

The Role of International Organisations in Advanced Research Evaluation and Impact Assessment and the Potential for Coordinated Action

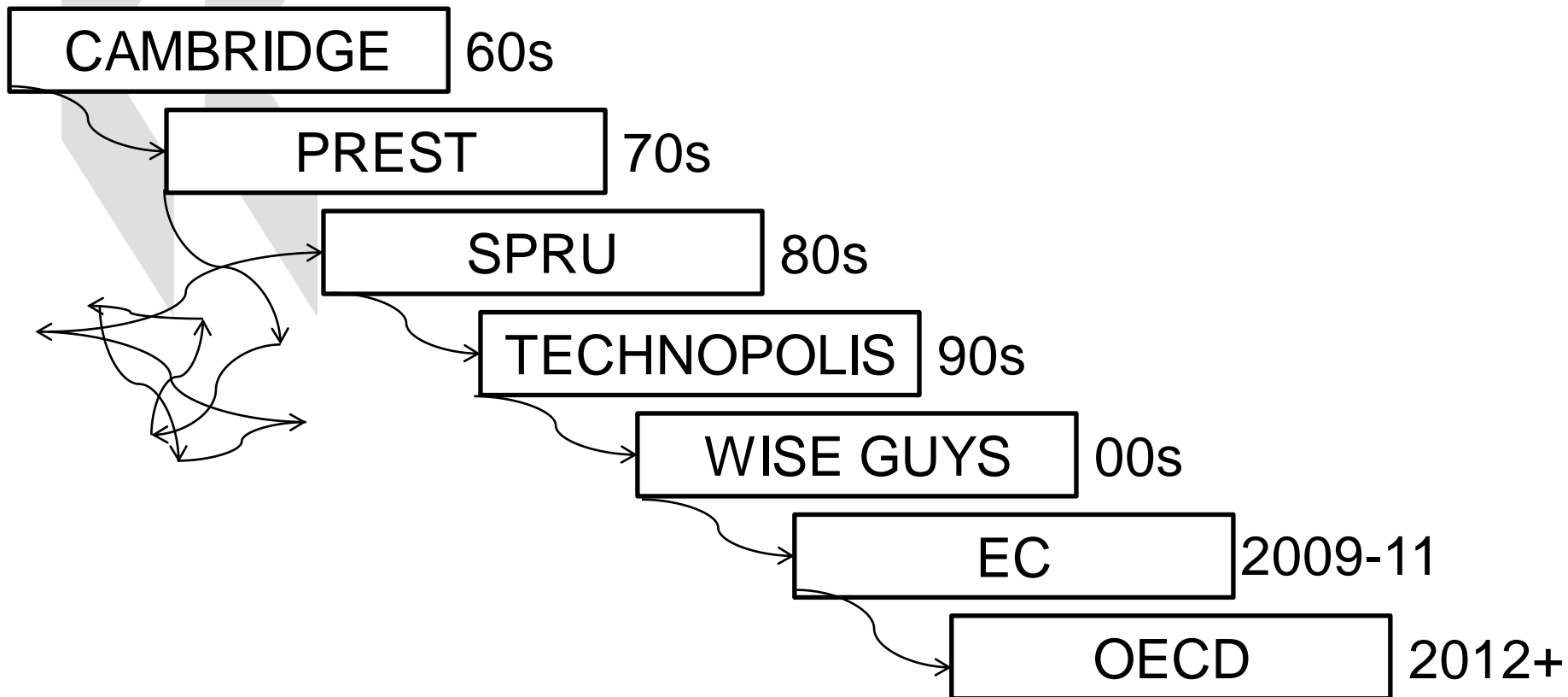
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ESF MO Fora on
Evaluation of Publicly Funded Research and
Evaluation: Indicators of Internationalisation
6-7 December 2012

Outline

- Who am I?
- Evaluation Anecdotes
- The OECD, Evaluation and Impact Assessment
- Going Global

A Personal Evaluation History

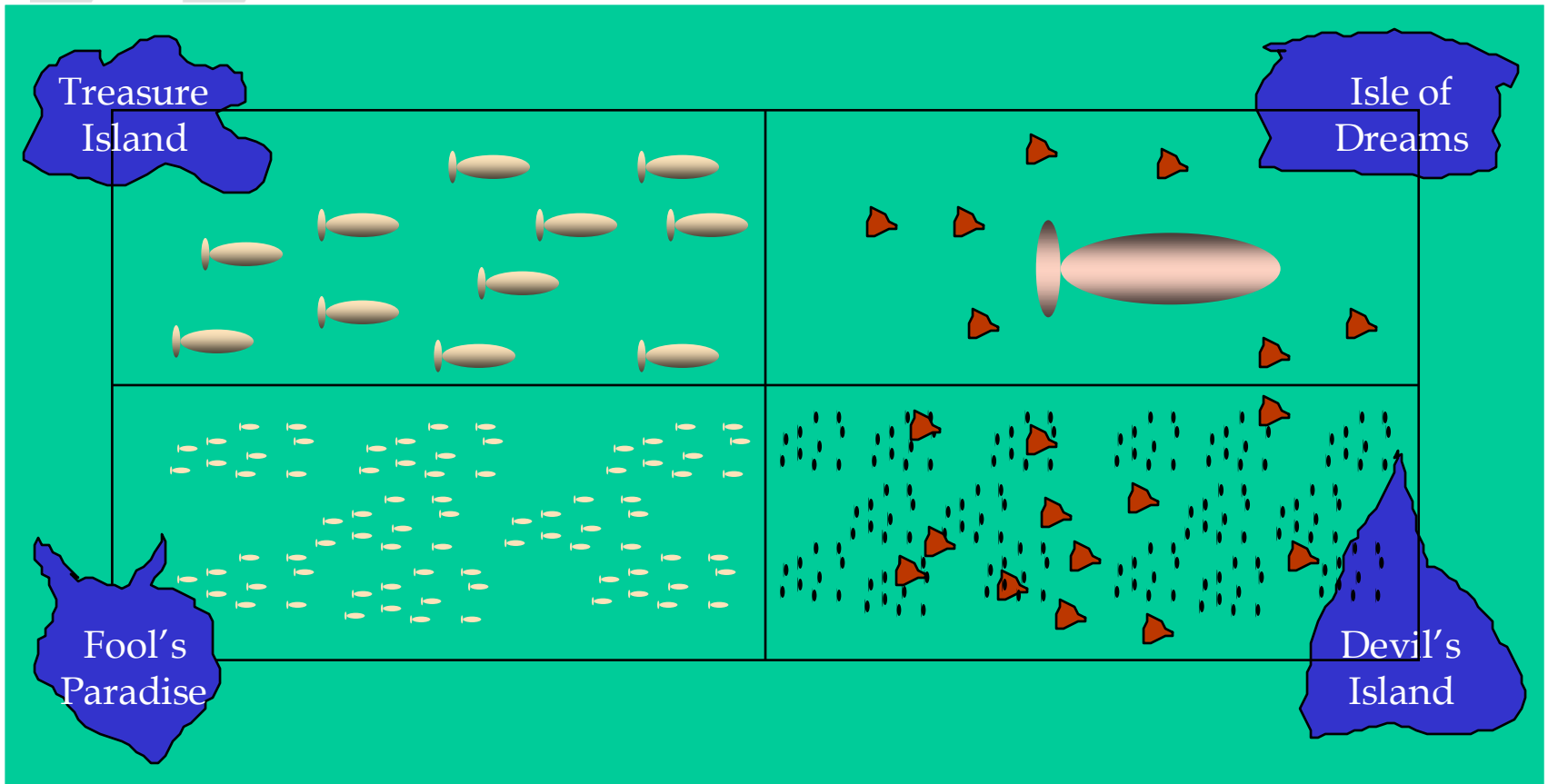


Evaluation Anecdotes

- Standard practice
- Hotspots
- Queuing theory
- Landing in hot water
- Get it in writing
- Publish and be damned
- Slippery customers
- Going fishing
- Spear tips
- Shoulders, wheels and spirals

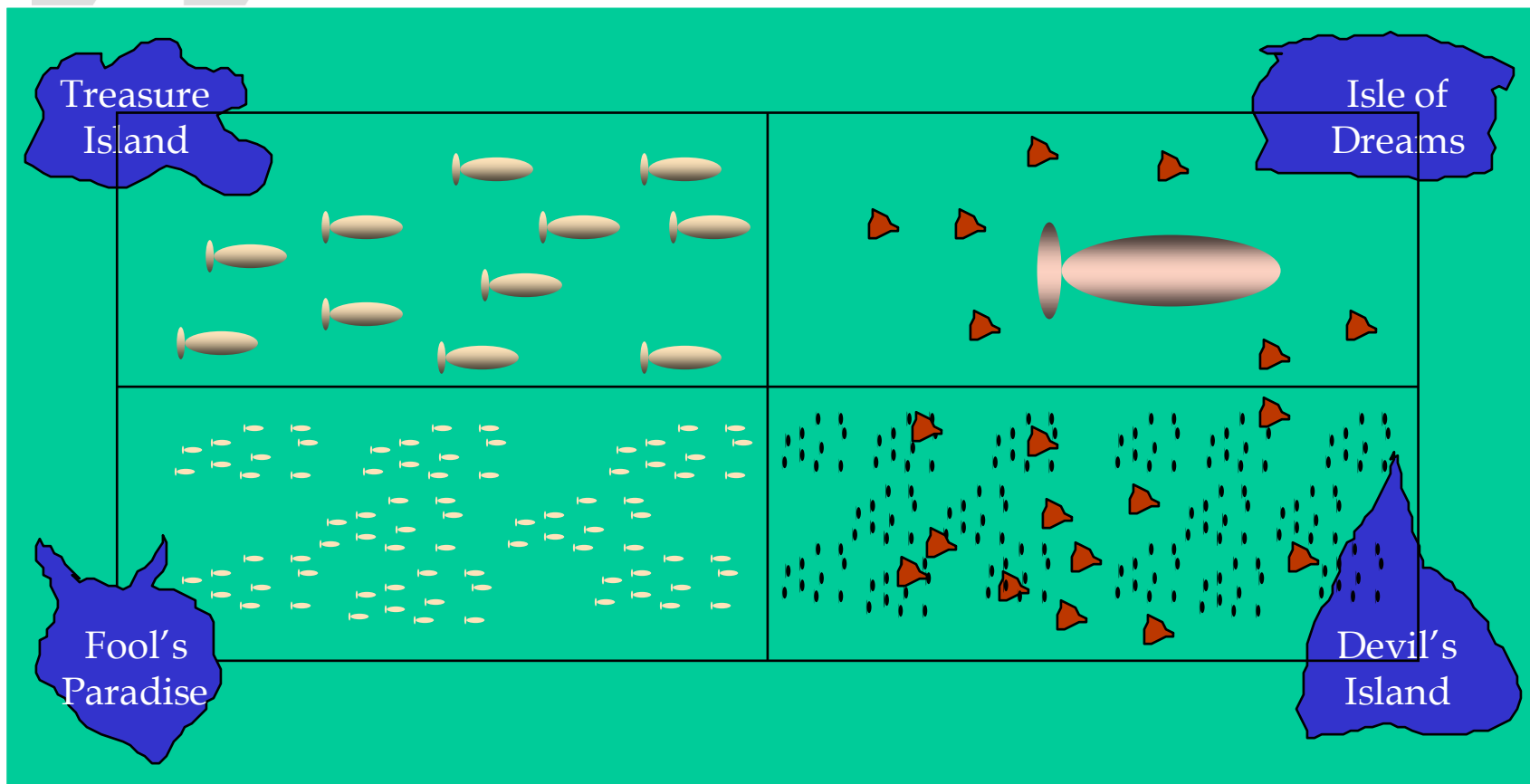
Gone Fishing

- Where would you send your fleet to search for fish?



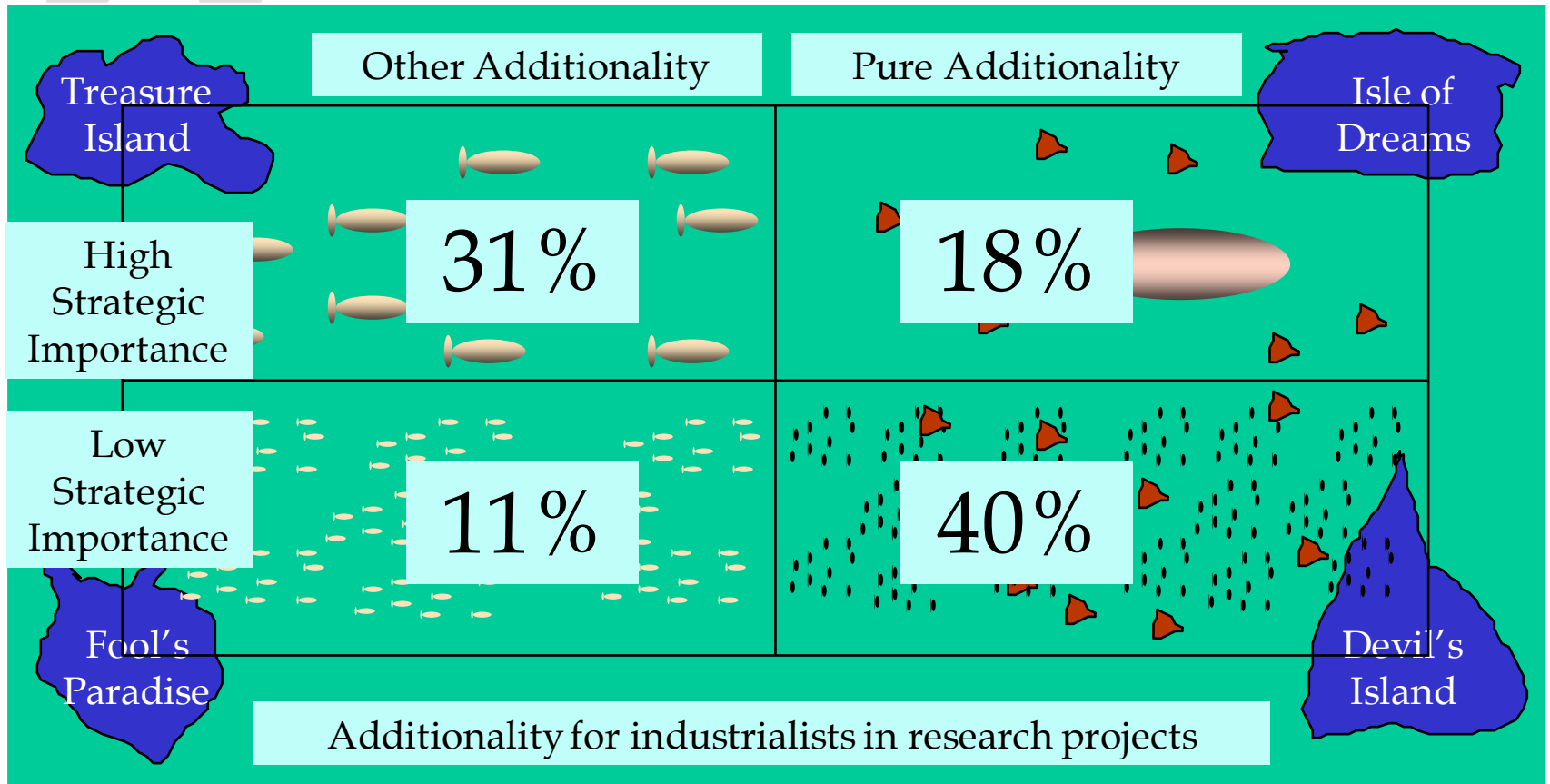
Supplementary Matched Funding

- Where would you send more ships if government matched your extra funding?



A Sensible Strategy?

- Does this distribution of extra ships make sense?

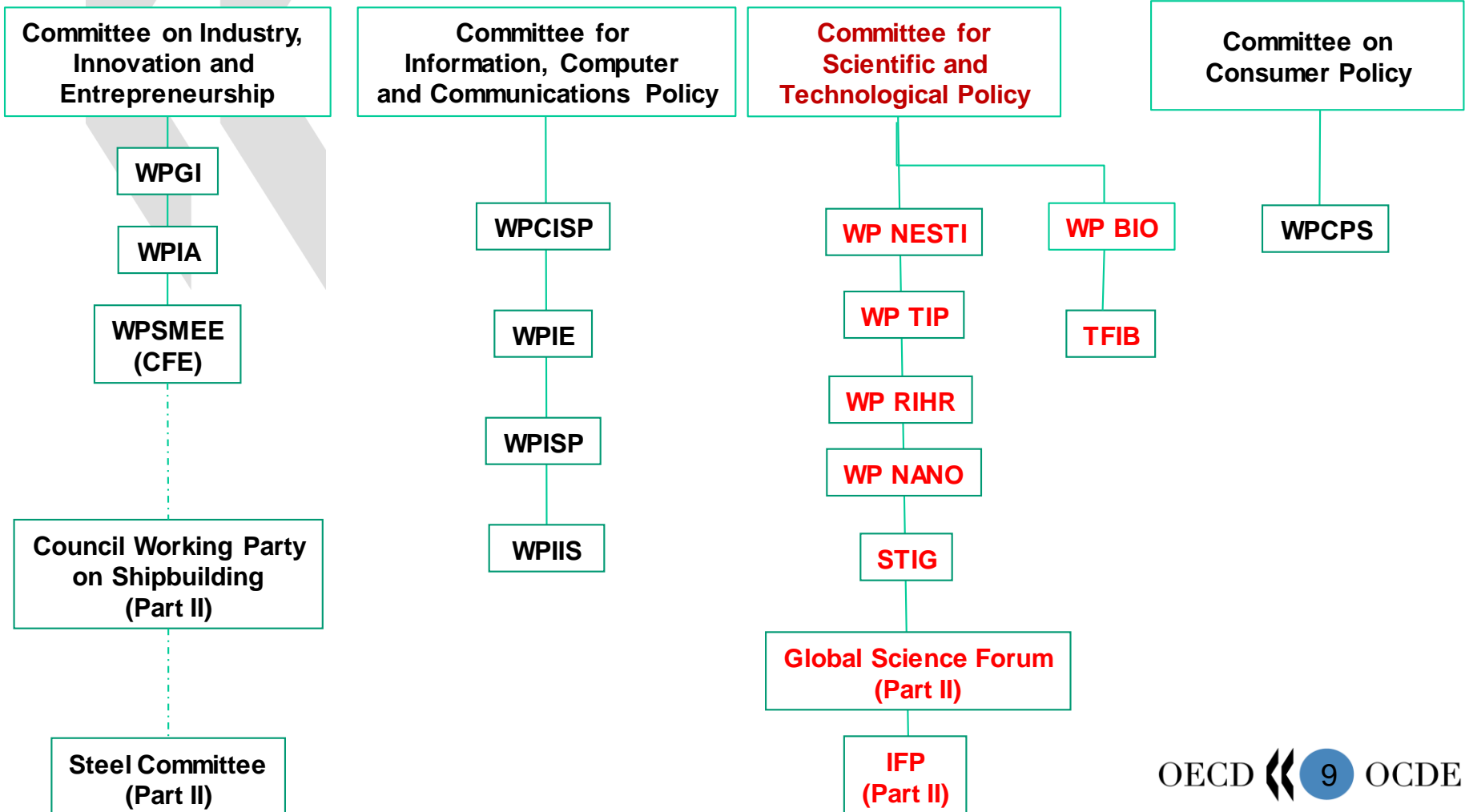


Evaluation Anecdotes

- Standard practice
- Losing focus
- Queuing theory
- Landing in hot water
- Get it in writing
- Publish and be damned
- Slippery customers
- Going fishing
- Spear tips
- Shoulders, wheels and spirals

OECD

Directorate for Science, Technology and Industry



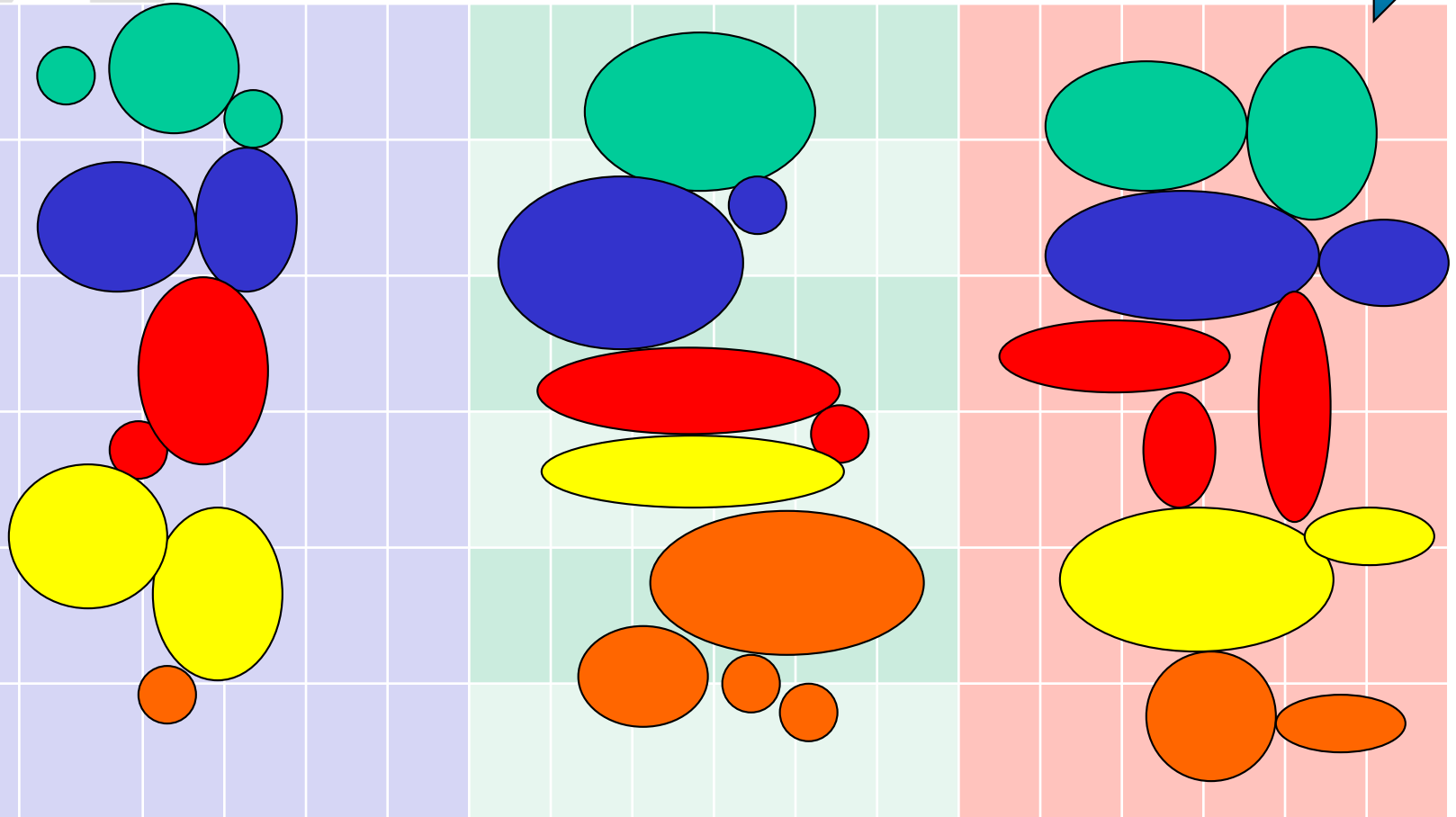
Evaluation and Impact Assessment in the OECD

- ICCP – interest in the evaluation of IT programmes since mid-1980s
- CIIE – current interest in the evaluation of industrial policy
- CSTP/NESTI
 - Collection of relevant data since the production of the Frascati manual in 1962
- CSTP/TIP
 - Numerous reports on evaluation and impact assessment since the mid-1990s
 - Policy Evaluation in Innovation and Technology: Towards Best Practices, 1997
 - Government R&D Funding and Company Behaviour: Measuring Behavioural Additionality, 2006
 - Enhancing Public Research Performance through Evaluation, Impact Assessment and Priority Setting, 2011

CSTP PWB 2013-14

Horizontal Working Party Logic

Vertical Thematic Logic



CSTP PWB 2013-2014 Themes

Economic and Societal Impacts

- A. Developing new tools and techniques to analyse the economic and societal impacts of science and technology
- B. The role and impact of science and technology policies
- C. The potential of emerging, converging and enabling technologies

Synthesis

Underpinning Elements

- A. STI data, publications, manual updates and rolling reviews
- B. CSTP contributions to the 2013 STI Scoreboard
- C. STI Outlook
- D. Innovation Policy Platform
- E. Innovation Policy Country Reviews

STI Interactions and International Cooperation

- A. Understanding the changing landscape of knowledge sharing mechanisms
- B. New forms of intellectual property management for fostering innovation
- C. Opportunities and options for public-private partnerships

Synthesis

Societal Challenges

- A. Science, technology, innovation (STI) and 'Green Growth'
 - STI and 'Healthy Ageing'
 - Towards an 'STI for Development' strategy

Synthesis

Economic and Social Impacts

- 13 Analytical Reports (+3)
- 4 Statistical Reports
- 1 Policy Recommendation

Developing new tools and techniques to analyse the economic impacts of science and technology	3 Statistical Reports 4 Analytical Reports 1 Policy Recommendation
The role and impact of science and technology policies	5 Analytical Reports
The potential of emerging, converging and enabling technologies	3 Analytical Reports 1 Statistical Report
The impact of science and technology on economic growth – a synthesis	1 Analytical Report

Developing new tools and techniques to analyse the economic impacts of science and technology

3 Statistical Reports
4 Analytical Reports (+1)
1 Policy Recommendation

- **Aim – The development of new tools and techniques and internationally consistent approaches to impact assessment in existing and new fields**
- Three items proposed by NESTI to enhance existing databases; to generate new indicators and guidelines for measuring public support for R&D and innovation; and to understand and measure the influence of the public on the course of STI activities
- One item proposed by RIHR looks at the attainment of diverse skill sets and impacts on the career development of researchers
- Two items proposed by the WPN that focus on the development of frameworks and tools to monitor and assess the societal and economic impacts of nanotechnology
- Two items proposed by IFP that focus on the economic impacts of developments in the space sector and the role played by STI in reducing vulnerability and increasing resilience to global shocks
- In addition, the GSF will produce a report on the development of strategic visions and roadmaps

- **Aim – To improve our ability to assess the potential impacts of STI policies**
- One item proposed by NESTI that will attempt to assess the macro-economic impacts of S&T funding volumes and patterns
- One item proposed by TIP that focuses on the impacts associated with the governance changes needed to stimulate system-wide innovation
- One item proposed by RIHR that focuses on the role of impact assessment in policy formulation
- One item proposed by the WPN that focuses on the development of a consistent conceptual and terminological framework to track nanotechnology developments
- One item proposed by the WPB that focuses on the potential impacts of industrial and environmental biotechnology policies
- In addition, two items proposed by GSF that address the economic impacts of international research infrastructures and the use of scientific methods to analyse and respond to global challenges

- **Aim – To explore the potential impacts of developments in emerging technology areas**
- One item proposed by NESTI that could lead to the establishment of an ‘Emerging and Enabling Technologies Observatory’
- One item proposed by RIHR that focuses specifically on the policies and policy instruments needed to support technological convergence
- One item proposed by WPN that links nanotechnology and converging technologies to broader policies for sustainable and green growth
- One item proposed by the WPB that focuses on the role of emerging and converging technologies in the evolution of the bioeconomy

- **Aim – To synthesise the results of the work conducted on the impact of science and technology on economic growth and social welfare**
- One main deliverable to be produced by the end of the PWB period, with regular reports to the CSTP concerning progress and emerging highlights

Extract from PWB 2013-14

- Several member countries have already begun to explore the “indirect” impacts of public science investments, including social outcomes, workforce outcomes and economic growth.
- The role of science in society, particularly as a response to development, is also of strong importance to many emerging countries.
- They share the need to consolidate data infrastructures and to develop methodological and analytical frameworks in order to improve their understanding of the role and position of science in the innovation system, to increase their capacity to assess impacts and to enhance their ability to formulate effective policies.

Going Global

- But at the current stage, there is no international platform to exchange information on this nascent approach to STI policy, which essentially involves developing a science for science policy.
- **OECD/CSTP could offer to be this international platform.** It has the experience, expertise and networks needed to gather experts, policy makers, scientists, and business people to nurture new thinking on the development of a more systematic and empirical approach to the formulation of STI policies.

Possibilities

- CSTP Workshop on Impact Assessment, March 2012
- Global Forum on the Knowledge Economy, Oct 2012
- Methodology development
- Development of global guidelines and best practices
- Standardisation and harmonisation
- Council Recommendations
- Ministerial Council Meetings



Thank you

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