

Technology Strategy Board

Driving Innovation



Trusted Services

**COMPETITION FOR COLLABORATIVE R&D
AND FAST-TRACK FUNDING
MAY 2010**

In May we are launching an £8m competition to fund projects that aim to speed up the deployment of secure and trustworthy information systems, within Digital Britain and the wider global economy.

We are inviting applications for fast-track and larger business-led collaborative R&D projects.

Trusted Services

COMPETITION FOR COLLABORATIVE R&D AND FAST-TRACK FUNDING

Summary

The Technology Strategy Board has allocated up to £8m to invest in highly innovative collaborative research and development projects in the area of trusted services.

The tools, techniques and services developed will accelerate the deployment of secure and trustworthy information systems, within Digital Britain and the wider global economy.

This investment targets the increasing risks that UK Government, businesses and consumers face, whilst providing significant market opportunities to build a strong UK capability base.

We are focusing on business-led collaborative projects to develop trusted services which rely on technologies and their associated supply chains that will deliver significant improvements over today's service offerings.

Up to one quarter of the funding will be awarded to fast-track projects which last up to 12 months and have a total value of less than £150k.

The remainder of the funding will be awarded to collaborative R&D projects lasting 12-36 months and with a total project value exceeding £150k.

Background and challenge

Human trust

When communicating face-to-face, people have evolved a complex set of social etiquettes and protocols that they use to work out how much they want to trust other human beings.

Some of these are subtle and subliminal, involving the appraisal of expression, tone of voice and body language. Such practices are likely to be culturally specific – both in the UK as a diverse society, and in a globalised world with globalised business where no 'one size fits all'. Factors such as familiarity and previous experience will also influence the extent to

which individuals will put their trust in others; initially, for example, information is received with some degree of scepticism and caution when conducting business with strangers or unfamiliar organisations.

Digital trust

The electronic world of trusted services has not, as yet, developed the subtly integrated toolset we need to replicate our senses and warn us when things are not as they should be. As well as feeling that we can trust a service, there is also the need to have established non-human trust relationships so that a trusted service can emerge from a collection of untrusted components within the system, or system of systems.

Within the next 5-10 years significantly more products and services will be delivered via electronic systems, and traditional paper-based systems will continue to diminish. The need to create trusted digital spaces that allow business, Government and consumers to transact with confidence across cyberspace is required now more than ever.

Personalisation

The Government is aiming to make service provision more personalised. Citizens doing business with Government, such as online tax returns, benefits payment and healthcare services, need to be able to trust these services as being secure.

The start of this personalisation can be readily seen in the transition from web 1.0 (information pull and client/server architectures) to web 2.0 (information push and peer-to-peer architectures). We expect this trend will accelerate, with increased take-up of consumer-to-consumer commerce, which means that access to trusted services is an essential prerequisite.

In the UK the Government's Digital Britain initiative seeks to use the internet and associated technologies to enhance the nation's knowledge-based economy and to ensure that its benefits are available across all segments of society.

But the internet is increasingly becoming the playground of criminals. As the internet has grown in value for law abiding people, so it has become fertile territory for new forms of fraud.

This trend offers unique opportunities and threats, enabling the UK to play a central role in the global digital economy. The availability of ever greater network reach and capacity, together with smaller, smarter devices means data can be consumed at the time and place of convenience to the recipient.

Coordination with other bodies

The Technology Strategy Board is working with Directgov as the challenge holder and is engaging with other bodies including NHS Choices, Business Link and the Office of Cyber Security. This is so that we can develop a range of projects which, as well as contributing to the UK's national goals, also represent business opportunities for UK industry. The new markets being created in trusted services offer potential for significant wealth creation in the UK.

There is support for this competition from the Engineering and Physical Sciences Research Council (EPSRC) and the Economic and Social Research Council (ESRC). Additional funding of up to £2m from the EPSRC and £300k from the ESRC will be available for projects where there is a significant high-quality academic component and that demonstrate added value to the Research Councils' portfolio, by building on or complementing existing research programmes.

The projects should make real progress towards meeting the targets set out in the UK Government's *Digital Britain Report* and mitigating electronic risks cited in the *Cyber Security Strategy*. We are particularly interested in the development of new or integration of existing technologies, methods and techniques into commercial and deployable services that allow public and private sector organisations to transact digitally with citizens.

Scope

This competition will address innovative solutions for trusted and trustworthy tools, technologies and methodologies in both the public and private sector markets for use within Digital Britain and the wider global economy.

All proposals must explain how the work will help in positioning the UK in the global market and against other global innovation leaders in the area. In particular, we welcome proposals that will accelerate deployment of the technology and place emphasis on the development of the supply chain, system integration and human interactions with these systems.

Project partners are also welcome who bring 'real-world' testbeds which could be used for testing complex trust scenarios. We encourage innovative projects building on the supporting research or transfer of techniques from other domains such as psychology, economics, mathematics, sociology, financial risk modelling, consumer complexity, and sales and marketing. This will allow collaboration between business, technology researchers, social scientists and other organisations, from the outset, to underpin system design.

The high-level challenges identified are:

- to increase understanding and subsequently improve management of trusted and trustworthy digital systems
- to form new or expand existing identity business services
- to accelerate their deployment to market.

Proposals will address these challenges by focusing on one or more of the following:

- development of trust models focused on real-world practical applications for small and medium-sized enterprises (SMEs), large enterprises or national bodies
- system developments or enhancements – for example, cognitive choice and consumer behaviour models, data capture, integration of existent privacy and trusted computing technologies
- small scoping studies into the development of certification, codes of practice, governance and standards that will accelerate deployment – only if included as part of a larger project and on the basis that the results will be made publicly available
- upstream trust services – for example, reputation services, peer-to-peer collaboration, discovery and identification of trusted digital services.

Funding allocation and project details

An indicative £8m of Technology Strategy Board funding and a possible £2.3m of funding from the Research Councils is allocated to collaborative R&D projects that address one or more of the areas indicated above and involve business-to-business, business-to-academic, or business-to-user collaborations.

All proposals must show how their project will make a major step forward and overall positive contribution in terms of economic and business impact as well as environmental and social sustainability, taking into account the full product lifecycle.

We particularly encourage projects that can demonstrate benefits across more than one business sector, and projects should include a strong supply-chain based collaboration in order that new ideas can be developed and exploited in a timely fashion.

We are also keen to see activities that bring novel or atypical ideas and consortia together.

There are two levels of application:

1. Mainstream collaborative R&D

Projects costing more than £150k in total – that typically take between 12 and 36 months to complete, with the outcome entering the supply chain within two to five years of completion.

2. Fast-track collaborative R&D

Projects costing less than £150k in total – these must be led by an industry SME or micro company and are expected to take up to 12 months to complete.

(Note: any consortia considering submitting a proposal in excess of £2m should speak to the Technology Strategy Board at the earliest opportunity.)

Where appropriate, this programme will encourage projects that build on existing UK world-class knowledge and other Technology Strategy Board programmes,





such as the innovation platforms in Intelligent Transport Systems and Services and Assisted Living, and the Information and Communication Technology and Digital Britain programmes.

Projects can range from focused basic research, aimed at establishing technical feasibility, through to applied research, and to experimental development projects. We expect to invest mainly in applied research (attracting 50% public funding) or experimental development (25% public funding) projects.

Projects involving industry-orientated basic research (75% public funding) will also be considered but a robust case must be made to support the requested level of funding.

Definitions of the above categories of research can be found in the Guidance for Applicants – see the Competitions section at www.innovateuk.org.

Application process

Mainstream collaborative R&D proposals

These are collaborative R&D proposals for projects lasting 12-36 months with total project cost of £150k+. The application process for mainstream collaborative R&D proposals is in two stages:

1. A compulsory Expression of Interest (EOI) stage.
2. A full-stage application (by invitation only, subject to recommendations made by the independent assessment panel).

Applicants have the opportunity to make an initial optional EOI prior to their compulsory application. The optional EOI will be looked at by officials and a response given to applicants within three working days. Applicants may take advantage of this up to one week prior to the compulsory EOI deadline.

The key dates for this competition are **10 May 2010** when the competition opens and **17 June 2010** when the compulsory

EOI must be submitted. Following the independent panel review of the compulsory EOIs, the Technology Strategy Board will then invite successful applicants to make a full-stage application.

Fast-track collaborative R&D proposals

We are also funding fast-track collaborative R&D projects lasting up to 12 months and with total project costs of less than £150k. Fast-track projects need to be led by a small, medium-sized or micro company and can be submitted from **17 May 2010**. We will be assessing applications and awarding funding on a regular basis until the allocated funding is exhausted, or until **10 September 2010** when the fast-track competition closes, whichever occurs first.

Applicants for fast-track funding will need to follow the process outlined in the fast-track Guidance for Applicants, which explains the application and assessment process in detail and sets out applicable dates.

There are individual Guidance for Applicants documents for each type of funding which explain the respective processes in detail and are available at www.innovateuk.org under Competitions.

There will be an optional briefing day specifically for this competition in London which will be advertised on the Technology Strategy Board website and via our knowledge transfer networks. We strongly advise potential applicants to attend this if possible.

Key dates

Mainstream collaborative R&D	
Stage one (EOI)	
Competition opens	10 May 2010
Optional briefing	19 May 2010
Optional EOI deadline	9 June 2010
Compulsory EOI deadline	17 June 2010
Applicants informed of result	9 July 2010
Stage two (full application)	
Feedback provided	12 July 2010
Compulsory applicant briefing	21 July 2010
Registration of intent	11 August 2010
Deadline for full application	18 August 2010
Full-stage applicants informed of result	1 October 2010
Fast-track collaborative R&D	
Competition opens	10 May 2010
Proposals can be submitted from	17 May 2010
Deadline for receipt of applications	10 September 2010



More information

For more information about this competition and details of how to register and apply, please see www.innovateuk.org under Competitions. Both Guidance for Applicants documents will be available when the competition opens on **10 May 2010**.

For background information on the strategies and innovation platforms mentioned see www.innovateuk.org/ourstrategy/innovationplatforms.ashx

Digital Britain Report,
www.culture.gov.uk

Cyber Security Strategy,
www.cabinetoffice.gov.uk

Competition helpline:
0300 321 4357

Email:
competitions@tsb.gov.uk

Publicity

The Technology Strategy Board frequently publicises the results of competitions and this includes engagement with the media. All applicants will be given a chance during the competition process to opt out of any publicity. Willing applicants will be asked to provide an agreed form of words for use in publicity material. E-mail pressoffice@tsb.gov.uk with any queries.

The Technology Strategy Board is a business-led executive non-departmental public body, established by the Government. Its role is to promote and support research into, and development and exploitation of, technology and innovation for the benefit of UK business, in order to increase economic growth and improve quality of life.

Collaborative research and development is part of the Government's Solutions for Business portfolio.

The Technology Strategy Board
North Star House
North Star Avenue
Swindon
SN2 1UE

Telephone: 01793 442700

www.innovateuk.org