

Corporate Policy and Strategy Committee

10.00am, Tuesday, 24 March 2015

Open Data Strategy update

Item number	7.3
Report number	
Executive/routine	
Wards	All

Executive summary

This report provides a progress update of the Open Data Strategy Programme and seeks endorsement for recommendations to progress to the next stage of the programme.

The Open Data Strategy was agreed in June 2014, and included a three year programme of development and innovation to be implemented.

Year one of the strategy has focused on data discovery, and key deliverables include EdinburghApps 2014 and provision of an Open Data portal. It has generated significant interest in the Scottish Government, Scottish Open Data community, Scottish Universities and wider Eurocities community.

Links

Coalition pledges	P15, P28
Council outcomes	CO23, CO24, CO25 and CO26
Single Outcome Agreement	SO1, SO2, SO3 and SO4.

Open Data Strategy update

Recommendations

It is recommended that the Committee:

- 1.1 Endorse the data and delivery principles and principles for data publishing across the Council.
- 1.2 Instruct all services to identify data sets for early release using the types of data identified in Appendix 2.
- 1.3 Agree to the Council delivering 100 new data sets at level three of the agreed Open Data format hierarchy¹ by Sept 2015, and identifying and cataloguing the opportunities for re-use.
- 1.4 Endorse the EdinburghApps programme as a delivery model supporting departments priorities and connecting with and promoting local businesses.
- 1.5 Endorse the need for resources to support the programme as noted at point 3.17.
- 1.6 To consider whether attendance by an elected member is required at the Eurocities Open Data Spring meeting in Eindhoven on 13 – 16 April 2015.
- 1.7 Confirm the focus of the City of Edinburgh Council's involvement in the Scottish Cities Alliance ERDF proposals - *Scotland's 8th City -The Smart City* – to focus on Open Data opportunities.

Background

- 2.1 At its meeting on 10 June 2014, Committee approved the Open Data Strategy, recognising that it would provide easier access to Council services and amenities through alternative channels, support innovative new ventures, enhance citizen participation in the decision making process and make better use of public assets for citizens, communities, businesses and the Council.
- 2.2 The strategy agreement was the first for a local authority in Scotland and Edinburgh is recognised as a leader in Scotland for open data.

¹ As noted in the Open Data full strategy p16 (http://www.edinburgh.gov.uk/info/20218/council-wide_plans_and_strategies/1031/open_data_strategy)

- 2.3 The EdinburghApps programme has been acknowledged by open data stakeholders nationally as a unique and progressive approach to delivering innovative solutions and for supporting creative industries and SME development in Edinburgh.

Main report

- 3.1 Since agreeing the Strategy, work on open data has progressed both internally and externally. A wide range of activities have contributed to the progress the Council has made since June 2014.
- 3.2 This has included the delivery of an alpha² open data portal, with 60 data sets. The Open Data Portal is part of the foundation upon which the Council is building its open data approach, not only as a repository of open data sets, but as an engagement tool with those interested in open data. A significant number of events and post event engagement have also been undertaken.
- 3.3 The delivery of the EdinburghApps 2013 winning ideas. These included [Recycling Edinburgh](#) (an app to discover recycling facilities) and AIRTS routing tool (improving journey planning and efficiency for the Community Equipment Store in Health and Social Care) (see Appendix 5 for case study). Both products use Council data, with Recycling Edinburgh providing a direct mobile option for residents, to reduce enquiries, and the AIRTS tool bringing efficiencies to delivery timetables.
- 3.4 Also delivered over summer/autumn 2014 was [SportsCubed](#), a website and Android app developed with University of Edinburgh Informatics students, using sports data to encourage more young people to take part in physical activity.
- 3.5 In June 2014 the Council hosted an EdinburghApps Road Safety hackathon, targeting the high risk group 11- 14 year olds. Road incidents data was used. Three of the ideas generated by this event, a gamifying app, safety alert app and environmental design proposal are currently being explored in more detail to establish how best to deliver proof of concept products to improve pedestrian safety in the city.
- 3.6 In September 2014 the Council hosted the second EdinburghApps 2014 civic challenge. The 2014 focus was on Culture and Sport and Health and Social Care. Five concepts, Run2See, ACE, Bubbal, SpeechCity and Find a Player, were awarded prizes. Of these, Run2See, ACE and Bubbal are now in active

² An **alpha** is the first phase release in the development of software or web development. In this phase, developers generally test the software by releasing it for limited controlled use, to inform the further development of the software or web service.

discussions with service areas or in development into a Council service or be a complimentary SME driven service.

- 3.7 The Council has also been working with the University of Edinburgh on the concept of a Living Lab³ for Edinburgh. As a way of testing the potential the Council shared cycling data to support the University of Edinburgh's new Master of Science course, in its first term (Sept 2014), in an investigation of travel in Inverleith. (see Appendix 4 for the case study)
- 3.8 Development of Edinburgh Collected, a new heritage product, jointly funded with Nesta Scotland's Open Data Scotland programme which uses data from Edinburgh Libraries Capital Collections, and also encourages new data collection. This is a corporate and partner digital project to gather, share and promote visual and textural memories of Edinburgh, enriching and sharing the cultural heritage of Edinburgh with the world
- 3.9 Supported the [University of Edinburgh's Innovative Learning Week 2015](#) (16-20 February) through the sharing of 'Edinburgh by Numbers' data the students had the opportunity to build proof of concept dashboards supporting the discovery stage of the development of city dashboards for the Council.
- 3.10 At a National and European level, the Council is an ongoing partner in the Scottish Government project to deliver a [Scottish Open Data strategy](#). The Council is a member of the Eurocities open data working group - members exchange experiences and compare examples of city initiatives in the field of open data across the EU; build business cases; and collect evidence on the advantages of municipal open data.
- 3.11 In parallel to the work Edinburgh has been undertaking as outlined above, the Scottish Cities Alliance, as part of the delivery of the Scottish Cities Alliance (the Alliance) Operational Plan, has agreed to make a single, non-competitive application for £10million of European Regional Development Fund (ERDF) of matched funding as part of a Strategic Intervention called "*Scotland's 8th City - The Smart City*" for the period 2014-2020.
- 3.12 The Alliance and the Scottish Government subsequently commissioned consultants Urban Tide to help the cities understand and articulate their individual investment priorities and the collaborative opportunities. A Smart City Investment Roadmap was produced identifying where each city is with the Smart City agenda and their initial investment priorities, with the collaborative focus across the seven cities being on the increased or the accelerated adoption of data and new technologies.

³ A **Living Lab** is a research and development approach to research based on human interaction with innovative approaches to given environment, driven by participant interaction.

3.13 The Council's contribution to the Alliance is coordinated through the Economic Development Service. The opportunities for Open Data to form part of the work that the City of Edinburgh Council can leverage in partnership with Scotland's other cities are significant and it is expected that the Council's ICT Solutions Service will play a lead role in taking forward these opportunities, in partnership with Economic Development.

Lessons Learned

3.14 The Council's Strategy to date has provided the impetus to build a platform and launch an open data development programme offering new opportunities for partnerships and innovation. Specifically the programme is producing new products that are changing the way we deliver services. These achievements must maintain momentum to deliver the benefits outlined in the Strategy.

3.15 The Council is recognised as leading the drive for open data in the city of Edinburgh but also as a leader nationally. Engagement and involvement with city partners and organisations is key to continuing the programme and building new opportunities. It is important that there is a champion who owns and delivers this.

3.16 Although data has been made available on request and for specific activities such as EdinburghApps, it has proved difficult to put in place a regular publishing programme for open data. Data custodians have not always felt able to share the data they manage. Reasons for this include: issues with finding data owners for sign off, concerns about poor data quality being made available and data being used to negatively impact the Council's reputation. A clear directive is required to release identified types of data.

3.17 The Council has a wide range of opportunities still to be explored – partnership working with other cities in the UK and the rest of Europe, University research and innovation but the culture change required inside the Council is significant – officers need to change publishing processes and understand the benefits of sharing and working collaboratively with data to identify business opportunities. Without this change we will be unable to develop our data release programme at sufficient pace to take advantage of opportunities which will benefit the Council and the city of Edinburgh. This change requires the identification of both data and training resources in order to deliver in realistic timescales.

3.18 Improving access to data will provide the Council with the knowledge and potential to improve services and deliver savings. The Better Outcomes through Leaner Delivery (BOLD) programme, and in particular Channel Shift, can utilise the data analysis and insight to support and inform their programme delivery. It is essential to identify core types of data and publish their data sets in 2015/16.

3.19 EdinburghApps, the Council's civic challenge competition, has developed a model which is now being considered by other cities in the UK. Running the event over a number of weeks gives teams the opportunity to learn more about the service challenge, understand the data and present more focused, realistic

proposals. This new delivery approach has enabled the Council to produce innovative and efficient products to improve services (see Appendix 4 for case study). Some of the winners, often students or individuals, have gone on to form new start-ups, and the Council has provided some business and marketing support as competition prizes. The overall approach is a good model for delivering best value services.

Next Steps

- 3.20 The Open Data programme for 2015/16 will continue to build on the existing programme that has been developed:
- a. Open Data Portal: delivery at the end of April 2015, providing a platform for publishing data, providing data insights and stories, data and innovation challenges, and the opportunity for citizens to share data and build visualisations.
 - b. Product innovation: launch of Edinburgh Collected, the Council's new digital service (April 2015). Launch of EdinburghApps 2014 winners will follow as indicated at 5.2b
 - c. Events: EdinburghApps Data and Innovation Festival will take place in June 2015. Programme will include a number of small events throughout June, all promoting sharing and re-use of data. (see Appendix 3)
 - d. EdinburghApps Civic Challenge competition (Sept 2015). This will follow the current format, running over 6/7 weeks, identifying challenges and offering the opportunity for winners to discuss their concepts with Council departments.
 - e. New data sets: discovery, assurance and publishing programme – update reports to be published monthly on the open data portal once available.
 - f. Cities Alliance Proposals: continue to support and explore the opportunity for match funding through the European Regional Development Fund of matched funding as part of a Strategic Intervention called “Scotland’s 8th City -The Smart City” for the period 2014-2020.

Measures of success

- 4.1 The success of the Open Data programme will be measured in the publishing of new data sets, case studies and projects.
- 4.2 Awareness in relevant audiences has been raised through EdinburghApps and working closely with the University of Edinburgh. It has delivered a number of successful new products which provide strong case studies for both the re-use of data and collection of new data. Some service areas have seen the benefits of this and are now supporters of the open data approach.

- 4.3 The delivery of the open data strategy requires the Council to follow a maturity path that incorporates the embedding and implementation of principles, standards and process changes in data publishing. At present these changes are only happening on a small ad hoc basis around events and requests.

Financial impact

- 5.1 Currently delivery has been managed through existing budgets identified in service areas.
- 5.2 Budget has been identified to deliver the Council's Open Data Portal and support overall development of agreed workstreams.
- a. Open Data Portal (April 2015)
 - b. Delivery of EdinburghApps 2014 winning products
 - i. Run2See May 2015
 - ii. ACE July 2015
 - iii. Bubbal August 2015
- 5.3 Travel options to Eindhoven have been considered and costs depend on the time of booking however, it is estimated that travel and accommodation will be in the region of £600. Costs can be met from existing Customer Service budgets.

Risk, policy, compliance and governance impact

- 6.1 The Open Data Strategy is part of the ICT & D Strategy Programme. Risks are monitored and managed at the project and ICT&D Board.

Equalities impact

- 7.1 The Open Data Strategy will promote equitable access to Council, and Partner services in line with Council equality standards.

Sustainability impact

- 8.1 The ICT investment will enable the ongoing delivery of data sets and development of appropriate case studies and new online services

Consultation and engagement

- 9.1 A key element of the development of the Open Data strategy is wider engagement with relevant audiences and sectors to encourage a city-wide

approach to the sharing and re-use of data. Stakeholders such as the Open Knowledge Foundation were consulted during the strategy development. Feedback was positive and supportive.

9.2 Ongoing engagement will take place in 2015.

Background reading/external references

[The City of Edinburgh Council Open Data Strategy](#)

[Scottish Government Data Management Board](#)

Re-Use of Public Sector Information Regulations 2005 <http://ec.europa.eu/digital-agenda/en/european-legislation-reuse-public-sector-information>

INSPIRE (Infrastructure for Spatial Information in Europe) Directive (2007) http://ico.org.uk/for_organisations/inspire_regulations

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Coalition pledges	P15 - Work with public organisations, the private sector and social enterprise to promote Edinburgh to investors P28 - Further strengthen our links with the business community by developing and implementing strategies to promote and protect the economic well being of the city
Council outcomes	CO23 - Well engaged and well informed – Communities and individuals are empowered and supported to improve local outcomes and foster a sense of community CO24 - The Council communicates effectively internally and externally and has an excellent reputation for customer care CO25 - The Council has efficient and effective services that deliver on objectives CO26 - The Council engages with stakeholders and works in partnership to improve services and deliver on agreed objectives
Single Outcome Agreement	SO1- Edinburgh's Economy Delivers increased investment, jobs and opportunities for all SO2 - Edinburgh's citizens experience improved health and wellbeing, with reduced inequalities in health SO3 - Edinburgh's children and young people enjoy their childhood and fulfil their potential SO4 - Edinburgh's communities are safer and have improved physical and social fabric
Appendices	Appendix 1 – Delivery and Data Principles Appendix 2 – Data Publishing Principles

Appendix 1 – Delivery and Data Principles

Delivery Principles	Data Principles
Keep it simple and small	Release good quantities of high quality data
Open by default	Describe the data
Engage early and engage often	Make data freely available (with defined exceptions)*
Foster innovation	Provide accessible data
Start with the customer's need	Allow reuse and redistribution
Share expertise and experience	Aim to publish linked data
Be transparent	Ensure data is as up to date as possible
Address common internal fears and misunderstandings	
Encourage universal participation	

- This refers to the Data Protection Act, Copyright, or other statutory or legal exceptions

Appendix 2 – Data Publishing Principles

Data Preparation	Readiness criteria
Is the data ready to publish (e.g. in an open format)	Is the data available in one of the agreed formats
Is the data publicly available	Types of data: available on the web; does not contain personal data; has been used to answer FOI enquiries; is used for performance reporting and does not infringe copyright
Is the data licensed for re-use, including commercial	Open Government Licence
Data Notification	
Data location	Where is the data stored? E.g. how will access be made?
Data description	A detailed description of what the data contains, how it is made and any points users should be aware of
Data owners contact details	Default will be Digital Team but can be data custodian
Data refresh	How often is the data updated
Data definition (for publishing on the store)	Group, category, metadata/tags
Communications	
changes or updates to data	Report the changes

sets	
Feedback	Responses to data, feedback, case studies and success stories

Appendix 3 – EdinburghApps Data and Innovation Festival

This mini festival will be made up of a number of satellite small events happening throughout June. The idea is to 'badge' these as all relating to or involved with data and innovation.

[Cyclehack](#) - begun in Glasgow this has now become a global event happening in cities around the globe during a specific weekend in June 2015. The format is to find solutions to cycle challenges collated from local citizens. Prototypes are presented on the Sunday.

[Code The City](#) – created in Aberdeen, this is a civic hacking event looking to improve access to local services. Running over a weekend it will invite local people, organisations, developers and designers to find solutions to civic challenges.

Data Jam and Symposium – this will be a new day conference, inviting data owners and custodians to meet up with SMEs, developers, designers and local people to discuss the potential of data sharing, insight and analysis. This event will break out into a number of segments - discovery and lightning talks, breakout sessions, and project pitches. The Symposium will feature a number of speakers with experience of data use and open data and alongside it an exhibition of demo products and concepts, all using or creating open data.

Meet Ups – during June there will be a number of informal Meet-Ups taking place for the various tech and creative communities in Edinburgh. For June these events will focus on open data.

Appendix 4 – Living Lab

The aim of the University of Edinburgh’s new Master of Science course is to train the students in data collection, management, modelling and analysis, as well as understanding the potential of designing with data. The use of a living lab approach has been identified as providing significant academic opportunities, as well as allowing the city to have research that is firmly based around issues that directly affect people in their day-to-day lives. The approach brought together three Council services, ICT Solutions, Transport, and Neighbourhoods, collaborating around data. As a result of this approach North Neighbourhood identified potential improvements for transport. The University felt that the experiment delivered good results, and have now received funding to further expand this course next year.

‘The Edinburgh Living Lab collaboration between the University and the CEC was invaluable in ...enabling teams of students to focus on the issue of Active Travel within the framework of Inverleith Neighbourhood Partnership’s planning priorities. Data played a central role in their projects: data that students themselves collected — using surveys, observation and digital techniques — was combined in a variety of innovative ways with open data sets, particularly those published by the CEC’ (Professor Ewan Klein, School of Informatics)

The project received a range of media coverage. One of the teams, (part of a 4-person interdisciplinary team titled ‘Brains on Bikes’), was featured on [BBC Scotland](#) demonstrating the research they were undertaking into cycling stress in cities.

Appendix 5 – EdinburghApps case study

The company, AIRTS, was set up following their success in EdinburghApps2013. They have delivered a new routing tool to improve deliveries provided by Community Equipment store. They researched the current routing processes and the standards required for deliveries before carrying out extensive analysis. They worked closely with the service, and were as a result able to factor in issues and risks faced by the team. Whilst the new product is only beginning to be in use the expectations are that this will not only significantly reduce the average waiting time for deliveries, but the admin time required for planning and confirming delivery times.