



EUROPEAN
COMMISSION

European
Research Area

Forward Looking Activities and International S&T Co-operation

European Commission

Research Directorate-General

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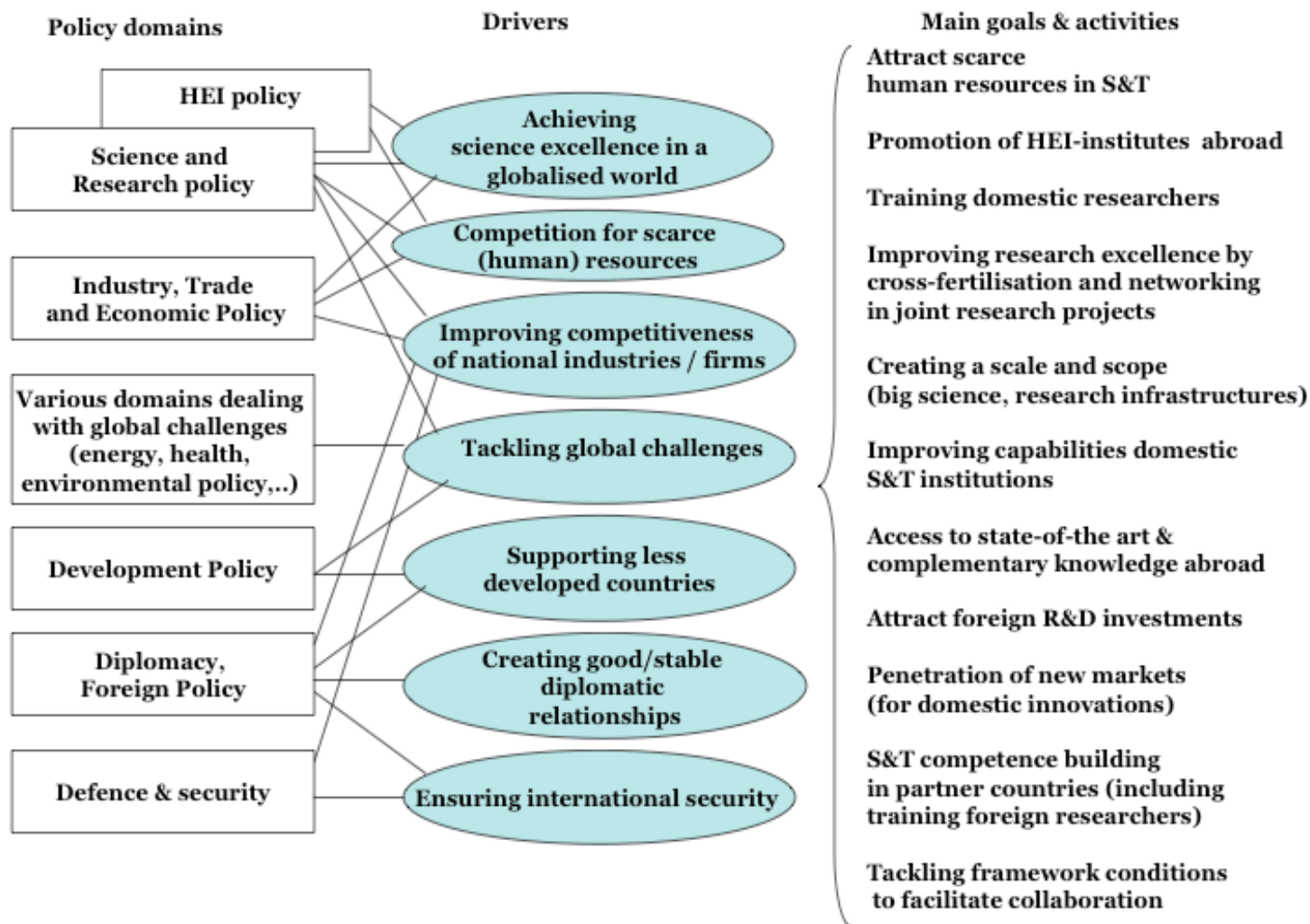
DG RTD D2 International Co-operation

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European Research Area

Drivers of International S&T Co-operation



Foresight and international S&T co-operation

Requirements for international co-operation foresight similar to other S&T foresight except:

- Generally more policy lines to reconcile;
- Generally more actors involved;
- Need to assess scientific potential plus 3rd country willingness;
- Geographic and/or S&T focus

Foresight and international S&T co-operation

General considerations in assessing international S&T co-operation:

- Poor understanding of impacts (generally considered « a good thing »)
- Competition, access to critical information and issues of trust
- Global challenges and different perspectives
- Constraints on realisation of benefits (legal and other)
- Asymmetry of national policies favouring inflows over outflows
- Importance of mutual learning

Foresight and international S&T co-operation

Demands for foresight activities for international co-operation:

- **SFIC mandate**

*“ sharing of information and consultation between the partners....with a view to **identifying common priorities** which could lead to coordinated or joint initiatives....”*

- Request to G8 Science Ministers for discussion on **fostering global "foresight"** - how to best facilitate/direct discussion towards long term "bigger picture" and common technology roadmaps

Requirements:

- Emerging technologies
- Embedding of foresight in programme development

Foresight activities – a snapshot from EC Science Counsellors

Brazil

- Main Actor: The Centre for Strategic Studies
- Studies: In 2006, 47 activities covering: Ethanol; The Sea and Coastal Environments; Strategic Applications for ICT 2015-2025; Technology Routes for Productive Sectors (footwear, medical-hospital equipment, cosmetics, air & space, etc.); Organic Semi-Conductors

Egypt

- Main Actor: Center for Future Studies
- Studies: Future Vision of Egypt 2030; Climate Change and its Impacts on Egypt; Egyptian Higher Education System: Towards Better Quality in the Future; Foresight of Water Resources and Management; Future Vision of the Capital of Egypt 2050; Positive Ethics Metrix to support Egypt's Vision 2030; Quest of R&D-related Foreign Direct Investment

Foresight activities – a snapshot from EC Science Counsellors

China

- Main Actor: State Council
- Studies: 20 strategic studies in 2003: Strategy on mid-and-long term S&T development; S&T structure reform and national innovation system; S&T in the manufacturing sector, agriculture, energy, resources and ocean development; transport; modern services; ecology, environment and recycling economy; urban development and urbanisation; S&T issues in population and health, public security, national defence; Strategic high technology and hi-tech industrialisation; Basic sciences; S&T platforms and infrastructures; S&T talents; S&T input and its models for management; Legislation and policy studies on S&T development; Innovation culture and science popularisation; Regional S&T development

India

- Main Actor: Department of Science & Technology
Technology Information and Assessment Council
- Studies: Vision 2020 - long term technology vision for India, carried out in Nov 1993

Foresight activities – a snapshot from EC Science Counsellors

Japan

- Main Actor: National Institute of Science and Technology Policy
- Studies: "Science Map 2006 -Study on Hot Research Areas [2001-2006] by bibliometric method"; "Social vision towards 2025 - Scenario Discussion based on S&T Foresight"; "Comprehensive Analysis of Science and Technology Benchmarking and Foresight"; "8th Science and Technology Foresight Survey Delphi Analysis

Russia

- Main Actor: Ministry of Education & Science
- Studies: S&T foresight study (in Russian) Dec 2008

Foresight activities – a snapshot from EC Science Counsellors

Israel

- Main Actor: Samuel Neaman Institute for Advanced Studies in S&T
- Studies: 'Israel 2028: Vision and Strategy for Society in a Global World'

USA

- Main Actor: National Academies; Think Tanks (e.g. the World Future Society); World Technology Evaluation Center
- Studies: many e.g. Grand Challenges for engineering