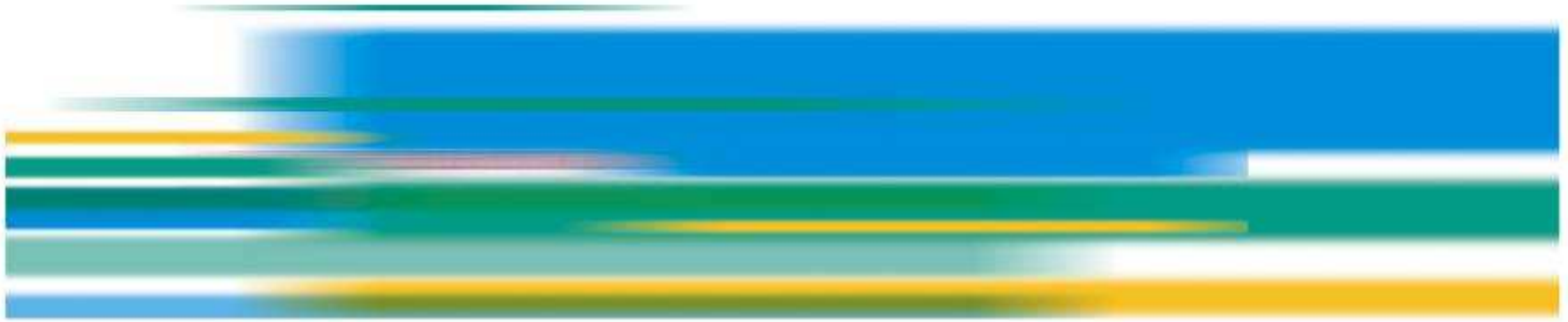
ENGINEERING AND PHYSICAL SCIENCES RESEARCH COUNCIL

Research Council for Manufacturing



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Pioneering research
and skills

EPSRC – some quick facts

- EPSRC is the **primary funding body** for science and technology research in the UK
- In the period 2008 – 2011, EPSRC will commit **£2.4 billion** to funding research, training and Knowledge Transfer in **UK universities**
- EPSRC currently funds almost **6000 research projects**, with a total value of **~£3.3 billion**
- EPSRC funding currently supports over **8300 PhD students**
- Approximately **20,000 publications per year** arise from EPSRC supported research

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EPSRC – Organisational Structure

Department for Business, Innovation and Skills (BIS)						
BIS Science and Innovation Group						
Research Councils UK						
AHRC	BBSRC	**EPSRC**	ESRC	MRC	NERC	STFC
Council Chairman: Mr John Armitt						
Chief Executive: Professor David Delpy						
Business Innovation Directorate: Catherine Coates		Communications & Information Directorate: Atti Emecz		Corporate Services Directorate: Stuart Ward		Research Base Directorate: Lesley Thompson

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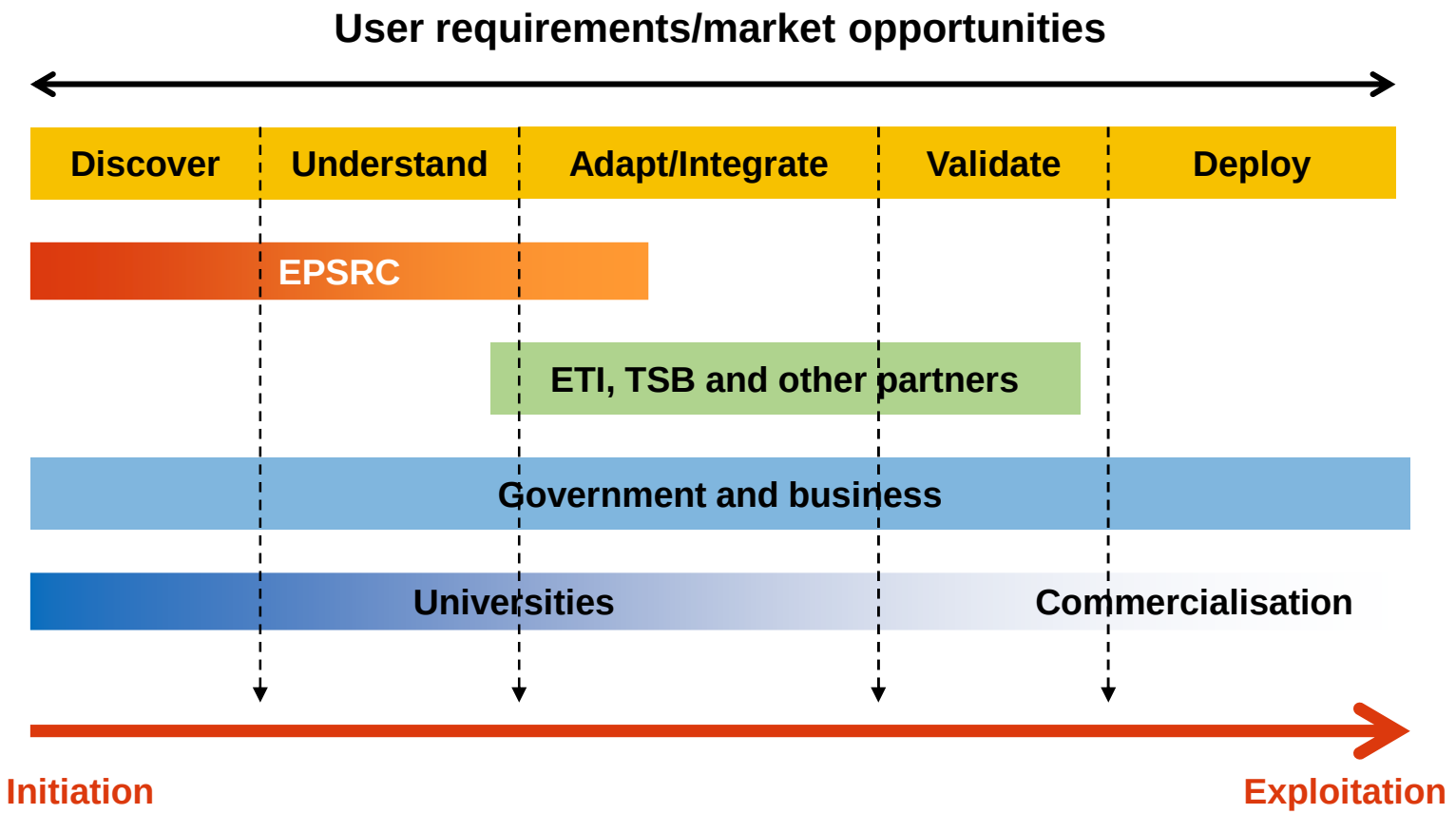
EPSRC in the Innovation Chain



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Our Strategic Ambition

The heart of discovery and innovation

We generate the fundamental knowledge and skilled people essential to:

- **government**
- **business and industry**
- **other research organisations**

Science and engineering drive the global economy.

Engineering and physical sciences research is key to tackling grand challenges such as:

- **energy security**
- **our ageing population**
- **crime**
- **economic resilience**

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EPSRC AND MANUFACTURING

Creating new industry and new jobs

- **Supporting key industry sectors**
  nuclear, aerospace, pharmaceuticals, low carbon industry
- **Creating wealth through new technologies**
  green technology, regenerative medicine, plastic electronics
- **Training highly skilled people**
  leading to new jobs and inward investment

“We are currently investing £1.2bn in research and postgraduate training relevant to manufacturing industries”

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EPSRC and manufacturing industries

Impacts are ubiquitous:

- across core disciplines (engineering, physical and information sciences)
- and in interface areas (life and social sciences)

Action to improve scale and speed of impact:

- Knowledge transfer and commercialisation
- Connection with business led initiatives, eg with TSB and strategic partners
- Industry involvement in postgraduate training
- Manufacturing research: design, manufacturing technologies and operations

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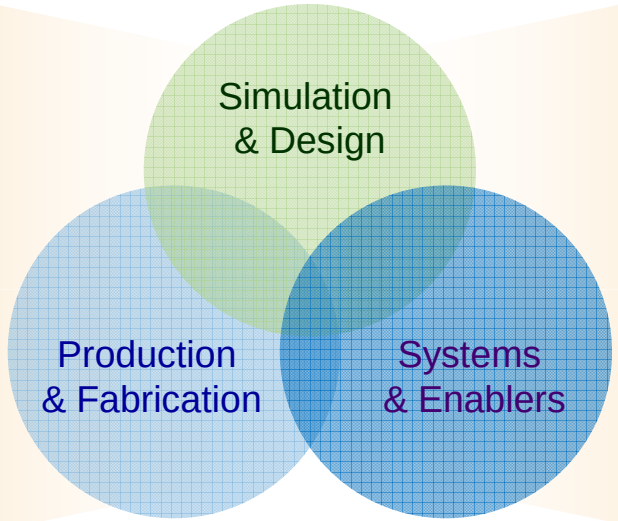
THE RESEARCH COUNCIL FOR MANUFACTURING

£1.2bn current investments*

2549 projects, 2225 PhD students

Fundamentals & Theory
£762.43M*



Applications & Outcomes
£114.28M*

Manufacturing Research
£339.50M*

*Figures correct as of September 2009

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EPSRC'S ROLE IN GROWTH TECHNOLOGIES

Centres of excellence and collaboration

- 3 New EPSRC Centres for Innovative Manufacturing (£15M): Regenerative Medicine, Photonics, Liquid metal processing
- 16 Innovative Manufacturing Research Centres (£117M+) across the breadth of UK manufacturing community to respond to industry needs.
- £24M for four Innovation and Knowledge Centres to accelerate business involvement in emerging technology areas.

Partnership with the Technology Strategy Board

- Jointly supporting a £200M investment in R&D in areas of strategic national importance.
- Identifying emerging areas for TSB support – Novacem green cement now being brought to market after 10 years of initial research supported by EPSRC.

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EPSRC Centres for Innovative Manufacturing

- To create, deliver and disseminate a coherent programme of innovative manufacturing research.
- To address major long-term manufacturing challenges / and or emergent market opportunities.
- To provide strong support for UK manufacturing industries.
- To enhance the global profile and significance of UK manufacturing research.
- To create a national network of expertise in manufacturing knowledge with outreach to other centres and relevant research groups.

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DEVELOPING HIGHLY SKILLED PEOPLE

EPSRC currently supports over 8,000 PhD students

Industrial doctorate centres provide industrially focused PhD training

- 1200 EngD students trained since 1992, involving 500 companies. ITM Power co-founded by a student now has a market capitalisation of over £100 million.
- New training centres starting in October 2009 will train 2000 students, and include 18 industrial doctorate centres
- Areas include Visualisation, Electronics Design, Systems, Medical Systems, Nano, Fuel Cells, Healthcare & Pharma, and Bioprocessing

"BAE Systems requires senior managers with excellent engineering understanding, business skills and market awareness; I believe the EngD programme satisfies these needs and should be encouraged."
Richard Blockley, Head of Technical Programmes at BAE Systems

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WORKING IN PARTNERSHIP

2,300 organisations collaborating on EPSRC projects

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