

## SIPER: Science & Innovation Policy Evaluations Repository Paul Cunningham, Jakob Edler (for the SIPER team)









JOANNEUM RESEARCH





# Research Infrastructure for Research and Innovation Policy Studies (RISIS)

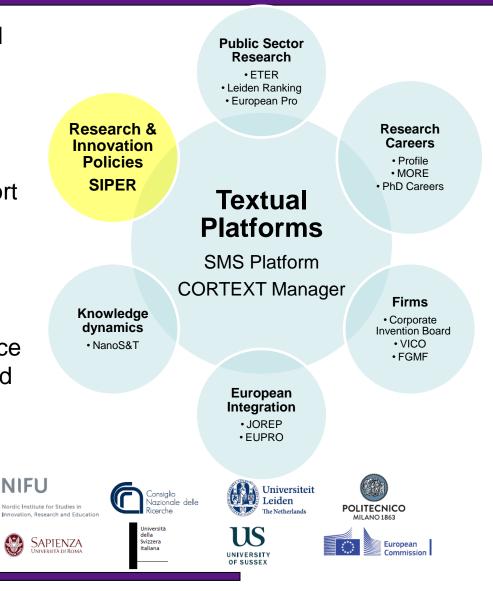
- coordinate existing fragmented datasets and open on a free-of-cost basis to European researchers
- develop new software platforms to support dataset building and treatments (from heterogeneous & unformatted textual corpuses)

**Impact**: provide a radically improved evidence base for research and innovation policies and for research evaluation (via enabling the development of new relevant indicators)

CSIC

Samuel Neaman Institute

National Policy Research



UNIVERSITEIT



**SIPER: Objective** 



To provide a central source of knowledge on science and innovation policy evaluations.

Two aims:

- on-line access to a unique collection of policy evaluations at a single location
- policy learning and further academic research by providing an informed searchable analysis of the database contents



# **SIPER: Components**



- Repository of existing evaluation reports (pdf) (focused on EU MS and OECD countries)
- Searchable database containing metadata accessible to scholars or policymakers
- Coordinated with
  - OECD-World Bank innovation policy platform (IPP, <u>www.innovationpolicyplatform.org</u>)
  - EU Research & Innovation Observatory (RIO)
- Builds on experience with previous INNO-Appraisal study
- Incorporates evaluation literature base developed in NESTA study on evidence of policy impact (Handbook of Innovation Policy Impact)



About



- Developed by Manchester Institute of Innovation Research, The University of Manchester
- Primary audiences: policy makers & academics in STI studies
- Goal: to include all evaluations of S&I policy instruments conducted after 2000 (plus earlier, 'seminal' evaluations) from around the world. Aim is to exceed 1000+ documents in all major languages.
- The team at Manchester: Jakob Edler, Paul Cunningham, Abdullah Gok, John Rigby, Yanchao Li
- International partners:
  - Brazil (UNICAMP) for Latin America: Adriana Bin, Sergio Salles-Filho, Paula Drummond, Rafaela Andrade
  - France (IFRIS): Marina Oulion
  - More international linkages in discussion...





- Reports and associated documents identified and accessed through semi-structured search process: government websites, international and supranational bodies, sites of leading evaluation practitioners.
- Criteria applied to ensure they are appropriate for application of characterisation process:
  - Contain an analysis/judgement about the subject of the evaluation
  - Relate directly to a S&I policy instrument (i.e. all public interventions that support S&I activities)
  - Evaluate a specific instrument or group of instruments.
  - Have a distinguishable methodology
  - Provide some sort of evidence of performance
- Inclusion/non-inclusion is not judgement of 'quality' of report or the evaluation/measure to which it refers



# The data



Three types of publicly accessible data:

- Policy measure characterisation (PL): basic three layer classification of the related policy measures.
- Basic information: evaluation title, author, language, country, related files etc.
- Factual Characterisation (FC): characteristics that can be inferred from evaluation reports themselves (methods, timing, topics, etc.)

Our typology of policy instruments: locating it in a virtual 3-D space according to three main attributes:

- Target of the measure (i.e. recipient /primary beneficiary of support) 10 categories
- Modality (i.e. how support is provided) 7 categories
- Policy objectives (i.e. principal rationale(s) for the support) 16 categories





Metadata collected

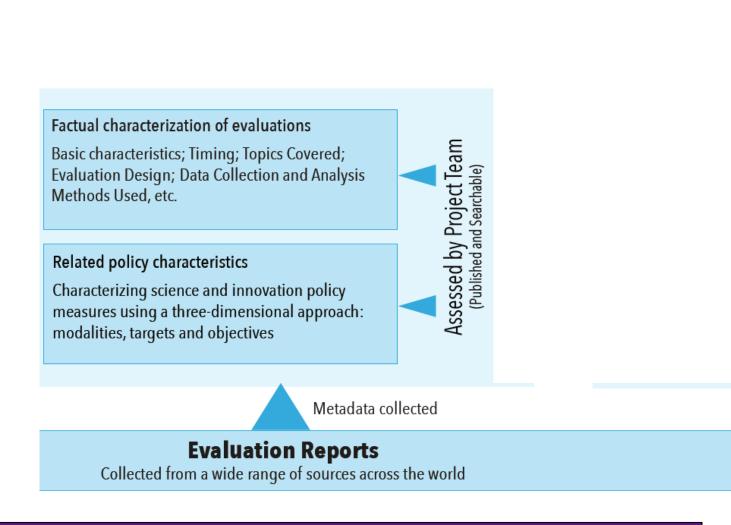
#### **Evaluation Reports**

Collected from a wide range of sources across the world

Open Evaluation Conference, Vienna, November 2016

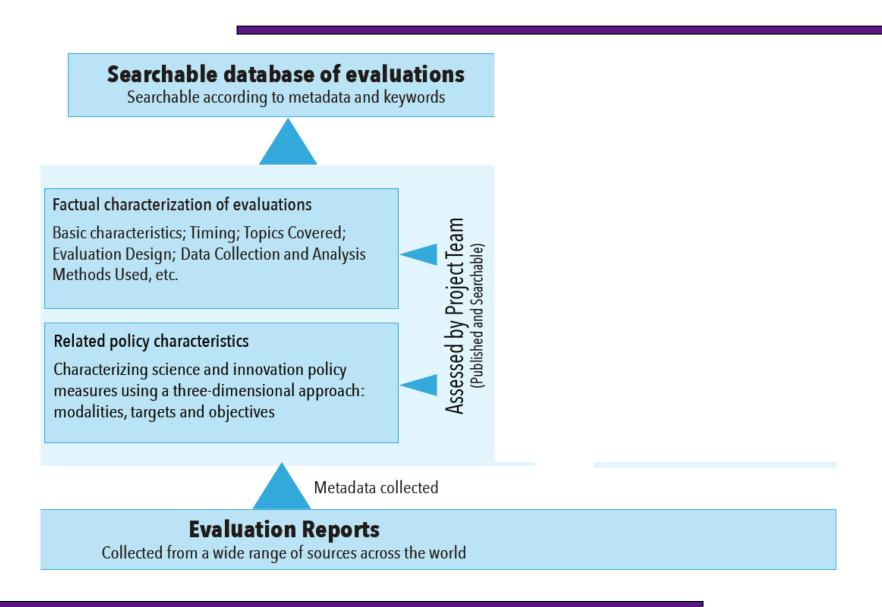






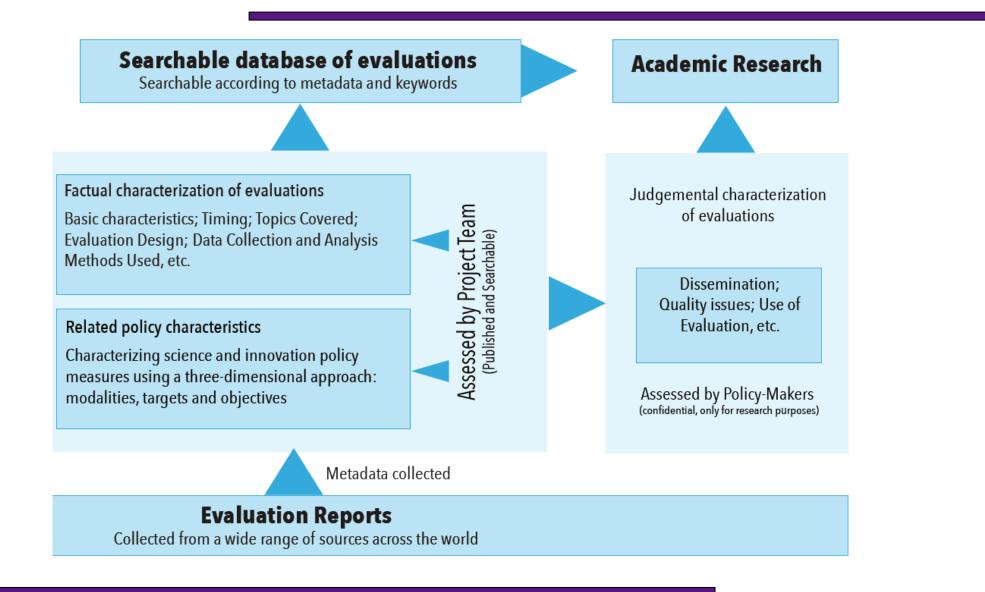






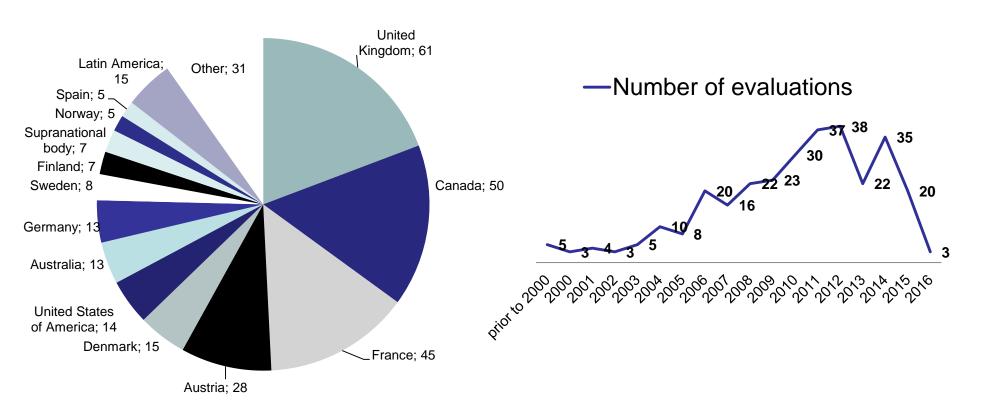








## Evaluations included so far



During the first pilot stage, 302 evaluations from 28 countries have been uploaded to SIPER database.

Science and Innovation Policy

**Evaluations Repository** 



# We need you





#### • <u>www.si-per.eu</u>

- Further work is being undertaken to populate and improve the site – pilot stage until February
- Your help on locating and/or coding evaluations would be valuable to us. Please send any evaluation documents you want to be included in the database, or express your interest in participating as a researcher or policymaker by e-mailing: siper@manchester.ac.uk





## Annex

Open Evaluation Conference, Vienna, November 2016



# 3-dimensional typology of policy instruments



#### Targets (Recipient of the support)

- 1. Individuals (researcher, student, manager, entrepreneur, investor, etc.)
- 2. Higher education institutions (including sub-departments and institutions)
- 3. Research Organisations (including the spectrum from public (PROs) to private (RTOs))
- 4. Public organisations (governmental or quasi-governmental agencies, policy making organisations not directly involved in R&D)
- 5. Intermediaries (such as science parks, business incubators, technology parks, knowledge brokers, TTOs, etc.)
- 6. Firms (SMEs focused)
- 7. Firms (no size-specific focus)
- 8. Other funding organisations (NGOs, NPIs, Not-for-Profit, Charities...)
- 9. Specific industrial sector targeted
- 10. Specific S&T field targeted

#### Modalities (How support is provided)

- 1. Direct financial support: grants, loans, guarantees, contracts, etc.
- 2. Direct financial support: scholarships, fellowships, etc.
- 3. Direct financial support: (non-project specific) institutional block grants
- 4. Indirect financial support: tax & fiscal incentives (e.g. R&D credits)
- 5. Infrastructure support (e.g. provision of access to and construction/upgrading of research infrastructure)
- 6. Non-financial support (e.g. training ,coordination and advisory/information support/provision)
- 7. Prizes and awards (ex-ante inducement, ex-post performance recognition, etc.)



# 3-dimensional typology of policy instruments



Policy objectives (Why the support is provided)

- 1. Enhancement of education and initial/further training
- 2. Facilitating personnel mobility
- 3. Internationalisation of research, technology, development and innovation (RTDI) activities
- 4. Awareness raising and promotion of public acceptance
- 5. Strengthening/improving research management practices
- 6. Improving absorptive capabilities and capacity
- 7. Supporting collaborative interactions for the production of new knowledge and/or innovation (including project focused approaches, innovation vouchers, etc.)
- 8. Supporting broader (multiple) interactions (e.g. through clusters or networks)
- 9. Supporting the commercialization of research (including support for the protection of IP)
- 10. Mobilising additional (non-public) financing for innovation (e.g. support of business angels, VCTs, equity schemes, etc.)
- 11. Stimulation of additional RTDI activity (e.g. increasing R&D expenditures)
- 12. Strengthening the quality of RTDI activities (promotion of excellence)
- 13. Creating new RTDI capacity (e.g. new organisations, start-ups, technology-based companies)
- 14. Generation or diffusion of innovation targeting the demand for innovation or the interaction between demand and supply (e.g. programmes to support public procurement of innovation, demand subsidies for innovation and awareness raising measures)
- 15. To support priority setting (e.g. foresight exercise)
- 16. Supporting the participation and advancement of women or minority groups in research and innovation