Technology Strategy Board

Driving Innovation

Supporting Business Innovation

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UDRC Industry Day - Friday 27th June 2014

Content

- Who we are and what we do
- Where do we invest ?
- Overview of our innovation programmes

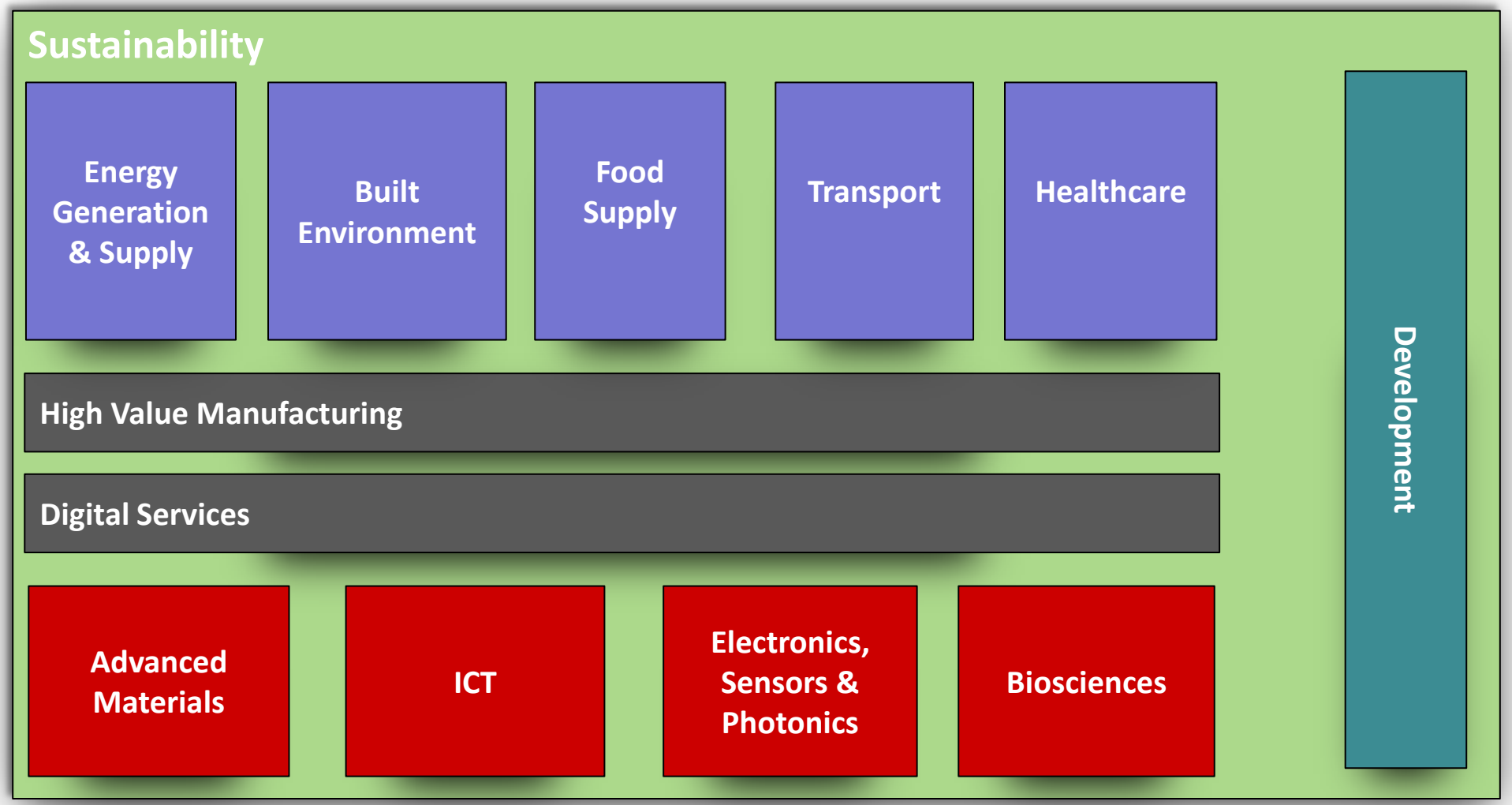
Technology Strategy Board
Driving Innovation

"The Technology Strategy Board is the UK's national innovation agency. Our goal is to accelerate economic growth by stimulating and supporting business-led innovation."

A big agenda

- In six years we have enabled about £3bn of investment in innovation (with partner and business contributions).
- We are already working with more than 4,900 companies of all sizes, 150 research organisations including 110 UK universities.
- Our networks have over 66,000 members
- We typically run around 80 R&D funding competitions per year across our priority themes.

Investing in Theme Areas



Our toolset

Range of ‘Tools’ with different objectives / characteristics

Collaborative R&D

- Competitions within specific themes
- Supports collaboration between businesses and between businesses and academia
- Open to businesses of any size including Start-ups and Micros
- £25k - £1m grant typical
- Programmes run from few weeks up to 2/3 years
- Intervention rate varies – typically 50% - 60%
- www.innovateuk.org/competitions.ashx

Collaborative R&D

A Case Study

Project partners

Stratophase, University of Southampton, Smart Fibres and Davin Optronics

Technology Strategy Board investment

£282,500

Total project investment

£565,000

The Need	The Solution
With increased globalisation, there's an increased threat from previously obscure diseases such as Ebola and bird flu. Early detection and prevention must be a priority	Consortium developed an optical microchip sensor capable of detecting toxins, viruses and bacteria. The sensor is robust and can be miniaturised so offering the potential for on the spot diagnosis


SBRI
Government challenges.
Ideas from business.
Innovative solutions.

SBRI Government challenges. Ideas from business. Innovative solutions.

- Open competitions addressing Public Sector challenges
- Competition widely advertised through TSB channels
- Applications assessed and most promising ones awarded development contracts
- Project risk is managed through a phased process
  - Phase 1 Proof of Feasibility: 2 - 9mths & £20k to £100k
  - Phase 2 Prototype Development: up to 2 years and £1M (depends on challenge)
- 100% funded
- IP rests with the company
- Possibility of long term contracts

SAPIENT: Background

- A joint call between the TSB and Dstl to invest up to £3m over 2 phases in the development of innovative sensing for asset protection (defined physical area such as a port, airport or military base).
- This competition was funded through the Small Business Research Initiative (SBRI). Developments are 100% funded and focus on specific identified needs in defence and civil sectors.

SAPIENT: The challenge

- Sensing for Asset Protection using Integrated Electronic Networked Technology
- Protection of land based high-value assets with defined borders, typically from human incursions into the area.
- The SAPIENT challenge is focused on MOD assets such as military Forward Operating Bases (FOBs), but solutions will also be applicable in civil areas such as dockyards, power stations, airports etc.
- Projects should achieve a Technology Readiness Level (TRL) of 3+ by the end of Phase 1.
- Phase 2 will deliver prototypes at TRL 5+ that can be built into a demonstration system by Dstl.

SAPIENT: The timeline

Set the challenge: sensing for asset protection both civil and defence, aiming to give SMEs access to exploit new markets and expand Dstl's supplier base

Phase1 competition opened April 2013

43 applications

10 projects funded – judged by expert assessment

The 10 Phase1 projects work to de-risk their technologies from October 2013 to March 2014

Phase 2 competition opened March 2014

4 projects will be funded – judged by expert assessment

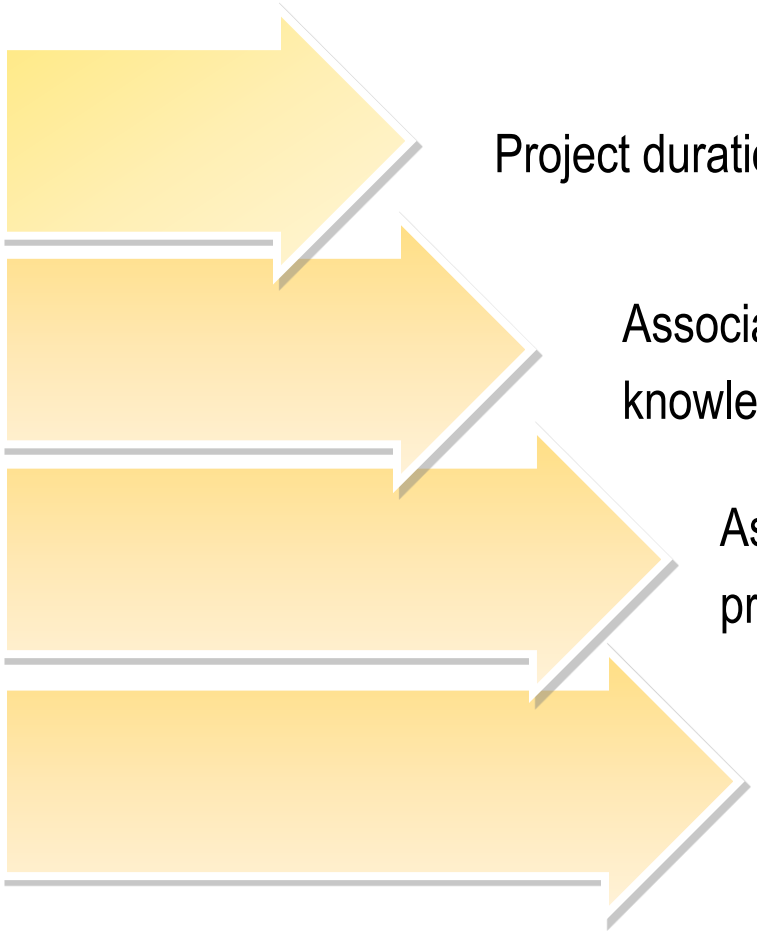
The 4 Phase 2 projects develop and deliver prototypes over a 15 month development

Trials / demonstrations of integrated system from the 4 suppliers in September 2015.

Knowledge
Transfer
Partnerships

What is KTP?

Features of KTP



Project duration between 6 months and 3 years

Associate recruited jointly but employed by knowledge base partner

Associate located wholly or mainly at business premises with Business Supervisor

KB Supervisor spends approx. half a day per week at the business premises

Project Budget

- Annual budget ~£60k*
- Includes Associate employment costs, KB supervision, travel, consumables and training
- SMEs contribute 33%*
- Large businesses contribute 50%*

* *Slightly different if KB Partner does not use 'full economic costing'*

Case Studies

Caledonian Aerotech Ltd

Award winning KTP project for superalloy recyclers

To identify and implement a means of reducing volatile organic compound (VOC) emissions within the existing alloy degreasing process whilst improving the effectiveness of the process; and to develop a new method for cleaning titanium.

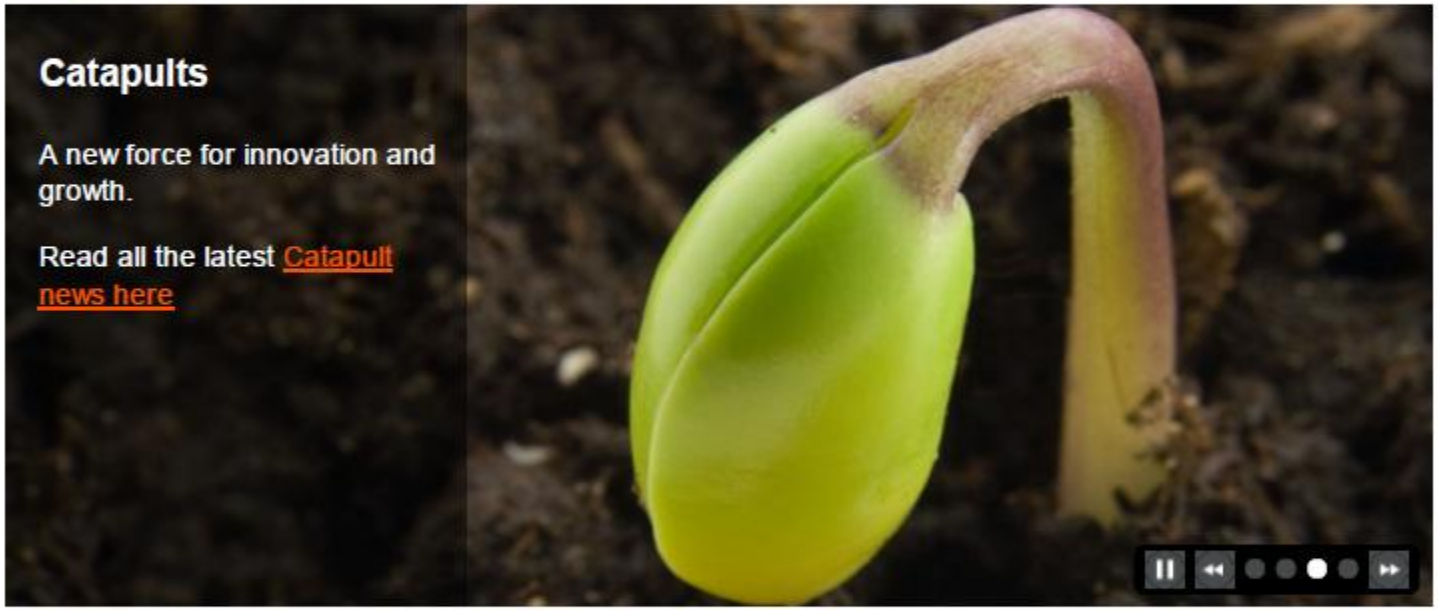
Heriot-Watt University
(School of Engineering and Physical Sciences)

Networking

Why join a Knowledge Transfer Network?

- Networking
- Partnering
- Funding opportunities
- Information and news
- Policy and regulation

- https://connect.innovateuk.org



Welcome to the Catapult Programme

A Catapult is a technology and innovation centre where the very best of the UK's businesses, scientists and engineers can work side by side on research and development, transforming ideas into new products and services to generate economic growth.

Catapults add an important new dimension to complement existing research and development programmes established by the Technology Strategy Board.

News

04 NOVEMBER 2013
Transport Systems Catapult gets name checked by BBC...

28 OCTOBER 2013
TSC Launch Event

25 OCTOBER 2013
Five Year Delivery Plan published

More news

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Choice of Technology Areas

- **Broad Criteria**
  - Potential global markets worth £ billions
  - UK world-leading research capability
  - UK business has ability to exploit the technology and capture a significant share in the UK
  - Centres enable UK to attract and anchor knowledge intensive activities of globally mobile companies
  - Closely aligned with, and essential to achieve, national strategic technology objectives

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