

ABERDEEN CITY COUNCIL

COMMITTEE	Strategic Commissioning
DATE	7 June 2018
REPORT TITLE	Joint Initiative for hydrogen Vehicles across Europe (JIVE)
REPORT NUMBER	RES/18/040
DIRECTOR	Steve Whyte
CHIEF OFFICER	Stephen Booth
REPORT AUTHOR	Andrew Win
TERMS OF REFERENCE	Remit of Committee: 3.1, 3.2, 3.4

1. PURPOSE OF REPORT

- 1.1 This report provides an update on the Joint Initiative for hydrogen Vehicles across Europe (JIVE) and seeks approval to procure vehicles and hydrogen supply to deliver the project.

2. RECOMMENDATION(S)

That the Committee:-

- 2.1 Delegate authority to the Head of Commercial & Procurement Services to enter into a contract to purchase ten hydrogen fuel cell buses from the UK joint Hydrogen Fuel Cell Bus contract framework, subject to the Council entering into a commitment with a bus operator;
- 2.2 Instruct officers to identify the most economically advantageous option to procure a hydrogen supply and delegate authority to the Chief Officer – Capital, following consultation with the Chief Officer – Finance and the Head of Commercial & Procurement Services, to undertake a joint procurement process with Dundee City Council to appoint a supplier of hydrogen.

3. BACKGROUND

- 3.1 Details of the European Funded Joint Initiative for hydrogen Vehicles across Europe (JIVE) Project have previously been presented to Finance, Policy & Resources Committee – 1 December 2016, 9 March 2017 and 1 December 2017. Officers were instructed to provide updates on the project. JIVE aims to further develop the hydrogen bus fuel cell technology and apply the learning from projects delivered and/or underway to bring a new generation of hydrogen fuel cell buses that are more reliable, economical and fuel efficient.

3.2 Purchase of Buses

3.2.1 Aberdeen is a partner with four other UK Cities - London, Birmingham, Dundee and Brighton - and this consortium has undertaken a joint procurement exercise to procure hydrogen fuel cell buses for the UK. This process was led by Transport for London commercial procurement team. The joint procurement exercise has recently finished and a framework agreement is in place with two bus OEMs (Original Equipment Manufacturer). The framework agreement sets a number of commercial terms for the OEMs to meet and these are as follows:-

3.2.2

Term	Detail/Consideration
Price	Less than £600,000 per bus (as required by the European Funding requirement of less than €650,000 per bus)
Warranties	90% bus availability Performance warranties on all major components including the bus structure, chassis, fuel cell, drive train, and batteries.
Service Support	Manufacturer responsibility for endemic/epidemic faults Parts, maintenance and technical support performance obligations

3.2.3 To maximise the benefit of the framework agreement, partners have agreed to order 60 fuel cell buses in one order in the next few months. As a result, officers require approval from committee for Aberdeen City Council to purchase ten hydrogen fuel cell buses through this framework.

3.3 Renewable Hydrogen Production & Supply

3.3.1 Offices have prepared a business case for the renewable hydrogen production and supply procurement exercise. The attached business case (Appendix 1) outlines the business needs, financial costs and preferred option to procure commercially viable source of renewable hydrogen to supply Aberdeen and Dundee City Council's hydrogen fuel cell bus and vehicle fleets.

3.3.2 The production and supply of hydrogen from renewable sources enables successful implementation of the additional ten hydrogen fuel cell buses and contributes to the Aberdeen Region Hydrogen Strategy and Action Plan 2015-2025. A recent market sounding exercise has demonstrated interest from suppliers and businesses, both local and international, to produce and supply 1300kg of hydrogen per day to serve hydrogen fleets in Aberdeen and Dundee. The key principle of the supply is that it will be delivered on a commercial basis and this is essential in ensuring the continued development of the hydrogen sector in Scotland.

3.3.3 Scope of the joint procurement exercise with Dundee City Council includes: design, build and operation of a hydrogen production facility; production of 1300kg of green hydrogen to meet both cities' needs; and distribution of the hydrogen at an agreed target price.

4. FINANCIAL IMPLICATIONS

4.1 As detailed at Finance, Policy & Resources Committee on 1 December 2018, this project has budgeted costs of £7.2m. This is comprised of £4.7m from external grants and £2.5m allocated from the General Fund Capital Budget at Council on 23 August 2017.

4.2 The recommended procurement approach would allow the Council to engage with bidders during the tender process. This lends itself to competitive dialogue and negotiated procedure – ensuring viable submissions and innovative solutions can be developed.

5. LEGAL IMPLICATIONS

5.1 The framework agreement and call off contract's terms and conditions can be utilised by the Council for the purchase of the 10 buses and have been reviewed by the Commercial Legal Team.

5.2 Procurement documents and terms and conditions for the hydrogen production and supply procurement will be developed in consultation with C&PS, including the Commercial Legal Team.

6. MANAGEMENT OF RISK

Procurement		Risk	Low (L), Medium (M), High (H)	Mitigation
OEM Bus Purchase Framework & Call Off Agreement	Financial	Additional costs associated with bus operator requirements	L	Early engagement has been had with bus operators and previous requirements have been shared when the tender specification was prepared.
	Legal	Contract call off agreement causes	L	The approval to enter into the call off contract will

		delays		ensure that this is completed in the timescales required.
	Employee	Demand on staff resources for delivering contracts on time	L	Services across council already engaged with process
	Customer	Delays in project may impact bus deployment timescales for bus operators	L	Flexibility has been built into contracts and delivery strategies
	Environment	The system must be safe and compliant with HSE regulations	L	Suppliers will be appropriately checked to ensure safety aspects of delivery are not compromised
	Technology	Failure in maintenance supply chain may result in operation downtime	L	A schedule of components and their supply routes will be compiled to ensure that any maintenance items are easily traceable and accessible
	Reputational	Failure to develop adequate joint contracts may affect working relations with colleagues from external organisations	L	Back-to-back contracts will be developed with partner organisations, such as Transport for London, Birmingham.
Hydrogen Production and Supply	Financial	Failure for market to deliver tender requirement	L	A market sounding exercise has demonstrated that there are many suppliers and interested businesses who could deliver the requirement.
	Legal	Contract finalisation causes delays	L	The contracting process has begun with early stage discussions to mitigate potential delays
	Employee	Demand on staff resources for delivering contracts on time	L	Services across council already engaged with process
	Customer	Delays in project may impact bus deployment timescales for bus operators	L	Flexibility has been built into contracts and delivery strategies
	Environment	The system must be safe and compliant with HSE regulations	L	Suppliers will be appropriately checked to ensure safety aspects of delivery are not compromised

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7. OUTCOMES

Local Outcome Improvement Plan Themes	
	Impact of Report
Prosperous Economy	Delivers on LOIP primary drivers of: Investment in infrastructure; innovation; inclusive economic growth; and internationalisation.

8. IMPACT ASSESSMENTS

Assessment	Outcome
Equality & Human Rights Impact Assessment	Full EHRIA not required
Privacy Impact Assessment	Not required
Children's Rights Impact Assessment/Duty of Due Regard	Not applicable

9. BACKGROUND PAPERS

Aberdeen City Council:

CHI/16/258 – FCHJU JIVE Business Case

CHI/17/050 – JIVE Project: Grant Agreement

CHI/17/260 - FCHJU Fuel Cell Bus Commercialisation Project

Aberdeen City & Region Hydrogen Strategy and Action Plan 2015-2025

10. APPENDICES

Business Case – JIVE: Renewable H2 Production and Supply

11. REPORT AUTHOR CONTACT DETAILS

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