Could a Space Technology and Innovation Centre help accelerate the commercialisation of new EO technologies

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Driving Innovation

What are TICs?

Business-focused centres that make world-leading technical capability available to businesses to solve their technical challenges.

Provide access to worldleading technical expertise, infrastructure, skills and equipment Technology Strategy Board Driving Innovation

Technology and innovation centres

Maximising the commercial impact of UK R&D – a prospectus

December 2010

What does a Technology and Innovation Centre (TIC) do? (1)

- Establish and maintain a world-leading technical development capability aimed at accelerating the development and commercialisation of ideas and new technologies.
- Work with businesses, the existing research base and research institutes
- Identify excellence and opportunities from across the UK supported by in-house applied R&D

What does a Technology and Innovation Centre (TIC) do? (2)

- Provide businesses with access to technology, skills and equipment that would otherwise be outside their reach and carry out technical development to enable realisation of the commercial potential of discoveries, products, etc.
 For example through technical demonstrators and process scale-up
- Support and protect the development of IP, both their own and that of others;

What does a Technology and Innovation Centre (TIC) do? (3)

- Provide assistance with the commercialisation of, or identifying funding for, development projects
- Provide a mechanism for interaction between industry and academia to facilitate knowledge transfer, training and skills development at all levels
- Help to develop value/supply chains

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Technology and Innovation Centres

Centres announced to date:

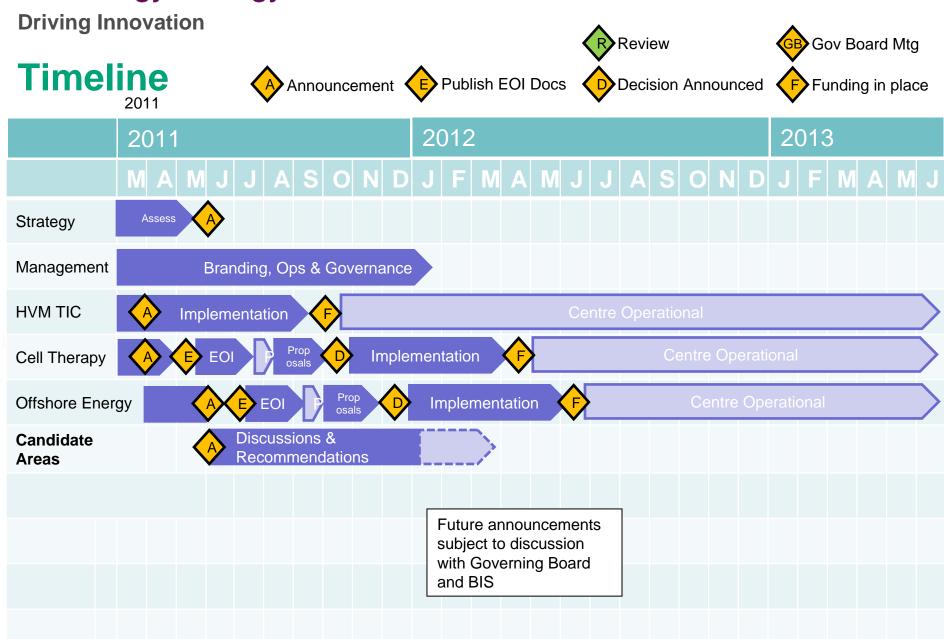
- High Value Manufacturing
- Cell Therapy
- Offshore Renewable Energy

Technology Strategy Board Driving Innovation Technology and innovation centres Closing the gap between concept and commercialisation Strategy and implementation plan May 2011

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Next phase of TICs - 3 from this list operational by 2013

- Complex Systems
- Digital media/creative industries
- Future cities
- Future internet systems
- Photonics
- Resource efficiency
- Sensor systems
- Smart grids and distribution
- Space
- Transport systems and integration



Timeliness and impact - establish a centre if...

 Investment in infrastructure and expertise is needed to acceleration the commercialisation of research

Key issues for candidate areas

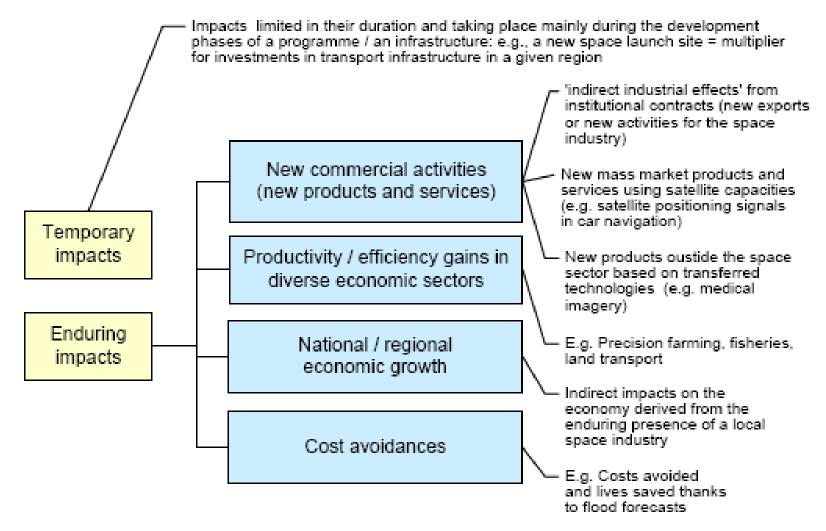
- Confirm the market opportunity for the UK and TIC
- Confirm UK capability, including active engagement and support for TIC
- Confirm challenges preventing greater commercialisation of research
- Define the role of TIC in addressing these challenges

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Impact of investment in Space

OECD report – The Space Economy at a glance 2011

Review of possible impacts derived from investments in space programme

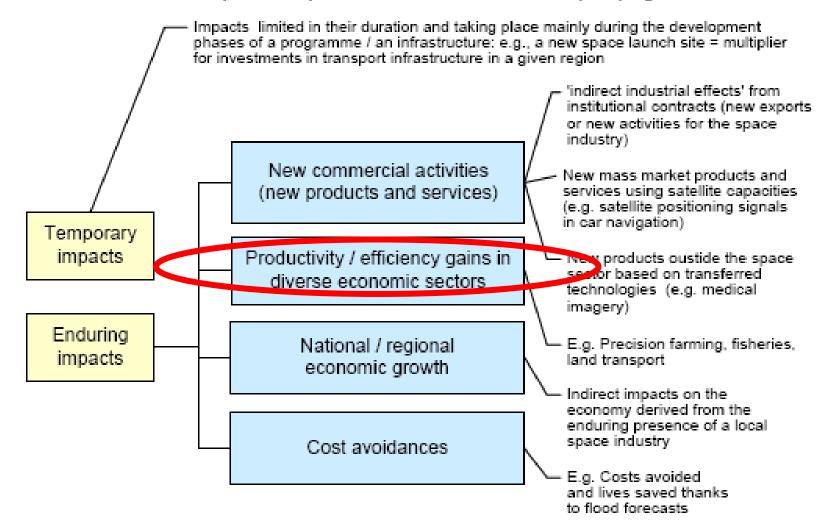


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Impact of investment in Space

OECD report – The Space Economy at a glance 2011

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What could the Space TIC do?

- 1. Technology Demonstration
- 2. Rapid prototyping
 - Hardware
 - Data products/software
- 3. Systems to aid applications development
 - simulation
 - testing
 - data integrity services
 - calibration and validation
- 4. End to end satellite operations and data handling
- 5. Professional Development and Training
- 6. Business support services

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What could the Space TIC look like?

- Strategic national facilities providing 'end to end' capability
 - EO Hub (satellite operations centre)
 - Visualisation Centre
 - Security and Resilience Centre (secure data links and servers)
 - CEMS (Centre for Environmental Monitoring Services)
- Technology Demonstration capability home of TechDemoSat programme (mission planning, satellite operation, data management, service demonstrations)
- Open Access to lab, test and data management facilities providing access to capabilities beyond the reach of smaller companies
 - Cutting edge collaboration facilities
 - Concurrent Design Facility
 - Innovation and Applications Centre
- Conference, meeting and training facilities
- 'Shop window' to showcase UK capability
- Link to Business Incubation facilities

Summary - Key elements of a TIC

- Infrastructure
- R&D Resource
- Open Innovation activity

Summary – building the case for a Space TIC

- The right time for the sector
- Business commitment
- Clearly defined scope and role
- Critical mass
- Step change in ability to commercialise research

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