



The Royal Academy
of Engineering

The European Institute of Innovation and Technology: A UK Perspective

Wednesday 25 March 2009

Chair: Professor Richard Williams OBE FREng



The Royal Academy
of Engineering

Gary Logan
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The European Institute of Innovation and Technology: A UK Perspective

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DIUS/RAEng Stakeholder event

25 March 2009

The European Institute of Innovation and
Technology: a UK Perspective"



Department for
**Innovation,
Universities &
Skills**

EUROPEAN INSTITUTE OF INNOVATION AND TECHNOLOGY (EIT)

Department for
**Innovation,
Universities &
Skills**

Gary Logan /EIT Project Manager

EU and International Innovation Policy
International Science and Innovation Unit

Reflections on recent EIT information events.

What were the EIT stakeholder seminars?

Who attended?

What did we learn?

What key questions were raised?

The call for proposals/evaluation process.

My conclusions.

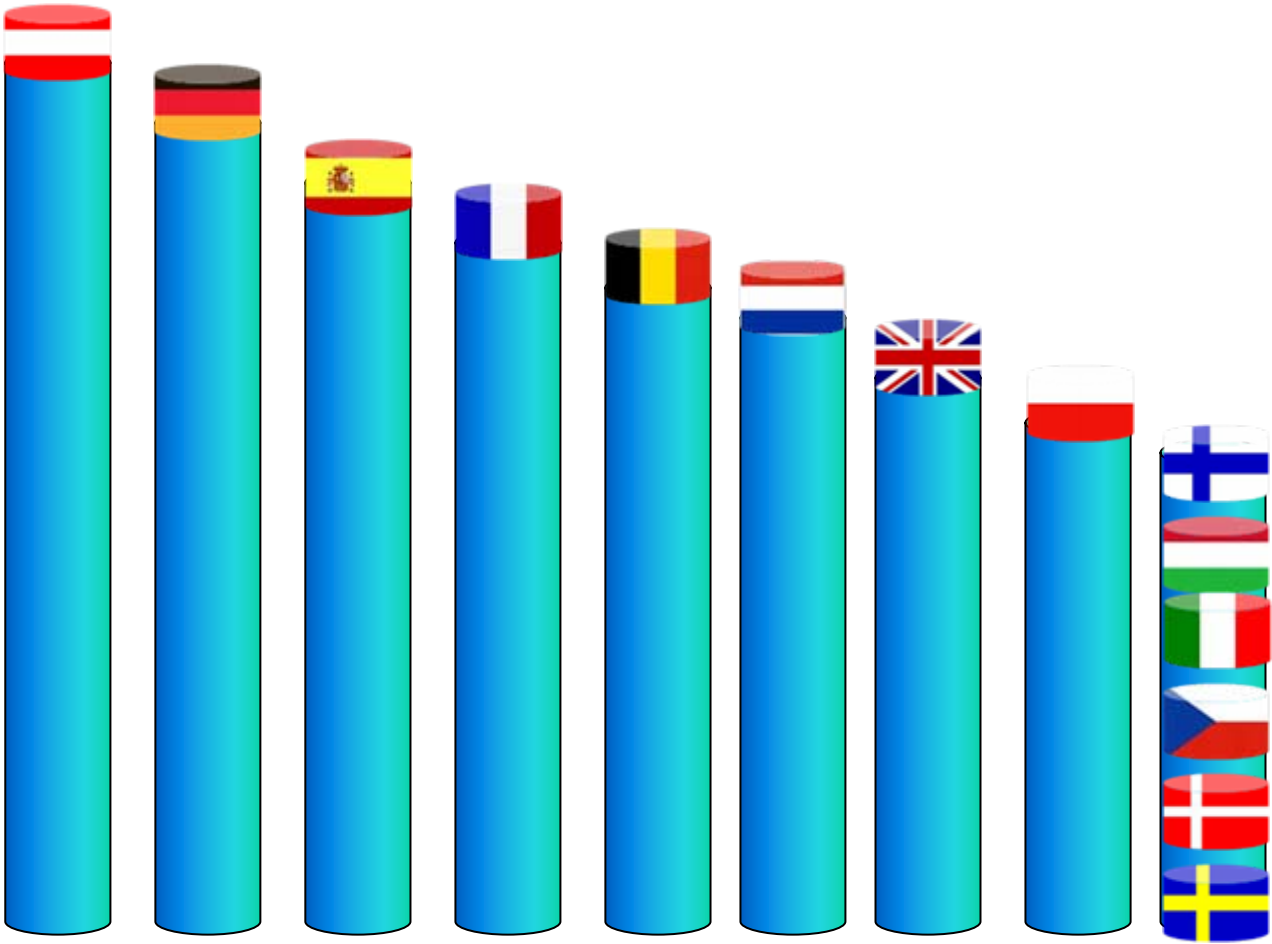
EIT Information seminars

- 4 stakeholder events have taken place;
- **Bratislava** – 24 November 2008 - (General information).
- **Budapest** - 23 January 2009 - (Future information and communication society theme).
- **Vienna** - 16 February 2009 - (Sustainable energy theme).
- **Madrid** – 16 March 2009 (Mitigation and adaptation of climate Change).

EIT Seminar objectives

- Open communication with all stakeholders.
- Allow discussion on the themes identified for the first Knowledge and Innovation Communities (KICs).
- Provide stakeholders with a clear vision on the focus of the KICs.
- Explore synergies between the 3 themes.
- Bring potential partners together.

Who attended the events?



Who attended?

- Strong attendance from Austria, Germany Spain, France, Belgium, Netherlands and UK.
- Apart from and Hungary & Poland, limited attendance from newer Member States.
- Very few delegates from outside EU.
- Strong academic and research representation.
- How well represented was business?

Business Engagement



Das Auto.



TOYOTA



THALES

SIEMENS

What have we learnt?

- Confirmation of the thematic areas and their (broad) scope.
- Details of the timetable.
- The Governing Board's vision for the KICs.
- **But** - still require clarity on number of important issues!

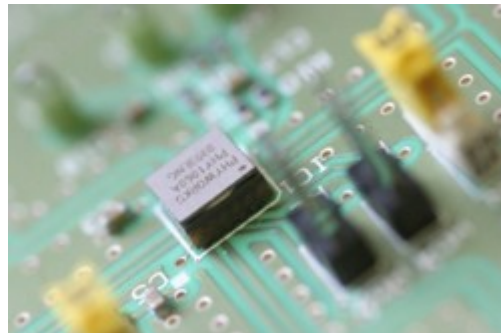
2-3 KICs in the thematic areas of

Mitigation and adaptation of Climate Change



Sustainable Energy

Future Information and Communication Society



Questions relating to KICs

- Why a KIC?
- Optimal size of a KIC?
- How many partners?
- What are **co-location centres**?
- Staff Mobility?
- How will education element be integrated?
- Which area to focus on?

More questions than answers!

- Emphasis on education, research or innovation?
- Overlap between themes?
- How to find partners?
- Integration with other European Programmes?
- What IP and legal structure?
- Where will funding come from?

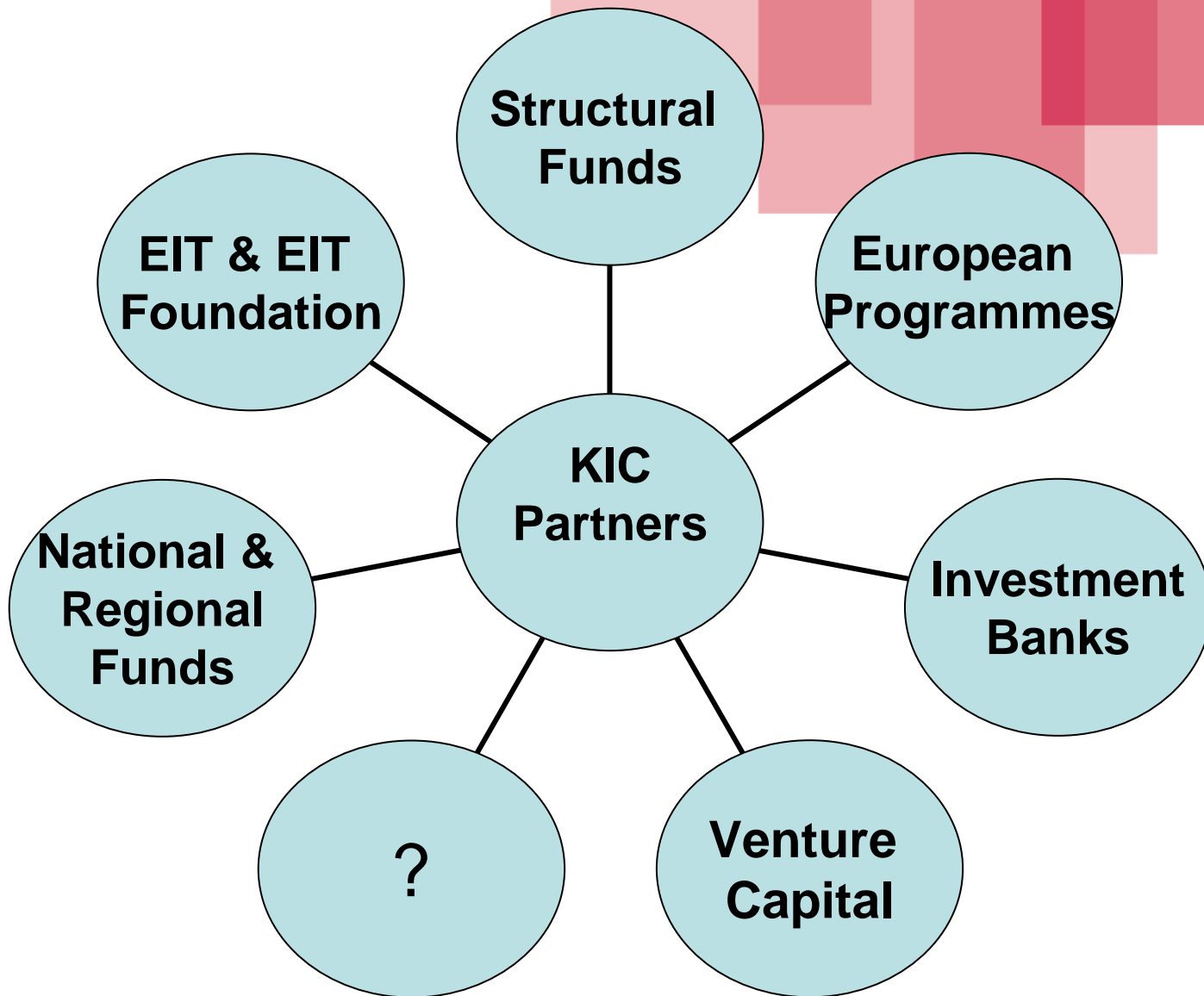
KIC Funding from a multitude of public/private sources





Questions relating to Funding.

- Size of the budget.
- Business engagement in a economic downturn.
- The EIT contribution.
- Finding the 75%.
- Financial planning.
- Self sustaining KICs.



KIC Goal - “To maximise the financial contribution from the private sector”.

Legal Structure

- What legal structure?
- EIT Regulation - “an autonomous partnership...regardless of its precise legal form”.
- Governing Board – “A KIC is a legally and financially structured and managed entity.”
- Proposals will need declaration from legal representative of each partner.

Intellectual Property

- What Intellectual Property Regime?
- Need a “motivating IP rules policy”.
- Governing Board – Limited guidance
– keep IP rules simple.
- Examples of IP policy good practice,
i.e. Stanford.
- Open or closed innovation?
- Who owns the IP, the EIT or KICs?

KICs – A major challenge.

- Very Broad thematic areas.
- Have to develop new ways of working.
- Need to be ‘unique and innovatory’.
- Need to become self-sustaining.
- Key role for Business.
- Will take time to establish.
- KICs will compete in a crowded landscape.

An already crowded landscape?



Energy Technology Platforms



EU Emissions Trading Scheme

European Strategic Energy Technology Plan



Joint Technology Initiatives

Department for **Innovation, Universities & Skills**

Submitting Proposals

- April call for proposals.
- 5 months to submit proposal.
- Over or under subscription?
- Financial/business planning – 5, 7, 15 years?
- Flexibility in proposals?
- Successful KICs expected to grow.

Evaluation Process

- Will process be similar to FP7?
- How will bids be evaluated?
- Who will evaluate them?
- Will there be a redress procedure?
- Feedback on unsuccessful proposals?
- Pre-screening prior to submission?

My conclusions –

- Don't expect much more detail in the call for proposal documentation.
- There is considerable room for flexibility within proposals.
- Proposals have to focus on answers.
- Addressing all the criteria satisfactorily will be a considerable challenge.
- Many delegates still uncertain about how KICs will operate.
- Unanswered questions over business engagement and funding.

“Each KIC partnership will be an innovation in itself
and will provide new forms of entrepreneurship”

Martin Schuurmans
Chairman of the EIT Governing Board
Bratislava – 28 November 2008



Where to find more information

European Commission website

www.ec.europa.eu/education/policies/educ/eit/index_en.html

Technology Strategy Board

<http://www.innovateuk.org/deliveringinnovation/internationalprogramme/theeuropeaninstituteofinnovationandtechnology.ashx>

Department for Innovation Universities and Skills website

http://www.dius.gov.uk/international_policy/science_and_innovation/eu_research_and_innovation_policy/eu_innovation_policy

EIT Contacts

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Professor Julia King CBE FREng
EIT Governing Board Member

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The EIT

Sustainable Growth and Competitiveness through Innovation

*Professor Julia King CBE FREng
Aston University, Birmingham
EIT Governing Board Member*

EIT Vision

EIT is recognized as a key driver of sustainable economic growth and competitiveness across Europe:

*through
stimulation of world-leading innovation*

Mission

To be the catalyst for a step change in the European Community's innovation capacity and impact through the delivery of major new actions.

The first of these actions is the creation of the Knowledge and Innovation Communities, KICs.

Strategic Objectives: focus of the EIT Governing Body

1. EIT Strategic Innovation Agenda (SIA) :
 - ideas / plans
 - entrepreneurship
 - Innovation and research
 - education

2. KICs with unique impact :
 - *The Future Information Society*
 - *Sustainable Energy*
 - *Climate Change Mitigation and Adaptation*
 - format, selection

3. Sustainable mobilization of additional funding:
 - EIT Foundation
 - EIB relationship
 - EU budget bids
 - other relationships and tools

Stakeholders

- Business
- Entrepreneurs, including SMEs
- Research and Technology Organizations
- Education
- Investment communities (private investors and venture capital)
- Research funders, including charities and foundations
- Local, regional and national governments

KICs will:

- build innovative ‘webs of excellence’
 - integrating education, technology, research, business and entrepreneurship
 - driving effective “translation” between partners: ideas, technology, culture, business models...
- on a significant scale
 - overall budgets of 50 - 100M € per annum
- create new business
 - for existing industry
 - for new endeavours
- educate and develop entrepreneurial people
 - able to work across stakeholder boundaries
- have societal impact

KIC Topics and Timetable

KICs with unique impact in the areas of:

- The Future Information and Communication Society
- Sustainable Energy
- Climate Change Mitigation and Adaptation

Timetable

- April 2009: Call for Proposals
- August 2009: Submission of Proposals
- By January 2010: Selection of 2 to 3 KICs

KICs in Sustainable Energy and in Climate Change Mitigation and Adaptation

- Significant areas of overlap exist between the two topics for example:
 - Carbon capture and storage
 - Energy efficiency
 - Alternative fuels
 - Energy storage
 - The electric economy: heating, vehicles etc;
 - The hydrogen economy...
- This is positive – there is so much to do
- Strong relationships between the KICs will be encouraged
- KIC applications must identify the core topic area (Energy or Climate Change) for the assessment process

Sustainable Energy: potential scope

- Sustainable Power Generation
 - Solar, wind, marine, biomass, fossil fuels with carbon capture and storage, nuclear, hydro...
- Electricity generation and distribution systems for sustainable energy systems
 - Local plus centralized generation, intermittency, energy storage...
- Heat for homes, business and industry
 - Combined heat and power, district heating, biomass, heat pumps...
- Energy efficiency in homes, business and industry
 - Insulation, smart metering...
- Alternative fuels
 - Biofuels, the hydrogen economy...

Mitigation

- Low carbon transport: land, aviation and shipping
- Forestry and farming: plants, soils, livestock...
- Waste and landfill: reduction and management of non-CO₂ GHGs
- Energy efficiency devices: low energy electronics, appliances, electric motors
- Low energy/low emissions processes: new industrial processes
- Small scale carbon capture and storage
- ...

Adaptation

- Prediction and planning
- Weather and flood
- Crops and farming
- Infrastructure impact
- Resilient water sources
- ...

What is a KIC?

A KIC will...

- be a high-profile, collaborative consortium
 - a “legally and financially structured and managed entity”
 - a close collaboration between geographically distributed but thematically convergent stakeholders, involving at least 3 EU states
 - open to international participation
- encompass the complete innovation chain
 - education to economic and societal impact
- deliver measurable impacts on society
 - economic, scientific, educational and entrepreneurial
- be recognised as a world leader in its field
- be a long term development: a minimum life of 7 years

Ingredients for a KIC with impact

- Geographically distributed people
 - across the European Community and linking to centers of excellence in other parts of the world
- Working in collaborative networks
 - focussed around 4 – 6 major nodes (typically)
 - each nodes will be a “co-location center” - where staff from different stakeholders come to work together, face-to-face
- Each co-location center should
 - encompass a significant part of the innovation chain
 - reach out to other partners, such as local clusters of SMEs
- Co-location of people is critical
 - it is the key to achieving knowledge transfer and ‘translation’: between stakeholders and between science, research and business
 - effective translation is fundamental to delivery of KIC goals
- Mobility of people is therefore essential
 - proposals will need to show how co-location will be managed

KICs and people

Innovative European entrepreneurs are a major output of every KIC

- Business people, entrepreneurs, researchers, technologists, educators, working together in **world class** KIC programmes
- Talented and committed academics from Europe and beyond, flexible, mobile and eager to innovate
- An environment which catalyzes movement of people between industry/business and academia
- Top quality leadership, engendering a highly developed team culture/spirit across the KIC

People management

- Incentive schemes to attract excellent partners from across the innovation chain
- Environments which stimulate working/studying together in diverse teams in co-location centers
- Recognition of people; pride in the EIT brand; “EIT” label for students...

KIC Selection Criteria 1

An internationally distributed collaborative consortium which :

- is composed of elite centers from business, entrepreneurship, technology, research and education
 - each with a track record in excellence, international cooperation, knowledge dissemination and translation to business
- enables collaborative people to work together in “co-location centers”
- is a legally and financially structured entity with a motivating intellectual property rights policy
- has top quality leadership, governance, structure and accountability
- attracts public and private funding, tripling the EIT funding over time
- can include excellent partners from non-EU countries

KIC Selection Criteria 2

Compelling, innovative proposals with future potential

- Addressing important topics for Europe
- With (new) business and societal impact
- Making innovation an integral part of Higher Education
- A strong research and technology base, relevant and critical to the success of the KIC, and including non-technological research
- Going beyond research and technology: translation to new and existing businesses
- Key performance indicators (KPIs), targeted investment returns and drivers identified upfront
- Short, medium and long-term milestones
- Builds up continuous, self-sustaining activities
- Has broad public outreach
- Has a 7 year-plus horizon

KIC Application Process

- Simple
- Transparent
- Cost-effective
- Maximum of 40 pages
- Description of KIC and business plan (20 pages)
- Organization, management and governance (15 pages)

- In the three topic areas

- **Step 1**
- Novelty and attractiveness 20%
- Impact 20%
- Coherence of strategy and activities 10%
- Co-location plan 20%
- IPR plan 10%
- Business plan 10%
- Outreach 10%

- **Step 2**
- Management and governance 50%
- Strength of partners 50%

Call, Selection and Monitoring

- Call for proposals for KICs by April 2009, submission August 2009
 - Based on KIC format and selection criteria, finalized by end March 2009
- Selection of the first 2-3 KICs by January 2010
 - Strong teams with the best chance of success
 - Proposals recognized as innovative, ambitious and coherent
 - Extensive publicity and support for the selected KICs
- Evaluation and monitoring of KICs starting by August 2010
 - Recognized as fair, simple and effective
 - Consistent and clearly derived from the original selection criteria
 - Rewarding good performance and achievement
 - Recognizing and communicating the EIT brand

Conclusions

- The EIT acts as a catalyst for developing European innovation potential
 - by promoting new ways of working between research, education and innovation
- Long-term commitment by business from the outset is essential to the EIT's success
- Education and entrepreneurship must be integral parts of innovation partnerships
- Opportunity for cross-fertilization and co-funding with other European and national programs and funds



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Technology Strategy Board

Driving Innovation

Promotion and Support of the EIT

Graham M Mobbs

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Promotion and Support of the EIT

- Ambient Assistant Living.
- EIT
- Eranets.
- EUREKA.
- Eurostars.
- JTI – ARTEMIS, ENIAC, IMI, F C & H, Clean Skys.
- Public Private Partnerships – Green Cars, energy efficient buildings and Factories of the future.

Promotion and Support of the EIT

The TSB in partnership with DIUS will play an active role in the EIT.

Representing UK interest at the EIT meetings.
Through our international projects team and The TSB Technologists in the thematic areas.

Promoting and informing stakeholders

Supporting events.

Information

Website.

Promotion and Support of the EIT

Individual KIC's

Sustainable energy

Mitigation and adaptation of climate change

Future information society

Supporting Individual KIC's.

Support successful KIC UK non-industry partners through finding UK business partners, to join and add value to the KIC.

Aim is to increase UK business participation.

Promotion and Support of the EIT

UK interest in EIT so far has been principally through academics and public sector bodies.

Support successful KIC UK non-industry partners through finding UK business partners, to join and add value to the KIC.

Multipliers – KTN's, EEN's, NCP's and links with businesses via the TSB Technologists.

Publicise EIT opportunities via the TSB website and through the above network.

Industry Funding.

Technology Strategy Board

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