
Grant funding and example projects

TBAT Innovation Limited

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Key Message

There are practical sources of grant funding (free money!) for SMEs, Large Organisations and Universities looking to research and develop innovative technologies and products

Overview

- Grant funding: key areas to consider
- Grant schemes for individual companies
- Grant schemes for collaborations

Grant Funding

- Key areas to consider
 - The markets & competition
 - The technology
 - Legislation and CE marking
 - The IPR
 - The development costs
 - The management team
 - The business case and funding schemes
 - Cash flow, P&L and Balance sheet
 - **SME, Large organisation, University?**



Grant Schemes for individual companies

UK – SME focus - Grant for research and development – ‘SMART’ – administered by TSB

- **Proof of Market** – 60% of project cost funded
 - Grants of up to £25,000 is available to SME's
 - Is there a market?
- **Proof of Concept** – 60% funded
 - Grants of up to £100,000 is available to SME's
 - Innovative and ground breaking ideas
- **Development Grants** – 35% to 45% funded
 - A grant of up to £250,000 is available to SME's
 - R&D into pre-production prototypes

Project Costs

- Labour costs
 - Cannot claim dividend as an eligible cost
 - Costs need to have been defrayed and tax paid
 - Sole traders – special case – agree upfront
- Overhead – pension, NI, Health care, Rent, Rates
- Materials, Sub-contract, IPR
- Testing, Training, Consultancy
- Capital costs, Hire Purchase
- Market assessment – meeting market requirements
- Project management

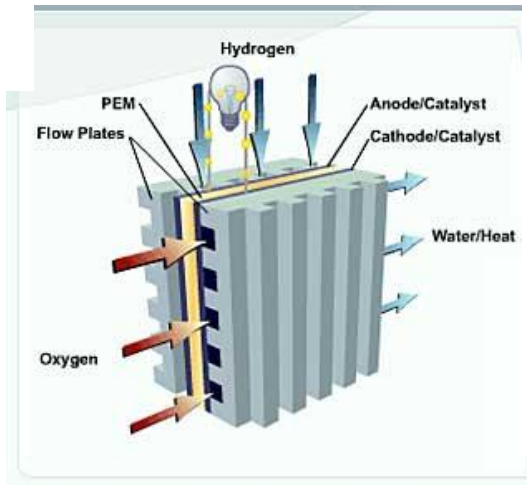
Grant Schemes for individual companies

1	Business opportunity	6	Innovation
2	Size & nature of market	7	Risks: tech & comm
3	Exploitation of results	8	Skills & experience
4	Benefits: eco, soc, enviro	9	Financial commitment
5	Technical approach	10	Added value

- 10 sections, 10 points each, need to be scoring **80%**
- Process:
 - Deadline for applications every 2 months; 31 May 2012
 - Decision + 1 month, start project + 2 additional months

Case Study – Development Project

North Notts traditional steel construction company. Wanted to diversify and have value add products. To also fit with core skills and experience
Development grant applied for:



- £250k of £600k project
- Partnering with East Midlands University and big player in Milk industry
- To Develop a containerised solution in 24 months – anaerobic digestion
- Joined with KTP

Case Studies – technology examples

Bid Title	Type of GRD	Grant monies secured
Ballast Water Management System	Development of prototype	£250k
Microbial fuel cell development and optimisation	Development of prototype	£250k
Development of durable water resistant natural fibre biocomposites	Proof of concept	£92k
Development of an innovative portable handheld pupil diagnostic device	Development of prototype	£97k
Development of an Energy Management System for rail vehicles	Development of prototype	£250k
Use of multibeam laser sensing to provide 3D positioning for offshore dynamic vessels	Development of prototype	£210k
Development of a real time sensor to measure moisture content of bulk coals	Development of prototype	£230k
Development of a real time full colour heads up display using holographic display technology	Development of prototype	£170k

Grant Schemes for Collaborations

How they work:

- Numerous National & European schemes
- Themed sector or challenge focused calls
- National or European collaboration

Reasons to participate:

- Financial support
- Route to market
- Access to knowledge
- Market advantage



UK Collaborations: TSB Competition Programme

- Various calls throughout the year
- Focus areas – built environment, transport, high value manufacturing, energy, electronics / photonics, materials.....
 - Accelerating Innovation in Rail: 14 Dec 2011
 - Marine Energy: Supporting Array Technologies: 17 Apr 2012
 - Sustainable manufacturing for the process industry: 25 Apr 2012
- 50% funding is typical from £100k to £1m+



UK Collaborations: TSB Competition: Process

Expression of interest:

7 Sides of which need to answer same 10 questions as GRD – in 3 pages. Need to very carefully craft EOI.

Full Application:

Similar to GRD.

More finance forms

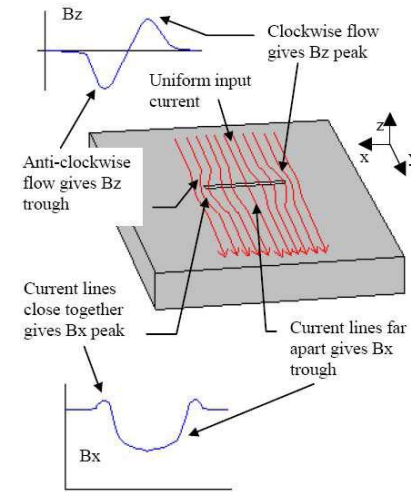
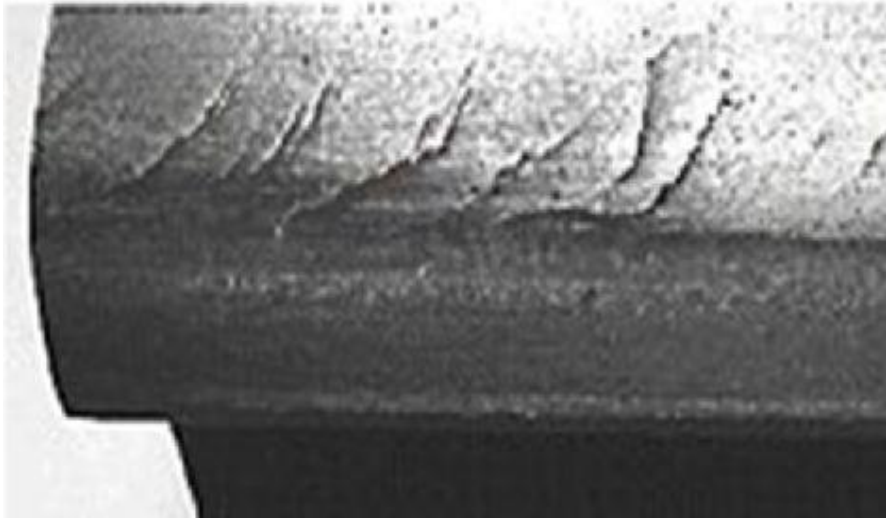
Same appendices

Key dates

Competition opens	5 March 2012
Briefing event	14 March 2012
Registration deadline	10 April 2012 noon
Expressions of interest (EOI) deadline	17 April 2012 noon
EOI applicants informed	8 May 2012
Stage 2 opens (for invited applications)	14 May 2012
Deadline for invited applications	27 June 2012 noon

UK Collaborations: Case Study

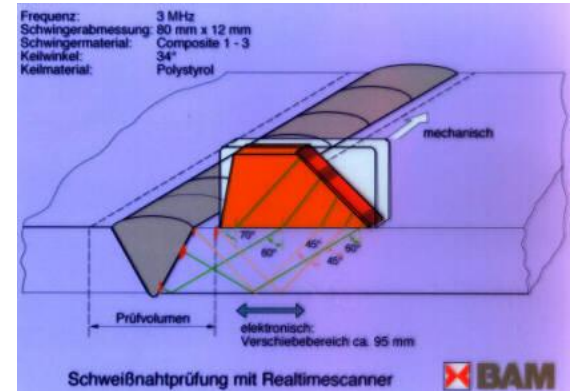
Accelerating Innovation in Rail call. Network Rail has significant issues with gauge corner cracking in rails – need better inspection solution. Large multinational rail company working in collaboration with SME and a University.



Seeking £250k of funding. Scoped project, coordinated partner input, wrote bid. Expression of interest successful, full application submitted, decision end March.

UK Collaborations: Case Study

Small Derby based business, well respected in their market place, leading edge product into Energy, Nuclear, Aerospace and Military markets.



Secured TSB Grant 'Nuclear R&D Feasibility Studies'

Partners include British Energy & Doosan Babcock

£200,000; Derby company had 50% of their costs covered by the grant

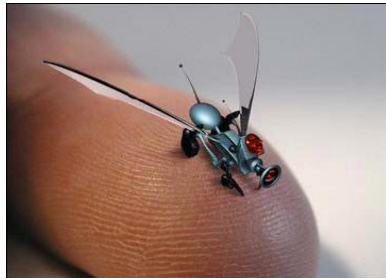
EU Collaborations

Plethora of schemes currently available:

- EUREKA Eurostars – R&D - 2 organisations – 50% to €300,000
- Specific focus areas; e.g. Maritime Technologies “MARTEC” – two or more partners - 50% to €300,000
- FP7: Research for SMEs – small groups of SMEs and RTDs – address technical problems – 50% €0.5m to €1.5m
- Framework Programme 7 (FP7): generic calls

EU Collaborations: FP7

- Various calls throughout the year
- Focus areas – Nano sciences, Materials, Production technology, Energy, Transport, Environment, Space
- Application addresses areas similar to UK grants
- 50% funding
- Runs to 2013
- 3+ month process



EU Collaborations: FP7 – example call

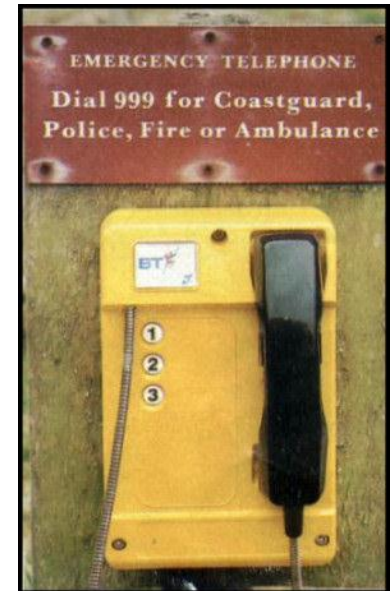
Cooperation Work programme: Transport

- Cost effective improvement of rail transport infrastructure
- 6 general topic projects – €26 million total
 - Energy consumption reduction in urban rail systems
 - Rail system interoperability (based on technological innovations)
 - Mitigation measures and good practice to reduce human fatalities and disruption of services from suicides and trespasses on railways
 - Reducing the occurrences and impacts of freight train derailments
 - A system approach for railways operation management to increase capacity and decrease delays
 - Cost effective improvement of rail transport infrastructure



EU Collaborations: FP7 – Case Study

- The development of an intelligent, physical condition monitoring, illuminated, self-powered emergency telephone casing for use in hazardous, arduous or safety critical situation
- 7 Industrial and Academic Partners from 5 countries – UK, Spain, Switzerland, Malta, Norway
- 24 month project ~ €1.3m project value, €660k funding



What makes a successful application?

- Plan well in advance
- Constantly check funding web sites
- Consider: Does your project genuinely answer the call?
- Consider: Who might your partners be?
- Use an expert?
- Think how to match fund
- Have patience
- Get to know the funders

Thanks

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