The Changing Context for STI Policy

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Innovation in a Global Knowledge

The Central Role of STI – the current position

- Central role of knowledge in the economy and society
- Dramatic advances in scientific knowledge
- Greater demands on STI to help solve major problems – food water and energy supply, ageing, climate change, carbon capture, etc
- Shift in policy rationale from market failure to STI system development and integration

Requirements for an Effective National STI System

1. A significant level of investment in R&D and innovation
2. Provision of adequate infrastructure
3. Effective targeting of research resources
4. An appropriate balance between knowledge production and knowledge adaptation
5. Effective collaboration between researchers and all components of the national STI system
6. Purpose-designed intermediaries to promote linkages

Challenges for National STI Systems

- A re-arranged global topography of knowledge production
- Interfacing with global value chains
- Effective IPR protection and management
- Trend to open innovation
- Positioning for emerging/converging technology platforms
- Ubiquity of technology-shaped decisions
- Building innovative capacity throughout the economy(not just in STI institutions)
- Contributing significantly to addressing ‘grand challenges’
- Demonstrating value for money without sapping creativity – costs of resource allocation
- Attacks on the integrity of science

Implications for the Structure and Governance of STI systems

- Limitations of centralised STI governance – need to build horizontal capacity
- Building capability to access the global pool of knowledge
- How & where to develop & locate knowledge integrators?
- Reduced control of national STI assets
- Need for strategic intelligence to guide investment, not just excellence