

**Presentation by DSG Pier Carlo PADOAN**  
**Wednesday March 25, 2009**

**CSTP Workshop on “Addressing global challenges - promising approaches and governance mechanisms for multinational Science and technology co-operation”**

Dear State Secretary, Frieder MEYER-KRAHMER ladies and gentlemen, colleagues,

*German leadership on the issue of multinational S&T cooperation*

- It is my pleasure to welcome you to today’s workshop on Global Challenges: Promising approaches and governance mechanisms for multinational Science and technology co-operation.
- This workshop was organised in close cooperation with the German Federal Ministry for Education and Research – the BMBF. The Committee for Scientific and Technological Policy here at the OECD has worked on numerous projects with the German BMBF. Including, Mr. State Secretary, a 2005 High Level Workshop on the Evaluation of Publicly Funded Research which you also attended.
- I would like to thank the BMBF for the strong leadership it has shown in raising at the OECD the importance S&T cooperation as means of addressing global challenges.
- The high level of country representation here today is a testament to the strategic importance our countries place on finding better ways to co-operate with one another – and with partners around the globe -- on the urgent science and technology challenges raised by global problems such as climate change, energy security, food security, global health
- Germany has also been instrumental in encouraging the OECD to include in its forthcoming Innovation Strategy advice on how our countries can – together – work more efficiently develop innovative solutions to common social problems and diffuse them as quickly and widely as possible.
- But Germany is far from alone in the OECD family in recognising that we have an incomplete understanding – both theoretical and practical -- of the

structure and dynamics of multinational scientific and technological cooperation projects. Japan has also asked the OECD to explore how to improve international research cooperation between developed and developing countries as part of development assistance. The goal is to strengthen the relevance and the ownership by partner countries of joint research.

- In short, OECD countries are searching for best practices and seeking consensus on how to improve existing approaches to international S&T cooperation and governance mechanisms.
- Today's discussions will be very helpful in advancing our thinking about what works, what does not and what are possible new approaches we should be exploring.
- I very much look forward to hearing the expert views on how, in their particular fields of expertise, the present system of multinational S&T cooperation works and what are the opportunities for improvement.

*Climate change technologies as an example of difficulties in multinational S&T cooperation*

- The topic is very timely, indeed. One of the many lessons we can draw from the current global financial crisis is the importance of dealing with challenges early in order to avoid escalation into much more difficult crises. This workshop seeks to do just doing that.
- Without early action, climate change, energy security, food security and global health –hardly easy “wins” as the situation now stands -- will become far more intractable.
- Take climate change as an example. There is convincing evidence that the consequences of not acting on climate change will be serious. In the absence of new policy, the OECD projects world greenhouse gas (GHG) emissions to double by 2050 and to continue to rise thereafter. By 2100 this would result in an increase in world temperatures by 4°C to 6°C. The consequences of such a scenario include: sea level rises, storm surges, more frequent and intense heat waves, and declining agricultural yields in many parts of the world.
- Clearly, it is essential we develop and globally deploy new technologies as early as possible. Renewable energies, nuclear energy, and carbon capture and storage are some promising technological possibilities for the energy

sector. In its recent report on Energy Technology Perspectives to 2050, IEA shows that a wide range of emerging technologies can contribute to a low-carbon economy provided the large investments needed to make them competitive start now.

- So, the question is: How can we expand the pool of available technologies and encourage their diffusion globally? One solution is that governments scale up their research and development policies. But given global public good nature of such technologies, it is unlikely investments will be made in the absence of a global co-operation.
- We have just recently been able to establish international consensus on the interpretation of scientific data with regard to climate change. To now foster multinational S&T cooperation we have to address issues common across all global challenges such as:
  - What are the R&D priorities?
  - How financing be allocated? How will work be divided?
  - Who are the stakeholders?
  - How will benefits be shared?.

*The time is ripe for these discussions*

- These are difficult questions but there is good news.
- First, while it is hard to see the silver lining in the current financial crisis, OECD studies show that many of the economic stimulus packages include R&D spending as part of the long term strategies to launch future growth. We are not seeing, as of yet, a decline in R&D spending.
- However, countries are interested in leveraging their resources, and international cooperation on S&T is widely seen as one way to use S&T funds more wisely.
- Second, with the rise of new economies and the globalisation of S&T capacity, today there are more resources and more players in S&T worldwide. This leads us to believe there are more opportunities for cooperation.

- Due to the rapid increase in R&D spending primarily by China but also by other emerging countries, the share of non- OECD countries in global R&D expenditures rose from 8% in mid 1990's to 18% in mid 2000's.
- With more resources invested in R&D, non-OECD countries are also producing more scientific articles, obtaining more patents, and training more scientists and engineers. As a result, the global S&T landscape is still “spikey” but increasingly multi-polar.
- OECD countries realise that a multinational S&T cooperation must involve these new players and they are actively searching for ways to do so.
- As we have seen in recent years, through the emergence of different innovative schemes like the G8+, the Major Economies Meeting (MEM), the OECD's Heiligendamm Process or the G20, there is a growing realisation that we cannot build a stable global economy without including developing countries in the decision-making process. The same holds true for multinational S&T cooperation.
- We need to find new mechanisms that are representative enough of the current global innovation landscape to effectively address the global challenges on the agenda.

#### *The OECD Role*

- The OECD is well placed to play an active role in taking forward the agenda of this Workshop. Let me tell you why I believe this is so:
- First, the OECD – and the CSTP in particular -- is a unique platform where key countries (including China, Brazil, Chile, South Africa, Israel, and Russia) can meet and discuss science and technology challenges of common interest. The OECD is a far more inclusive “club” than many realise.
- A second strength of the OECD is the breadth of its work. Each of the global challenges you will discuss today are worked on in-house, be it food and agriculture, the environment and climate change, health, or energy. The OECD thus offers the unique opportunity for drawing on broad expertise, creating synergies and policy coherence.
- Finally, the OECD often uses “soft law” approach to global governance issues. At the OECD It builds consensus on good policy practice and common approaches. We increasingly find our soft instrument approach advantageous because countries can often agree to implement OECD. This

may prove to be an effective approach to the governance issues of S&T cooperation.

- Let me end by saying the OECD is ready to work with you in the search for new approaches and governance mechanisms for international S&T cooperation.
- I wish this workshop a success!
- Thank you.