



Belfast City Council

Report to:	Development Committee
Subject:	QUESTOR Centre Membership
Date:	15 September 2010
Reporting Officer:	Mr John McGrillen, Director of Development, ext 3470
Contact Officer:	Ms Shirley McCay, Head of Economic Initiatives, ext 3459

Relevant Background Information

Established in 1989 at Queen's University Belfast, the QUESTOR Centre is Europe's only Industry University Co-operative Research Centre (I/UCRC). The I/UCRC concept is a highly successful model developed by the National Science Foundation (NSF) in the United States where more than 30 such centres have been operating successfully for more than 20 years. QUESTOR has been formally linked to the NSF Programme since its formation in 1989.

The QUESTOR Centre provides member companies and organisations with a world class environmental research programme focussed on their specific needs. In addition the Centre has developed a unique model for the transfer of technology and knowledge to member organisations and for the commercial exploitation of research conducted. The centre serves a select membership made up of environmental regulators and environmentally responsible companies, ranging in size from large multi-national corporations through to forward looking Small and Medium Sized Enterprises (SMEs). Members include BP, Exxon Mobil, Chevron North Sea Limited, Bombardier, Coca Cola Northern Ireland, Northern Ireland Water and the Northern Ireland Environment Agency.

The Members vote on project proposals at Industry Advisory Board (IAB) meetings which are held twice yearly. Typically there are in the region of 14-15 funding proposals submitted at each IAB Meeting and, depending on funding, approximately 8 of these are approved for funding.

QUESTOR have developed their work along the lines of 4 priority areas and have established associated research clusters in each of these areas:

- Waste Management and Remediation;
- Environmental Monitoring;
- Water and wastewater treatment; and,
- Renewable energy technologies.

Belfast City Council officers have been involved in the establishment of and are currently represented on both the Waste Management and Remediation and the Renewable Energy clusters.

As part of Council's environmental industries action plan developed in 2007, Belfast City Council agreed to take an introductory two-year trial Associate Membership (2008 and 2009) of QUESTOR. As an Associate Member, Council is currently represented on QUESTOR's Industrial Advisory Board (IAB) and can have a direct influence in determining the strategic direction of the annual research programme. The IAB votes on and selects all research proposals and monitors progress on active research projects. Additionally, the Council has access to the research conducted and, on completion, receives recommendations for technology transfer and commercial exploitation opportunities. Finally, the Associate Membership enables the Council to represent the interests of small businesses from within Belfast as the current level of SME membership of £5,000 has proven to be quite prohibitive for small businesses. This will allow the SME sector to gain access through Belfast City Council's Associate Membership to the new technologies, knowledge and prototypes that are developed as part of the research programme.

Through the two-year trial membership, representatives from both Economic Development and Waste Management have been developing both our understanding of the QUESTOR process and relationships with the academic and industrial partners from within the QUESTOR membership. In both November 2007 and May 2010, Council hosted the IAB meeting in City Hall. Council have also been approached in order to champion a project at the IAB meeting in November 2010 concerning the development of new technologies aimed at promoting sustainable renewable energy solutions which is a large and growing global market. Additionally, officers have engaged with businesses from within the environmental sector in order to facilitate their introduction to the (Research and Development) R&D capabilities within the QUESTOR Centre.

Key Issues

It is envisaged that the world market for low carbon and environmental goods and services will be in the region of £3,000billion this year and growing by an estimated 5% year on year despite the impacts of the recession. In Northern Ireland, the sector is worth £3.3billion with 1,620 businesses employing 30,600 people. It is further anticipated that the promotion of environmental technologies and the development of renewable energy will assist with addressing the impacts of the economic downturn.

QUESTOR is at the leading edge of research into these technologies and provides access to the research undertaken to their member companies. This will ensure that relevant Council sections have access to the latest research on waste management and remediation, pollution control and renewable energy but will also enable officers to play an advocacy role on behalf of Belfast based SMEs and facilitate linkages into the R&D process.

At present only 1% of Northern Ireland's energy usage is provided for by indigenous renewable sources with the other 99% being imported. By 2020 at least 15% of the total UK energy consumption must come from renewable sources. QUESTOR has been successful in the early stages of a competitive process to establish a competence centre for sustainable energy. Invest Northern Ireland, who administer the programme, have awarded QUESTOR early stage funding for the project definition stage and the development of a business plan for the proposed Centre. The full proposal, if funded,

could lead to an investment of up to £10million over a 5 year period into research into renewable energy technologies.

The Director of QUESTOR has initiated discussions with officers in relation to the establishment of this centre and has indicated a desire not only to locate the proposed centre in Belfast, but also to engage with the Council in relation to the potential for locating the Centre on the North Foreshore site. This would be hugely significant in terms of the potential to create and sustain high value employment opportunities in emerging technologies in Belfast. Further, the centre will be firmly focused on research with proposals requiring a compelling commercialisation plan which in turn could create new business ventures.

Resource Implications

Membership would cost £10,000 for a further year.

Recommendations

It is recommended that the Committee approves a further year's membership for the QUESTOR centre and that officers continue to sit on QUESTOR's IAB. This will enable officers the opportunity to continue championing project proposals at the IAB meeting and to assist QUESTOR with the development of the proposal for the Competence Centre in Sustainable Energies.

Decision Tracking

If recommendation is accepted, an update will be presented to a future meeting of this Committee.

Time frame: September 2011 Reporting Officer: Shirley McCay

Key Abbreviations

I/UCRC – Industry University Co-operative Research Centre
SME – Small to Medium Sized Enterprise
NSF – National Science Foundation
QUB – Queen's University Belfast
IAB – Industrial Advisory Board
R&D – Research and Development