

CHESHIRE EAST COUNCIL

Cabinet

Date of Meeting:	21 st April 2015
Report of:	Executive Director for Economic Growth and Prosperity
Subject/Title:	Investment to Secure the Square Kilometre Array Project
Portfolio Holder:	Councillor Don Stockton, Housing and Jobs

1.0 Report Summary

- 1.1 Jodrell Bank Observatory is a key asset within the Cheshire science corridor portfolio it attracts over 160,000 visitors each year. It is currently going through a period of rapid expansion and is currently competing on a world stage to retain the Square Kilometre Array (SKA) project and headquarter status for a further 50 years, which is significant as the current contract is for only 4 years.
- 1.2 Retaining the headquarters of the SKA project is estimated to be worth £1 billion of private sector investment and will help to secure a further 200 on site high value jobs, along with giving additional benefit to the visitor economy in Cheshire.
- 1.3 CEC investment in Jodrell Bank as part of the SKA project will not only help to support the growth in the economy it will unlock further funding from (EDRF, Heritage Lottery, and Universities) which is estimated to equate to over £100 million.
- 1.4 CEC sits at the heart of a region that has one of the strongest science and technology clusters in the UK boasting world class academic, research and innovation support infrastructure, and which, in particular, excels in the fields of life sciences and biotechnology, chemicals, and aerospace, and associated growth industries.
- 1.5 The wider science corridor generates of £970 million in Gross Value Added (GVA) and employees over 11,000 people. Cheshire East itself accounts for 36.9% of the North West region R and D jobs and companies in the region have consistently experienced growth rates of a 7% per annum.
- 1.6 These highly skilled international industries require expertise in key growth areas to ensure that Cheshire East is able to realise its full potential as the fastest growing science and technology cluster in the

UK supporting new Small and Medium Enterprise's and building upon our unique asset base.

- 1.7 As part of its ambitious jobs-led growth agenda, CEC has set out a clear action plan to develop and grow the Technology and Science corridor in the area and as part of the plan Jodrell Bank given the unique importance of the site.
- 1.8 In April 2011, Jodrell Bank Observatory of the University of Manchester, in Cheshire, England was announced as the location of the headquarters office for the project. The SKA Organisation was formed and the project moved from collaboration to an independent, not for profit, company.
- 1.9 CEC is committed to supporting the growth and success of the Jodrell Bank site as a unique asset in the Cheshire Science Corridor, and continues to work closely with partners across the Manchester city region to develop the site's record in hosting world-class science and visitor activities.
- 1.10 CEC is facilitating discussions with the University of Manchester, Jodrell Bank Observatory and the Science and Technology Facilities Council to develop a strong vision and action plan for the future of the site.
- 1.11 In line with the vision for the site to remain a world leading resource in the field of Astrophysics and Astronomy, development package support will include:
 - a) £290 million pounds to be invested now and in the next five years of highway improvements across our area – benefiting Jodrell Bank in providing enhanced connectivity across Cheshire and connections into Manchester and our road and rail network.
 - b) Access improvements for the Jodrell Bank site specifically.
 - c) £1m direct capital investment to the SKA project is included in our approved capital programme for draw down over the next two years.
 - d) We will work with the Site Team at Jodrell to put in place a Local Development Order for the site allowing for simplified planning.
 - e) We will work partners to establish an International School to support our growing international workforce and science/technology based industries.

2.0 Recommendations

2.1 That Cabinet

- 1 approve the investment of £1million by the Council via the capital programme into a package of activity and support, focusing on connectivity and asset enhancement as part of the SKA project and headquarter retention;
- 2 delegate the final investment decision to the Executive Director of Economic Growth and Prosperity in consultation with the Portfolio Holder for Jobs and Housing, and the Portfolio Holder for Resources and S151 Officer; and
- 3 request that officers undertake all necessary due diligence including the development of a full business case, subject to the retention of the SKA project at Jodrell Bank.

3.0 Reasons for Recommendations

- 3.1 The investment and support package will set clear directive in terms of the growth of this key asset as part of the retention of the SKA project and headquarters. It will also further demonstrate the Council's role in the Growth of the Science Corridor, thereby demonstrating its commitment to Economic Growth in Cheshire.
- 3.2 The project relates directly to the Council's key priority: *A growing and resilient local economy*.
- 3.3 'Ambition for All: Sustainable Communities Strategy 2010-2025' – Priority 2 Create conditions for business growth, harness emerging growth opportunities and create a climate attractive to business investment.
- 3.4 'Cheshire East Corporate Plan 2013-2016' – Outcome 2 Cheshire East has a strong and resilient local economy. Priority 1 – investment to support business growth.
- 3.5 Investment in Jodrell Bank as part of the SKA project will also help to support and unlock further funding from (EDRF, Heritage Lottery and) which equates to over £100 million.
- 3.6 Continued support for Jodrell Bank redevelopment and other key investment projects, "Visitor Economy Strategy" 2011.

4.0 Wards Affected

- 4.1 Jodrell Bank is located on the border between the wards of Gawsworth and Dane Valley, although the significance of the site makes it relevant to all wards.

5.0 Local Ward Members

- 5.1 The local ward members to the site are :
Councillor Lesley Smetham (Gawsworth),
Councillors Andrew Kolker and
Councillor Les Gilbert (Dane Valley)

6.0 Policy Implications

The project relates directly to the Council's key priority: *A growing and resilient local economy*. It is also prioritised in the Council's Three Year Plan:

- Outcome 2: *Cheshire East has a strong and resilient economy,*
- Priority 1 (*Local Economic Development*), and
- Change Project 1.3 (*Investment to support business growth*).

This proposal also accords with, and is complementary to the following:

Ambition for All: Sustainable Communities Strategy 2010-2025: Priority 2 Create conditions for business growth

- Harness emerging growth opportunities;
- Create a climate attractive to business investment..

Cheshire East Economic Development Strategy

- Ensure that Cheshire East maintains and enhances its role as a 'knowledge economy';
- Facilitate economic growth through progressing schemes that will create jobs and improve the attractiveness of the area as a place to invest, live and visit;
- Macclesfield and its hinterland sustain their current position as one of the most successful parts of the regional economy.
- Emerging Science Corridor Opportunity Study

7.0 Implications for Rural Communities

- 7.1 The site has significance for the borough as a whole both in leisure offer, economic benefit.

8.0 Financial Implications

- 8.1 The in principle investment of £1million, identified in the 2015/216 capital programme, will be funded by Cheshire East as a first call on available capital reserves. This commitment will be part of the package to help ensure that Jodrell Bank retains its world SKA project and headquarter status; in terms of its site infrastructure, science engagement offers, international science facilities. A full business case will be commissioned with comprehensive costed programme of works subject to the retention of the SKA project.

8.2 The business case should include details of how this investment will specifically benefit the wider economy and stimulate business growth and release more quality jobs available in the area.

8.3 Highways improvements as yet undefined some of which will be part of existing planned programme.

9.0 Legal Implications

9.1 As this project progresses the council will have to be mindful of matters including state aid, procurement, contractual matters, vires, planning, highways and consultation which will be considered as part of the project as it develops and the business case is prepared.

10.0 Risk Management

10.1 There is a reputational and economic risk if Jodrell Bank is not supported to retain its SKA world status and continued growth. This support package will be key (along with work with partners).

10.2 Development proposals in the vicinity of Jodrell Bank are subject to the Town and Country Planning (Jodrell Bank Radio Telescope) Direction 1973 which sets out consultation procedures for planning applications in a defined protection zone. Planning policies are designed to ensure that developments which adversely affect the scientific work of the telescope are not permitted. Unfortunately these principles have not always been adhered to at appeal. There are several developments proposed in settlements within the protection zone – and these will require careful scrutiny to ensure the integrity of the scientific work at Jodrell Bank is not affected.

11.0 Background and Options

11.1 Established in 1945 by Sir Bernard Lovell, the Jodrell Bank Observatory has been a long established world leader of academic research, hosting high profile research in the field of Astrophysics. The 76m tall Lovell Telescope on site is the third largest in the world, and is joined by three other smaller telescopes at the Observatory. The telescopes have made Jodrell Bank and the University of Manchester key players in the research of meteors, quasars, and gravitational lenses. During the Space Race the Observatory played a leading role in tracking space probes, and is credited with being the first in the world to locate Sputnik's booster rocket, following the launch of the world's first artificial satellite in 1957

The impact of Jodrell Bank beyond academia was recently assessed in the Research Excellence Framework exercise (REF) which assessed the quality and impact of research in UK higher education institutions. The University of Manchester's School of Physics and Astronomy

impact, including the public engagement work at Jodrell Bank, was rated highest of any Physics Department in the UK. This was achieved through a strategic approach to developing a high national and international media profile combined with a purpose-built facility at Jodrell Bank to welcome visitors and engage them directly with the actual research going on at the site and beyond.

- The award winning £3M Jodrell Bank Discovery Centre opened in April 2011.
- 160,000 people visit the Centre each year, including 16,000 school pupils which is forecast to raise to 25,000 each year.
- Current exhibits highlight radio astronomy research, including the work of the Lovell Telescope and e-MERLIN, pulsars, the CMB, black holes, gravitational lensing, the evolution of stars and the science & technology of Big Telescopes (including the SKA).
- In November 2011, the SKA Organisation was formed and the project moved from collaboration to an independent, not for profit, company. The members of the SKA Organisation are:

Australia: Department of Innovation, Industry, Science and Research

Canada: National Research Council

China: National Astronomical Observatories of the Chinese Academy of Sciences

Germany: Federal Ministry of Education and Research (withdrew in 2014)

India: National Centre for Radio Astrophysics

Italy: National Institute for Astrophysics

New Zealand: Ministry of Economic Development

South Africa: National Research Foundation

Sweden: Onsala Space Observatory

The Netherlands: Netherlands Organisation for Scientific Research

United Kingdom: Science and Technology Facilities Council

The BBC Stargazing Live series has been broadcast live from Jodrell Bank annually since 2011. It typically attracts around 2-3 million viewers per episode although the 2015 eclipse special attracted a peak

of 4.7 million viewers, the highest morning TV audience since the Diamond Jubilee in 2012.”

Significant infrastructure and site development is planned at Jodrell Bank to; one retains its world status and two; flourish as part of the rapid expansion. The University of Manchester is already investing £16million toward refurbishment of the Grade 1 listed assets on site and over £19 million is being sought from HLF and ERDF to building a new visitor pavilion and gallery space.

CEC investment (£1million) and partnership support in terms of helping to unlock further funding and project support will be key. CEC has a vested interest to ensure that Jodrell Bank reaches its full long term potential as part of the SKA project, both in terms of its continued contribution to science ecology, cultural and visitor offer and economic growth.

Endorsement of a package of support will enable CEC to directly stimulate further economic growth within the science corridor and this world class science asset.

12.0 Access to Information

The background papers relating to this report can be inspected by contacting the report writer:

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