

ITEM No ...7.....

REPORT TO: CITY DEVELOPMENT COMMITTEE – 27 JANUARY 2020

REPORT ON: PUBLIC WI-FI / 5G PROJECT

REPORT BY: EXECUTIVE DIRECTOR OF CITY DEVELOPMENT

REPORT NO: 7-2020

1 PURPOSE OF REPORT

1.1 To seek approval for the award of the main works contract to deliver the public Wi-Fi / 5G project at Dundee Central Waterfront and adjacent areas.

2 RECOMMENDATION

2.1 It is recommended that the Committee:

- a approves acceptance of the tender price of £549,521 capital and £10,000 revenue (per year over 7 years) from AWTG Limited.
- b notes progress in concluding a Heads of Terms agreement with Abertay University, as project research partner and remits the Head of Democratic and Legal Services to conclude a legally binding agreement between the respective parties.

3 FINANCIAL IMPLICATIONS

3.1 The Executive Director of Corporate Services has confirmed that capital funding for the above project is available as detailed on the attached sheet at Appendix 1.

3.2 The revenue cost of £10,000 per year (over 7 years) will be met from the City Development Economic Development budget.

3.3 The delivery of this project will assist in developing a robust business case to unlock the £2 million assigned in the Tay Cities Deal Heads of Terms for 5G testbed use case development and position Dundee to lead on this.

4 BACKGROUND

4.1 Reference is made to Article XV of the minute of the meeting of City Development Committee on 9th September 2019 where committee noted progress towards delivery of the project and procurement of the main works contract. The Executive Director of City Development was remitted to conclude a Heads of Terms agreement with Abertay University as the proposed academic research partner.

4.2 The Council's Digital Strategy has set out an ambition for the city to become a Smart City with the highest possible quality of digital connectivity to improve quality of life and economic development. This project seeks to develop the citywide infrastructure necessary to deliver that ambition.

4.3 The project objectives are:

- a The creation of a 5G testbed environment within the Central Waterfront Investment Area.
- b The provision of high quality free public Wi-Fi within the Central Waterfront Investment Area and adjacent Development Areas.

- 4.4 5G is short for 'fifth generation mobile networks'. It will provide much faster data download and upload speeds. 5G will offer connections that are up to twenty times faster than current connections, with average download speeds of around 1GBps expected as the technology evolves. The networks will help power a rise in Internet of Things technology, providing the infrastructure needed to carry very large amounts of data, allowing for a smarter and more connected world.
- 4.5 The procurement of the main works contract was, progressed utilising the competitive dialogue route. The process has been managed through Public Contracts Scotland. Following a pre-selection stage in May/June 2019, 3 bidders were invited to participate in dialogue with 2 taking advantage of this opportunity. Dialogue with bidders took place in late October and early November 2019. The Invitation to Submit Final Tender (ISFT) was issued on Public Contracts Scotland (PCS) on November 21st 2019 with a response deadline of 13th December 2019. One tender response was received from AWTG Limited.
- 4.6 The proposal was formally evaluated and scored during week commencing 16th December. The evaluation group concluded that the bid was compliant and recommended that it be taken forward to committee for approval. AWTG Limited designed and installed the first ever 5G Test Infrastructure in the UK and one of the first in the world at the University of Surrey. AWTG Limited also has a strong track record in the UK regarding Wi-Fi network design and deployment - for example, having deployed key networks in Central London for the 2012 Olympics, across Barnsley and Kingston, among others.
- 4.7 Subject to Committee approval and the required standstill period, it is anticipated that the contract will be formally awarded on 10th February 2020 with the main works within the Central Waterfront Area expected to be completed by the end of 2020. This timescale has a number of dependencies. These include lead times for the design, ordering and replacement of some street lighting columns and the requirement to avoid disruption to events within Slessor Gardens. Where existing street lighting columns are replaced these will be re-used in other parts of the city.
- 4.8 The contract will deliver the infrastructure needed for provision of free public Wi-Fi and the 5G testbed. The tender cost includes the supply and installation of fibre in the Central Waterfront Investment Area (including fibre connection back to Abertay University), the supply and installation of equipment required to operate the outdoor public network within the Central Waterfront Investment Area and the supply and installation of 5G testbed enablement equipment within the Central Waterfront Investment Area. The supplier will also extend Public Wi-Fi coverage to the development areas highlighted in the map at appendix 2 at no cost to Dundee City Council.
- 4.9 In developing the 5G testbed project proposal cognisance has been taken of relevant guidance in respect to possible health effects. In particular, the Scottish Government's position statement in relation to 5G and public health. This draws on evidence based advice from ICNIRP (International Commission on Non-Ionizing Radiation Protection), which is formally recognised by the World Health Organisation, and Public Health England (PHE), who have the scientific expertise to assess the literature on this subject. It is noted that "Radio waves have been transmitted into the environment for many years, they deliver broadcast radio and television signals and support emergency services and others". Furthermore, the position statement goes on to note, "there is no convincing evidence that radiofrequency field exposures below international guidelines cause health effects in either adults or children". In summary it is noted that "on the basis of sustained evidence-based research from around the world, ICNIRP concludes that exposure to electromagnetic fields (EMF) below the recommended threshold is unlikely to be associated with adverse health effects in either adults or children. This view is fully supported by PHE" and "The advice provided by PHE is fully endorsed by the Chief Medical Officer for Scotland".

- 4.10 The Executive Director of City Development was remitted to conclude a Heads of Terms agreement with the School of Design & Informatics at Abertay University. This is now being finalised prior to formalising a legally binding agreement. The School will offer access to expertise in Cybersecurity, Internet of Things and Mobile Games Development through existing R&D centres through 'use case' proposals. They will provide a host room for telecommunications equipment, network access for the Public Wi-Fi Service and 5G Testbed in the Waterfront Area (via the Janet network) and will engage and work with the Supplier to provide active research participation in the testbed.
- 4.11 On December 16th 2019, Abertay University officially opened the School of Design & Informatics. At its heart is an Emergent Technology Centre including a development studio for experimental games design and hacking projects, a Visual Design Studio for digital arts research, a Usability Lab kitted with eye-tracking equipment, specialist cameras and an observation room, An XR (Extended Reality) Lab for experimentation with room-scale Virtual Reality, motion tracking and multi-user Augmented/Mixed Reality projects. The new facilities will allow staff and students to engage with product prototyping, using rapid manufacturing technologies and innovative new mobile Internet of Things services, in partnership with the 5G Testbed.

5 POLICY IMPLICATIONS

- 5.1 This report has been subject to an assessment of any impacts on Equality and Diversity, Fairness and Poverty, Environment and Corporate Risk. There are no major issues.

6 CONSULTATIONS

- 6.1 The Council Management Team were consulted in the preparation of this report.

7 BACKGROUND PAPERS

- 7.1 None.

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GH/R/EC

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APPENDIX 2



