

BIRMINGHAM CITY COUNCIL

PUBLIC REPORT

Report to:	CABINET
Report of:	Strategic Director for Change and Support Services
Date of Decision:	15th November 2016
SUBJECT:	BIG DATA CORRIDOR: A NEW BUSINESS ECONOMY – FULL BUSINESS CASE
Key Decision: Yes	Relevant Forward Plan Ref: 002446/2016
If not in the Forward Plan: (please "X" box)	Chief Executive approved <input type="checkbox"/> O&S Chairman approved <input type="checkbox"/>
Relevant Cabinet Member:	Councillor Waseem Zaffar - Transparency, Openness and Equality
Relevant O&S Chairman:	Councillor Mohammed Aikhlaq - Corporate Resources and Governance
Wards affected:	ALL

1. Purpose of report:

- 1.1. Subject to the finalisation of a European Regional Development Fund (ERDF) funding agreement and a formal offer of grant award to accept grant funding of £1.226m under the European Structural and Investment Funds (ESIF) 2014-2020 Programme for the Big Data Corridor (BDC) project at a total project cost of £2.453m.
- 1.2. BDC will provide a new type of business support programme that encourages businesses to engage with the Internet of Things (IoT) and the wider data economy. 125 Small/Medium Enterprises (SMEs) will be supported to gain new skills and capabilities to make use of personal, open and commercial data and IoT opportunities to develop new products and services. BDC will offer access to data, data management capabilities and real life technology demonstrators for SMEs to use. SMEs will be supported to innovate and bring new products/services to market.

2. Decision(s) recommended:

That Cabinet:

- 2.1. Approves the Full Business Case (FBC) (attached at Appendix 1) for the Big Data Corridor (BDC) project at a total cost of £2.453m, which will provide a data management platform and support package to Small/Medium Enterprise's (SME's) to understand the benefits of using data to design new services and products.
- 2.2. Approves the City Council acting as the Accountable Body for the BDC and accepts the offer of £1.226m of European Regional and Development Fund grant (attached at Appendix 2), which is being matched against an equivalent amount of City Council, and its partners, capital and revenue expenditure.
- 2.3. Delegates authority to the Information and Communications Technology (ICT) programme board to approve the Procurement Strategy and subsequent award of contracts in accordance with Standing Orders and the Procurement Governance Arrangements up to a maximum value of £0.417m.
- 2.4. Authorises the Acting City Solicitor to negotiate, execute and complete all necessary documents to give effect to the above recommendations.

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3. Consultation

3.1. Internal

3.1.1. In developing this bid, consultation and discussions have been held with the former Cabinet Member for Skills, Learning and Culture, the Assistant Director's for Transportation and Connectivity, and Employment as well as officers within the Business Development and Innovation team in order to inform them of the BDC proposal and the opportunities this presents for their own services and customers. They were all supportive and recognised the benefits to the city and in supporting enterprise and economic growth.

3.1.2. Since the application was submitted, the portfolio holder has changed to the Cabinet Member for Transparency, Openness and Equality. The Cabinet Member for Value for Money and Efficiency, the Deputy Leader and the Assistant Director – Chief Information Officer have been briefed and are fully supportive.

3.2. External

3.2.1. The Smart City Commission chaired by the former Cabinet Member for Sustainability, which includes the Universities, Health, West Midlands (WM) Police and local SMEs plus national representatives (e.g. Digital Catapult, BIS, private sector organisations such as City Council partners Amey and Centro) have been informed and consulted on the BDC proposal (January 2016). The Commission acknowledged the need to help SMEs enhance their digital capabilities and make better use of technologies and data to stimulate innovation and design new services. The Commission supported the proposal and agreed that it was in alignment with Birmingham's Smart City principles.

3.2.2. BDC was presented to the WM Digital Working Group (December 2015) and at the Smart City Alliance (January 2016). Additional focus group activities have been undertaken at Innovation Birmingham Ltd (March 2016) (who are a partner) with a wider survey sent out to Greater Birmingham and Solihull Local Enterprise Partnership SMEs for further feedback, which has been used to shape development of the proposal.

4. Compliance Issues:

4.1. Are the recommended decisions consistent with the Council's policies, plans and strategies?

4.1.1. The BDC proposal supports the Council Business Plan and Budget 2016+: outcome 1: a strong economy with an enterprising and innovative green city and outcome 4: thriving local communities. Whilst the funding is directly targeted at improving SME's skills and capabilities to innovate using data and technologies, the demonstrator activities will be focused on specific challenges in the areas of health, mobility and sustainability that engage citizens and communities in East Birmingham and develop solutions for them.

4.1.2. The BDC proposal directly delivers towards the ICT & Digital Strategy 2016-2021 outcomes of; Digital City, Digital Economy and Digital Collaboration. It is part of the ICT & Digital portfolio of projects which will be governed and assured as part of the ICT & Digital Strategy Theme 5 - Governance. It does this through creation of a city data platform that encourages the adoption of smart technologies; use of open standards and open data and improving digital skills of SMEs.

4.1.3. BDC applies the Future Council design principles to work with partners; take a whole system approach, use our strategic assets to leverage economic growth and enables their application in the wider organisation through provision of insight and multi-supplier models

4.2. Financial Implications

4.2.1. The total value of this project proposal over 3 years is £2.453m comprising £0.365m capital and £2.088m revenue expenditure. 50% of this expenditure will be funded from ESIF grant, with the other 50% being funded by the City Council and its partners, which is set out in the table below:

Revenue Expenditure	Match Funding	ESIF Grant	Total Expenditure
Birmingham City Council	241,660	241,657	483,317
Aston University	324,328	324,328	648,656
Birmingham City University	215,139	215,139	430,278
Enable ID	65,447	65,447	130,894
Innovation Birmingham	61,678	61,678	123,356
Telensa	82,799	82,799	165,598
West Midlands Combined Authority (Transport for West Midlands)	53,142	53,142	106,284
Total Revenue Expenditure	1,044,193	1,044,190	2,088,383
Capital Expenditure:	Match Funding	ESIF Grant	Total Expenditure
Birmingham City Council	145,000	145,000	290,000
Birmingham City University	25,000	25,000	50,000
Telensa	12,500	12,500	25,000
Total Capital Expenditure	182,500	182,500	365,000
Total Big Data Corridor	1,226,693	1,226,690	2,453,383

4.2.2. The project entails the development of a software platform and sensor network, based on SME and partner requirements. The project will review the existing hardware and software assets of the Council, the partners and potentially other public sector organisations such as WM Police regarding their suitability for re-use and adaptation. The explicit aim is to identify a suitable asset and adapt it for the project to avoid development from scratch and give SMEs access from months 12 onwards. As such, at this point it is not clear whose data platform will be developed and in the event that this is not the City Council, a license agreement will be completed to ensure that at the end of three years, the platform (wherever it resides) will be switched-off. The most appropriate platform will be identified as a priority in the first four months of the project.

4.2.3. Staff from the Council and partners will develop this platform to meet the demands of SME's. This will require up to £0.365m of capital expenditure in staff time and the procurement of sensors and hosting solutions; contracts for platform and interface development, system and data integration, and data processing. Revenue expenditure will be incurred through the provision of staffing time to support SME's e.g. in the Serendip incubator based at iCentrum. Of the total project expenditure of £2.453m, a maximum of £0.417m is expected to be procured, which is broken down in the FBC at Appendix 1, the remaining spend will be staffing and overheads.

4.2.4. The City Council's revenue match funding of £0.241m is from existing staff over the 3 years, whilst the capital match funding of £0.145m is from existing Digital Birmingham capital reserves. Written confirmation of individual partner match-funding has been received.

4.2.5. Birmingham City Council as the Accountable Body will manage the project and ensure funds are spent to deliver the outputs agreed with DCLG as outlined in Appendix 2. The City Council is required to ensure compliance with ERDF grant conditions; which will be passed on through a consortium agreement with each delivery partner. Reporting templates have been developed for consortium partners to use and performance will be closely monitored by Digital Birmingham.

4.2.6. All delivery arrangements will be subject to monitoring and performance checks and project compliance visits. There are no further on-going revenue implications as a consequence of accepting this grant funding because the data platform has a life span of the duration of the project (3 years) in line with ERDF guidance. This is a proof of concept project which will enable the Greater Birmingham and Solihull Local Enterprise Partnership (GBSLEP) to assess the viability of this service.

4.2.7. The project will be delivered by the Digital Birmingham team and a formal project board will be set up to provide governance and monitoring of outputs.

4.3. Legal Implications

4.3.1. The City Council has the power to enter into this activity in accordance with the general power of competence conferred by Section 1 of the Localism Act 2011 (LA 2011). The proposed activity is within the boundaries and limits on the general power set out in Section 2 and 4 of LA 2011 respectively. The recommendations in this report will promote and improve the economic well-being of Birmingham's residents and businesses by helping to create new job opportunities and safeguard existing jobs in local businesses.

4.3.2. The data platform will act as an address book for data exchange across various providers and as such the appropriate safeguards and data sharing agreements will have to be implemented which includes password protection and consent to conditions of use. This will ensure compliance with the Data Protection Act. Intellectual Property (IP) issues associated with the project will be documented in the consortium agreement. Background IP will be retained by the partner who brings it along and only the new IP will be shared. As part of the ERDF grant requirements no delivery partner can be seen to be a beneficiary.

4.3.3. Digital Birmingham will be required to check the eligibility of SME's taking part in the programme to ensure compliance with ERDF funding rules particularly the state aid General Block Exemption Regulation (GBER) threshold in relation to providing training and support

4.4. Public Sector Equality Duty

4.4.1. An initial Equality Assessment (EA001110) screening has been completed. There is no adverse impact as the project is specifically aimed at all SME's within the GBSLEP area who meet the specific criteria to gain business support as identified within the ERDF Funding requirements.

4.4.2. This BDC demonstrator project aims to impact on economic recovery, well-being, mobility, health and sustainability with a focus on East Birmingham. The aim is to maximise opportunities for investment in areas of deprivation and broker these opportunities across a range of stakeholders and partners as part of work already undertaken to establish the Eastern Corridor Smart Demonstrator.

5. Relevant background/chronology of key events

5.1. History

- 5.1.1. In response to the ESIF Priority 1 Research and Innovation call, BDC has been designed as a user and demand led demonstrator to develop and test new products and services with strong citizen engagement and a clear aim to make a positive difference to people's lives. It supports the GBSLEP ESIF strategy, which highlights the use of demonstrators as the 'preferred vehicle' to drive innovation and collaboration from the private and public sector and Higher Education Institutions. BDC directly advances the objectives of the GBSLEP Strategic Economic Plan 2016-2030 for demand led innovation and strengthening the innovation eco-system
- 5.1.2. The approval to bid report was produced and approved on 25th September 2015 by the Assistant Director for Transportation and Connectivity. The outline application was submitted and DCLG's invite to progress to full application stage was received 1st December 2015.
- 5.1.3. Cabinet approved the submission of the Big Data Corridor ESIF bid on 22nd March 2016 and the full application was submitted 29th March 2016 and, following a number of revisions, received approval at the GBSLEP ESIF subcommittee 7th September 2016.
- 5.1.4. DCLG has confirmed that the full application has been successful and a copy of the in-principle offer of grant funding is attached at Appendix 2.

5.2. What the Big Data Corridor project will deliver

- 5.2.1. BDC aims to accelerate digital skills of SME's to capitalise on the exponential growth of the Data Economy through this support project. It will provide a new type of business support programme that creates the environment for SME's to innovate and experiment.
- 5.2.2. BDC differs from traditional business assist programmes because it aims to create an innovation eco-system, develop a new market place for data and applications and offer a comprehensive support package. Support includes access to computing facilities, sensors and sensor data and technical support to process and analyse data. This is complemented by access to workshops and in depth advice on how to develop new products and services and move from prototype to commercialisation.
- 5.2.3. All support for SMEs will be provided free of charge based on meeting eligibility criteria and state aid requirements.
- 5.2.4. The project will create primary outputs of 125 businesses assisted, 32 new products/services developed and an estimated employment increase of 56 full time jobs.
- 5.2.5. Secondary outputs will be generated from the proof of concept of creating a data management platform and marketplace using open standards that the Council and wider public sector can learn from. Additional open data will become available as a by-product.
- 5.2.6. The project aims to demonstrate viability, benefits, partner and legal arrangements for operating such a platform. Taking into account regional investments over the coming 2-3 years (e.g. WM Police and West Midlands Combined Authority (Transport for West Midlands) are investing heavily in insight capability) Digital Birmingham will develop a business case that can be presented back to the Council's Chief Information Officer and others to suggest adoption and supporting mechanisms.

5.3. Delivering demand led innovation

- 5.3.1. Research results from the Greater Birmingham Digital Audit 2015 and the GBSLEP in January 2016 consistently evidence that businesses do not fully understand the value to gain from using digital technologies. In the BDC survey in 2016 75% of businesses in the Eastern Corridor expressed their interest in better understanding these benefits.
 - 5.3.2. BDC will design the business assist programme and data platform through further requirement gathering from SMEs. Suggested topics for SME workshops include: Applications for the Built Environment, Using the Internet of Things, New World Business Models and How to benefit from Data Analytics.
 - 5.3.3. BDC will run SME workshops to solve real-life challenges such as travel behaviours or impact of lighting on the use of an area. These will be designed by citizens, the partners and SMEs themselves. Citizens and stakeholders will then be involved in testing and reviewing solutions. This will ensure products address a market need and citizens become part of service development. Citizen engagement may include events such as hackathons, focus groups for prototype testing and surveys for market research.
 - 5.3.4. An example challenge could be to reduce congestion in a part of the Eastern Corridor. SMEs are given access to a smart lighting application network, public transport and highways data, social media trends and personal data from individuals that volunteer to share their data. SMEs will be encouraged to understand behaviours and trends and validate ideas with citizens leading to development of a new product or service.
- ### 5.4. BDC benefits for the Council
- 5.4.1. The data platform provides proof of concept for the use of open standards, enables the Council to build up the ICT&D supply chain with multiple suppliers and partners and influence the market.
 - 5.4.2. It provides an opportunity for the Council to work with and learn from public sector partners to adapt our corporate infrastructure as part of the ICT&D strategy to simplify, standardise and share.
 - 5.4.3. The project will gain additional value and insight from existing (including BCC) open data.
 - 5.4.4. BDC leverages existing Council and partner assets such as Innovation Birmingham's iCentrum space, the Council's open data portal, Aston University's photonics programme, EnableID's access to the Hub of All Things personal data store etc.
 - 5.4.5. BDC aims to develop solutions that can be scaled and replicated across the GBSLEP and elsewhere.
 - 5.4.6. The data platform will enable exploration of new service delivery models e.g. shared revenue; freemium services etc.
 - 5.4.7. The delivery of services by the public sector is declining; more and more demand for services will be met through the investment of the private sector in developing new services and products. Citizens will procure more services and manage themselves how services are delivered. The BDC collaboration of public and private sector with citizens will provide the stimulus for use of data and technologies to drive innovation and address city challenges such as poor air quality; health inequalities; congestion or obesity.

5.5. Timescales for Project Delivery

5.5.1. The key timescales are as follows:

Project commencement	22/11/2016
Legal agreement with delivery partners signed	31/11/2016
Submission of first grant claim	31/12/2016
Selection of appropriate partner data platform to be developed	31/03/2017
SME registration through Growth Hub live	30/04/2017
Business support workshops and advice starts	01/05/2017
First parts of platform, software tools and or data available for SMEs	01/06/2017
Agreed project practical completion date	31/07/2019
Project finish	31/10/2019

5.6. Deliver partners

5.6.1. BDC will be delivered by a consortium of 7 partners with an excellent track record in providing knowledge transfer, technology based innovation and technical support:

Partner	Role
Birmingham City Council	Accountable body, project management, procurement of data platform and interfaces where applicable, marketing and communications
Aston University	Provides photonics and smart lighting demonstrator technologies and knowledge transfer services
Birmingham City University	Develop and manage a data platform (software) and provide technical advice to SME's
EnableID	Gathers business requirements, provides advice on privacy and personal data
Innovation Birmingham	Leading business engagement, events and innovation activities; provision of incubator think space Serendip
Telensa	Technology infrastructure and software and technical support services, delivery of training modules
West Midlands Combined Authority (Transport for West Midlands)	Data provider; innovation activities and challenges focused on intelligent mobility, delivery of training modules

5.7. Procurement implications:

5.7.1. At the start (month 1-6) BDC will engage SMEs and stakeholders to understand what advice and technical facilities SMEs need to innovate and what software assets already exist that could support project delivery. This will define the procurement approach to be taken and the design of specifications.

5.7.2. Digital Birmingham will aim to maximise value for the Council and the region by building on existing infrastructure and enhance those facilities where possible (e.g. WM Police investments in Insight). Close cooperation with Corporate Procurement and the ICT Programme Board will define the actual procurement strategy and detailed specifications.

6. Evaluation of alternative option(s)

6.1. Do not accept the grant offer of £1.226m grant to up-skill SME's with latest innovative technologies and practices to support SMEs competitiveness, economic growth for the GBSLEP and creation of jobs. This option is discounted because it would not deliver the outlined benefits for SMEs and the council.

7. Reasons for Decision(s)

7.1 The BDC project will support up to 125 SME's to upskill into the data economy and create 56 jobs within the GBSLEP area directly contributing to the strategic outcomes of the Council Business Plan and Budget 2016+ to drive economic growth and create jobs as well as delivering social and environmental value.

7.2 Delivering BDC will deliver a raft of wider benefits for the Council including the opportunity for wider business and service transformation. The project will provide the Council with a data platform framework upon which to evaluate future opportunities to exploit city data assets to create efficient business and citizen friendly services.

Signatures	<u>Date</u>
Cllr Waseem Zaffar Cabinet Member for Transparency, Openness and Equality <div style="text-align: right; border-top: 1px dotted black; height: 20px; margin-top: 10px;"></div>	
Angela Probert Strategic Director for Change and Support Services <div style="text-align: right; border-top: 1px dotted black; height: 20px; margin-top: 10px;"></div>	
List of Background Documents used to compile this Report:	
<ol style="list-style-type: none"> 1. Outline Bid Approval Delegation Report – Strategic Director of Economy dated 25th September 2015 2. DCLG Letter giving approval to go to full application. 3. ESIF Full Application for Big Data Corridor: Cabinet report 22nd March 2016 	
List of Appendices accompanying this Report (if any):	
<ol style="list-style-type: none"> 1. Appendix 1 – Full Business Case 2. Appendix 2 – DCLG In-principle offer of grant funding 3. Appendix 3 – Equality Analysis 	

PUBLIC SECTOR EQUALITY DUTY

- 1 The public sector equality duty drives the need for equality assessments (Initial and Full). An initial assessment should, be prepared from the outset based upon available knowledge and information.
- 2 If there is no adverse impact then that fact should be stated within the Report at section 4.4 and the initial assessment document appended to the Report duly signed and dated. A summary of the statutory duty is annexed to this Protocol and should be referred to in the standard section (4.4) of executive reports for decision and then attached in an appendix; the term 'adverse impact' refers to any decision-making by the Council which can be judged as likely to be contrary in whole or in part to the equality duty.
- 3 A full assessment should be prepared where necessary and consultation should then take place.
- 4 Consultation should address any possible adverse impact upon service users, providers and those within the scope of the report; questions need to assist to identify adverse impact which might be contrary to the equality duty and engage all such persons in a dialogue which might identify ways in which any adverse impact might be avoided or, if avoidance is not possible, reduced.
- 5 Responses to the consultation should be analysed in order to identify:
 - (a) whether there is adverse impact upon persons within the protected categories
 - (b) what is the nature of this adverse impact
 - (c) whether the adverse impact can be avoided and at what cost – and if not –
 - (d) what mitigating actions can be taken and at what cost
- 6 The impact assessment carried out at the outset will need to be amended to have due regard to the matters in (4) above.
- 7 Where there is adverse impact the final Report should contain:
 - a summary of the adverse impact and any possible mitigating actions (in section 4.4 or an appendix if necessary)
 - the full equality impact assessment (as an appendix)
 - the equality duty – see page 9 (as an appendix).

Equality Act 2010

The Executive must have due regard to the public sector equality duty when considering Council reports for decision.

The public sector equality duty is as follows:

1	<p>The Council must, in the exercise of its functions, have due regard to the need to:</p> <ul style="list-style-type: none">(a) eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by the Equality Act;(b) advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it;(c) foster good relations between persons who share a relevant protected characteristic and persons who do not share it.
2	<p>Having due regard to the need to advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it involves having due regard, in particular, to the need to:</p> <ul style="list-style-type: none">(a) remove or minimise disadvantages suffered by persons who share a relevant protected characteristic that are connected to that characteristic;(b) take steps to meet the needs of persons who share a relevant protected characteristic that are different from the needs of persons who do not share it;(c) encourage persons who share a relevant protected characteristic to participate in public life or in any other activity in which participation by such persons is disproportionately low.
3	<p>The steps involved in meeting the needs of disabled persons that are different from the needs of persons who are not disabled include, in particular, steps to take account of disabled persons' disabilities.</p>
4	<p>Having due regard to the need to foster good relations between persons who share a relevant protected characteristic and persons who do not share it involves having due regard, in particular, to the need to:</p> <ul style="list-style-type: none">(a) tackle prejudice, and(b) promote understanding.
5	<p>The relevant protected characteristics are:</p> <ul style="list-style-type: none">(a) age(b) disability(c) gender reassignment(d) pregnancy and maternity(e) race(f) religion or belief(g) sex(h) sexual orientation