="list-style-type: none"> Physical space remodelling / presentation Equipment Dedicated connectivity Rent / rates Set up project management 	£500,000
Project management / core staffing and engagement <ul style="list-style-type: none"> Project/ Centre Management Measurement & Evaluation Associated project costs 	£200,000 £15,000 £15,000
Development costs <ul style="list-style-type: none"> Technical expertise (hardware, software, engineering) Innovation facilitation Project development resources Research 	£1,000,000 plus in-kind resources from universities
Events and engagement <ul style="list-style-type: none"> Event costs Outreach activity with SMEs Promotion costs 	£160,000
Digital connections for project development and links to UK Digital Catapult Nodes <ul style="list-style-type: none"> Mobile 5G Ultrafast clusters/Digital exchange, I-beacons & wireless 	£1,200,000 £945,000
TOTAL	£4,035,000

Funding and Governance

Coast to Capital Local Enterprise Partnership is the business-led partnership between the private sector and public authorities with responsibility for driving long-term growth. We were established by the present Government in 2010. The Coast to Capital region includes Brighton and Hove, Lewes, London Borough of Croydon, the Gatwick Diamond, West Sussex and the eastern part of Surrey

The goal of Coast to Capital LEP is to create over new 100,000 jobs in twenty-five years. To do this, we place international growth and entrepreneurship at the heart of our strategies. The aim is to transform our economic performance so that our region competes successfully with the best in the world. Coast to Capital aims to develop an economy that is trade-led with a business community that is outward looking, investment focused and driven by the need to be innovative. We will support the creation of a skilled workforce delivering high value added and knowledge-driven products and services. Coast to Capital has digital connectivity as one of its key priorities. We recognise that we already have a strong creative, digital and information technology sector and are looking to build significantly on that competitive advantage.

Coast to Capital Local Enterprise Partnership is a company limited by guarantee. It has a Board of eighteen Directors, eleven from Business, two from higher and further Education and five local authority leaders (three from upper tier authorities). The Board is chaired by Tim Wates, who chairs the Wates Group and is also a UK Trade Ambassador.

The Board meets six times a year and has a well-established committee structure to oversee and govern the myriad of funding and activities for which we are responsible. This programme of work would fall under our Business Support Committee, which oversees our sector work, has attendance from infrastructure, finance and international trade colleagues and whose Chairman (Managing Director, RBS South East) reports directly to the Board.

We have a separate finance committee that scrutinises all funding programmes including Regional Growth Fund, Growing Places, Growth and Equity Funds and our social enterprise funding. We anticipate this committee would independently oversee and review the financial aspects of the delivery programme. We have a further layer of governance in that we have an independent Audit Committee. We are introducing an academic team to work with us on evaluation and monitoring the £202 million Local Growth Deal we have just negotiated with Government.

We propose that we establish a Project Advisory and Development Group (PADG) that will report into the Business Committee. All partners to have one place and that a Coast to Capital Board Member chairs this Group. We will have a Vice Chairman elected by the PADG itself.

Terms of reference will be developed for the first meeting of this PADG and will be expected to cover:

- Receive reports from Wired Sussex
- Overview of project delivery
- Strategic direction

- Advice and guidance to the project delivery team
- Identifying and addressing risk
- Development of quarterly reports for the Coast to Capital Board
- Data projection compliance
- Evaluation and Monitoring of financial project milestones and KPI's

PADG should meet quarterly, produce meeting and action notes that should be transparent and readily available to all stakeholders through the Coast to Capital website and other means.

Members will include:-

- Coast to Capital LEP (permanent)
- CDEC (permanent)
- Wired Sussex (permanent)
- University of Brighton (permanent)
- 2 independent, relevant and high profile individuals (permanent)
- University of Sussex ((co-opted)
- Chichester University (co-opted)
- American Express (co-opted)
- Gatwick Airport Ltd (co-opted)
- SITA Laboratories (co-opted)
- The Arts and Humanities Research Council (co-opted)
- Kent, Surrey and Sussex Academic Health Network (co-opted)
- Brandwatch (co-opted)
- iCrossing (co-opted)
- Other SME's to be recruited (see Project organisation and delivery section) (co-opted)

Sources of funding and resources over three years:

• Connected Digital Catapult	£500,000
• University expertise and research	In Kind
• ERDF (Coast to Capital)	£458,000
• Local Growth Fund – 5G investment	£1,200,000
• Local Growth Fund – Digital infrastructure	£350,000
• Greater Brighton City Deal – Digital Exchange	£635,000
• TOTAL	£3,143,000

Impact

Our three top line impacts for the project will be:

- To ensure that the UK and a broad range of UK-based businesses obtain significant commercial benefit from the activities and innovations that this programme delivers.
- To contribute significantly to a growth in the economic impact and international reputation of the digital cluster in the Brighton area and the Coast to Capital region more generally, realising high skill employment growth and a quantifiable increase in innovation activities within the cluster
- To be able to measure a marked improvement in the value that the business community regionally derives from university research activity

We will set up a robust system of evaluation which includes feedback monitoring, surveys, case studies and data collection.

We can measure how the proposals and related creative and digital sector impacts on the C2C LEP area economy. The C2C LEP has baseline data and measures changes that show overall improvements in

- Businesses in the digital sector – with current projected growth potential;
- People employed in the digital sectors
- Contribution to the economy of the creative/ digital sectors
- Improved skill base for digital innovation sector

Coast to Capital undertakes business surveys from time to time to capture changes in the baseline data to measure business growth, new/ additional jobs created and new companies established. In addition, the LEP uses national data sources to assess its economy and economic growth.

This we will enable us to monitor the following areas at regional level:

- R + D activity in SMEs
- Increased levels of innovation (IP, TSB and other funding, new products)
- Increased in levels of international trade
- Internal innovation activity (pivoting, new business models)
- Growth in local business base (across all sectors in Brighton)
- Increased utilisation of local and national expertise – use of the universities, peer to peer learning and expertise from the Catapult
- Increased private sector investment
- Newly developed supply chains to support the Internet of Place

Other impacts that we will measure are:

- New products services developed as a direct result of the project activities.

- The value of additional funds and resources brought to the area (to businesses and to the universities and public sector) as a result of raised reputation and experience in digital technologies.

Case study information will be provided as part of the awareness raising and will help drive innovation for the project proposals and for additional digital innovation to create ideas that can benefit from the expertise of the Node.

We will work with SPRU to ensure that we develop a model which allows us to measure the impact of our activity at a national level.

Learning and Dissemination

We will develop a learning and dissemination plan for the project that will include:

- Channels to raise awareness of the project ideas and objectives – this will be across all stakeholders – tailoring messages for different stakeholder groups.
- Information to facilitate understanding and to educate the stakeholders about the potential of the project.
- Engagement activities to get input and feedback from the community and stakeholders.
- Promotional activity to ‘sell’ the outputs and results of project activities as they progress. This will include case study materials through written and video examples.

The consortium members already have established networks which can be used to disseminate project information, learning from the project and outputs to their network communities on an on-going basis. Learning from the established networks will also be used to feed back into the project development.

Audiences for communication and learning dissemination:

Internal: the Project Advisory and Development Group will bring and share their learning to the group activities on a regular basis – through meetings and bringing external presentations as appropriate

Local: local dissemination will primarily be designed to deliver and maximise engagement from SMES. We will utilise partner relationships, especially via Wired Sussex, and the universities of Brighton and Sussex. We will supplement that with engagement with other business engagement organisations including Local Authorities, the chambers of commerce, and retailer and tourism business support groups. We will use existing *and* purpose-built social media channels

National: on a national level dissemination will be through a process of cascading opportunities and learning via a series of pre-existing channels. These will include CDEC and its contacts within the TSB, Wired Sussex and its relationships with cluster organisations in Bristol, Manchester and Newcastle through the one Digital Alliance (5,000 companies in total) and its formal engagement with Tech City UK. Wired Sussex also has strong relationships with SMEs in Ipswich, Bournemouth, Medway, and elsewhere via the Recreate project and these will be utilised. Coast to Capital will cascade out through its channels including the national LEP Network. National groups with whom we already have developed relationships (such as NCUB) will also be utilised. Universities and large companies will use their existing channels.

International: we will use this programme to generate inward investment and trade opportunities for UK businesses and will work with UKTI and others in this regard. We will work to maximise the opportunities that SMEs might generate by participation via EU programmes such as Horizon2020. Our partner universities, Sussex in particular, has extensive international links and we will ensure they are maximised for dissemination and

promotional purposes. Coast to Capital has also developed significant ties with Brussels and other international arenas, for example ASEAN countries.

We will use the Digital Catapult Node and Brighton's reputation in the digital sector to generate interest and establish the Node as the Centre of Excellence for creative/ digital business encouraging local (and other regional and national) businesses and stakeholders to engage with the centre.

The project activities will be open to any business to collaborate and share ideas and learning from the project activity (not just C2C businesses). Businesses will be able to collaborate on projects and/ or receive regular communications about the projects and general innovations in the sector. This will include local, national, European and International developments, ideas and best practice.

As the activity will be Brighton / Gatwick focused in terms of the end users/ beneficiaries, we would expect the majority of the impact to be achieved in the local area. However, the programme developments are transferable – both in an area-based capacity and across sector so we would expect the impact and benefits to be able to be widely used across the UK, Europe and internationally.

The Digital Catapult Node will respond to demand for special events, discussion forums, showcases etc to network businesses that have potential for collaboration, sharing of knowledge and expertise and potential for new product and service design.

Space provision

Through the Digital Catapult we will establish a significant physical presence for the regional consortia. The primary Digital Catapult Node will be at **The FuseBox** in New England House, home of Wired Sussex and right at the heart of the tech cluster.

New England House is an established creative economy business hub with nearly 100 SME's employing 1,000 people based there.

As part of Greater Brighton City Deal and with over £25m of investment, New England House is currently undergoing a programme of major refurbishment and expansion that will increase its usable capacity from 135,000 sq ft to 200,000 sq ft.

It is close to transport links and at the heart of the New England Quarter, recently identified by Government as *Tech City South* and also the location for the new University of Sussex business spin-out centre (currently under construction).

The Node will have ultrafast broadband connectivity and a direct connection to the London Internet Exchange via the new, innovative Brighton Digital Exchange (BDX). The BDX is currently being installed in New England House also as part of the Greater Brighton City Deal.

The FuseBox is an ideal location for the physical node:

- Many local tech businesses already use it, regularly attending and hosting hackathons, workshops, and innovation and training programmes in the space
- It currently hosts 10 innovative start-ups and delivers a programme for them developed by Wired Sussex, with extensive support from the University of Brighton and American Express
- It is already regularly used by HEIs to engage with innovative businesses and has a university-employed Researcher-in-Residence based there with a remit to provide SMEs with access to existing academic research.
- It hosts Venture Capitalists and Angel Network Groups on a regular basis
- It has a range of existing studio resources including 3D printing facilities,
- It is in close proximity to both the University of Brighton and the new University of Sussex spin-out centre
- It will shortly have very high spec connectivity and capacity via the BDX.
- It already has developed linked to SMEs in other parts of the UK and Europe via the ReCreateEU programme

The physical Node will provide the minimum specification for the Catapult physical location and other services through:

- Connectivity including video to the national Catapult centre, other regional consortia and other innovation communities around the UK and internationally.
- A place in which the outputs of the project and specifically the visualisations of 'city data' could be shared but which could also provide an environment for businesses to test thinking and ideas and receive advice and training.

- Space for live demonstrations.
- “Off-Web” facilities for testing new products and services.
- Space for seminars, training and conferences.
- Access to 5G mobile connections.
- Access to experts who understand the nature and structure of the City’s data resources

The Node would be set up as a discrete centre within the Fusebox. We would envisage the staffing to be flexible, bringing in additional support and expertise as required.

We will also use a secondary centre at the nearby University of Brighton in one of their research centres, most likely within the secure and dependable software systems research cluster. This will ensure we do not duplicate resources and can use the existing resources to add value.

Additional Information

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Annex 2: Project Timetable for Strand 1

Week	Date	Partnership Development	Project & Ideas Development	Governance & Legals	Budget	Location
Week 28	October				Provisional response on capital project expected.	
	Wed 15 Oct 14		Project Group Meeting			
Week 29	Mon 20 Oct 14					
	Tue 21 Oct 14	Regional LEP / 5G Summit Meeting				Surrey University
Week 31	Mon 3 Nov 14					
	Wed 5 Nov 14	Evening Announcement. Press release embargoed.				
	Wed 5 Nov 14	Embargoed Local Media Announcement				
	Thu 6 Nov 14	Internal Project / C2C / SME-CDIT / Stakeholder communication.				
	Thu 6 Nov 14	Comm to LEP Group				
	Fri 7 Nov 14	Gatwick Airport Meeting - Phil Jones, Michael Ibbitson, Guy Stephenson, Peter Hutchison				Gatwick
Week 32	Mon 10 Nov 14					
	w/c 10 November		Project Group Meeting			
Week 33	Mon 17 Nov 14					

Week 34	Mon 24 Nov 14					
	Mon 24 Nov 14	Discussions with Dave Coombes, Univ of Chichester				
Week 35	Mon 1 Dec 14					
	Tue 2 Dec 14	5G / Surrey University Partnership Development Meeting				
	Wed 3 Dec 14				Capital Funding decision expected	
	Thu 4 Dec 14	Engagement with other regional Digital Catapult Centres				Teleconference
	Thu 4 Dec 14		Project Team Development Meeting			
Week 36	Mon 8 Dec 14					
	w/c 8 Dec 14		NEH Development Kick Off Meeting			
	w/c 8 Dec 14		Agree make up of PADG. Coordinated and invitation letters created by PH, sent out by PJ.			
Week 37	Mon 15 Dec 14					
	Mon 15 Dec 14			Partnership Meeting		

	Tue 16 Dec 14			CDEC + Core Development Team Meeting. 4pm, 16th December.		
	Thu 18 Dec 14					
Week 38	Mon 22 Dec 14					
			Update to Gatwick			
Week 39	Mon 29 Dec 14					
Week 40	Mon 5 Jan 15					
	January 15			Quarterly Report Created		
	Mon 6 Jan 14		Core Development Team Meeting			
	Wed 8 Jan 14	Meeting with Digital Catapult Centre in Sunderland				
Week 41	Mon 12 Jan 15					
	Thu 16 Jan 14			Proposed Steering Group Meeting		
Week 42	Mon 19 Jan 15					
				Regional CDECs meeting - London		London
Week 43	Mon 26 Jan 15					
	Late Jan / Early Feb			First PADG Meeting - set date		

Week 44	Mon 2 Feb 15					
				Agree Project Activity outline. Agree Metrics for measuring progress.		
Week 45	Mon 9 Feb 15					
	Tue 4 Feb 14			Core Development Team Meeting		
Week 46	Mon 16 Feb 15					
	Mon 16 Feb 15		Open Data Institute Talk			NEH
Week 47	Mon 23 Feb 15					
Week 48	Mon 2 Mar 15					
	Mon 9 Mar 15		Centre launch (latest date)			
	March		Event at CDEC (London)			
	March		Open for Business Launch Event - March.			
Week 49	Mon 9 Mar 15					
	Early 2015					
	Early 2015					
Week 50	Mon 16 Mar 15					
Week 51	Mon 23 Mar 15					

Week 52	Mon 30 Mar 15					
<p>Events - Rolling programme of Lectures, Talks, Debates, Idea Creations and Knowledge Transfer to support Learning and Dissemination. Workshops, events, interdisciplinary lectures, facilitated sessions, events, hackathons, game jams, new / emerging tech events, local, regional, national and international events will all be curated to develop and build awareness of the Internet of Place</p>						
	April 15			Q4 Quarterly Report		
	July 15			Q1 Quarterly Report		
	September 2015		Brighton Digital Festival - International Angle Event			
	October 15			Q2 Quarterly Report		
	January 16			Q3 Quarterly Report		
	April 16			Q4 Quarterly Report		
	July 16			Q1 Quarterly Report		
	September 2016		Brighton Digital Festival - International Angle Event			
	October 16			Q2 Quarterly Report		
	January 17			Q3 Quarterly Report		
	April 17			Q4 Quarterly Report		

	July 17			Q1 Quarterly Report		
	September 2017		Brighton Digital Festival - International Angle Event			
	October 17			Q2 Quarterly Report		
	January 18			Q3 Quarterly Report		