# ITEM No ...2......

REPORT TO: CITY DEVELOPMENT COMMITTEE – 20 AUGUST 2018

REPORT ON: TENDER FOR THE PROVISION OF SMART AND INNOVATIVE MOBILITY SERVICES FOR THE MOBILITY INNOVATION LIVING LABORATORY

REPORT BY: EXECUTIVE DIRECTOR OF CITY DEVELOPMENT

**REPORT NO: 211-2018** 

### 1 PURPOSE OF REPORT

1.1 This report details tenders received and requests a decision on acceptance thereof.

### 2 **RECOMMENDATION**

2.1 Approval is recommended of (1) the acceptance of the tenders submitted by the undernoted contractors and (2) the undernoted total amount, including allowances, for each project.

Project Reference Project Description	Contractor	Tender Amount	Fees and Other Costs	Total Amount
Provision of Smart and Innovative Mobility Services for the Mobility Innovation Living Laboratory: Lot 1. Advanced mobility services for the public.	Co-Wheels	£128,820	-	£128,820
Provision of Smart and Innovative Mobility Services for the Mobility Innovation Living Laboratory: Lot 2. Advanced fleet services	E-Car Club	£51,800	-	£51,800
Provision of Smart and Innovative Mobility Services for the Mobility Innovation Living Laboratory: Lot 2. Advanced fleet services.	Enterprise	£150,250	-	£150,250
Provision of Smart and Innovative Mobility Services for the Mobility Innovation Living Laboratory: Lot 3. Advanced parking services.	Atkins	£283,879	-	£283,879
Provision of Smart and Innovative Mobility Services for the Mobility Innovation Living Laboratory: Lot 3. Advanced parking services.	Just Park	£132,600	-	£132,600
Provision of Self Service Bike Hire Scheme: Lot 5	Ride On	£0	-	£0
Provision of Self Service Bike Hire Scheme: Lot 5	Urbo	£0	-	£0

- 2.2 It is recommended that no award be made under Lot 4, but instead an additional tender process is initiated with the aim of integrating the services provided through the projects above. Details are available in Appendix 2.
- 2.3 It is recommended that approval is given for officers to negotiate time and financial amendments with Scotland's Smart City Programme office to allow for future Lot 4 alternatives.

# 3 FINANCIAL IMPLICATIONS

3.1 The Executive Director of Corporate Services has confirmed that funding for the above projects is available, totalling £747,349. Details are available in Appendix 1.

### 4 BACKGROUND

- 4.1 With reference to City Development Committee Report 101-2017 (Article VII of the minute of meeting of this Committee of 27th March, 2017) and City Development Committee Report 354-2017 (Article VI of the minute of meeting of this Committee of 30 October 2017 refers), Dundee City Council has secured funding to establish the Mobility Innovation Living Lab (the MILL) and appointed Urban Foresight as programme manager in October 2017.
- 4.2 The MILL aims to establish Dundee as a real-life test and experimentation environment for smart mobility solutions, encompassing new technologies, business models and regulatory frameworks. It is about delivering positive change to mobility that improves wellbeing and quality of life, connecting people with services and enhancing economic opportunity for all as well as ensuring Dundee City Council benefits from targeted deployment of emerging transport technologies. The MILL brokers access to the city's infrastructure, data and citizens, who will be engaged in the co-creation of solutions that meet real needs.
- 4.3 Dundee City Council has received European Regional Development Fund (ERDF) funding through Scotland's smart city programme named "Scotland's 8th City" to establish the MILL and deliver a programme of pilot projects in the smart mobility space.
- 4.4 The intention is that The MILL contributes further to Dundee's reputation as a local, national and international beacon for smart mobility projects and as a centre of excellence for design and innovation.
- 4.5 Dundee City Council has identified 5 specific opportunity areas for the first round of innovation pilots, which comprise Lots 1-5 to be awarded under this contract:
  - a Lot 1: advanced mobility services for the public solutions to increase public use of shared mobility services and/or reduce the use of fossil fuelled vehicles;
  - b Lot 2: advanced fleet services solutions to increase shared use of mobility assets or reduce the use of fossil fuelled vehicles amongst corporate fleets;
  - c Lot 3: advanced parking services technology and physical infrastructure to enhance the management and experience of using the city's parking assets and provide data to support the development of new mobility products and services; and
  - d Lot 4: advanced use of urban data advanced use of urban data and intelligence to enhance the experience of using mobility services or facilitate the development of new data-led mobility services or products.
  - e Lot 5: zero cost bike hire schemes, including deployment of both conventional and e-bikes (bikes with electric motor assistance).

Tender assessment information is detailed within Appendix 1.

4.6 The Council is seeking to award contracts to suppliers that have a relevant innovative product, technology or service which is developed to a suitable level to be tested, trialled and refined in a live trial environment. The intention is that through the living laboratory process the solution can be refined, a sustainable business model identified, and routes to market established to allow the Solution to be commercialised and shared with other cities.

- 4.7 Following an open procurement exercise, approval is recommended to award contracts and initiate an additional procurement exercise to ensure the objectives of the MILL are achieved and benefits realised for the Council within timescales associated with the ERDF funding.
- 4.8 Project description of the recommended projects to be awarded under each lot are provided in Appendix 2.
- 4.9 The recommendation to award 2 contracts in each of Lots 2, 3 and 5 has been taken on the basis of the offers being complementary and affordable within the brief issued to the tenderers.

# 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 All members of the Council Management Team have been consulted and are in agreement with the contents of this report.

### 7 BACKGROUND PAPERS

7.1 None.

Mike Galloway Executive Director of City Development Neil Gellatly Head of Roads and Transportation

NHG/JB/KM

24 July 2018

Dundee City Council Dundee House Dundee

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# APPENDIX 1: TENDER ASSESSMENT INFORMATION

CLIENT	CITY DEVELOPMENT		
PROJECT NUMBER PROJECT PROJECT INFORMATION	Provision of Smart and Innovative Mobility Services for the Mobility Innovation Living Laboratory		
ESTIMATED START AND COMPLETION DATES	September 2018 December 2019		
TOTAL COST	Lot 1 contracts£128,820Lot 2 contracts£202,050Lot 3 contracts£416,479Lot 5 contracts£0Non contract allowances $£0$ Fees $\_$ Total $\_$ $£747,349$		
FUNDING SOURCE	European Regional Development Fund£298,940 (40%)Scottish Cities Alliance Investment Fund£82,208 (11%)Dundee City Council Capital Plan£146,000Dundee City Council Car Parking Reserve£220,201		
REVENUE IMPLICATIONS	None		
POLICY IMPLICATIONS	There are no major implications		

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CLIENT	CITY DEVELOPMENT	CITY DEVELOPMENT					
TENDERS	Lot 1 tenders were received from 8 contractors, as described below:						
	Contractors	<u>Tender</u>	Quality Ranking	Combined Price/Quality Ranking			
	Co Wheels	£128,820	1	1			
	Conigital	£195,000	2	2			
	Ecar Club	£54,550	3	3			
	Enterprise	£146,200	4	4			
	IBI Group (Project 1)	£198,460	5	5			
	IBI Group (Project 2)	Did not meet Project Brief	-	-			
	IBI Group (Project 3)	Did not meet Project Brief	-	-			
	Indigo Park Services	£199,875	6	7			
	NCP	£57,000	7	6			
	Ubitricity	Did not meet Project Brief	-	-			
	Lot 2 tenders were received	Lot 2 tenders were received from 7 contractors, as described below:					
	Contractors	Tender	Quality Ranking	Combined Price/Quality Ranking			
	Ecar Club	£51,800	1	1			
	Enterprise	£150,250	2	2			
	Co Wheels	£161,065	3	3			
	Mobiag	£48,600	4=	4			
	NCP	£57,000	4=	5			
	Urban Integrated	£140,212	6=	6			
	The Virtual Forge	£195,440	6=	7			
	Lot 3 tenders were received	Lot 3 tenders were received from 8 contractors, as described below:					
	Contractors	<u>Tender</u>	Quality Ranking	Combined Price/Quality Ranking			
	Just Park	£132,600	1	1			
	Atkins	£283,879	2	2			
	Pelican (Smart Parking Ltd)		3	3			
	NCP	£83,725	4=	4			
	Chipside Ltd	£325,730	4=	5			
	Flexisolar	£395,400	4=	6			
	Swarco	£397,522	4=	7			
	Indigo Park Services	£400,000	8	8			
		~ 100,000	0	<b>v</b>			

	Lot 5 tenders were received from 2 contractors, as described below:				
	Contractors	<u>Tender</u>	Quality Ranking	Combined Price/Quality Ranking	
	Ride On Urbo	£0 £0	1 1	1 1	
CLIENT	CITY DEVELOPMENT				
	The consensus of the assessment panel was that none of the proposals submitted under Lot 4 sufficiently represented value for money for the Council or fully addressed the objectives of the 'Mobility Intelligence Work Package' within Dundee City Council's ERDF funding proposal Hence, it was decided that not awarding under Lot 4 and initiating an additional, more prescriptive procurement exercise would achieve the best outcomes for the Council.				
RECOMMENDATION	On price and quality basis it was agreed to recommend awarding contracts to: CoWheels Enterprise ECar Club Atkins Just Park Ride On Urbo				
ALLOWANCES	None				
SUB-CONTRACTORS	None				
BACKGROUND PAPERS	Report 101-2017 to the 27 M https://www.dundeecity.gov.u	arch 2017 City Development ik/minutes/article?articlekey=	Committee: -71563		
	Report 354-2017 to the 30 October 2017 City Development Committee: https://www.dundeecity.gov.uk/minutes/article?articlekey=73533				

### **APPENDIX 2: PROJECT DESCRIPTIONS**

#### Lot 1: Advanced Mobility Services For The Public

The project identified under Lot 1 aims to significantly improve the use of electric car club vehicles in Dundee, reducing the need for private car ownership within the city and presenting a flexible, easy-to-use option for visitors to get around the city and surrounding region. This in turn will help to deliver a reduction in carbon emissions and air pollution in terms of NOx and PM10 readings caused by transport in the city through a reduction in the number of journeys made by private, fossil fuelled vehicles.

This will be achieved through a series of innovations within **Co-Wheels** existing car club service operating in Dundee, namely: smart use of Dundee City Council mini buses; linking electric car club cars and solar power; growth and technical developments for the car club; fully integrated service, plus enhanced links with National Entitlement Card and other lifestyle providers; opening fleet and pool cars for wider public use, and; potential integration with future bike hire services.

Key target outcomes:

- utilisation rates of 25% or higher for all vehicles fitted with Co-wheels technology;
- at least 20 more vehicles fitted with Co-wheels telematics;
- a reduction in "down-time" usage of vehicles fitted with Co-wheels technology;
- at least 100 new members using the Co-wheels service in Dundee;
- at least two new electric cars into the Dundee Co-Wheels fleet, in line with the two rapid charging hubs being commissioned; and
- greatly enhanced functionality for the App and booking platform.

#### Lot 2: Advanced Fleet Services

The projects identified under Lot 2 seek to enable the sharing of fleet vehicles within and across local companies and the Council, resulting in cost savings to participating organisations as well as increased shared mobility options for employees and the public. This in turn will help to deliver a reduction of transport costs for fleet operators through sharing of assets and a reduction in carbon emissions and air pollution in terms of NOx and PM10 readings caused by transport in the city through a reduction in the number of journeys made by private, fossil fuelled vehicles. It will also build on Dundee's leadership in the roll-out of Electric Vehicles through increasing the number and accessibility of EVs in the city.

The first project will work within the context of a specific organisation, Blackwood Homes, a major care business operating in Dundee, with the aim of reducing reliance on fossil fuelled "grey fleet" vehicles. **E-Car Club** will introduce fully electric vehicles and associated charging infrastructure at centrally located Blackwood sites for shared use by Blackwood staff for travel between clients' homes and other operational requirements and to the wider community for their personal transport requirements. The project will enable the experimentation with new task allocation software alongside the existing innovations in the car club platform by providing a live scenario for testing. It will build on the existing studies and seeks to deliver a wider behaviour change platform to act as an ideal case study for other businesses across the UK.

Key target outcomes:

 cost savings for Blackwood compared to the alternatives of grey fleet, directly owned pool cars or taxis;

- providing the community with a valuable transport resource, particularly for care providers, who are the focus of this initial trial;
- increased the staff time efficiency for the organisation and meaning they can spend more time fulfilling their role rather than travelling; and
- creating a catalyst for this business to adopt an EV car sharing model across all of its operations and act as a flagship scheme for other businesses.

The second recommended project will make available a fleet of low emission car club vehicles for shared use by public and private sector organisations within Dundee. **Enterprise** is in a unique position of being able to guarantee this usage due to being sole supplier of car hire to the Scottish Government, Police Scotland, and NHS Scotland all of whom are currently interested in using ECC as an alternative to grey fleet and car hire, as well as over 60 corporate accounts in Dundee each month via traditional car hire having operated in the City for over 20 years.

Key target outcomes:

- increased efficiency from organisations using the car club model and in addition this would make savings from a C02 perspective as it would eradicate the need for Enterprise to send two cars into the city in order to perform a delivery;
- utilisation of a combination of hybrid, plug in hybrid and 100% Electric vehicles in Dundee providing members with the greatest amount of choice;
- reduced use of conventional fuelled vehicles by businesses and organisations;
- improved utilisation of transport assets held by business and organisations;
- facilitated access to public sector transport assets by the broader community.

#### Lot 3: Advanced parking services

The two projects recommended to be awarded under Lot 3 will greatly improve the user experience of parking in the city and give Dundee City Council greater flexibility and control in managing its parking assets. This will enable the Council to use parking in the city centre as a key, dynamic component in implementing, for example, Low Emission Zones or incentives for uptake of shared and low carbon mobility.

The first recommended project would see all 530 city centre on-street parking bays equipped with intelligent sensors as part of smart city parking system provided by **Atkins and AppyParking**. The solution will consolidate digitised parking data, parking sensors and the management of existing parking assets and enhance the user experience of parking. It will give drivers the ability to: navigate directly to available bays; visualise capacity of parking across the city in real time; understand clearly the pricing for parking in each location; receive a notification on their mobile phone to start payment for a parking session when they park in a bay; effortlessly pay only for the minutes parked; get clear and free notifications if an active payment is due to expire, and; have parking sessions end automatically by simply driving out of the bay.

Key target outcomes:

- establishing a benchmark for projected financial uplift that Smart City Parking will provide Dundee City Council in terms of cashable and non-cashable benefits;
- an increase in bay occupancy turnover 3-6% estimated bottom line uplift;
- an increase in length of stay 3-6% estimated financial uplift;

- reduction in payment avoidance 2-4% estimated financial uplift;
- increase in PCN revenue 5% estimated contravention detection increase;
- providing data to Dundee City Council to help them understand and optimise the location of electric vehicle charging points, and put Dundee on the map as a leader in trialling and developing parking.

The second recommended project would introduce a range of innovations making cashless parking payment in Dundee more accessible and intelligent. **Just Park**'s innovations will include: pre-booking and optimising the utilisation of EV charging points; digital high street parking validation service; pay-on-exit and auto pay; hospital concessions; friendly enforcement Service; dynamic and emissions-based charging; predictive availability service, and; parking discovery service.

Key target outcomes:

- reducing congestion and improving local air quality;
- significantly improve the motorist's experience;
- drive footfall on to the high-streets; and
- generate additional income for the local authority through advertising, increased compliance or additional parking revenue through emission based or dynamic pricing.

#### Lot 5: Zero Cost Bike Hire Scheme

The two operators recommended to be awarded under Lot 5 will allow access to short term cycle hire for residents, visitors and businesses/organisations/institutions. Any improvement to active and sustainable transport options will improve health of users and the environment through zero emission transport.

As well as conventional push bikes the inclusion of e-bikes will build on our electrification of transport strategies as well as offering the opportunity to travel by bike for persons of restricted mobility.

Both tenderers have offered a NIL cost tender to operate in the Dundee City Council area and will allow an easy to use cycle option for short term use.

**Urbo** will operate the "Bike Share" conventional dockless push bike scheme and **Ride On** will operate a docked electric bike scheme, with initial investment and operating costs recovered through membership and pay as you go user fees.

#### **Programme Integration**

Through the MILL, these individual projects will be delivered as a joined-up, living laboratory programme, and collaboration across projects will be enabled where beneficial. To maximise the benefits of integration across the projects described above, it is recommended that an additional, more prescriptive procurement exercise is initiated for a software solution to integrate the services offered in the projects above (as well as other services such as public transport). This would be a consolidated journey management system and present a single Dundee-branded app/web service through which users can easily access the range of services.

With this solution in place, the MILL ShareMORE programme will aim to deliver a first-of-a-kind mobility demonstrator offering Dundee residents, businesses and visitors with a single service to access (electric) vehicles from Scotland's three main Car Clubs (including underutilised DCC vehicles) and smart parking anywhere in the city centre off- or on-street. This would provide a genuine alternative to private car ownership for many households across the city, and a flexible, easy-to-use option for visitors

to get around the city and surrounding region, this will also explore integration with ongoing smart travel initiatives through the National Entitlement Card (NEC) and ABC ticket schemes.

Key target outcomes:

- by making car club use through Scotland's three leading car club operators, as well as Dundee City Council vehicles, available for public use through a single service, will create a scale and range of vehicles significantly beyond what would be possible otherwise - as well as clear roll-out opportunity to other Scottish cities;
- through incorporating smart-parking (on and off street), the service can address one of the key user "pain points" and causes of inner city congestion;
- a "mobility as a service" project (MaaS) that builds in competition from service providers from Day One, creating a market place for mobility services rather than a single, locked-in consortium; and
- Car Clubs and Parking create a critical mass and could start to include others (eg bus services and Lot 5 solution), incorporate previous MaaS research projects in and around Dundee, and allow integration with NEC.