



SBRI competitions can bring dramatic improvements to specific public sector challenges by enabling government bodies to engage with a broad range of businesses and technologies. Winning companies are awarded contracts with the department to demonstrate and develop their technology.

## What is SBRI?

SBRI is a process that enables government bodies to connect with technology businesses, finding innovative solutions to specific public sector challenges and needs.

It uses the power of government procurement to accelerate technology development, supporting projects through the stages of feasibility and prototyping which are typically hard to fund. SBRI offers an excellent opportunity for businesses, especially early stage companies, to develop and demonstrate technology, supported by a customer, and to climb the first rung on the government procurement ladder.

It can be difficult and confusing for businesses with innovative ideas to engage with the public sector. Equally, government departments have no easy access to the ground-breaking companies that might provide new solutions to help them meet their objectives. Indeed, some of the most interesting and innovative ideas will come from companies working outside the sector and from early stage businesses.

The UK public sector spends around £220bn a year on goods and services. SBRI allows departments to use some of this money to drive innovation, operating under the EU pre-commercial procurement legal framework.

#### Benefits to government

The public sector can use SBRI to find innovative solutions by reaching out to companies from different sectors, including small and emerging businesses. It is a recognised process that supports the public sector to procure the development of new technical solutions accelerating technology adoption. High-risk, new ideas can be explored as the risk is managed through awarding multiple contracts and having a phased development programme. Using SBRI competitions is an excellent way for departments to meet the requirements of their Innovative Procurement Plans.





### Benefits to business

SBRI competitions create excellent opportunities for businesses to engage with a government department and prove their technology or idea. Successful companies will gain a lead customer for the development of their solutions, and will retain their intellectual property rights. They will receive a contract for the full cost of demonstrating the feasibility of their technology and the opportunity for subsequent funding for prototype development. This provides a reliable source of early stage funding, a potential route to market and establishes credibility for further investment. Any company can submit an application, although the structure of the scheme is particularly beneficial to early stage companies and small and medium-sized enterprises (SMEs).

Each competition and its topic are led by the relevant public sector body. The Technology Strategy Board has the role of championing the SBRI programme and supporting the expansion to a wide range of government bodies, as well as using its outreach connections to publicise the competitions. Details of all current competitions are listed on the Technology Strategy Board website, www.innovateuk.org/sbri

### SBRI key features

- by a defined challenge
- pre-commercial procurement guidelines
- contract not a grant
- Fast-track, simplified process
- Particularly suitable for SMEs
- Government department acts as the lead customer
- by the company
- in meeting policy objectives.

### How does it work?

SBRI is a simple process. Typically competitions are split into two phases. All competitions are based around a market need, which is expressed as a desired outcome, rather than a required specification.

### Phase 1

proposals concentrate on proving the scientific, technical and commercial feasibility of the proposed project. The results of Phase 1 determine whether the solution should go further to Phase 2 - not all projects will progress to the second phase.

### Phase 2

is the principal research and development effort, aiming to produce a well-defined prototype. Projects that successfully complete Phase 2 can then be commercialised and offered to government departments and others under the normal procurement process.

Open competition supported

Competition launched

6.

**Assessment** of projects for Phase 2 funding 5.

Phase 1 demonstration of feasibility – lasting 6 months and worth about £50-100k

4.

Most interesting ideas selected

7.

Phase 2 – Prototype development – lasting about two years and worth £250-£1m

8.

Leads to competitive procurement by department and product to market



# Reducing the soldier's burden

A British soldier patrolling on foot in the 50 degree heat of Afghanistan could be carrying a pack weighing as much as a medieval suit of armour.

Much of the pack weight of up to 75kg is due to the power requirements of the soldier's equipment and this obviously presents a challenge for the Ministry of Defence - how to reduce the weight without affecting the performance, so that soldiers are more comfortable, agile and better able to go about their duties.

'Powering the Dismounted Soldier' was an SBRI competition launched by the Centre for Defence Enterprise in March 2009 to look at reducing the weight of the pack's battery components. The competition identified several key challenges where innovative technology could provide the solution:

- alternative fuel source
- · novel battery chemistry
- sustainable energy solutions
- reducing the burden on the dismounted soldier
- cutting the cost of man-portable power solutions
- doubling the energy density or halving the weight of current portable power supplies
- intelligent power management
- · smart materials.

A total of 34 new technologies and ideas were submitted. Following a short assessment process, 12 contracts totalling over £500k were awarded for Phase 1 - proof of principle. The most promising technologies and projects will then be funded through the Phase 2 prototype development and could result in subsequent deployment to reduce the weight burden for soldiers on the front line.

# Competitions

All competitions are listed on the Technology Strategy Board website. Competitions are also broadcast through the knowledge transfer networks, the regional development agencies, UK science parks, Business Link and others. SBRI was re-launched in March 2009 and by August 2009 16 new competitions had been launched with: the Department for Health, the Home Office, Ministry of Defence, East of England Strategic Health Authority, the Design Council, Department for Local Communities, and the Homes and Communities Agency. In the first four months, over 800 companies have applied to these competitions and over 250 have been awarded contracts. More competitions are planned and will be launched regularly on a range of topics.

### Defence

The Ministry of Defence runs a programme of specific SBRI competitions through the Centre of Defence Enterprise.

They cover a range of topics from new tank technologies to medical calls for prosthetics and the use of novel materials and technologies to reduce the weight our soldiers have to carry.

More details on current topic areas and information on how to apply are available on the Centre for Defence Enterprise website at www.science.mod.uk/ Engagement/enterprise.aspx



### Health

Five successful SBRI health competitions have generated over 250 applications from companies, many of whom do not work in the health sector. Topic areas cover hospital acquired infections, patient safety, managing long-term conditions and keeping children active. There is a continuing programme of health competitions being run by the National Health Service and the Department of Health.

### Security

The Home Office has instigated two internal security related competitions. One was run with the Design Council on reducing the chances of mobile phones being stolen, by increasing the security of the data they store. Another was looking for new technologies that will help identify individuals with suspicious intent in crowded places, to reduce the risk of terrorist attack.

### Buildings

New buildings are becoming increasing more energy efficient, but what about the huge amount of old housing stock? On behalf of the Homes and Communities Agency and the Department for Communities and Local Government, the Technology Strategy Board ran a SBRI competition to identify technologies for retro-fitting social housing. Over 340 applications were received, with over 190 companies receiving Phase 1 feasibility contracts.





SBRI is one of the tools that the Technology Strategy Board supports to drive innovation in the UK. 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 the quality of life. It is sponsored by the Department for Business, Innovation and Skills (BIS)

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