AN EU US-STYLE PUBLIC PROCUREMENT SBIR (SMALL BUSINESS INNOVATION RESEARCH) PROGRAMME?

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MYTHS OF INNOVATION POLICY

MYTH 1: The key funding model for successful science and technology companies is Silicon Valley style venture capital.

E.G. The “soft start-up” and R&D contracts for lead customers represents the dominant financing model for successful S&T companies in Cambridge.

Other VC problems:

• only appropriate for a minority of start ups
• early trade sales common, reducing jobs impact
• very low (zero!) returns for investors: SOLUTIONS: SBIR programme AND POSSIBLY new VC instrument based on French VC Guarantee model or US Small Business Investment Company (SBIC) model
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**MYTH 1:** The key funding model for successful science and technology companies is Silicon Valley style venture capital.

**MYTH 2:** Academic IP is the key source of ideas for successful science and technology start-ups.

Solving problems for customers in a business environment is the key driver of new product ideas.
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WRONG

MYTH 2: Academic IP is the key source of ideas for successful science and technology start-ups.

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MYTH 3: The best way for Government to help stimulate innovation is by co-funding multi-partner collaborative R&D projects (the UK and EC model).

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Multi-partner collaborations likely to be a distraction for SMEs: too far from market and require co-funding (Eurostars an improvement).
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THE KEY TO STARTING AND GROWING MOST SUCCESSFUL S&T COMPANIES IS SOLVING CUSTOMER PROBLEMS THROUGH R&D CONTRACTS.
POLICIES THAT ENCOURAGE LEAD CUSTOMERS AND SUPPORT THE SOFT COMPANY MODEL

1. Encouraging private sector “lead customers”; use “Eurostars” instrument to promote simple R&D contracts between SMEs and large company lead customers?

2. Government procurement based innovation policies (US SBIR, DARPA etc)
US GOVERNMENT ‘PROCUREMENT BASED’ INNOVATION POLICIES

- Small Business Innovation Research (SBIR) programme the lead federal government policy for small businesses

- $2.5 billion per annum in contracts to develop technologies that federal agencies need as customer or for policy:
  - $150k for Phase I
  - $1m for Phase II

- 100% funding plus profits; part up-front

- 1500 firms receive 4,000 awards per year; multiple awards common

- Transparent, competitive process

- 70% to companies employing less than 25 people

- $3-6 billion in further government R&D contracts for small businesses including Phase III SBIR
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THE “LARGEST SEED CAPITAL PROGRAMME IN THE WORLD”

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MORE IMPORTANT THAN VENTURE CAPITAL FOR EARLY STAGE S&T COMPANIES

• $3–6 billion in technology development R&D contracts for small businesses including Phase III SBIR

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WHAT HORIZON 2020 SAYS ABOUT PROPOSED EU SBIR

• “Seamless and coherent funding from idea to market”

• A “dedicated instrument building on the SBIR model”– only open to SMEs

• “All of the societal challenges and enabling and industrial technologies shall apply the dedicated SME instrument and allocate an amount to it;

  “...expected that 15% of total combined budget (€7.4 billion) will go to SMEs”

• Phased like US SBIR

• Links to networking, pre-commercial procurement, and access to risk finance
IMPLEMENTATION ISSUES

• Responsibility for SBIR fragmented across programme and diluted.

• Expected SBIR expenditure of “€7.4 billion” is an aspiration not a budget: ambiguities and lack of familiarity could lead to part of it being diverted into conventional collaborative research programmes

SIMILAR PROBLEMS HAVE SERIOUSLY UNDERMINED THE UK’s THREE ATTEMPTS TO IMPLEMENT SBRI SINCE 2001
(Current version highly effective, but underfunded)
SOLVABLE IMPLEMENTATION ISSUES

• Awards perceived of as “grants” rather than “contracts”

• Management approach still unclear: current expectation seems to be that conventional EC research management machinery will be used

• How to balance single customer approach with participation by different member states

• Relevance to all member states

• How to cover full range of technologies

• How to manage build up of expenditure on a new programme
KEY SUCCESS FACTORS

- Single EU programme with defined responsibility and budget
- Competitions run by informed, engaged, paying customers
- “Single customer per project – not a collective or a committee
- “Contracts” not “grants”: 100% funding
- Meaningful amounts per project
- Complete transparency of awards
- Efficient, timely, competitive process
IDEAL MODE OF OPERATION

- EC invites proposals every 6 months for SBIR Competitions from public sector spending agencies in individual member states or small consortia (e.g. health service, transport, energy, security, agriculture)

- Competitions must be compliant with rules and processes similar to US SBIR

- Projects must be related to future needs, objectives and policies of government agency as a customer (direct or indirect) or specifier

- Successful bids from public sector member state organisations awarded EU contribution of 50% of competition costs.

- Complementary measures to encourage take-up of resulting innovations across the EU
FURTHER INFORMATION: www.davidconnell.org