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Restructuring Districts into Science Quarters (REDIS) Local Action Plan for Science Central, Newcastle Upon Tyne

Section 1.0 Introduction

REDIS

REDIS “Restructuring Districts into Science Quarters” is a European project funded by URBACT II. It comprises of a network of 8 cities¹ who are involved in the physical development of Science quarters, one of which is Science Central in Newcastle.

The project aims

- to explore how science quarters can be integrated into the adjacent urban area and contribute to the economic and social regeneration of cities and
- to develop a set of best practice tools around key operational elements such as marketing/promotion and governance/management of such areas.

The project comprises of a series of workshops located in each partner city, resulting in recommendations to inform the development of each science quarter, drawing upon best practice from the European cities.

Newcastle Science City

The primary objective of Newcastle Science City is to increase significantly private sector led wealth creation and jobs in Newcastle and the wider economic geography. This will be done by creating a dynamic urban environment for new innovation as well through the collaboration and co - location of science and technology businesses with Newcastle University.

This activity is being led by the Newcastle Science City Partnership which comprises of Newcastle University, Newcastle City Council, and the business community as core members.

Newcastle Science Central

The physical hub of Newcastle Science City is Science Central, which is the focus of the REDIS project. Science Central is a new urban quarter in the centre of Newcastle which will be an exemplar in sustainability, attracting leading edge scientific organizations to a mixed new community encompassing a variety of educational, business and residential uses.

Extending in total to 24 acres (9 hectares), the site provides an opportunity for the regeneration of an under-used part of the city centre into a place which will have science and sustainability at its core. It will provide the essential infrastructure for the growth of the science economy and will act as the home of Newcastle University as it develops its world recognised research and business collaborations in the field of sustainability.

The focus of the REDIS project for Science Central in the original application was: community engagement and participation, design; improving accessibility and openness of the site, and financing models. These are still of relevance to the Science Central

¹ Aarhus (Denmark), Bialystok (Poland), Halle (Germany), Magdeburg (Germany), Manresa (Spain), Newcastle upon Tyne (UK), Vienna (Austria), Piraeus (Greece). A minimum of 8 partners is needed to comply with project eligibility requirements.

development, along with governance, branding and marketing, growing indigenous and attracting new businesses, sustainable development, and phasing of and de-risking the site to attract private sector investment.

Local Support Group

A requirement of the REDIS project is to establish a local support group made up of key representatives to oversee the development of a local action plan.

The following organisations are involved in the Newcastle local support group:

- 1NG – the city development company for NewcastleGateshead,² leading on the development of key strategic developments, one of which is Science Central.
- Newcastle Science Company Ltd – established to promote science and innovation in the business and local community in Newcastle.
- Newcastle City Council – the local authority and joint land owner of Science Central.
- Newcastle University – a world renowned University and joint land owner of Science Central.
- ONE North East – the regional development agency.
- Centre West – a charitable community organisation working in the west end of Newcastle to improve the economic, social and environmental prosperity of the area.
- Private sector (Orla Proteins Technologies Ltd) – a local company that has commercialised a biosurface engineering technology to improve the functionality of proteins.

Local Action Plan

The aim of the local action plan is to identify actions to guide the development process drawing upon the recommendations made and lessons learnt from the European partners that will contribute to the successful regeneration of the Science quarter.

This document sets out the urban and economic context for the project, information on the proposed Science Central development and a series of actions that the partners will take forward in the next three years drawing upon the recommendations identified in the REDIS baseline assessment and implementation laboratories in each of the partner cities to progress activity related to Science Central.

Section 2.0 Urban and Policy Context

Spatial context

Newcastle is part of the North East region (2.5m inhabitants), located next to the Scottish border. The population of this region is concentrated in the two former industrial valleys: the city regions centered on Tyne and Wear and the Tees valley.

Newcastle is both the geographic and economic centre of the city region as well as being the capital of the wider North East region. It is the main driver of economic growth spreading the benefits to surrounding areas.

Economic base

During the 19th century, industry developed rapidly along the River Tyne. Thriving sectors were port activities, chemicals, tanning, shipbuilding, glass making and coal transport.

Newcastle developed rapidly over this period and became the economic, cultural, financial and administrative centre in the North East. During much of the 20th century, however, there

² NewcastleGateshead – Newcastle and Gateshead are separate local authority areas, but work together on a number of strategic issues including destination market, economic development and planning.

was a gradual decline. Industrial restructuring and heavy competition from emerging locations created a decline in the manufacturing base and an outflow of expertise and skills. During the 1980s and 1990s, the region fell behind other UK core regions in terms of economic growth.

Table 1. Newcastle versus the UK average

<i>Variable</i>	<i>Newcastle</i>	<i>UK</i>
GVA per person index (UK=100) 2008	92.1	100
Unemployment Feb 2011	6.8%	4.7%
Employment growth 1998 - 2008	19%	9.5%
% of higher educated 2009	21%	20%
R&D expenditure by firms 2007	0.8%	1.3%
VAT Registrations as % of business stock 2007	11%	10.2%

Despite the North East lagging behind other regions, Newcastle has begun to experience a reversal of fortunes and is a key economic driver of the city region. In 2008 there were 176,000 employee jobs in Newcastle, with the City demonstrating employment growth in line with the national trend and more rapidly than the rest of the region. The city has gradually shifted from a manufacturing based economy to a service and knowledge based economy. Manufacturing now accounts for 5.2% of employment and this sector has diversified into new areas such as offshore industry, pharmaceuticals and biotechnology.

Meanwhile, the share and number of service jobs has increased rapidly accounting for 91.6% of employment. The share of knowledge intensive businesses is low (compared to other UK cities), but this sector is growing. The most important knowledge intensive activities in the city include finance, IT and business services.

The 2010 Cities Outlook report looks in detail at 8 key performance indicators. Out of the eight core cities in the UK Newcastle has an average of 4.3 out of eight, broadly in line with Manchester and Nottingham but outperforming Liverpool, Sheffield and Birmingham.

All cities have been hit by the recession with a particular effect on the manufacturing and construction sectors. Data and anecdotal evidence suggests that Newcastle has proven to be resilient during the recession, although the impact of cuts in the public sector has still to take effect.

Knowledge base

Newcastle has a strong set of higher educational institutes (HEIs) and R&D activity. There are five universities in the region, including two universities based in Newcastle: Newcastle University and Northumbria University. There are approximately 50,000 students in Newcastle and it is recognised as one of the UK's most student friendly cities.

Research quality is high, and there are pockets of world leading research. The principle areas of research excellence include cancer studies, clinical studies, nursing, environment and earth sciences, chemistry, applied maths, computer science, civil and mechanical engineering, marine technology, transport, design, architecture, planning and law.

The city wants to capitalise more on its research capacity and encourage the commercialization of research. This is one of the key objectives of Newcastle Science City and Science Central will be a physical hub where Newcastle University will act as a magnet for businesses to co-locate and collaborate.

The North East benefits from Objective 2 funding, a key aim of which is to improve the regional knowledge economy. Seven Innovation Connectors have been identified as part of the regional Objective 2 programme 2007-2013 one of which is Newcastle Science City. Investment in Newcastle Science Central is a key strand of the Newcastle Science City Innovation Connector Investment Plan, to provide a physical hub for knowledge intensive businesses.

Despite the presence of two Universities the educational and skills level of the population is relatively low. Attracting and retaining skilled people is a key challenge for the city, and the development of Science Central as an attractive residential and work location will assist with this.

There are also pockets of deprivation in Newcastle, one area is the West End directly adjacent to the planned Science Central area. It is envisaged that benefits arising from the site will provide opportunities for adjacent communities.

Accessibility

Newcastle's good accessibility (national and international) is one of its key assets. The airport offers a number of international destinations, and also highway and train connections are good. These are important assets for Newcastle's economy.

Quality of Life

Newcastle has a rich cultural asset base; with numerous museums, galleries, theatres and a world-class cultural heritage (cathedrals, castles, Hadrian's Wall). There are many natural amenities in close proximity to the city, including national parks and areas of outstanding natural beauty. The combination of culture and nature make Newcastle one of the most popular UK cities for tourists.

The city has also been ranked as Britain's most sustainable city in the Forum for the Future's annual ranking for the second time in two years, in recognition of the city's work in protecting and promoting the environment.

The 1PLAN

Acknowledging the need to revitalize its economic base, 1NG produced the 1PLAN, an economic and spatial strategy for NewcastleGateshead, on behalf of its partners including Newcastle City Council.

The 1PLAN sets out a strategy for the next 20 years based on three key elements:

- 4 Big Moves, which establishes economy, people, place and sustainability as the core components of the strategy
- 10 key steps which describes the practical actions to be taken in the next three years
- A placemaking strategy setting how the urban core will be transformed.

NewcastleGateshead's economy will be transformed through science, technology and innovation leading to high levels of employment, new firm formation, a revitalised business base and the attraction of inward investment. Science City has been identified within the 1PLAN, as a key priority to address economic under performance and the over dependence on the public sector. Science Central it states will be a dynamic environment for research, business incubation and collaboration between the University and businesses. The development is central to the area's economic future and this was highlighted by the implementation laboratory in Newcastle as being important for the success of the development.

Summary

Newcastle in the last decade has transformed itself and continues to be the main economic driver in the North East. Substantial investment in the City coupled with a pool of skilled and talented people and some high profile companies has enabled Newcastle to reinvent itself and its image. However, there are still a lot of challenges facing the city as it moves towards a knowledge economy, including attracting firms, commercializing research, growing the business base and retaining skilled people. Enhancing Newcastle's reputation and critical mass as a city of science has been identified as one of the steps to grow the knowledge economy. The development of Science Central as a mixed use quarter with science and sustainability at its core will be instrumental in Newcastle becoming a more prosperous city.

Section 3.0 Science Central

The Site

Science Central is a unique opportunity. The re-development and regeneration of this key 24 acre portion of Newcastle city centre has been identified as one of the core pillars of the economic strategy for the future prosperity of Newcastle.

Located centrally on the site of the former Tyne Brewery (see location context plan and aerial photo within Appendix 1), Science Central presents the opportunity to create the infrastructure required for the growth of the science economy in the most sustainable way.

Following the acquisition of the former Scottish & Newcastle brewery and adjacent land by Newcastle City Council, Newcastle University and One North East in 2005, the project partners have already completed a programme of demolition and site remediation in preparation for development.

The site sits at a key point of transition within the city, with the established commercial and business core lying adjacent to the east and areas of relatively deprived residential accommodation to the west (some of which are in the top 10% most deprived in the UK).

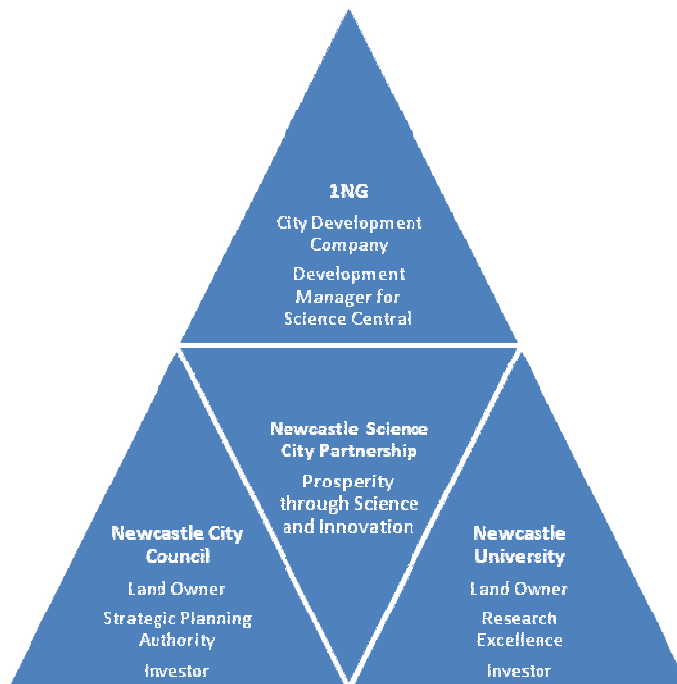
The site therefore offers the opportunity for greater integration of these communities through improved access to the city centre business core and their inclusion in the growth of the science economy at Science Central.

The Partners

The Science Central project is being promoted by a lead partnership of Newcastle University and Newcastle City Council. This partnership seeks to nurture and develop the science economy within the city and thereby help secure the economic future.

The primary vehicle for undertaking this work is the Newcastle Science Partnership, which is tasked with developing the growth of new and indigenous scientific organisations which will be major contributors to the local economy over the coming years.

The diagram below sets out the relationships between the partners:



Newcastle University

Newcastle is one of the UK's leading Universities and aims to be a world-class research-intensive university, delivering teaching of the highest quality and playing a leading role in the economic, social and cultural development of the region.

As part of the University's "Vision 2021" strategy, it has embarked on major programmes linked to societal themes. 2011 will see the launch of the societal theme in Sustainability. A new research institute bringing together hundreds of researchers in Sustainability is being created with major areas of focus around transport, energy, water, marine, food, urban and rural economy and health and the environment (all areas where the University has critical mass and a significant reputation).

As part of its Sustainability strategy the University is planning extensive capital development, within a future phase of the Science Central development. This development will be a unique facility co-locating major items of university infrastructure in an environment designed for business and university activities to be co-located.

The University expects to develop some 33,600 sq metres of space for its own use and, with private sector partners, will develop at least an equivalent amount of space within the Science Central project. This will underpin a major inward investment strategy for the site built around the theme of sustainability and co-location.

Newcastle City Council

Newcastle City Council has been a key partner from the outset of the Science City initiative, committing substantial resources to the preparation and development of the project. The Council is fully committed to the transformation and growth of the local economy and recognises Science Central as one of the key projects which will achieve this.

1NG

1NG the city development company for NewcastleGateshead is acting as the development manager for Science Central on behalf of the above partner organisations. Leading on the design, phasing and construction of the site, 1NG are translating the vision of the partners into a viable and deliverable development.

Private Sector

Initial development activity is already progressing in collaboration with GMD Developments Ltd, which is undertaking the £87m (€100 m) development of a new 10,000 sq.m Business School for Newcastle University with neighbouring student accommodation. Northland Properties Ltd will also complete the development of a 160 bed 4 star hotel on site in June 2011.

Masterplan vision

1NG, working with a multi-disciplinary professional design team led by Make Architects who were appointed in October 2009, has established the masterplan vision for Science Central.

This foresees a £255m (€290 m) private sector redevelopment of the site to include:

- 16,800 sq.m of university accommodation
- 81,950 sq.m of new business accommodation
- 38,310 sq.m of residential accommodation, in a mix of family, apartment and postgraduate student formats
- A hotel of 5,900 sq.m
- 31,750 sq.m of mixed community, retail, leisure, parking and energy infrastructure
- a new east/west pedestrian route across the site which will link the existing local communities with the core of the city centre;
- three significant new public open spaces
- a combined heat and power plant which will generate and supply energy to all buildings within the project and, in the longer term, potentially to neighbouring communities

The masterplan has been devised with a particular focus on sustainability, with environmental, social and economic factors being considered throughout the design process. A central aspiration of the masterplan and of the project partners is that Science Central should be an exemplar in sustainable urban development.

Consultation with the community and key stakeholders has taken place during the process. The feedback was positive with a general desire to see the development progress quickly.

A copy of the plans and aerial images which highlight the masterplan vision are included as Appendix 1.

The masterplan has been developed to a level of detail to form the basis of an outline planning application for the entire project, which was submitted to the Local Planning Authority in January 2011, with approval anticipated in spring.

Economic Impact

An assessment of the economic impact of the Science Central development has been undertaken based on the proposed level of development as set out in the masterplan. The outcome of the analysis is set out below.

- The creation of up to 4,500 gross jobs, (1,900 net jobs) a proportion of which will be secured by residents of adjacent communities
- An estimated £167.5m (€190 m) per annum of GVA will contribute to the region's and UK's economic output
- £255m (€290 m) of private sector investment will be levered following the development of 174,710 sq m of teaching and research space, office, commercial

and community accommodation, as well as 550 homes in a new urban neighbourhood.

- Newcastle's reputation for world leading and internationally excellent research and business base in life sciences, cancer research, stem cells, biological and environmental sciences will be strengthened. The University is a key economic driver in Newcastle employing 5,000 people and generating £372.5m (€423 m) turnover.
- The rate of innovation, technology adoption and commercialisation will be accelerated in the economy of NewcastleGateshead.
- Newcastle will be put at the forefront of sustainability, in terms of design, carbon emissions, sustainable energy production and integration with surrounding communities building on its existing strengths.

Progressing Science Central

A number of other activities alongside the development of the masterplan have been progressed to ensure that development at Science Central is a success. These include:

Phase 1 of the Science Central Development

Design work is underway for the next phase of Science Central with the focus being on the provision of essential site infrastructure and the removal of physical constraints to further development by the project partners and the private sector, in order that momentum can be maintained.

The next phase of investment will deliver a "Gateway" building which will accommodate new and growing businesses, continuing professional development activity for businesses as well as a suite to showcase the science expertise within the city. The Gateway Building will be an iconic development and act as a catalyst for the wider development of the site. High quality design, public realm and environmental standards will be integral to the development of the Gateway Building.

Funding from a number of sources, in addition to that secured from the partners including ERDF is being sought for this work.

Although the majority of the site is in the ownership of the partners, there are a number of sites within the masterplan area that are privately owned. Acquisition of a number of strategically important sites is underway to enable the site to be redeveloped in accordance with the masterplan.

Geothermal Energy

Funding has been secured and work is underway to explore the feasibility of geothermal energy at the site. The money will fund the drilling, hydraulic testing and geophysical logging of a 2000m borehole at the site. Scientists believe that at this depth the borehole, the deepest ever drilled in the UK, will bring up hot water at a temperature of 80 degrees centigrade - hot enough to heat any domestic or commercial central heating system.

Newcastle Innovation Machine

The Newcastle Innovation Machine (NIM) operated by Newcastle Science Company Ltd encourages entrepreneurs to establish their own businesses by identifying an unmet market demand and matching the service/product to an entrepreneur. The objectives are:

- to create and support sustainable high-growth insight-led businesses and jobs in Newcastle and the region;
- to create a world-class innovation capability based on insights into new unmet-needs and de-risking the innovation process for potential entrepreneurs
- to build collaborations between all innovation players (universities, research centres, start-ups, SMEs and large corporate) at every stage of the process; and

- to create a critical mass of innovation skills and culture.

To date 17 businesses have been created with a further 20 businesses supported via the NIM.

Community Engagement

As well as community consultation as part of the masterplanning process, one of the main objectives of the Newcastle Science Company Ltd is to encourage schools and the community to get involved in and benefit from science.

The Community Engagement Project is an ambitious city wide programme that aims to increase residents' awareness of and participation in theme related science activities (Ageing and Health, Stem Cell and Regenerative Medicine and Sustainability).

The Community Science Team works to develop relationships with scientists and a broad range of Newcastle residents (specifically those living in disadvantaged areas of the city) increasing their awareness of and participation in Newcastle based science related activity.

Initiatives that are currently underway include:

Community Activity

- Scotswood strategy community group are learning about sustainable engineering and the city's expertise in low carbon vehicle technology
- Promoting halogen cooking, a more environmentally method of cooking that helps people learn about low cost and healthy eating
- Identifying why cancer rates are higher in certain neighbourhoods and what can be done to overcome this.

School Activity

- Crest Awards in partnership with Newcastle City Council celebrating achievement in STEM (Science, Technology, Engineering and Maths)
- International Year of Chemistry – a project with both Universities, Nissan and Narec about electric vehicles
- Annual Glow Careers Conference held in November attracting 500 young people
- Olympic and STEM programme – using the city's involvement in the Olympics as a hook for STEM learning.

NIReS

A new research institute encompassing Newcastle University's sustainable science activity, to be known as the Newcastle Institute for Research in Sustainability (NIReS) has been established. This will bring together hundreds of researchers in sustainability with major areas of focus around transport, energy, water, marine, food, urban and rural economy and health and the environment (all areas where the University has critical mass and a significant reputation). The physical location of NIReS will be Science Central providing the opportunity for the University to work more closely with business, allowing research to be commercialised, generating wealth and jobs.

REDIS – Baseline and Implementation Laboratory Findings

REDIS Baseline Assessment

As part of the REDIS programme, a comprehensive baseline assessment of Science Central was undertaken in 2008. This identified that the partners within Science Central should consider the following issues when taking forward the work to inform the development:

- How to design a workable and efficient management model, given the different legal bases and ambitions of the constituent organisations?
- How to create physical areas that promote and encourage interaction?
- How to link the opportunities of Science Central to the further regeneration of adjacent deprived areas?
- How to ensure that the Science Central concept will be maintained when pressure mounts to fill spaces with unrelated activities?
- Funding mechanisms: how have REDIS partners arranged funding (from different sources) to develop the site?
- Competition with other 'Science cities': To what extent have 'established' science cities an advantage over those that are being developed now?

REDIS Implementation Laboratory

The main aim of REDIS is for the cities to learn from each other and to share best practice. To facilitate this transfer of knowledge, an implementation laboratory is held in each city. The implementation laboratory comprises of a series of site visits and workshops, resulting in a set of recommendations for how the cities could take forward their schemes.

The implementation laboratory in Newcastle was held in May 2009 and attended by all the partner cities, at a time of transition in the delivery of Science Central. At that time, 1NG had recently become the development manager on behalf of the partners and a review was underway of the governance and delivery arrangements.

It had been agreed by the partners that the previous masterplan for the site which identified up to 2 million sq ft of development was no longer viable given the economic climate and that a new vision and deliverable masterplan was required.

The workshops focused on four key areas, the concept, process and management, branding and communication as well as social and physical connectivity. A report of the implementation laboratory is available at <http://urbact.eu/en/projects/innovation-creativity/redis/homepage/>

The main recommendations from the implementation laboratory reiterated the findings of the baseline assessment and also set out the following suggestions.

- Clearly articulate the vision and unique selling points of Science Central and how this fits within the overall economic vision for the City.
- Create an environment to foster a quadruple helix (business, university, science and the community)
- Need for a marketing strategy that distinguishes Newcastle Science Central from Newcastle Science City.
- Create a programme of community engagement and use science as a means of engagement
- Given the long term nature of the development, short term interim uses should be promoted on the site
- Refine the delivery structures to simplify and streamline the decision making process
- Create links, physical, social, cultural and economic links with adjacent communities

Section 4.0 of the action plan sets out the activities to be taken forward within the next three years as well as how the issues identified during the REDIS process will be addressed to realise the Science Central vision.

Section 4.0 Vision and Action Plan

Vision

Science Central is a new 24-acre urban quarter in the heart of Newcastle, which will be an exemplar in sustainability, attracting leading-edge scientific organisations and high-value jobs to a mixed new community comprising educational, business and residential uses.

Action Plan

The table below sets out the activities that will be delivered in the next three years and addresses the points raised in the REDIS baseline assessment and implementation laboratory.

Developing Science Central

Activity Title	Lead Partner	Other Partners	Description	Timescales	Resources
Planning Permission	1NG	NCC	Outline planning permission for 174,710 sq meters of commercial, office, university and 550 new homes, improved access and public open space submitted. Reserved matters applications to be submitted for infrastructure works and the Gateway Building.	Spring 2011 Summer 2011	Existing
Infrastructure Works	1NG	NCC/NU	The infrastructure work will allow an element of all anticipated land uses to be made available to the market within the first phase. Wellington Street will be the focus of a significant upgrade facilitating access to a range of development plots. This will be complemented by the creation of two new public spaces, tackling site abnormalities and improving pedestrian access to the site. The development plots facilitated by this infrastructure will allow: <ul style="list-style-type: none"> • Significant development by Newcastle University bringing to life the "Knowledge Zone" • Capacity for the development of business space • The delivery of a new 160 bed hotel • Commencement of development of the first phases of a 	Ongoing – July 2013	£16.7 million

			<p>“Sustainable Home Zone”.</p> <ul style="list-style-type: none"> The provision of a range of supporting leisure and community facilities, in the form of cafes, restaurants and local retail facilities. <p>Detailed design work is underway and a contractor will be procured to start work on site in January 2012.</p>		
Gateway Building	1NG	NCC/NU	<p>An iconic Gateway Building is to be developed to increase the growth of new businesses, encourage collaboration with the University and to promote science to the community and the development opportunities to investors.</p> <p>The uses in the Gateway Building will include:</p> <ul style="list-style-type: none"> Project marketing/Science showcase –to promote the opportunities on offer and to highlight the scientific and sustainable theme of the development. A Continuing Professional Development (CPD) facility will offer training run by the University to private businesses Incubation units to support new and growing businesses which are being created from the Newcastle Science City Innovation machine, being spun-out from Newcastle University or which are being attracted to the city for the first time. <p>The building is currently being designed and a start on site is anticipated in January 2012.</p>	Ongoing – July 2013	£11.3 million
Land Assembly	1NG	NCC	<p>Securing the remaining sites that are in private sector ownership will enable Science Central to be developed in accordance with the masterplan.</p> <p>A number of properties have been identified to be purchased on the perimeter of the site. A strategy to acquire these sites is to be produced, with the aim being to acquire the sites via</p>	Ongoing	To be identified

			negotiations with the landowners.		
Interim Uses	1NG	NCC/NU/ NSCs	<p>To animate the site in the short term a number of interim uses will be brought forward. The interim uses will comprise of uses to promote the site as a place for science and sustainability alongside more commercial uses.</p> <p>Proposals include temporary art work, car parks, community allotments, sustainability experiments including carbon capture initiatives, planting for biomass and pioneering habitats and events spaces.</p>	Ongoing	To be identified
Formalising Delivery Structures	1NG	NCC/NU	<p>Given the scale and development timescales for Science Central, the partners have agreed to the formation of a Limited Liability Partnership between Newcastle City Council and Newcastle University to centralise assets and funding to attract private sector investment.</p> <p>Once established the LLP will be the main delivery vehicle for Science Central and will streamline governance arrangements.</p>	Summer 2011	Existing

Business Development

Activity Title	Lead Partner	Other Partners	Description	Timescales	Resources
Newcastle Innovation Machine (NIM)	NSC	Private Sector	<p>Based on the successful pilot project, it is proposed to continue the NIM to create and support the next generation of high-growth enterprises through the development of insight-led businesses.</p> <p>The investment will lead to the creation of 50 new high-growth businesses, the support of 200 businesses and the creation of 200 direct jobs.</p>	Ongoing	Existing

Branding & Marketing	1NG	NSC/NU/ NCC	<p>Science Central is to be retained as the preferred name for the development.</p> <p>A marketing strategy is to be developed for Science Central which will comprise of:</p> <ul style="list-style-type: none"> • Distinguishing Science City from Science Central • Branding of the site and roll out of the brand • Design of and erection of hoardings • Promotional literature and website development • A marketing suite within the Gateway Building • Press releases • Presentations to key audiences 	Ongoing	Existing
Business Winning	All		<p>Attracting new businesses to Science Central will be critical to the growth of the economic base in science and sustainability. As well as businesses, investors and developers will need to be secured for the Science Central development.</p> <p>Development of the proposition, identification of key target markets and providing a market facing customer service to attract this vital private sector investment will be the priority in the next three years.</p>	Ongoing	Existing
NIReS	NU	Private Sector	<p>A new research institute encompassing Newcastle University's sustainable science activity, to be known as the Newcastle Institute for Research in Sustainability (NIReS) has been established.</p> <p>Once the phase one infrastructure is in place, the University will bring forward development to bring together hundreds of researchers in sustainability with major areas of focus around transport, energy, water, marine, food, urban and rural economy and health and the environment.</p> <p>The University's presence on the site will enable them to work more closely with business, allowing research to be commercialised, generating wealth and jobs.</p>	Ongoing	£30 million

Community and Schools Engagement

Activity Title	Lead Partner	Other Partners	Description	Timescales	Resources
Community Engagement	NSC	Centre West	Monitor and manage the delivery of a package of community led science projects delivered by a range of Newcastle based community groups and third sector organisations	Ongoing	Existing
		Centre West, NU/UNN Cancer Research UK, ICfL, NESCI etc	Continue to raise awareness, knowledge and profile of Newcastle based science and research (following the three core themes) within disadvantaged communities throughout Newcastle via community events and road-shows	Ongoing	Existing
		Centre West	Facilitate access and broaden participation (increase demographic representation) in existing science related activities, research, public events etc	Ongoing	Existing
		Newcastle Council for Voluntary Services (NCVS)	Increase the capacity of third sector organisations and science and research institutions to develop collaborative projects and approaches to working	Ongoing	Existing
		NCVS	Manage the communication of thematic science research, events and opportunities to “hard to reach” Newcastle residents via the Community Engagement website	Ongoing	Existing
		NCVS	Develop a third sector and science forum for information sharing, ideas exchange and the adoption of best practice	Ongoing	Existing
		Newcastle Futures	Raise awareness and knowledge of the science, technology, engineering and math (STEM) job opportunities that exist at all	Ongoing	Existing

		Newcastle Futures	levels Promote and encourage the uptake of training with regard to STEM related skills	Ongoing	Existing
		Newcastle Futures	The development of industry demand led training and skills interventions relating to the NSC three core themes in partnership with training providers from all business sectors	Ongoing	Existing
School Engagement	NSC	Local Authority and Schools	Support the delivery of Science subjects, enabling teachers to link to STEM employers and STEM research institutes to ensure that students can understand the relevance of the science they are taught in everyday life	Ongoing	Existing
		STEM Employers, schools,	Promoting the wide variety of career options available to those who study STEM subjects, clarifying study and progression routes	Ongoing	Existing
		FE/HE institutes	Links to STEM ambassadors, employers, under and post graduates	Ongoing	Existing

Section 5.0 Delivery and Governance

The Newcastle Science City Board comprising of representatives from Newcastle City Council, Newcastle University, Newcastle Science City, One North East and the private sector are the strategic decision making body promoting the objectives of Science City.

To oversee the physical development at Science Central, a project board has been established, chaired by 1NG with representation from the key partner organisations. Decisions from this board are reported to the Newcastle Science City Board.

Given the scale and complexity of Science Central, the project partners have undertaken considerable work to establish a suitable long term delivery mechanism and the means by which control and accountability will be maintained over the life of the project. This has been one of the issues highlighted within the REDIS process that required further clarity and structure.

JV Vehicle

It is envisaged that a bespoke delivery vehicle will be established between Newcastle City Council and Newcastle University, in the form of a Limited Liability Partnership. This vehicle will be jointly owned and controlled by the partners and will allow the centralisation of project assets and resources in a manner which is understandable and attractive to private sector partners. This is considered essential for the successful long term delivery of the project.

The legal structure envisaged can be summarised as follows:

- The Science Central Joint Venture Company (JVCo) is to be established, most likely in the form of a LLP, with the injection of land and cash investment from the public sector partners.
- The JVCo will be jointly owned and controlled by the respective partners and decision making will be made equally.
- It is envisaged that 1NG, the city development company for NewcastleGateshead, would provide development and construction management services to the JVCo.
- The JVCo will enter into contracts with designers and contractors for the construction of infrastructure and building works as necessary;
- The JVCo will engage with the private sector for the sale of development plots facilitated by infrastructure work.
- Receipts from sales of development plots will be re-invested by the JV in subsequent phases of development on a rolling basis until completion of the project, and
- An Estates Management Company would be formed which would undertake the long term management of the development on behalf of all owners

Governance

The JV structure envisaged would create an autonomous and empowered entity, but ultimate control of the project would be retained by the core partners through a clear protocol of delegated authority. Regular Board meetings would be held for the JV Co in order to ensure that each of the project partners and their representatives are fully informed of project progress and to ensure that the JV Co is acting in accordance with the intentions of the partners.

Funding

Following detailed financial appraisals £42 million (€47 m) of public sector investment is required to deliver the scale of development proposed at Science Central, which will lever in £255 million of private sector investment.

To date, £16m (€18 m) is fully committed to the project equally by Newcastle City Council and Newcastle University. Sources for the remaining funding must therefore be identified to enable the project vision to be delivered in the long term.

The funding confirmed from the core partners is sufficient to allow commencement of works on site, with further funding bids currently submitted for both Regional Growth Fund (RGF) and ERDF funding (totalling £12.7m (€14 m) for physical works). Further work to support the business case for an Accelerated Development Zone is ongoing with Newcastle City Council and further future bids to other sources are being considered.

Section 6.0 Added Value of REDIS

This section sets out the lessons that have been learnt from the other European Cities involved in REDIS that can be applied to Science Central.

All of the developments being taken forward by the cities involved in REDIS are at different stages, involve a range of partners, are targeting a range of sectors and also differ in terms of scale and location. However, all of the schemes are aiming to stimulate economic growth via growing the knowledge economy, are keen to strengthen links with Universities and improve the quality of place.

The key lessons arising from the implementation laboratories from the other cities are set out below:

- Developing a shared vision amongst stakeholders that clearly sets out the unique selling points of the development
- Streamlined governance structures that have strong leadership and champions within the partner organisations to move the development forward as well as promote it to others, businesses, investors, developers, funders, other stakeholders
- Co – locating businesses, universities and research institutes either via incubators/technology centres or within the development to enable research to be applied to businesses and to improve the quality and scale of research as well as providing a pool of skilled workers for businesses. Aachen within the REDIS network formalises this approach via contracts between businesses and the Universities.
- Ensuring that adjacent communities benefit from the opportunities arising in the science developments, and formalise this through a quadruple helix (business, community, university and the public sector)
- Development of strong formal and informal networks between businesses located at the development as well as with the wider economic area
- Identification of businesses locally, nationally and internationally to target to attract them to the development. To aid new businesses Tampere provides assistance via free workspace, legal, financial, property search and recruitment advice as a soft landing for inward investors.
- Facilitation of the cross over between businesses in different sectors, creative, tourism, IT, digital, media etc can all contribute to the growth of science businesses and the knowledge economy
- Provide a catalyst for the site via incubation facilities, research institutes, technology centres or a key anchor tenant
- Ensure good connectivity between the development and adjacent amenities
- Consider designating an area as a special economic zone to attract businesses and investors.
- Animate the area particularly in the first phases when there are fewer uses on site and footfall maybe low especially after working hours.

Section 7.0 Conclusions

Newcastle has valued their involvement in the REDIS project and this action plan sets out how the partners will take forward a number of actions to realise the vision of Science Central and contribute to the wider objectives to grow the knowledge economy of Newcastle as a science city.

Significant progress has been made in the last two years on Science Central since Newcastle committed to the REDIS project and this action plan sets out a series of actions in the next three years that will result in the completion of the first phase at Science Central.

In summary Science Central:

- Is a key project for the future prosperity and growth of the Newcastle economy as identified and prioritised within the 1PLAN, the economic and spatial masterplan for the area
- Will contribute significantly to the re-balancing of the local economy, creating 4,500 gross jobs (1,900 net) and leveraging over £255m (€290m) of private sector investment
- Will be an exemplar in sustainability and will provide the physical infrastructure to enable the growth of the science economy within a unique urban environment
- Will enable the further establishment of Newcastle University as a world-leader in academic research, with a particular focus on investment in sustainability research
- Provide the opportunity through investment in further infrastructure, to accommodate new and growing science companies and major established organisations engaging in university collaboration.
- Provide opportunities for residents and schools to engage in science and sustainability to make them feel involved in the development at Science Central.
- Will continue to incorporate best practice from international experience and aim to make Science Central a world wide example of a sustainable science led development.
- Will contribute to the wider economic, social and environmental objectives to improve the well being and raise aspirations of the people in the city.