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Effectively Governing Multilateral Science, Technology & Innovation Co-operation in the Context of Global Challenges

Health R&D as a Global Public Good – Cross-Sectoral Learning
Geneva, April 2013

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Why is Multilateral STI Co-operation Necessary?

To **enhance** our understanding of impact chains

To **form** research based narratives to make policy makers and the general public understand the seriousness of the situation.

To **develop** technology and innovation based solutions.

To **adapt** these solutions to different ecological, social, cultural contexts.

To **embed** technical solutions in more comprehensive social change processes

To **increase** acceptance & to avoid „rebound effects“.

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The new global dimension adds complexity as well as new possibilities

- Until recently, global STI activities were mainly clustered in the “triad” (North America, Europe, Japan).
- New countries are appearing on the global STI arena
  - Korea as example of successful technological catch up
  - Brazil (aeronautics, biotech),
  - China (solar and wind energy)
  - India (ICT, wind energy)
  - South Africa (coal liquefaction)
  - …

Case Studies

1. **CGIAR:** Consultative Group on International Agricultural Research
2. **Gates:** The Bill and Melinda Gates Foundation
3. **GEO:** Group on Earth Observations
4. **IAI:** Inter-American Institute for Global Change Research
5. **IAEA:** The International Atomic Energy Agency
6. **IEA:** The International Energy Agency – Implementing Agreements
7. **JPI:** EU Joint Programming Initiatives – Agriculture, Food Security and Climate Change (FAACCE)

+ 2 mini case studies

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Expert Group: Six OECD Member countries and two non-Member countries

Australia
Austria
China
France
Germany
Norway
South Africa
South Korea

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Five governance dimensions

- Priority setting
- Funding and spending arrangements
- Knowledge sharing and intellectual property
- Putting STI into practice
- Capacity building for research and innovation

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Governance Lessons

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Policy Challenges

- Make policy makers and the general public aware of the value of (international) STI co-operation.
- Achieve high-level political support and/or have a demand-driven approach
- Operate with a mandate
- Align national research priorities with international co-operation where possible to achieve greater effectiveness & prioritization
- Convince existing funders to orient calls to the goals of international co-operation

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Some basic findings of the project

- Research on multilateral STI co-operation is extremely limited to date
- There is no universal solution to effective governance approaches for international co-operation in STI
- The changing nature of global challenges requires nimble governance approaches to respond to contingencies
- Governance structures must be a “learning system”
- Governance dimensions should be linked through coherent goals

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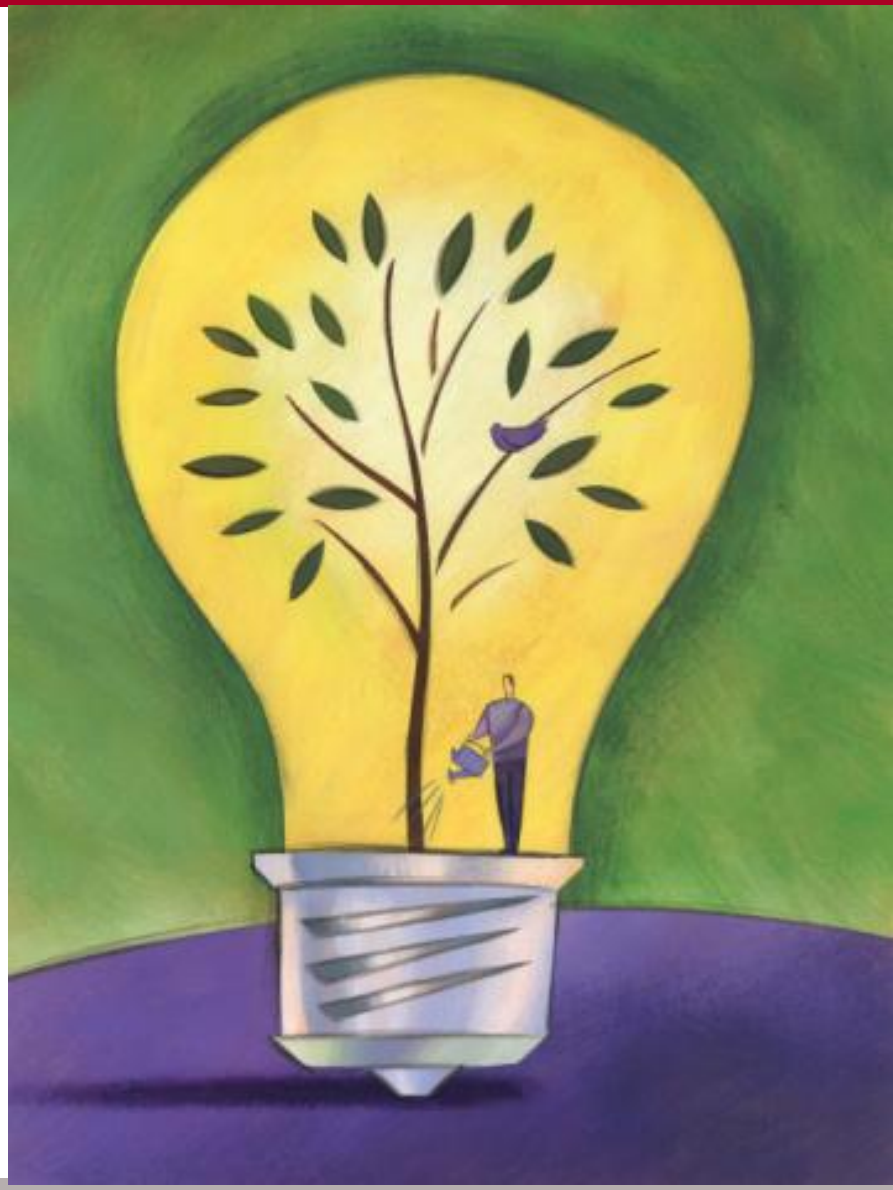
Agenda & Priority Setting Governance

- Link priority setting with related governance dimensions from the outset
- Flexible and adaptable governance structures
- Combine bottom-up and top-down governance



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Funding and spending

- Contingency provisions
- Harmonize funding
- Seek multi-annual funding or “smooth” funding

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Knowledge Sharing and Intellectual Property

- No uniform solution
- Use governance approaches to encourage sharing
- Adapt to each phase of the collaboration life cycle

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Bridging Research into Practice

- Go beyond “technology fix” paradigm
- Address political, economic and cultural conditions
- Implement strategies for communication with stakeholders and the general public.

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Capacity Building

- Needs to be included in both developing and developed countries
- Seek to minimize duplication
- Foster south-south and south-north co-operation

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Meeting Global Challenges through Better Governance: International Co-operation in Science, Technology and Innovation

may be found online at
www.oecd.org/sti/stpolicy/governance

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