

Open Programmable City Region

– Details of the Proposal

1. The West of England Local Enterprise Partnership Strategic Economic Plan, 2015-2030 allocated funding to create digital infrastructure and a research and development test-bed.
2. The Open Programmable City Region (OPCR) Programme is the resultant programme and will invest in new digital infrastructure and research projects for Bristol and the West of England. This will build upon previous investment in the Open Programmable City (OPC) network to create further economic opportunities, support university and business research and innovation in the city and enable wider community and SME engagement in this field.
3. The Open Programmable City (OPC) Network is a hyper fast, software defined research and development test-bed. It consist of a network of high capacity underground fibre optic cables linking several nodes (including Bristol University, Engine Shed, Watershed, and @Bristol), a high performance computer, a high definition 3D visualisation facility and a wireless network in the city centre. It is operated by Bristol is Open Ltd, a joint venture between Bristol City Council and the University of Bristol.
4. It is a research platform for the next generation of technologies and does not provide routine services, to the city council or anyone else, which are provided by commercial providers. This is an important distinction and ensures that the proposal is in accordance with State Aid legislation.
5. The platform will allow R&D, piloting and product realisation of software and hardware which have the potential to create the following outcomes for the city and region:
 - Jobs directly attributable to the roll out and operations of the network
 - Attracting companies that wish to develop/test applications, products and expertise on a ‘real world’ closed network – moving from lab prototype to a saleable ‘product’
 - Placing the West of England region at the centre of global development, leading to new centres of expertise attracting academics, employees and companies to the region.
6. The Open Programmable City Region (OPCR) Programme will extend the existing Open Programmable City (OPC) network to new areas of Bristol and future extension of this advanced and unique platform across the West of England. The resulting regional network will emerge as a unique, world leading Open Programmable City Region (OPCR), attracting people, businesses and investment. The Network will connect up areas, institutions and communities identified as having high potential for: producing valuable research projects with communities, developing new products or services, stimulating economic growth.
7. Bristol City Council will manage the overall OPCR Programme, working in partnership with the other local authorities and the Local Enterprise Partnership has approved funding for the regional scale activities, such as programme management and system integration.
8. Each local authority within the West of England is responsible for securing funding and developing its own part of the OPCR Network and Research Projects on that network. Based on a Full Business Case submitted by Bristol City Council the Local Enterprise Partnership has agreed funding for expansion of the Network within Bristol and research projects to utilise the infrastructure.
9. The “Bristol Project” comprises several components:
 - Deploy a technically and operationally compliant network extending the existing OPC infrastructure in Bristol, deploying links to the Knowle West Media Centre and the Sensor Factory at Filwood Green Business Park, and enabling a network to test Connected and Autonomous Vehicles (CAV).
 - Install research, development and prototyping infrastructure and equipment at the Sensor Factory to promote the development of skills and new products and services using the OPCR infrastructure.
 - Link Knowle West Media centre to the OPC network, providing connectivity between this network and the City’s Living Lab, encouraging new research funding bids and creating new opportunities to engage the broadest cross section of the community in co-creating the Future City.

- Deploy intelligent roadside infrastructure to support CAV research, promoting growth and investment in research in Bristol and the region.
 - If sufficient funds are available within the grant to link the Bottleyard studios to the network.
10. In addition, if funding becomes available, the Project will extend the network to the Bottle Yard Studios and deploy a research and development capability at the Bottle Yard Studios site.

Benefits

11. This proposal links local businesses and communities in the South of the city into the existing network. The connectivity will provide a platform for R&D and the nominated projects will demonstrate the impact of this network on skills, jobs and growth in these specific domains.
12. The Economic Case has been assessed by independent consultants appointed by BCC, and reviewed by consultants appointed by the Local Enterprise Partnership. That assessment predicts that the Bristol Project is likely to create 200 Net Additional Jobs. It also assessed the effect on the economic value of goods and services produced in an area – termed Gross Value Added (GVA).
13. The analysis demonstrated that the Bristol Project had the capacity to produce an additional GVA per annum of £1.7 million, £21.5m cumulative.
14. The Consultants concluded the cost per net additional job favourable when compared to recognised benchmarks and that when calculating the GVA per pound of investment, the overall ratio performs well against established benchmarks.

Funding

15. The LEP have agreed £4.04m of capital funding to cover the OPCR Programme and Bristol Project. This provides for the full cost of the delivery of the project, based on the estimates of costs made during the development of the business case.

Project Governance and Delivery

16. The programme will be governed by a Programme Board consisting of
- A senior representative from each authority (Bath and North East Somerset, Bristol, North Somerset and South Gloucestershire) - as Senior Users to ensure the programme maintains direction to achieve the economic objectives.
 - A representative from the LEP to ensure alignment of the programme with strategic and network developments.
 - A member from the Supplier and to ensure deliverability and alignment with the wider network.
17. The Programme Board will ensure alignment of the programme and its constituent projects with the objectives, funding and reporting requirements.
18. The local authorities will enter into a Partnership Agreements with each other to set out how the grant is to be allocated and respective roles and responsibilities. BCC will also need to enter into one or more agreements to procure the works and services required to implement the OPCR Programme and Bristol Project and authority for the Executive Director of Growth and Regeneration is requested to enter into such agreements.
19. A Programme Manager will be appointed by BCC to co-ordinate the overall OPCR programme. Each authority will appoint its own Project Manager and Delivery Team for their activities, as business cases are approved, and will nominate a representative to take part in programme level activities as necessary. The Programme Manager will not manage the implementation of projects within the other local authority areas but will, through the Programme Board's decision making, ensure that the resultant network operates as a single, integrated network.
20. The Bristol OPCR Project will be governed by Project Board consisting of senior stakeholders from Bristol City Council, Bristol Is Open, Knowle West Media Centre and other organisations that are relevant to the delivery of

the projects. A Bristol Project Manager will be appointed to manage the delivery of the Bristol Project and its various component research projects.

Procurement

21. The city council will procure suppliers to undertake the works necessary to deliver the Bristol project. It is envisaged this will involve a main contractor who will then procure the infrastructure and manage the relationships with equipment providers etc who will be procured under the most appropriate, straightforward and cost effective channel which may include use of existing framework agreements.

Appendix B: Details of Consultation and Engagement Carried Out

Engagement has taken place with the existing core partners and with a wider range of stakeholders to the programme – primarily prospective industrial partners and representatives of the four universities and local authorities which comprise the WoE LEP area. The local authorities within the region will work together under a Collaboration Agreement to achieve the outcomes established for the programme.

Extensive engagement has been undertaken with the participants of the four research projects outlined in this document. Stakeholders have been fully involved over an extended period in developing the research project approaches, aims and objectives.

Appendix C – Summary of any engagement with scrutiny

None

A risk log was contained within the Business Case. Key risks are:

OPCR Risk Register																	
Negative Risks that offer a threat to OPCR and its aims (Aim - Reduce Level of Risk)																	
Ref	Risk Description	Key Causes	Key Consequence	Status Open / Closed	Strategic Theme	Risk Category	Risk Owner	Key Mitigations	Direction of travel	Current Risk Level			Monetary Impact of Risk £k	Risk Tolerance			
										Likeli hood	Impac t	Risk Rating		Likeli hood	Impac t	Risk Rating	Date
1	Suppliers are not able to meet the requirements of the project	Capability of the Market/Suppliers	Unable to meet the obligations nor realise the benefits of the grant	Open	Delivery		Programme Manager	Rigorous testing of supplier capability	Improving	1	5	5	4,100	1	5	5	26/04/2018
2	Technology changes	Rapid change in this sector, for example 5G	Equipment is rapidly out of date	Open	Technology		Programme Manager	Future-proofing as much as possible with the suppliers	Static	3	3	9	Unknown	3	3	9	26/04/2018
3	Research Projects are not delivered by partners as envisaged in the business case	Changing circumstances in the Innovation landscape	The benefits of the Project will be different and potentially lower than expected in the business case	Open	Delivery		Programme Manager	Close liaison with research partners	Static	2	4	8	Unknown	3	3	9	26/04/2018
4	State Aid challenge.	A 3rd party takes a view that the funding contravenes state aid provisions	BCC will need to defend the state aid position	Open	Legal		Programme Manager	State aid approach backed by legal advice.	Static	2	2	4	Unknown	3	3	9	26/04/2018
5	Insufficient funds within the grant to complete the Programme/Project	Rising costs of equipment or services or unforeseen costs	Additional BCC or Other funding required	Open	Financial		Programme Manager	Good procurement and project management	Static	2	3	6	Unknown	3	3	9	26/04/2018
6	Insufficient expertise or capacity within BCC to manage the Programme and Project	The programme is in a new area of technology	Poor programme or project management	Open	Delivery		Service Manager	Recruitment of external programme and project management	Static	2	3	6	Unknown	3	3	9	26/04/2018
7	Other local authorities do not bring forward business cases	Unable to identify suitable business cases in their areas or wish to allocate funding in a different way	The Regional network is smaller and covers part of the region, resulting in fewer jobs being created/ other benefits overall	Open	External		Programme Manager	Continued liaison with the LEP and other local authorities	Worsening	5	2	10	Unknown	5	2	10	10/05/2018

Equalities screening / impact assessment of proposal

Bristol City Council Equality Impact Relevance Check

This tool will identify the equalities relevance of a proposal, and establish whether a full Equality Impact Assessment will be required. Please read the guidance prior to completing this relevance check.

What is the proposal?	
Name of proposal	OPCR Programme and Bristol Project
Please outline the proposal.	<p>To extend the existing Open Programmable City (OPC) Network - a hyper fast, software defined research and development test-bed. It will consist of a network of high capacity underground fibre optic cables linking several nodes.</p> <p>It is a research platform for the next generation of technologies and does not provide routine services, to the city council or anyone else, which are provided by commercial providers.</p> <p>The platform, operated by the Bristol Is Open company, will allow R&D, piloting and product realisation of software and hardware which have the potential to create the following outcomes for the city and region:</p> <ul style="list-style-type: none"> • Jobs directly attributable to the roll out and operations of the network • Attracting companies that wish to develop/test applications, products and expertise on a 'real world' closed network – moving from lab prototype to a saleable 'product' • Placing the West of England region at the centre of global development, leading to new centres of expertise attracting academics, employees and companies to the region. <p>The Open Programmable City Region (OPCR) Programme will extend the existing Open Programmable City (OPC) network to new areas of Bristol and future extension of this advanced and unique platform across the West of England. The resulting regional network will emerge as a unique, world leading Open Programmable City Region (OPCR), attracting people, businesses and investment. The Network will connect up areas, institutions and communities identified as having high potential for: producing valuable research projects with communities, developing new products or services, stimulating economic growth.</p> <p>The key extensions are into South Bristol into Filwood and the Knowle West Media Centre and in the north of the city a network for connected an autonomous vehicles.</p>
What savings will this proposal achieve?	N/A
Name of Lead Officer	Alex Minshull

Could your proposal impact citizens with protected characteristics? (This includes service users and the wider community)
Please outline where there may be significant opportunities or positive impacts, and for whom.
The project is unlikely to provide significant opportunities for people with protected characteristics. However, the key community opportunity is the investment at the Knowle West Media Centre and “The Factory”, at Filwood Green Business Park. This will give access to local people to state of the art technologies and create skills development and employment opportunities in this area.
Please outline where there may be significant negative impacts, and for whom.
None

Could your proposal impact staff with protected characteristics? (i.e. reduction in posts, changes to working hours or locations, changes in pay)
Please outline where there may be significant opportunities or positive impacts, and for whom.
None
Please outline where there may be negative impacts, and for whom.
None

Is a full Equality Impact Assessment required?	
Does the proposal have the potential to impact on people with protected characteristics in the following ways: <ul style="list-style-type: none"> • access to or participation in a service, • levels of representation in our workforce, or • reducing quality of life (i.e. health, education, standard of living) ? 	
Please indicate yes or no. If the answer is yes then a full impact assessment must be carried out. If the answer is no, please provide a justification.	No.
Service Director sign-off and date: Zoe Willcox, 25thApril	Equalities Officer sign-off and date: Duncan Fleming, 25thApril

Summary of Eco impact assessment

The decision being taken is to develop a fibre and wireless research network and undertake a number of research projects to use this infrastructure, which will involve manufacture of products (The Factory), testing of vehicles (CAV) and digital media projects (KWMC).

Summary of impacts and Mitigation	
<p>The environmental impacts and mitigation measures were assessed in the development of the Business Case.</p> <p>The significant impacts of this proposal are...</p> <p>The construction of the network involving laying of ducting and fibre, erection of wireless communication boxes on lamp posts, the installation of ICT equipment at the nodes and the purchase of materials and disposal of waste from The Factory.</p> <p>The proposals include the following measures to mitigate the impacts:</p> <p>Assessment of environmental matters in procurement of goods and services, re-use of ducts and equipment where possible and a potential reduction in transport needs from the local manufacture of items at The Factory.</p> <p>The net effects of the proposals are positive</p>	
Checklist completed by:	
Name:	Alex Minshull
Dept.:	Planning Services
Extension:	
Date:	25/04/18
Verified by	Steve Ransom

Appendix I: Combined Background Papers

West of England Investment Board, Full Business Case

Programme: Local Growth Fund

Scheme: OPEN PROGRAMMABLE CITY REGION: BRISTOL INFRASTRUCTURE PLUS THE SENSOR FACTORY, C.A.V. ACCESS NETWORK, THE BOTTLE YARD & KNOWLE WEST MEDIA CENTRE RESEARCH PROJECTS

<https://s3-eu-west-1.amazonaws.com/so-welep-uploads2/files/Joint%20Scrutiny/OPCR%20Full%20Business%20Case%20Publishable.pdf>

Note that the Bottleyard Project is not included in the Grant offer but remains part of the overall programme should funds be available for its completion.