ITEM No ...6.....

REPORT TO: NEIGHBOURHOOD SERVICES COMMITTEE – 12 JUNE 2017

REPORT ON: SMART CITY – SMART WASTE - DUNDEE

REPORT BY: EXECUTIVE DIRECTOR OF NEIGHBOURHOOD SERVICES

REPORT NO: 187-2017

1. PURPOSE OF REPORT

1.1 This report seeks to inform the Committee of the Council's Smart Waste Project included in the Councils Digital Strategy, being undertaken with support of the European Regional Development Fund and in collaboration with Edinburgh, Glasgow, Perth and Stirling.

2. **RECOMMENDATIONS**

2.1 The Committee is recommended to approve the Smart Waste Project which includes the purchase of equipment via DCC Corporate procurement/Scotland Excel framework and the engagement of a Project Officer on a temporary basis.

3. FINANCIAL IMPLICATIONS

3.1 The Scottish Cities Alliance (SCA) has received approval for a £10m European Regional Development Fund (ERDF) strategic intervention on Smart Cities. The total Smart Waste project budget for Dundee is £250,000 over the period 2016-2019. Dundee City's Council contribution of £150,000 will be met from capital allowances from Parks and Open spaces within Recreation, Culture and Arts and Heritage section of the general services plan 2017-22 as a spend to save initiative, with additional funding of £100,000 from the ERDF.

4. MAIN TEXT

- 4.1 The Scottish Cities Alliance (SCA) exists to collaborate on economic development initiatives and includes all seven Scottish city local authorities. The SCA board comprises each Council Leader and Chief Executive and the Scottish Government is represented by the Cabinet Secretary for Infrastructure, Investment and Cities. Following a strategic review the board agreed three main programmes:
 - low carbon economy
 - city infrastructure investment
 - smart city
- 4.2 Within the smart city programme there has been considerable interest from Cities in taking forward trials in using sensor technology in the street litter and cleaning operations. Smart litter bins monitor fullness and have demonstrated in early reductions in journeys to empty streets and park area litter bins reducing carbon emission and vehicle costs and ensuring full bins are emptied on demand. Solar powered bins also compact waste extending the duration between emptying.
- 4.3 The Dundee Smart Waste project will seek to install range of sensor technologies in litter bin routes along with compactor bins in trial areas in order to learn the optimum mix in Dundee determined by the data collected from the sensors and operators experience. Smart phone, and vehicle tablet technologies will also be integral to the trial which will enable the most efficient route planning in response to the data analysis. Electric pedestrian cleaners shall also form part of the project trials.
- The deployment of smart technology in this way will provide an opportunity for Dundee to become a leader in new technologies referred to as the 'Internet of Things' and 'big data'. The project team will be collaborating with the other cities in Scotland, academics and business to quickly become leading experts in rolling out advance digital solutions in city services. The data from litter

- operations can, when shared in the Dundee Data Platform, also be used to provide insights useful to planning and managing other city services.
- 4.5 The project will be managed using the PRINCE2 methodology, in compliance with the project monitoring regulations associated with the ERDF grant funding. The project will be led and managed by Neighbourhood Services Environment, working with a project board comprising of representatives from key partners and in conjunction with the Scottish Cities Alliance Smart Waste Group. Governance will be provided by the Council's Digital Oversight Board, and the Scottish Cities Alliance board.
- 4.6 The Smart Waste project will be delivered across four work packages which broadly align with the deliverables:

Work Package	Summary	By Date
Mobilisation	Develop project initiation document and consult stakeholders and other cities on collaborative issues.	June 2017
Procurement and Deployment of technologies	Procure mix of bin types, vehicle and operator equipment.	April 2018
Operate and benefits realisation.	Test changes to operation to gain efficiencies, carbon reductions and improved environmental outcomes.	Dec 2018
Disseminate and plan future roll out	As per ERDF requirements produce communication material on lessons learned and future roll out options.	April 2019

5. POLICY IMPLICATIONS

5.1 This report has been screened for any policy implications in respect of Sustainability, Strategic Environmental Assessment, Anti-Poverty, Equality Impact Assessment and Risk Management. There are no major issues.

6. **CONSULTATIONS**

6.1 The Council Management Team have been consulted in the preparation of this report.

7.0 BACKGROUND PAPERS

7.1 None.

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10 May 2017