Discussant intervention on the presentation "Evaluation studies, potentials of the SIPER database"

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8th RISIS Policymakers Session
30 September 2021

European Commission

STIPCOMPASS
INTERNATIONAL DATABASE ON STI POLICIES

OECD

Outline of my comments

- Drawing some parallels with the EC-OECD STIP Compass
- Some reflections on your initial data analysis
- Answering policy makers' and analysts' questions with SIPER
- Some technical questions and issues
- Additional features you might consider adding

STIP Compass in figures

https://stip.oecd.org/

+1000 policy officials	are registered to answer the online EC-OECD STI Policy Survey
+5000 policy initiatives	currently in force are accessible via STIP Compass, based on responses to **50 core questions** in the EC-OECD STIP Survey
59 countries	participated in the 2021 edition of the Survey, providing data on **+2,000 new initiatives** and **updating +3,000** others – latest data to be published **22 Oct 2021**
+700 dashboards	allow data to be browsed in STIP Compass, each of which has **at least six interactive data panels**
+8k EC + OECD publications	are semantically linked in STIP Compass, together with **+20,000 academic articles** and **+1,000 statistical indicators**
2.7 MEUR	The investment the EC and OECD have made **over six years** (2016-22)
120k pageviews	were registered in STIP Compass over the last year, a **350% increase** since the portal's launch in 2018

Main use-cases of STIP Compass

Provide **a bird's eye overview** of the main national STI policies in one place.

Learn **how other countries design STI policies and deploy instruments** to address various objectives and challenges.

Enable **policy learning** by providing practical guidance on how to achieve specific policy goals using analytical frameworks.

A first source of evidence for **OECD and EC analyses**.

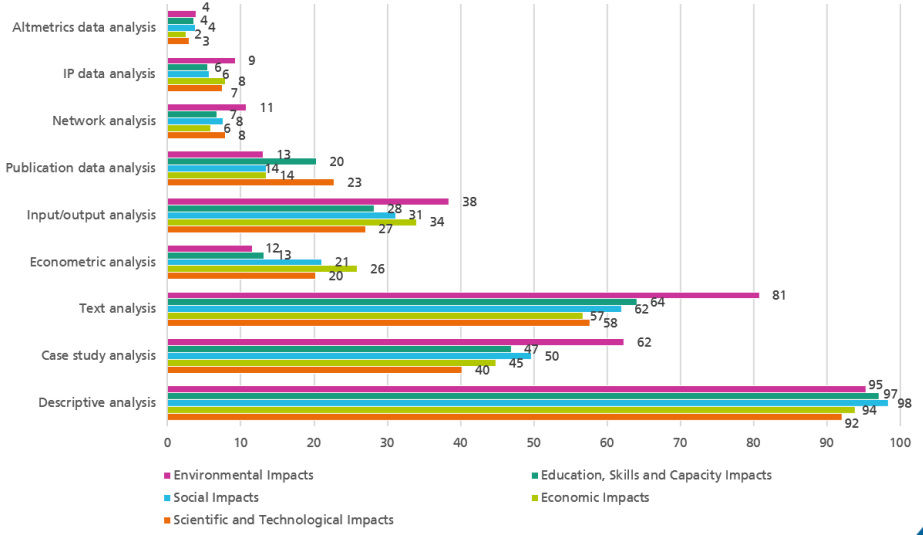
A resource for academics and other policy analysts to **tackle research questions** in the field of STI policy.

National digital infrastructures and other policy databases can **call up the latest STIP Compass data on demand**.

Some reflections on your initial data analysis

- Differences and uniformity in the patterns you observe – what we expected?
- More complex design of environmental impact studies – baked-in or learning curve?
- Number of interim evaluations – what impacts are evaluations having?
- Policy-evaluation lag times – consequences for observing emerging policy trends?

Figure 6. Data analysis methods (percent of all reports considering this impact)



Policy makers and analysts questions

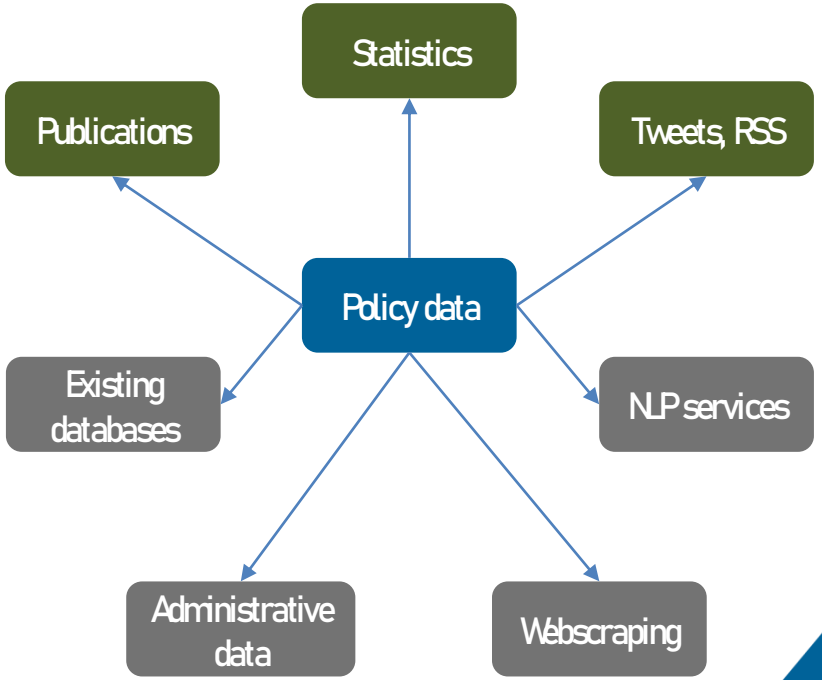
- The normative turn in STI policies is real and raises evaluation challenges that are a concern for OECD member countries.
- The challenges our country delegates discuss:
  - What's the international evidence base on the effectiveness of the policies we're implementing?
  - How to implement new generations of policies like MOIPs and TIPs?
  - How to evaluate policy mixes and this new generation of policies?
- These are challenging given the range of objectives, actions and stakeholders, and call for systemic approaches to policy design and evaluation.

How could a DB like SIPER help our delegates?

- What does the SIPER ‘value chain’ look like?
  - Is it ‘just’ an ‘intermediate’ product that provides baseline data on evaluations?
  - Could it add further layers of ‘intelligence’ that leverage its data model and exploit linked data possibilities to help answer policy makers’ questions?
    - What could this look like?
    - How could other parts of the RISIS ecosystem be leveraged?
- Settling questions like these is important for setting expectations of what SIPER should try to achieve.

Some technical issues to think about in this context

- What are the opportunities for linking SIPER data to other datasets?
- SIPER doesn't aim to cover all evaluations made in the field – what are the costs and benefits of this scope?
- Does the SIPER data model need revising in light of policy makers' and analysts' interest in new generation policies like TIPs and MOIPs?



Other features?

- Mapping fiche for each evaluation and not just a link to the PDF
- Beyond the current (useful) filters, adding a recommendation engine that suggests similar evaluations to look at
- Interactive data stories that highlight interesting patterns and link to interesting practices
- …

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HIGH-TECH STRATEGY 2025

Hightech-Strategie 2025

Start date : 2018 **End date :** N.A

Name of responsible organisation :

- Federal Ministry of Education and Research (BMBF Bundesministerium für Bildung und Forschung)
- Federal Ministry for Economic Affairs and Energy (BMWi) Bundesministerium für Wirtschaft und Energie)

Description :

- The High-Tech Strategy 2025 sets the mid-term strategic orientations for Germanys R&D and innovation activity: reinforce the S&T base, enhance innovation and job creation, and help address global challenges to improve peoples lives. The HTS also aims to improve and accelerate the transfer of research into new products and services. The High-Tech Strategy 2025 focuses on three major fields of action.

Objectives :

- 1 Tackling the major societal challenges
The strategy focusses on research that is geared to current and future needs and that is relevant to people's everyday lives. The goal is to achieve technological and non-technological innovations, including social innovations, which focus on benefiting the people. To this end, the strategy is developing missions and setting concrete goals which unite the support of science, business and society. The High-Tech Strategy 2025 is specifically promoting research into issues that are relevant to the German economy and society. The Focus is in particular on the areas of Healthcare, Sustainability, Climate Action and Energy, Mobility, Urban and Rural Areas, Safety and Security, and Economy and Work 4.0.
- 2 Strengthening Germany's future competencies
The strategy aims to systematically and consistently evolve future competencies for a progressive Germany. To this end, it is promoting key enabling technologies that also open up new and disruptive innovation potential with their broad range of applications and strengthen the German economy in international competition. At the same time, the promotion of research and technology is accompanied with additional training and further education measures.
- 3 Establishing an open innovation and venture culture
For innovative results, the strategy promotes innovative forms of cooperation that create spaces for ideas and involve new actors in the innovation process. To ensure that research results feed even more effectively into practical application, the strategy is strengthening transfer, supporting open forms of innovation and the development of leapfrog innovations, promoting entrepreneurial spirit and innovative strength in SMEs.

Related to a theme :

- NATIONAL STI PLAN OR STRATE… — Governance
- BUSINESS INNOVATION POLICY STRATEGIES — Innovation in firms and innovative entrepreneursh…
- TRANSFER AND SHARING STRATEGIES — Science-industry knowledge transfer and shari…
- RESEARCH AND INNOVATION FOR SOCIETY STRATE… — Research and innovation for society
- PUBLIC RESEARCH STRATEGI… — Public research system
- INTERDISCIPLINARY RESEAR… — Public research system
- MISSION-ORIENTED INNOVATION POLICI… — Emerging trends in STI policy

Direct beneficiaries :

- PUBLIC RESEARCH INSTITUTES — Research and education organisation…
- PRIVATE RESEARCH AND DEVELOPMENT I… — Research and education organisations
- ESTABLISHED RESEARCHERS — Researchers, students and teache…
- POSTDOCS AND OTHER EARLY-CAREER RESEARCHE… — Researchers, students and teachers
- PHD STUDENTS — Researchers, students and teache…
- SMES — Firms by size
- FIRMS OF ANY AGE — Firms by age
- ACADEMIC SOCIETIES / ACADEMI… — Intermediaries
- ENTREPRENEURS — Economic actors (individua…
- PRIVATE INVESTORS — Economic actors (individua…
- CIVIL SOCIETY — Social groups especially emphasis…

Estimated budget expenditure range per year :

- Not applicable

Background including shifts in the policy initiative :

- In September 2018, the fourth edition (after 2006, 2010 and 2014) of the High-Tech Strategy was adopted by the German government. The HTS is developed further as a comprehensive, interdepartmental innovation strategy. New topics were added and new instruments for funding innovation introduced. The upward trend in investments in research and development is continued.

The HTS is considered to be a living, learning process which is continuously reconsidered. A consulting body, the High-Tech Forum, which consists of representatives of science, industry and society, is charged with developing proposals for the strategy's further development and implementation. Following a review, the strategy now includes twelve missions in areas where solutions to major challenges can only be found in cooperation with all stakeholders. These missions unite science, business and society behind common goals. HTS has linked up topics in various fields of innovation policy across Federal Ministries. Aspects related to funding are addressed in connection with efforts to improve general conditions. Individual fields of technology are seen as contributions to realising important social policy aims or as innovation drivers for other fields of technology ("key technologies"), while social change is considered to be an important prerequisite for the generation of technological knowledge. International and interdisciplinary co-operation will be further enhanced through appropriate measures.

Under the umbrella of the current High-Tech Strategy, all of the Federal Government's departments are developing joint aims and implementation steps to which all players in innovation activities – at the municipal, national and European levels – can orient their

Final word

- Again, congratulations, this looks very useful
- Both the EC and OECD are interested in linking SIPER data to STIP Compass – let's make this happen soon!
- There are many development possibilities, and it'd be great to hear more about your thinking on these

Thank you!

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