scrutiny











A Report of the **Economy & Culture Scrutiny Committee**

Higher Education Innovation In Cardiff

November 2013



Cardiff Council

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CHAIR'S FOREWORD

Cardiff Council has an important role to play in supporting businesses of all sizes within the city, particularly in the current economic climate where growth is vital to our local economy. This short scrutiny inquiry sits as part of a suite of work alongside our 2013 'Small Business' Task and Finish Inquiry, and the 'Central Markets and Arcades' Inquiry due to commence in early 2014.

Cardiff is in the fortunate position of having a number of successful Higher Education Institutions within the city, each with unique areas of expertise and providing the city with a highly-skilled population. These universities play an important role in driving innovation and growth through the successful exploitation of new ideas, turning these ideas into business or social capital.

It is increasingly acknowledged that partnership arrangements, cooperation and collaboration can drive increased benefits, and it is important to examine the relationships that the Council has in place with the key academic institutions in Cardiff. The Committee was encouraged to find that these relationships are developing in Cardiff, recognising that effective and inclusive partnerships don't appear overnight but are built on ongoing engagement and development of trust.

The short scrutiny received evidence from a range of sources, including Cardiff University, Cardiff Metropolitan University, University of South Wales, University of Wales, Cardiff Council, MedaPhor, Q Chip, Manchester City Council and the Local Government Association. I wish to express my thanks to all those who contributed to this scrutiny exercise, either in person or in writing, who willingly gave their time to assist us. Finally I would like to thank the scrutiny officers for their work throughout this short scrutiny and the development of this report.



Councillor Craig Williams
Chairperson, Economy & Culture Scrutiny Committee

INTRODUCTION

As a part of the Economy and Culture Scrutiny Committee work programme for 2012-13, the Committee agreed to consider Higher Education Innovation. It was decided that a short scrutiny inquiry held across two Committee Meetings would be the relevant means to consider this topic. Members received evidence at their Committee Meetings held on 4th July and 5th September.

SHORT SCRUTINY TERMS OF REFERENCE

The scope of the scrutiny was designed to provide an overview of innovation in the context of higher education institutions (HEIs) and to identify the role the Council can play in supporting HEIs for the benefit of the city as a whole.

The following terms of reference were used for this short scrutiny exercise:

"The short scrutiny will look at Innovation in general and will examine:

- What is innovation and what role do Higher Education Establishments play?
- The benefits for Cardiff that can emerge from innovation supported by Higher Education Establishments
- The policy context surrounding innovation in Wales
- The Councils current levels of support for / and partnership arrangements with Higher Education Establishments in Council
- The appropriateness of these levels of support
- Whether there is scope to improve and expand support for Higher Education Innovation
- Examples of good practice from relevant local authorities and universities.

The scrutiny will then produce recommendations based on the key findings that have emerged from the evidence.

KEY FINDINGS

Having received evidence on this subject at both their July and September 2013 Committee Meetings, Members identified a number of key findings for the Inquiry.

Overview

- KF1. Innovation is the successful exploitation of new ideas, turning these ideas into business or social capital. This can be through the development of new products, services or new ways of doing things, but more often it is a result of incremental changes or combinations of existing ideas and experience. Design is now being recognised as an important element of innovation policy and is being included in policies across Europe.
- KF2. The universities located in Cardiff provide great opportunities for the city as a whole. Each of the four universities based in the city have links with other academic institutions and businesses around the world, from Silicon Valley in the USA, to Geel in Belgium, creating opportunities for the city and making Cardiff part of a global network of academics, entrepreneurs and businesses. The universities are also investing in redeveloping areas of the city and constructing landmark buildings within Cardiff.
- KF3. The Council recognises the important role the universities based in the city have to play for the local economy. The universities in Cardiff have an excellent reputation in terms of innovation, two vice chancellors are involved in the Cardiff Business Council, and the universities have links with the wider Cardiff city region. Cardiff University was recognised by businesses as having a good internal structure for cross-department collaboration, and there is a good process in place in terms of commercialising products.
- KF4. Innovation Wales, the Welsh Government's innovation strategy for Wales demonstrates a commitment to innovation. It has adopted a focused approach with a single overriding principle the need to promote,

encourage and enable innovation across the whole economy, with key investments that have been made on the basis of clear strategic priorities, built on Wales' strengths. It states that "By promoting, encouraging and enabling innovation across the whole economy; private and public sectors, services and manufacturing, and working with partners, the Welsh Government can foster a culture and an environment for innovation [...]."

Partnership

- KF5. It is clear that Cardiff Council, and specifically its Economic Development Directorate are developing relationships with all the universities located in the city. Representatives from both Cardiff University and Cardiff Metropolitan University indicated that new ways of working in partnership with the Council are developing, and this is something that historically has not happened. Examples of projects undertaken between Cardiff Council and universities in Cardiff include:
 - Officers from Cardiff Council playing an ongoing role in the SPIDER
 (Supporting Public Service Innovation using Design in European
 Regions) Project. Members were informed that it may not have taken off
 had the Council not been involved and that there is an opportunity to
 build on this commitment to the Project by supporting officers to
 participate in the training that is developed through the Project.
 - Cardiff Council partnering with the University of South Wales and other organisations, to deliver the Venturefest Wales event that took place in Cardiff in July 2013.
 - Economic Development officers worked closely with representatives of the University of Wales to encourage an internet coding firm based in West Wales to relocate to Cardiff, rather than Bristol. This type of partnership working is helping build relationships with both the university and business community, and ensuring growing companies locate in Cardiff.

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¹ Innovation Wales, Welsh Government, 2013

- KF6. There is potential for further partnership between the Council and the universities in Cardiff. University representatives expressed a willingness to undertake joint forward planning and share 'master plans', with these being matched up for the benefit of the city. Dynamic universities want the city to keep pace, and complementary assets should be in place to support this. Opportunities exist for strategies such as the Council's Transport Strategy, Housing Strategy or Local Development Plan, to be matched up with expansion and development plans of the universities within the city.
- KF7. As the relationships between the Council and Cardiff based universities develop, there is scope for links to be made between Council and university departments, over and above those that exist with Economic Development. The Council could also a play role in signposting businesses to the correct/relevant university sections or employees, and could explore opportunities for university academics to assist and advise on internal Council projects or service redesign initiatives.
- KF8. Council officers and university representatives recognised that the connections between government (local and national), businesses and higher education establishments have historically been quite poor.
 Improvements are being made, with the Council working more closely with the Universities, and the establishment of the Cardiff Business Council, but there still remains a lot of work to do.
- KF9. The Vice Chancellors of Cardiff University and Cardiff Metropolitan University are both on the Cardiff Business Council Board, which is seen as a positive step for the city. This will provide the Council with a real opportunity to listen to and respond to the needs to both businesses and universities in Cardiff.
- KF10. Having four universities located within Cardiff provides potential opportunities for apprenticeships and community engagement work.

 Members were informed that the University of South Wales has an engagement strategy in place, particularly to work with schools in the city,

and that apprenticeships are part of the vision for the future in Cardiff University. This is something the Council should work closely with universities on, particularly in addressing the NEET agenda in the city.

KF11. Universities, businesses and other organisations in Cardiff are responsible for hosting events in the city that are attended by individuals from across the world. One such example is the Global Service Design Conference to be held in the Wales Millennium Centre in November 2013. Opportunities exist for the Council to promote the city to a global audience, and for Cardiff Council's Events Team to share their expertise, building relationships with the organisers.

Council Role

- KF12. Representatives of each university stated that the Council has an important role to play in attracting and retaining the best students to Cardiff, which directly influences levels of entrepreneurship and student start up companies. The Council can influence housing standards, transport links, the city's environment and reputation, and ensure Cardiff is a vibrant place to work and live. It was reported that there is a perception that Cardiff does not compete well with the attractiveness of larger cities in England as a place to do business, and as a place that attracts the highest quality workers. This is something the Council has a role in addressing.
- KF13. Members who attended Venturefest Wales were encouraged to hear the view from a number of panellists (who were predominantly CEOs of innovative companies) that government (both national and local) does have a role in business, and that many companies have thrived as a result of public sector support.
- KF14. There are opportunities for the Council to take risks, and invest in start up companies, giving them initial financial support and advice. This does not have to be on a huge scale, but the Council should 'throw its hat in the ring' in terms of supporting businesses. This risk taking could also extend to

Council functions trialling innovative products or services developed by Cardiff based businesses.

- KF15. Businesses were positive regarding the support they had received from the Council, in terms of financial support and also general business advice. It was commented that Council officers were always available and accessible for businesses. Businesses were also positive about the incubation facilities the Council has available in two locations in Cardiff, aimed at providing space and support for new businesses who need accommodation in order to get themselves up and running and established.
- KF16. It is clear to Members that the Council, and in particular the Economic Development Team, is doing a lot of work in encouraging and supporting innovative start-ups and businesses within Cardiff. Members felt there was a lack of robust information provided to evidence this work, and that figures should be available to show:
 - businesses that have received financial support and investment;
 - any stakes/shares the company has as a result of investment in startups;
 - interactions between entrepreneurs and the Business Council;
 - jobs created as a result of partnership between the Council and university;
 - companies using Council incubator facilities.

Incubation

KF17. An opportunity exists for the Council to provide incubation support to businesses that are created as spin-outs from some of the universities based in the city. Representatives of the University of South Wales indicated that many ATRiuM students will start businesses, but would be likely to access incubator facilities in Newport, and it was indicated that while Cardiff Metropolitan University's Centre for Product Design & Development Research has high ambitions and a number of their students already go on

to become self-employed, further progress could be assisted via access to incubation facilities.

- KF18. Witnesses felt that the incubation space available in Cardiff is good, providing accommodation for businesses without having to agree to long term contracts. However it was stated that there is no natural follow on from these facilities. As companies grow, a natural progression would be to move into a bigger space with longer lease contracts the kind of facility that a science park would provide however there is not this kind of space available in Cardiff. While some companies may be tied to Cardiff because of their links with the university they originated in, or hospital they work closely with, there is a risk that some with global aspirations may relocate if their growth is being held back.
- KF19. A science park would not only provide office space for growing companies, it could support the creation a critical mass (enough scientists and engineers working close to one another to create a community of knowledge and expertise). This could lead to further product developments, innovations and new ideas.
- KF20. Council officers indicated that they have recently been in discussions with the Welsh Government regarding the development of a science park, and it is a need for the city that the Council is well aware of.

Opportunities

KF21. Access to finance and grants is very important for start up companies, with many companies not selling / generating money straight away and needing to invest at the research and product development stages. Members were made aware that there is good access to finances in Cardiff, with money accessible from the Welsh Government, Cardiff Council and a strong presence from Finance Wales. Cardiff University spin-outs also have the benefit of potential investment from Fusion IP, which has an arrangement in place with the university.

- KF22. Cardiff Enterprise Zone is being developed and will focus on the financial sector, which is understandable as a strong sector in the Cardiff economy. This could present a great opportunity for seed fund companies to be located, providing opportunities for start-ups and innovative businesses to access finance. This could help put Cardiff on the map in terms of a location to start or relocate a business.
- KF23. Networking opportunities exist for small businesses in Cardiff, particularly those that are based within incubator facilities. This networking helps provide companies with advice from those who have been through issues before, and can assist each others' growth. A number of witnesses suggested, however, that the Council could have a role to play in formalising or mapping the network opportunities that exist in the city, creating a community of Cardiff-based entrepreneurs. The Council could also assist in providing exposure for companies through local business media.
- KF24. Members were concerned that there seems to be confusion caused by the multiple layers of support available for businesses. It is unclear where the lines of responsibility are drawn between the Council, Welsh Government and Finance Wales, and it can be confusing for businesses to understand which services they should be contacting the Council for, and when to contact the Welsh Government. There is room for improvement so that businesses are signposted to all the useful support and resources that are available to them.
- KF25. The Council could also play a coordinating role in pulling together all the advice and support that is available for businesses, whether that be financial support or business advice support, and making links with university academics or members of the Cardiff Business Council.
- KF26. Despite the Council having services in place to support entrepreneurs and start-up businesses, it was felt that many people will not recognise the worth of contacting the Council and won't be aware of the services available. It

was stated that the Council could play a more active role in promoting its services, contacting start-up businesses and developing its reputation so that it embedded within the mindset of the Cardiff business community.

Good Practice

- KF27. The work undertaken by Manchester City Council (MCC) is recognised as good practice arrangements that Cardiff should be aspiring to replicate. The Corridor Manchester partnership provides the overarching framework for MCC's close working relationship with local HEIs. Collaboration exists on both a strategic and an operational level. The following are important aspects of Manchester's continued success in this area:
 - Corridor Growth Fund
 - Science and Innovation Regional Growth Fund
 - Urban Broadband Fund.
 - establishment of Manchester Science Park Limited
 - Business Growth Hub
 - the campus development by Manchester Metropolitan University (MMU)
 (one of the largest regeneration projects in the northwest, creating jobs
 for hundreds of people).
- KF28. Examples of good practice can also be found in other areas across Britain, and there are plenty of lessons that can be learned for Cardiff in examining them. Good practice is highlighted by the Local Government Association in the following areas:
 - Oxfordshire
 - Plymouth
 - East Anglia
 - Manchester.

RECOMMENDATIONS

The Committee considered input from many sources during this scrutiny, with the evidence collated in this report forming the basis for the recommendations.

The Committee recommends that:

R1. The Cabinet ensures that the Council continues to improve its relationships with the Universities in the city, particularly by undertaking joint forward planning and sharing 'masterplans', ensuring the visions of the Council and Universities in Cardiff are aligned.

Supported by Key Finding 6

R2. The Cabinet ensures that the Council continues its commitment to the SPIDER project by supporting officers to participate in the training programmes developed as a result.

Supported by Key Finding 5

R3. The Cabinet ensures that Cardiff continues to advance as an attractive place to work and locate a business by improving transport links, housing standards, the city environment and raising the city profile.

Supported by Key Finding 12

R4. The Cabinet ensures that the Council continues to provide financial support to innovative start ups in the city, and is willing to take risks in supporting businesses and trialling their products or services.

Supported by Key Findings 14 and 20

R5. The Cabinet ensures that the Council continues its support of incubation space in the city and looks to promote these more widely, to all Cardiff based universities and their relevant graduates. The Council should explore the opportunity of developing further incubation space with Cardiff Metropolitan

University (Centre for Product Design & Development Research) and University of South Wales (ATRiuM).

Supported by Key Findings 16 and 17

R6. The Cabinet ensures that the Council continues to develop plans with the Welsh Government to provide office space for innovative companies who are looking to move on from incubators, such as a science park.

Supported by Key Findings 17, 18 and 19

R7. The Cabinet encourages the Cardiff Business Council (CBC) to provide support and advice to innovative start up companies and entrepreneurs, and ensures that all businesses in Cardiff are aware of the CBC.

Supported by Key Finding 24

R8. The Cabinet ensures that the Council looks to support universities in hosting global events in the city, and uses them as opportunities to further promote Cardiff to businesses and entrepreneurs. The Council should have a strategy in place and information available to sell the city to a global audience.

Supported by Key Finding 11

R9. The Cabinet ensures that the Council looks to learn lessons from leading British regions, such as Manchester and Oxfordshire, in terms of innovative business and entrepreneurial presence, ensuring Council officers are in active engagement with counterparts in these leading regions.

Supported by Key Finding 26 and 27

R10. The Cabinet ensures that all the advice and support available to new businesses in the city is pulled together and catalogued, regardless of who may provide this support. This should include the development of clear guidance and advice for businesses on where the responsibility of the

Council, Welsh Government and other organisations such as Finance Wales lies.

Supported by Key Finding 23, 24 and 25

R11. The Cabinet ensures that a community of Cardiff based entrepreneurs is developed, through the formalising of networks that exist within the city, the promotion of businesses through local press and the press of partners, and through Cardiff Business Council.

Supported by Key Finding 22

R12. The Cabinet ensures that the Council further develops the promotion of the services and advice it has available, making contact with businesses and ensuring that the Council is embedded as a place to provide support to businesses in the city.

Supported by Key Finding 25

R13. The Cabinet ensures that the Council's Economic Development Directorate develops a reporting mechanism that evidences the Council's support of innovative start-ups and entrepreneurs. This information may include; businesses that have received financial support and investment; the progress and performance of companies that have been invested in; any stakes/shares the Council owns in companies; interactions between entrepreneurs and the Council; companies using council incubator space.

Supported by Key Finding 16

R14. The Cabinet ensures that the Council works with each university in the city to develop community engagement strategies, with a view to increasing the number of community based projects, apprenticeships and school based projects undertaken by universities and their students.

Supported by Key Finding 10

R15. The Cabinet accepts these recommendations and in its response, identifies an action plan, including timescales, for the implementations of the accepted recommendations.

EVIDENCE

Innovation

- 1. Innovation is the successful exploitation of new ideas, turning these ideas into business or social capital; it can happen in many ways and in any sector of the economy. It is sometimes the result of the application of brand new knowledge but more often it is the result of incremental changes, or new combinations of existing ideas and experience. It can involve the development of new or improved products, of different or better processes for producing goods or services, or the introduction of entirely new services.
- 2. Innovation can also mean ensuring products are designed to reduce the amount and type of materials used in production and considering whole life cycle issues such as reuse and recycling at the design stage. In the public sphere this might mean developing new approaches to supporting an ageing population to stay in their own homes, or to adapt communities to climate change these initiatives can have commercial and well as social benefit. In business, it's about profit and growth through doing things differently from, and better than, the competition.
- 3. Innovation is acknowledged by many as essential to the success of an economy, and it is important that innovation is encouraged within a local economy, as it is seen to contribute directly to productivity growth and creates sustainable, high value jobs. The challenge is how to create the systemic conditions needed to deliver the scale and pace of change required.
- 4. Throughout the Inquiry, Members heard examples of how Cardiff Council is currently encouraging and supporting innovation and innovative firms locally, and what the universities in Cardiff can offer for the city in the creation of innovative start-ups and spin out companies.

Higher Education Institutions

Higher Education Institutions – their importance

5. Higher Education Institutions (HEI) play an important role in driving local innovation and growth for a number of reasons. 'Higher Education Institutions and Local Government', a report produced by the Local Government Association (LGA), identifies a number of innovation related benefits that result from HEIs in a city.

Higher Education Institutions:

- attract people and businesses to an area
- develop knowledge bases
- create local demand for housing, services, transport and amenities
- are major consumers of skills as well as producers
- are internationally wired academics have global connections which can be harnessed for wider civic benefit
- are part of the "civic brand" globally recognised and are major hooks for inward investors.²
- 6. The report 'Higher Education Institutions and Local Government' supports this by stating a number of figures that emphasise the importance of universities for a local economy.
 - Universities help to commercialise innovation. Innovation accounts for 63 per cent of all annual labour productivity growth since 2002.
 - The higher education sector employs more than one per cent of the UK's total workforce and for every 100 full-time jobs within universities more than 100 other full-time jobs are generated through knock-on effects.
 - For every £1 million of university output a further £1.38 million of output is generated in other sectors of the economy.

² 'Higher Education Institutions and Local Government'; Local Government Association, 2013 (pg 5)

- Universities in the UK contributed £3.3 billion to the economy in 2010-11 through services to business, including. commercialisation of new knowledge and delivery of services.³
- 7. It is important to note that many of the benefits arising from university innovations may provide social and economic benefits to society at large. These benefits will not always be captured by an analysis of the income streams from intellectual property, as their value to society is likely to be greater than the direct financial returns to universities.
- 8. This demonstrates the importance of greater collaboration between councils, HEIs and businesses to develop strategies together for the benefit of the local economy and to further develop the HEIs as a hub of learning, living and working.
- 9. In March 2013 the Welsh Government published *Innovation Wales*, an innovation strategy for Wales, following a call for evidence in late 2012. The Welsh Local Government Association (WLGA) responded to this call for evidence recognising the importance of local authority contributions to supporting higher education innovation. It states that "local authorities also have a key role in terms of facilitating discussions between the higher and further education institutions and the business community in their areas in order to encourage better linkages so that the innovative activity of the HE and FE institution benefits the local economy and offers opportunities for young people to stay in their communities." ⁴

Universities in Cardiff

10. There are four universities with a presence in the City of Cardiff. These are Cardiff University, Cardiff Metropolitan University, University of South Wales (formerly University of Glamorgan) through the ATRiuM: [Cardiff School of

³ 'Higher Education Institutions and Local Government'; Local Government Association, 2013 (pg 7)

⁴ Response to Welsh Government Innovation Wales Consultation, Welsh Local Government Association (submitted to Committee as background information)

Creative and Cultural Industries]), and the University of Wales.⁵ Presentations were received from representatives of each of these HEIs to gain an in depth understanding of the support available for innovative start-ups and spin-outs in Cardiff.

- 11. 'Rebuilding Momentum' a Cardiff Council Green Paper released in April 2013, aimed to start "a conversation on the future development of the capital city of Wales". The importance of the universities in Cardiff is acknowledged within the foreword by the Cabinet Member for Finance, Business and Local Economy. It states that "Our universities also have an important role to play. They need to become central to our ambitions in the way that they haven't been in the past." 6
- 12. The 'Opportunities and Challenges' section of this Green Paper notes that "Cardiff benefits from 3 strong local universities each with areas of world" leading expertise and one of the most highly-skilled population of all UK cities. The potential for a dynamic knowledge-based economy is here – it needs to be converted into reality."8
- 13. The Green Paper goes on to state that "[...] pockets of potential exist, such as Life Sciences, ICT and Green Technologies. Cardiff's universities have worldleading expertise in all of these areas, particularly Life Sciences, which is one particular sector where businesses in the city and region come together to form a significant UK cluster."9

Cardiff University

14. Established in 1883, Cardiff University is a member of the Russell Group of Universities¹⁰ and is currently ranked 15th in the UK and 136th in the world

The Committee also recognises that the Open University has a base in Cardiff.

⁶ 'Rebuilding Momentum' – Cardiff Council Green Paper (pg2)

Report recognises Cardiff University, Cardiff Metropolitan University and University of South Wales

Rebuilding Momentum' – Cardiff Council Green Paper – Opportunities and Challenges (pg 12)

Green Paper – Cardiff Today (pg 6)

¹⁰ The Russell Group represents 24 leading UK universities which are committed to maintaining the very best research, an outstanding teaching and learning experience and unrivalled links with business and the public sector.

according to the QS World University Rankings¹¹. It is the third largest employer in the area with more than 6,300 staff, and attracts top talent from around the world, building a critical mass of expertise in key areas. The University's research base supports more than 1,800 current research contracts, and members were informed that it is estimated that Cardiff University's students bring £150-200 million pounds annually to the local economy.

- 15. Members received evidence from Cardiff University Dean of Engagement (who is also Professor of Governance and Development). In terms of the University's contribution to innovation, Members were told that the university currently has 21 active knowledge transfer partnerships, and 216 firms active in the economy have been created by Cardiff graduates. Cardiff is recognised outside of Wales for the Cardiff University Innovation Network (CUIN) which has 1800 members, most of which are Small to Medium Sized Enterprises (SMEs).
- 16. According to the CUIN website, "Innovation is the lifeblood of business. Cardiff University's highly successful Innovation Network is a melting pot of new ideas and how to put them into practice. A mix of people from business, industry, finance and academia get together in an informal atmosphere to listen, to learn, to talk and to network. Ideas are exchanged, problems are discussed, expertise is shared, solutions are sought."
- 17. It was commented that historically the Council and University have not worked well together, but a new partnership was emerging demonstrated by the Innovation Campus being developed on Maindy Road, Cathays. Members were informed that this is a good example of where Cardiff University is investing in and redeveloping areas of the city. The Hadyn Ellis Building is the first flagship building on the new Maindy Park site. Built on a disused former industrial space, this new campus is aimed at regenerating a major site within central Cardiff.

¹² Cardiff University Innovation Network website (www.innovation-network.org.uk/about/background-to-the-innovation-network.aspx)

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¹¹ The QS World University Rankings are annual university rankings published by Quacquarelli Symonds (QS) which provides overall rankings as well as ranking for individual subjects.

- 18. Further evidence of this developing relationship included the fact that the University Vice Chancellor was on the board of the Cardiff Business Council, and that a joint delegation of individuals from Cardiff Council, Cardiff University and the Welsh Government has recently visited Imperial College, London to assess good practice.
- 19. In terms of what the Council could do to assist the University, it was felt that, as partnerships and relationships develop, there is potential for the two organisations to share and calibrate their 'master planning'. This will ensure that new developments, such as Maindy Park, will have suitable transport links to the University's Heath Park facilities and support people in travelling to work and study, with suitable housing available for staff and students. The aspiration of the University is to attract the most talented individuals from across the country, and the attractiveness of the city as a whole as somewhere to work and live will influence whether these aspirations are achieved something which the Council can play a significant role in.
- 20. Members were informed that an apprenticeship programme was being developed, as part of the University's vision for the future. However it is still under development and full details could not be shared, but they would be taken forward with the Partnership Board in the near future.

Cardiff Metropolitan University

21. Cardiff Metropolitan University is made up of five Academic Schools; Cardiff School of Art & Design; Cardiff School of Education; Cardiff School of Health Sciences; Cardiff School of Management; and Cardiff School of Sport. The University has a number of high-profile research and enterprise centres, including the Food Industry Centre, the Welsh Centre for Tourism Research, and the National Centre for Product Design and Development Research. According to the Research Assessment Exercise¹³ 2008, over 28% of research

¹³ The Research Assessment Exercise (RAE) is the UK bench-marking exercise to measure the quality of research conducted by universities across the UK. It is an internationally a recognised indicator of research quality.

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submitted by Cardiff Metropolitan University is rated as internationally excellent or world leading and 64% of research is rated as being of international standing.

- 22. The University is involved in a number of innovation support programmes including:
 - ASTUTE (Advanced Sustainable Manufacturing Technologies) a
 partnership of universities across Wales that aims to enable the
 manufacturing industry in West Wales and the Valleys to grow by
 adopting more advanced technologies, and at the same time improve its
 sustainability by reducing its environmental impact.
 - Design Wales Forum a network for designers in Wales, established in 2010 by Design Wales. A key aim of the Design Wales Forum is to create activity which supports the maintenance and capacity growth of the Welsh design community.
 - Institute for Sustainable Design (ISD) a pan-Wales initiative that helps businesses to help themselves by encouraging and supporting innovation through design. ISD drives businesses to gain competitive advantage from within and, in turn, become more sustainable.
 - Knowledge Transfer Partnerships a part government-funded programme to encourage collaboration between businesses and universities in the United Kingdom.
- 23. Members received evidence from the Operations Director, National Centre for Product Design & Development Research (PDR). PDR is a world renowned design and innovation consultancy and research centre set up in 1994. He informed Members that design was increasingly being recognised within definitions of innovation at a European and national level. The university is currently working with Welsh Government on their innovation policy, with 'Innovation Wales' recognising that "traditional' R&D, usually accepted as the best measure of innovation, is actually only a small part of the overall process..". 14

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¹⁴ 'Innovation Wales', Welsh Government, 2013 (pg 4)

- 24. Members were informed that the Cardiff Metropolitan University is involved in a number of projects pushing forwards with innovation. These include:
 - SEE Platform (Sharing Experience Europe Policy Innovation Design) –
 a network of 11 European partners engaging with government to
 integrate design into innovation policies and programmes. SEE aims to
 build a bank of evidence to support public authorities to integrate design
 into their mainstream practice.
 - SPIDER (Supporting Public Service Innovation using Design in European Regions) – funded by the European Commission and Welsh Government the project aims to deliver innovative solutions to Europe's toughest social challenges by engaging public services and citizens in an ambitious programme of service design projects.
 - Service Design Global Conference 2013 where leading practitioners, businesses and academics present the latest thinking in the field of service design. The event held on 19th and 20th November in the Wales Millennium Centre attracted over 450 individuals from across the world to Cardiff, a number greater than when the same event was held in Paris and San Francisco in the previous two years.
- 25. Members heard that Cardiff Council is one of the SPIDER project participants, and is working with the University and a number of local organisations to deliver two projects around the following challenges:
 - Driving an active youth workforce
 - Extending independent living for older people.

Other participants of the wider SPIDER project include Seine-Maritime County Council, Geel City Council and Association of Flemish Cities and Municipalities. It was commented that the Council's Operational Manager (Enterprise), has worked closely with PDR on this project and there will be further opportunities in the future for the Council to be involved.

26. In relation to the Service Design Global Conference 2013, Members were encouraged to hear that university events were attracting individuals from across the world, and were informed that opportunities exist for the Council to

work closely with the university on events such as this, collaborating to share its expertise in planning and delivering events that will boost the reputation of Cardiff.

- 27. It was also commented that the Council should ensure it continues its support of both the SPIDER project and SEE Platform. Members were informed that the SPIDER project would not have happened if the Council hadn't got involved, and it is important that the Council builds upon this support by allowing and supporting staff to attend any training programmes that are developed as a result.
- 28. Building on comments from the representative of Cardiff University, Members were informed that Cardiff Metropolitan University would also be willing to share and calibrate its wider plans with the Council. This is as a result of relationships being developed that haven't existed in the past.
- 29. Members were informed that while the PDR has very ambitious plans, incubation space¹⁵ is something that isn't currently included, with limited space available, and this is something that could be worked on with Cardiff Council. University representatives stated that developing activities to help support students engage in entrepreneurial activity has long been a high priority at Cardiff Metropolitan University. Various programmes have been designed to help students develop their business ideas and an entrepreneurial mind-set. Responses to the University's annual 'Destination of Leavers' survey shows that 335 students reported themselves as self-employed / freelance over the last five years.
- 30. Cardiff Metropolitan University is the lead partner for the Youth Entrepreneurship Higher Education South East Wales Hub (The Hub). The Hub is one of six Regional hubs established and funded by Welsh Government to

entrepreneurs to grow - faster.

¹⁵ In general terms, business incubation provide growth SMEs and start-ups with the ideal location to develop and grow their businesses, offering everything from virtual support, rent-a-desk through to state of the art laboratories and all points in between. They provide direct access to hands-on intensive business support, access to finance and expertise and to other entrepreneurs and suppliers to really help businesses and

drive its commitment to encouraging youth entrepreneurship in Wales. In Cardiff Metropolitan University the Hub has funded the establishment of the Centre for Student Entrepreneurship, which organises extra-curricular activities to aid the development of entrepreneurial characteristics in students and provides them with the practical skills and information they will need to start a business.

University of South Wales

- 31. The University of South Wales (USW), formed by the merger of the University of Glamorgan and the University of Wales, Newport, is one of the largest campus universities in UK by student number. Members met with the USW Director of Business Development, who estimated that the around 6,000 students are either studying at a Cardiff based campus, or live in Cardiff and travel to a non-Cardiff campus. The university has internationally recognised strengths in applied research and engagement, working with the private sector, industry and government.
- 32. Key sectors represented through the Cardiff campuses of the University include legal and professional services, and creative and cultural industries, with particular strength through the National Conservatoire of Wales in the Royal Welsh College of Music and Drama, and the School of Creative & Cultural Industries based at the ATRiuM campus.
- 33. USW has provided the city with two iconic buildings in the form of the Royal Welsh College of Music and Drama, and the ATRiuM building. It was commented that buildings like these help enhance the status of the city.
- 34. Members were informed that 166 student start-ups have been created by USW students in the last five years, ranging from fashion designers to web and computer game design companies, with the majority located within the Cardiff city-region. The University has a 'Student Start-up' Strategy in place and incubator facilities for student start-ups, however this facility is located in Newport. Figure A shows the three distinct strands of this 'Student Start-up' strategy; Engagement, Empowerment and Equipping.

FIGURE A

Student Start-up Strategy

University of South Wales Prifysgol De Cymru

Engagement

- Inspiring and fun workshops
- Masterclasses
- Competitions
- Global Entrepreneurship Week

Empowerment

- Skills development
- Business Surgeries
- E-venture platform
- CPD for Educators
- Live project briefs

Equipping

- Bright Ideas Den
- Fairwood Trust
 Scholarships
- Angel investors
- Business Loft coworking space
- 35. In a presentation from the USW Director of Business Development, the Deputy Director, Commercial Services and the Dean of the Faculty of Creative Industries, Members were informed that the University has worked with Cardiff Council on a number of occasions and has a good relationship developing. One key example given was where Cardiff Council had partnered with the University of South Wales, and other organisations, to deliver the Venturefest Wales event.
- 36. Venturefest Wales took place in Cardiff in July 2013 and brought together innovators, entrepreneurs and investors in Wales under one roof. The event provided opportunities for entrepreneurs to share their knowledge and expertise with other delegates, and aimed to provide opportunities for individuals to making connections with businesses and investors alike.
- 37. Members of the Committee were invited to attend this event, and were particularly interested in a question raised during a panel discussion, where representatives of five innovative companies discussed a number of issues and took questions from the audience. Asked "do you agree that government has no place in business?", many of the panellists commented that their business would not have been a success without government support. Some stated that this support helps them compete with international companies who have large

handouts from their respective governments, and that governments (both national and local authority) can have an important role in match funding; R&D funding; general financial advice and support; SMART schemes ¹⁶ and promoting exports/products.

- 38. Again it was commented by University representatives that the Council has a key role supporting graduate retention and attracting the highest quality individuals to the city. This can be achieved through the provision of good transport networks, high quality standards of housing, a good reputation in terms of safety and the attractiveness of the city as somewhere to work and live.
- 39. It was also felt that it was important for councils to listen to the needs and desires of businesses in developing infrastructure and makings the city an attractive place to work. Often Councils have their own set agenda or direction, but when businesses and communities are more closely involved, it results in a more vibrant location to work and live.
- 40. Members were informed that USW, through its Cardiff based campuses, has a focus on community based initiatives. The University has a range of strategies in place to work with local schools and colleges, and students studying at the ATRiuM are encouraged to engage with community projects through an extracurricular strand of the graduate programme. This not only provides opportunities for communities in the city, but also helps students develop a range of social skills that sit alongside the more formal business side of their studies.

University of Wales

41. The Deputy Director of the University of Wales' Global Academy met with Members at the July Committee meeting. The Global Academy is aimed at

¹⁶ SMART (**S**mall firms' **M**erit **A**ward for **R**esearch and **T**echnology) schemes offered grant funding to SMEs to engage in research and development projects from which successful new products, processes and services could emerge.

boosting the economic and innovation performance of Wales through enhanced synergy between higher education and the private sector, and partners with MIT Industrial Liaison Program and the Irish Technology Leadership Group in Silicon Valley. Offices for the Global Academy are located in Cardiff, Swansea and North Wales.

- 42. Members were informed that historically, academia, businesses and governments don't work well together, and that improvements in relationships and building trust are essential for progress to be made. In order for a drive for Innovation to be successful, these three institutions must be working in partnership towards shared outcomes.
- 43. The global network opportunities that the University has created are important to the success of innovative businesses it works with. Welsh based companies are given direct access to entrepreneurs and innovators from one of the world's top universities (Massachusetts Institute of Technology [MIT]) and to presidents and CEOs of businesses located in Silicon Valley home to many of the world's largest technology corporations as well as thousands of small start-ups.
- 44. Members were informed that the University of Wales aims to produce benefits for Wales as a whole through all its projects and partnership arrangements. The University has an office in San Jose (the self-proclaimed 'capital of Silicon Valley') which is free for any Welsh company to use as a base when looking to penetrate the US market.
- 45. The University of Wales has previously worked closely with officers from Cardiff Council's Economic Development Team in encouraging a Pembrokeshire based Internet coding firm to relocate to Cardiff rather than Bristol. Premises in Cardiff were indentified that suited the company's needs and a growing innovative firm has set itself up in Cardiff as a result.
- 46. It was commented that the interactions between the Council and universities would benefit from an increase in spectrum over and above the Economic Development Department. A number of university departments are working on

initiatives and research that could influence and inform the range of services that the Council provides on a daily basis. Similarly, the local authority would benefit from knowing about the projects that academics are actively working on, and potentially help shape the direction that research takes in order to be useful for practitioners.

- 47. These improved relationships would also help where companies come to the Council seeking advice and support, as the Council would be in a better position to advise the right individuals from the HEI located in Cardiff to contact. This network of support would naturally grow stronger and gain in reputation.
- 48. In terms of what the Council can be doing to support innovation from universities, it was felt that the Council could act as a 'test-bed' for new ideas and initiatives, and this could include providing access to Council markets or services. The Council can also play a part in creating an entrepreneurial environment by supporting growth strategies, enabling a pipeline of new start-ups/entrepreneurs and investment stakes in new ideas/start-ups.
- 49. On the flip side, it was also felt that as the Council and universities develop partnerships, university academics, researchers and post graduate students could contribute to Council projects, or assist on service redesign initiatives that fall within their area of expertise.
- 50. While Cardiff has a lot to offer, and lower living costs that other larger cities in the UK, many innovators and entrepreneurs do not consider Cardiff as a place to locate their business. That said, the Deputy Director commented that his line of work had meant a great deal of international travel, and that people seemed more familiar with the brand of 'Cardiff' than they were with 'Wales' this is something the Council should be building upon.
- 51. Members were informed that an opportunity to support innovative start-up companies could exist through the Enterprise Zone which is being developed for Cardiff. The Enterprise Zone will have a focus on the financial sector, which is an area of strength within the Cardiff Economy. This presents a great

opportunity for 'seed fund' companies to be located in the city, providing additional options for start-ups and innovative businesses looking to access finance. This could help put Cardiff on the map in terms of a location to start or relocate a business.

Cardiff Council

- 52. Cardiff Council's Economic Development Directorate is responsible for the development and delivery of the vision to turn Cardiff into one of Europe's leading regional capitals for business. The function works with both existing businesses and inward investing businesses, providing the necessary support and guidance to allow businesses to grow and flourish in Cardiff. Members were informed that one of the main drivers for economic growth in Cardiff was to support local companies with continuous backing and to help innovative small companies to grow.
- 53. As mentioned by University representatives, through the work of the Economic Development function, Cardiff Council was able to support Venturefest Wales 2013, which brought innovators, entrepreneurs and investors in Wales together in one place on 9th July. A number of Councillors from the Committee attended this event as part of this short scrutiny inquiry.
- 54. The Economic Development Directorate was also involved in SPIDER-HACK, an event run in partnership between Cardiff Metropolitan University and the Council. It was highlighted as an ideal example of a partnership between the University and the Council, looking at creative ways to consider solutions to issues the Council faces, and supports the evidence received from other sources that the Council is developing closer working relationships with the universities in the city.
- 55. The focus of this SPIDER-HACK event was the NEET agenda, re-engaging young people, and involving them in service redesign. A range of programmers, application developers, graphic designers and young people met to develop

solutions to a number of challenges. Two real solutions/smart phone 'apps' were developed at this event, which will be taken forward by the partners and young people involved. The event demonstrates the wider benefits that can be applied to Cardiff by having a strong base of innovative businesses and higher education institutions, and having good working relationships between public services, businesses and academic institutions.

- 56. Finance is available to companies within Cardiff through a number of funds. The Cardiff Capital Fund is available to support businesses through a range of financial assistance packages and is aimed at both start-up growth businesses and existing companies that need assistance to undertake investment. The New Enterprise Start-UP Fund is designed to assist new start-up companies in Cardiff. Financial assistance is available from £500 to £5,000. The Capital Investment Fund consists of loans and equity investments up to £25,000, and is available for business activities including: start-up growth businesses; established and expanding companies; high technology and knowledge based companies; and companies demonstrating continuous improvement, competitiveness, innovation and creativity.
- 57. Members were informed that the fact that the two university start-ups that had been invited to provide evidence have both in the past received financial backing from the Council. This was a clear demonstration of the Council's commitment to supporting innovative businesses in the city to develop.
- 58. The Council's Economic Development Directorate has incubation space available within the city via Cardiff Business Technology Centre and the Cardiff Medicentre. These are Cardiff's leading technology, innovation and bio science business locations, aimed to provide space and support for new businesses in key sectors who need accommodation to get up and running and develop themselves.
- 59. The Council's Head of Economic Development recognised that the authority's responsibility extended further than just supporting businesses directly transport, housing and planning policies are all important in creating a city

where businesses can flourish, attracting the best workers, and where universities are able to attract top students. The Council has a role in creating and maintaining an environment that will attract innovators and entrepreneurs and it was recognised that improvements are needed in Cardiff in terms of the quality and quantity of these individuals.

- 60. Members were informed that the Council is actively looking at comparator cities, and seeking to learn lessons that will enable Cardiff to compete on the world stage. Helsinki was identified as an important comparator city, and the methods used in establishing a 'city region' were being considered for Cardiff.
- 61. Members were keen to explore whether Manchester was being used as a comparator city by Cardiff Council, given a written submission provided by Manchester City Council's Principal Regeneration Officer (see paragraphs 99 103). In response, Cardiff's Head of Economic Development indicated that Manchester was recognised as an exemplar in a city region perspective, and was being used in analysis to inform the establishment of a Cardiff City Region and other innovation-related policies.
- 62. A message that the Members had heard from a number of university academics was reemphasised by the Head of Economic Development namely, that the relationships and connections between government (both local and national), businesses and HEIs have historically tended to be quite poor. However progress is being made to improve relationships and collaborative working, but a lot of work still remains to be done. The fact that two of the university Vice Chancellors sit on the Cardiff Business Council was given as an example to show how this relationship is developing. As mentioned previously, the Council's Green Paper "Rebuilding Momentum" highlights higher education as one of the emerging strengths for Cardiff, and essential for the future development and progression of the city.
- 63. Members were informed that, in order to deliver on the Innovation Wales

 Strategy (see paragraphs 68 78), collaborative working between the Council,

 Welsh Government and universities is essential. It is hoped that the Welsh

Government and local authorities can work together to develop joint working strategies to provide support and advice for businesses and individual projects. Specialist support required for the success of these projects could then be provided through universities working alongside the Cardiff Business Council.

- 64. Another example given of how the relationship is moving forwards is the Council's role in supporting Cardiff University to develop Maindy Park Innovation Campus. This has been recognised as an important collaboration that could help boost the city's development and given potential capacity for further expansion.
- 65. Members were also informed that, while good practice is already in place, further improvements could still be made by the Council in the following areas;
 - encouraging and supporting networks;
 - working closer with the universities in Cardiff;
 - working with and influencing the education system as a whole in Cardiff to encourage innovation and ideas;
 - collaboration of resources and:
 - working with the Business Council to move forward and develop strategies.
- 66. It was recognised that the Higher Education sector in Cardiff is a strength for the city, with the universities having a particularly good reputation in terms of innovation and business start-ups. A number of the universities with a presence in Cardiff also have bases in surrounding areas, such as Newport and Pontypridd, and this was noted as important in the future development of a Cardiff city-region.
- 67. When Members inquired whether Cardiff Business Council should be helping signpost issues and play an active role in supporting new businesses looking to establish themselves in Cardiff, they were informed that the local authority and Welsh Government should be working on signposting (and already does provide lots of advice to small businesses), while the Business Council will have a role in looking at ways of communicating these services to a wider audience.

Members felt that this is a potential area for confusion for businesses, and was an area that the Council should be actively looking at improving, particularly support to innovative start-ups and SMEs.

Welsh Government Policy

- 68. Launched in July 2013, *Innovation Wales* is the Welsh Government's innovation strategy for Wales. Innovation Wales recognises the widely accepted technology-based concept of innovation, but emphasises that innovation can be achieved everywhere and anywhere and by anyone, across the board. To encourage these broader areas of creativity and wealth generation, Innovation Wales highlights the need for the public sector to be less prescriptive and more open to fresh solutions for supporting business and procurement.
- 69. This strategy is not intended to act as a detailed delivery plan but highlights priorities for intervention by a range of actors in Wales. It builds on existing strategies, highlighting the importance of innovation to their successful implementation, and sets a framework for future funding programmes.
- 70. The strategy states that the Welsh Government has adopted a focused approach with a single overriding principle the need to promote, encourage and enable innovation across the whole economy, with key investments that have been made on the basis of clear strategic priorities, built on Wales' strengths. It states that:

"By promoting, encouraging and enabling innovation across the whole economy; private and public sectors, services and manufacturing, and working with partners, the Welsh Government can foster a culture and an environment for innovation which is one of the five key themes of Innovation Wales. A key imperative here is the ability to bring about the emergence of new combinations

of ideas through creating spaces for what has been termed 'entrepreneurial discovery'."17

- 71. The strategy comments that many believe Wales has often shied away from making tough decisions on funding - "spreading the jam too thinly rather than a relentless focus on excellence". In a move away from this, the Welsh Government has adopted a 'smart specialisation' methodology to deliver Innovation Wales. This will focus large scale interventions on creating real critical mass in the areas where we already have capability and can see significant opportunities, recognising Wales' strengths and defining research and innovation priorities for the future.
- 72. Smart Specialisation is a strategic approach to economic development through targeted support to Research and Innovation (R&I). More generally, smart specialisation involves a process of developing a vision, identifying competitive advantage, setting strategic priorities and making use of smart policies to maximise the knowledge-based development potential of any region, whether it is strong or weak, high-tech or low-tech. It builds on the past, recognising current and past initiatives to support innovation, but also attempts to break with the past by being much more inclusive in its development and delivery with other vital stakeholders in the region such as business and universities.
- 73. The strategy recognises that Wales is a small country and therefore cannot be good at everything. The strategy states that the Welsh Government "need to recognise where our strengths are and exploit them more. This means developing distinct and genuine areas of excellence, and not slavishly imitating the successes of other regions."18
- 74. The following domains are identified as areas in which Wales has existing strengths, where strong economic opportunities exist and where there is potential to combine our assets across a range of industrial and research sectors.

^{17 &#}x27;Innovation Wales', Welsh Government, 2013 (page 10)18 'Innovation Wales', Welsh Government, 2013 (page 6)

- Life sciences and health
- Low carbon, energy and environment
- Advanced engineering and materials
- ICT and the digital economy.

These are domains that the Welsh Government expects priority investment in innovation capacity to occur.

75. Innovation Wales identifies five key themes where innovation players in Wales can concentrate their efforts. These key themes are:

- Improving collaboration
- Promoting a culture of innovation
- Providing flexible support for innovation
- Innovation in government
- Prioritising and creating critical mass.

76. A number of actions identified within the strategy recognise the need for the Welsh Government, universities, businesses and local authorities to work together and collaborate in order to maximise the economic and social benefit from innovation in Wales. A summary of the Innovation Wales areas for action is given below (a more comprehensive list of actions can be found within the Innovation Wales Strategy¹⁹):

- Collaborating inside and outside of Wales Wales needs to collaborate and engage more productively with external bodies.
- Knowledge exchange and commercialisation Knowledge exchange and commercialisation of R&D will be given a high priority in Wales and will favour a demand led approach.
- Adopt a broad definition of innovation The value of all types of innovation should be recognised, not only those which are technology led.

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 $^{^{19}}$ 'Innovation Wales', Welsh Government, 2013 (Section 4 - Five key themes for innovation)

- **Education and skills** Innovation, entrepreneurship and enterprise should be given a prominent position in the curriculum.
- Promotion and celebration of innovation Wales must present itself to the world as an attractive place to locate and grow innovative businesses.
- Providing flexible support for innovation (Finance) We will work to develop financing products to bridge the gap between research and the deployment of new products and ideas.
- Providing flexible support for innovation (Welsh R&D funding for business) - Local sources of R&D funding support in Wales are necessary to complement UK wide schemes.
- Innovation support and delivery Support for research and innovation needs to be delivered in a clear, more flexible and business friendly manner.
- Open Innovation Wales should seek to develop a culture of open innovation.
- Prioritising and creating critical mass Wales needs to identify opportunities for a small number of major investments designed to have a transformational effect of Wales' research and innovation capabilities.
- 77. When receiving evidence from Council officers, Members were encouraged to hear that a number of these areas for action have already been identified as priorities, and that work was being undertaken to assist Cardiff in maximising the potential economic and social benefits from innovation.
- 78. The Strategy states that European programmes have been used effectively in Wales to help build research and innovation capacity in priority areas. There is a window of opportunity at present, where major European funding programmes are being developed for the period 2014-2020. The year 2014 will see the launch of Horizon 2020, which will give organisations in Wales the opportunity to compete for considerable European funding for R&I.

Horizon 2020

- 79. 'Horizon 2020 The Framework Programme for Research and Innovation', will succeed Framework Programme 7 as the main financial instrument supporting European research and development. With a proposed €70.9 billion budget (a significant increase over FP7), the new Programme is intended to form a key part of the overall drive to create new growth and jobs across Europe.
- 80. Aside from the increase in budget, Horizon 2020 intends to provide major simplifications through a unified set of rules. It will combine all of the research and innovation funding currently provided through the Framework Programmes for Research and Technical Development, the innovation related activities of the Competitiveness and Innovation Framework Programme and the European Institute of Innovation and Technology.
- 81. Horizon 2020 represents a big change from the previous Research Framework Programmes. Aside from the increase in budget, it will for the first time bring together all of the EU's funding for research and innovation in one place. Horizon 2020 intends to make it easier to participate in EU-funded research and innovation actions, to increase scientific and economic impact, and give the taxpayer better results and better value for money.

Innovative Companies

82. As part of this Short Scrutiny exercise, Members felt it was important to receive evidence from companies that originated from ideas and research in Cardiff based Universities, which have now become established companies within the city. Evidence was received from two companies; MedaPhor and Q Chip.

MedaPhor

83. MedaPhor is a global provider of advanced ultrasound education and training for medical professionals. The company was formed in 2004 as a Cardiff

University spinout. The company's Chief Executive Officer (CEO) was invited to meet with the Committee at its September meeting to discuss a number of issues including the support the Council has provided this company, and improvements that could be made in the services the Council provides to innovative start-ups.

- 84. Members were informed that MedaPhor was a successful example of how a university idea can result in a company being formed that provides local employment and generates a high-tech skills base, with the potential to be one of the world's leading companies in the field of medical simulation. It was stressed to Members that the company did not start generating sales until 2010, and that the investment received during the research and development stages of the company were important to its success. This applies to many innovative companies, who can require a number of years of support before they start generating income through product sales.
- 85. Access to flexible incubator space in Cardiff was identified as an important factor to the success of innovative companies. Cardiff Medicentre²⁰ was highlighted as an important factor in helping MedaPhor establish itself. MedaPhor's CEO stated that new companies cannot afford to tie themselves to long term contracts for office space while income is not being generated. The Medicentre allows for flexible incubator facilities, with only a notice period of one month required. It also provides substantial networking opportunities with other companies and individuals operating in similar markets, who may be able to pass on advice or expertise.
- 86. It was commented that MedaPhor were aware of all the support services the Council has available due to the fact they are located within the Medicentre. It was questioned whether companies outside these facilities would be quite as aware, and that the Council could play a role in pulling together and coordinating all the support available to innovative and new start-up companies,

²⁰ The Medicentre is a business incubator for biotech and medtech startups in Cardiff, established as a joint venture between Cardiff University, Cardiff Council, Welsh Government and the Cardiff and Vale University Health Board.

- creating a form of 'advice hub', so that more companies will be able to take advantage of the support mechanisms in existence in the city.
- 87. Access to finances was also highlighted as an important factor behind successful innovative companies. In the nine years since being formed, MedaPhor has received financial support from Fusion IP (a commercialisation partner which works with universities to take intellectual property to the marketplace via spin-out companies), Finance Wales and Cardiff Council. Fusion IP also provided access to management resources, which provided important help in developing business led to raising further investment. It was commented that if the company hadn't received this financial backing, it would have failed.
- 88. Another factor highlighted as being behind the success of the company was the good structure in place within the Cardiff University. The University allows for cross-departmental collaboration and there is a strong emphasis on the commercialisation of products and ideas. The University is willing to take risks and back ideas, where maybe there is no 'proof of concepts', and where other investors would not get involved.
- 89. An area for improvement highlighted by MedaPhor's CEO is that there is no obvious follow on for companies in Cardiff once they start to outgrow the Medicentre and are in a position to be agreeing longer term contracts.

 Companies at MedaPhor's stage in development should be looking to occupy a larger facility with longer leases the kind of space that would be found within a larger science park. However there is no such facility available in Cardiff. This may not only be holding companies like MedaPhor back, but also preventing small companies from taking their place at the Medicentre and starting to benefit from the networking and expertise opportunities that exist in this incubator space. It was commented that the Council should play a leading role in developing a science park like this in Cardiff.
- 90. When the Council's Head of Economic Development was questioned on the plans for the development of a science park in Cardiff, he indicated that

meetings with the Welsh Government have recently taken place on this very topic. Members were told that accommodation sites were currently being analysed as a possible location for such a facility to be developed in the city.

- 91. Members questioned whether the global aspirations of companies like MedaPhor, coupled with the absence of a larger science park in the city, would mean that companies have to leave Cardiff in order to grow. The company's CEO commented that companies will often hold onto a local affinity for the area that they started up. In MedaPhor's case, the company's close proximity to the university and hospital are very important factors for it remaining in Cardiff. That said, the company is growing, and looking to grow further, and may soon need to locate to bigger premises; or if the company was bought out it could quite easily be relocated anywhere in the world.
- 92. Members were informed that the Council should not speculate by supporting companies once they have been established it takes a significant amount of analysis to work out if these risks will pay off. Local authorities are better off waiting for larger investment funds and specialists (such as Fusion IP) to filter out who they feel will be successful, and then the Council step in when these companies are looking to further develop.

Q Chip

- 93. Q Chip Ltd is a specialist drug delivery company based in Cardiff. They are experts in the application of fluidic droplet systems to formulate monodispersed microspheres for the controlled release of active pharmaceutical ingredients. The company was formed in 2003, as a spin-out company Cardiff University Engineering School. The Committee received a written submission from Q Chip's Managing Director.
- 94. In the ten years since it was formed, Q Chip has relocated its premises a number of times, including the Cardiff Business & Technology Centre and the Medicentre both of which are supported by Cardiff Council. Members questioned the reason behind so many moves and were informed that they

- were a natural progression for the company as it grew and looked for larger premises to relocate.
- 95. The Managing Director of Q Chip commented that a science park in Cardiff could be advantageous, but would need to be planned carefully so that the location was right, and so that it would suit the manufacturing requirements that many, more established scientific companies, will have. It was commented that working a science park environment could create a critical mass, where a large number of scientists and engineers working in a close proximity could create a community, encouraging new ideas and further innovations.
- 96. The Managing Director of Q Chip was asked for suggestions on how the Council and universities could help innovative start-up companies. The Members considered one of the key suggestions to be that the Council could help create a community of entrepreneurs in the City. It was suggested that additional networking through a network of like-minded professionals, with access to expertise and equipment could support the development of start-up companies. It was commented that, despite having operated in Cardiff for 10 years, there were many companies within the life sciences sector that Q Chip had never had contact with. The Council could also play a role in raising the profile of innovative companies, through the networks already in place such as Cardiff Business Council and through local business press.
- 97. Q Chip recognised that the Council already provides a number of support and services for SMEs, however it was commented that many small and new companies may not have a clear picture of the full range of support available from the Council and other organisations, or how best to access this support. It was suggested that the Council could take a proactive role in contacting SMEs, making them aware of all the benefits that are potentially available for them to access. This will require the Council to have a full awareness, and to have pulled together information on all the support available in Cardiff in advance.
- 98. Members were interested to note that similar suggestions were made by both companies that had provided evidence to the Short Scrutiny. That while the

Council has good support services available to SMEs, more could be done to pull together the support available from all organisations in Cardiff and that there could be a role for the Council in sharing this information with companies. More could also be done by the Council in providing companies with increased networking opportunities, either through Cardiff Business Council or through informal networks that the Council was aware of. Members commented that this would be a good opportunity for the Cardiff Business Council to become more inclusive, and to support the interests of smaller companies in the city.

99. Members were also concerned that despite all the support services the Council has available, many business owners or entrepreneurs may not be accessing them because they do not see their value or do not even know the services are available. Members felt that Cardiff Council (in partnership with the Cardiff Business Council) should be more active in promoting its services and support mechanisms, actively contacting businesses and building up its reputation within the business community.

Good Practice Case Studies

Manchester City Council

- 100. In the planning stages of this short scrutiny exercise, Manchester was highlighted a number of times as a city leading the way in terms of innovative and entrepreneurial businesses. Manchester City Council (MCC) Economic Development Unit was contacted to provide information on how the local authority works with higher education and other innovative sectors to stimulate growth and in particular business start ups.
- 101. A written submission was received by Members at the September 2013

 Committee meeting. This outlined that The Corridor Manchester partnership provides the overarching framework for MCC's close working relationship with local HEIs. This partnership comprises MCC, University of Manchester (UoM), Manchester Metropolitan University (MMU) and the Central Manchester

University Hospital Foundation Trust. The Corridor Board comprises of chief executives, vice chancellors and directors from the various partners, and MCC's Leader. The Corridor's Strategic Vision to 2020 has five key themes, each of which has its own sub-group containing representatives from all the member organisations:

- Research and Innovation
- Employment, Business and Skills
- Transport
- Sense of Place
- Environment and Infrastructure.
- 102. The submission states that the collaboration between MCC and local HEIs goes beyond the formal Corridor Manchester partnership and there are strong working relationships in place between all senior figures. Collaboration continues at a more operational level on a number of major projects such as the construction of the new Birley Fields MMU Campus in Hulme, the Bus Priority Package and public realm improvements to Oxford Road. MCC's role in these projects is broad and can include being the owner of the land being developed, the Highways Authority, the Planning Authority or the accountable body for external funding.
- 103. The submission highlighted a number of areas where MCC is making a direct contribution to the local economy and businesses through partnership, delivery or funding initiatives. These include:
 - The Corridor Growth Fund is a £2 million grant scheme which is aimed at small and medium-sized enterprises which will help underpin the private sector led growth of the of the knowledge economy in the Corridor. The scheme launched in April 2013 and will close in March 2015 and is expected to support the creation of at least 100 full time jobs in research and development related employment.
 - Greater Manchester recently secured £10 million from the Regional Growth
 Fund to invest in enterprises looking to grow their bottom line through
 cutting-edge science and technology. The funding will be made available to

both small and large organisations and include firms seeking to harness the potential of Graphene - the ultra-thin, ultra-strong material discovered by academics at UoM - as well as funding reserved to assist science graduates with potentially innovative and lucrative ideas to set up businesses of their own. The programme will help speed up the process of creating a critical mass of high-tech firms in the region and support creative individuals as well as multi-national companies.

- Manchester is one of 10 cities that have been allocated funding from the
 Government's £114 million Urban Broadband Fund. This funding will be
 used to deliver the Corridor Digitalisation project to put in place open-access
 Next Generation Access (NGA) digital infrastructure using state of the art
 fibre to the premises and advanced wireless.
- The Business Growth Hub, launched in November 2011, was established by Manchester Solutions following the demise of the North West Development Agency and Business Link and in response to national government's policy of stimulating private sector led growth. The primary aim of the Hub is to drive strong, sustainable business growth in Greater Manchester and the wider Northwest working with businesses of all sizes and sectors by addressing barriers to growth and enabling companies to get the support they need in areas such as access to finance, international trade, innovation and leadership and recruitment.
- MMU are currently constructing their new Birley Fields Campus in Hulme. The new campus will be completed in September 2014 and will be home to the Faculty of Education and the Faculty of Health, Psychology and Social Care. The new campus is being constructed on MCC owned land which has been donated at nil cost to ensure the development could become a reality. Spin off research and development industries are expected to locate within Citylabs (the refurbished former Royal Eye Hospital), Techno Park on Birley Fields and Manchester Science Park.
- 104. MCC is not directly involved in providing incubator space or in funding university innovation centres. The Universities do have incubator facilities which provide free space for start up businesses but these are funded in house and

the universities receive a stake in the business. MCC has, however, played a pivotal role in the establishment of Manchester Science Park Limited which started operating in 1984 and now operates four sites across the city. MCC is a shareholder in the company along with Salford City Council, UoM and MMU. The company offers flexible lease terms on a range of high quality office and laboratory space. The facilities have been popular with high tech companies who benefit from the high quality space and strategic links to the Corridor and other growth areas of the city.

UK Case Studies

105. In April 2013, the Local Government Association (LGA) produced a report 'Higher Education Institutions and Local Government - Collaborating for Growth'. This report emphasises the role universities and other higher education institutions can play in supporting local economic growth, and the pivotal role that Councils play in creating conditions for economic growth. The report stresses that Local Economic Partnerships (LEPs)²¹ and City Deals²² have meant that Councils and partners are working closer together than they have in the past. While LEPs and City Deals are not applicable in a Welsh context, the underlying concept of cooperation and partnership working between the Council and the relevant parties is still applicable.

106. The report gives examples of where councils and universities have worked together for the benefit of a city or area, and where universities are playing an important role in the economy. ²³

²¹ LEP's are a voluntary partnership between local authorities and businesses aimed at determine local

economic priorities and leading economic growth and job creation within its local area.

22 City Deals are agreements and funding between government and English cities that give the city control to; take charge and responsibility of decisions that affect their area; do what they think is best to help businesses grow; create economic growth; decide how public money should be spent.

^{&#}x27;Higher Education Institutions and Local Government'; Local Government Association, 2013 (pg 6)

Oxfordshire

"The City Deal bid has brought together all Oxfordshire councils, the two universities, the big science facilities at Culham and Harwell, and the Oxfordshire Local Enterprise Partnership in a unique joint proposal that seeks to boost the knowledge economy and create a new partnership for growth.

The Oxford and Oxfordshire proposal centres on the potential to accelerate the growth of the city region's knowledge-based economy through the development of a network of enterprise and innovation centres across the key economic 'hubs' of Oxford City, Bicester, and Science Vale, which includes the recently created Enterprise Zone."

107. HEIs have an essential role in working with businesses across the functional economic area (FEA) to devise and provide courses to meet the needs of local businesses. Businesses and HEIs need to be engaged to ensure the right people are doing the right courses, and there is an opportunity for Councils and HEIs to work together to ensure they have an appropriately skilled workforce. An example of this is seen through the Plymouth City Deal.²⁴

Plymouth

Case Study - Delivering business demand for skilled employees

"A deal for Plymouth and the wider area will create an innovation eco-system dedicated to realising the commercial potential of our world class marine technology knowledge and assets.

In order to address national and local barriers, one of the three initiatives proposed as part of the deal is through the commercialisation of our knowledge base in the marine technology sector through a single business support platform and development of a robust innovation 'eco-system' to nurture business.

This will be achieved by the University, marine and maritime knowledge, research and development facilities and services brought together under the GAIN (Growth Acceleration and Investment Network) proposition.

²⁴ 'Higher Education Institutions and Local Government'; Local Government Association, 2013 (pg 8)

Using GAIN as a single portal and 'neutral space' for innovation will offer intensive commercialisation assistance, supply chain development, and streamlined access to national and EU business growth programmes in marine and in relevant associated sectors.

A recent independent evaluation of the services provided to businesses by GAIN found that the businesses who had benefited from a range of support, have seen a 37 per cent increase in employment and cumulatively increased turnover by 60 per cent with a projected GVA increase in the region of 40 per cent."

108. Innovation plays a critical role in producing growth in the UK economy due to the disproportionately high level of job generation in innovative companies and the resilience of innovative graduate led organisations during the recession when compared to UK businesses as a whole. The LGA report highlights that universities in the East of England have been active in bringing forward initiatives that support innovation.²⁵

East Anglia

Case Study - Developing knowledge and commercialising innovation

"A virtual enterprise hub based at the University of East Anglia (UEA), InCrops stimulates commercial activity in the alternative and non-food crop sector by establishing business networks for sharing research knowledge.

InCrops has been developed to support: the commercialisation of new biorenewable and low carbon products; the business and commercial sector and sustainable economic growth through supply chain development, market integration and product innovation; successful technology transfer into the business and commercial environment; and commercialisation through business spin outs and business incubation support in the East of England. SMEs, new start-up businesses or entrepreneurs looking to start a new business are offered up to 14 hours of free specialist business support and consultancy."

²⁵ 'Higher Education Institutions and Local Government'; Local Government Association, 2013 (pg 10)

109. Bringing together assets across the public sector base in a particular FEA can lead to a place having significant funds for leverage and development. Utilising sites for the creation of good quality living accommodation for students or amenities for the community are examples of where collaboration between universities, councils and businesses would benefit all through the creation of local construction jobs, additional local amenities and an increase in the housing stock.²⁶

Manchester

Case Study - Making the best use of public assets across an economic sub region

"In Manchester, strong partnerships have allowed the council to identify and exploit opportunities for growth. For example, the new campus development by Manchester Metropolitan University (MMU) is one of the largest regeneration projects in the northwest, creating jobs for hundreds of people. [...] The City Council has worked closely with MMU to develop a masterplan for the site and to manage the wider stakeholder consultation.

A development agreement has been used to ensure that the regeneration benefits of the Birley Fields site (which is council owned) are realised.

Independent economic research commissioned by the partners involved in the regeneration scheme anticipates that the Birley Fields campus development will have significant outcomes for the local economy, including supporting 877 local jobs, generating a gross value added (GVA) of £29.2 million per year to the economies of Hulme and Moss Side and creating direct additional revenue of £76.7 million to the Hulme and Moss Side area.

In addition, the university as a purchaser of goods and services predicts that an additional £3.99 million could be spent in the local area as a result.

MMU has made a commitment to be part of the local community, and employ local people."

²⁶ 'Higher Education Institutions and Local Government'; Local Government Association, 2013 (pg 11)

110. The LGA report highlights that it is important for councils and businesses recognise the role that HEIs can play in driving economic growth both through education and wider civic leadership. By enabling this to happen, innovation can be nurtured and supported to drive an area forward.

INQUIRY METHODOLOGY

- 111. Members undertook the short scrutiny of 'Higher Education Innovation in Cardiff' over two Committee meetings; 4th July 2013 and 5th September 2013. Members received evidence from the following internal stakeholders: Councillor Russell Goodway (Cabinet Member: Finance, Business and the Local Economy), Ken Poole (Head of Economic Development) who gave a presentation and answered questions posed by the Committee, and Gareth Newell (Operational Manager Enterprise).
- 112. Representatives from the three major higher education institutions in Cardiff gave evidence at the Committee meeting on 4th July. This included the following witnesses:
 - Kevin Morgan, Cardiff University, Dean of Engagement and Professor of Governance and Development
 - Gavin Cawood, Cardiff Metropolitan University, Operations Director,
 National Centre for Product Design & Development Research
 - John Francis, University of South Wales, Director of Business Development
 - Karen Turnbull, University of South Wales, Deputy Director, Commercial Services
 - Gill Sandford, University of South Wales, Dean of the Faculty of Creative Industries
 - Richie Turner, University of Wales, Deputy Director, Global Academy.
- 113. In addition representatives from a number of organisations either attended the September meeting, or provided a written submission. This included:
 - Stuart Gall, MedaPhor, Chief Executive Officer
 - Dan Palmer, Q Chip, Managing Director
 - David Houliston, Manchester City Council, Principal Policy Officer
 - Rachael Donaldson, Local Government Association.
- 114. Members then discussed and decided the key findings and recommendations for the report at the Committee Meeting held on October 3rd 2013.

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(submitted to Committee as background information)

FINANCIAL IMPLICATIONS

115. The Scrutiny Committee is empowered to enquire, consider, review and recommend but not to make policy decisions. As the recommendations in this report are to consider and review matters there are no direct financial implications at this stage in relation to any of the work programme. However, financial implications may arise if and when the matters under review are implemented with or without any modifications.

LEGAL IMPLICATIONS

116. The Scrutiny Committee is empowered to enquire, consider, review and recommend but not to make policy decisions. As the recommendations in this report are to consider and review matters there are no direct legal implications. However, legal implications may arise if and when the matters under review are implemented with or without modification. Any report with recommendations for decision that goes to Cabinet / Council will set out any legal implications arising from those recommendations. All decisions taken by or on behalf of the Council must (a) be within the legal power of the Council; (b) comply with any procedural requirement imposed by law; (c) be within the powers of the body or person exercising powers on behalf of the Council; (d) be undertaken in accordance with the procedural requirements imposed by the Council e.g. standing orders and financial regulations; (e) be fully and properly informed; (f) be properly motivated; (g) be taken having regard to the Council's fiduciary duty to its taxpayers; and (h) be reasonable and proper in all the circumstances.

COMMITTEE TERMS OF REFERENCE

To scrutinise, measure and actively promote improvement in the Council's performance in the provision of services and compliance with Council policies, aims and objectives in the area of economic regeneration.

The Committee is responsible for looking at the following areas:

- Cardiff Business Partnership
- Cardiff & Co Marketing Initiative
- South East Wales Economic Forum
- Economic Strategy & Employment
- European Funding & Investment
- SME Support
- Cardiff Harbour Authority
- Lifelong Learning
- Leisure Centres
- Sports Development
- Parks & Green Spaces
- Libraries, Arts & Culture
- Civic Buildings
- Events & Tourism
- Strategic Projects
- Innovation &Technology Centres
- Local Training & Enterprise.

To assess the impact of external organisations including the Welsh Government, Welsh Government Sponsored Public Bodies and quasi-departmental non-governmental bodies on the effectiveness of Council service delivery.

To report to an appropriate Cabinet or Council meeting on its findings and to make recommendations on measures, which may enhance Council performance in this area.

ECONOMY & CULTURE SCRUTINY COMMITTEE MEMBERSHIP



Councillor Craig Williams (Chairperson)



Councillor Dilwar Ali



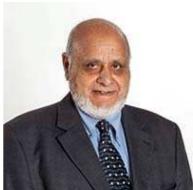
Councillor Peter Bradbury



Councillor Gareth Holden



Councillor Nigel Howells



Councillor Mohammad Javed



Councillor Georgina Phillips



Councillor Christopher Weaver



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