RISIS

Research infrastructure for research and innovation policy studies

SEVENTH FRAMEWORK PROGRAMME

Key elements of the FP7 project Research Infrastructure for Science and Innovation (policy) Studies

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Basic data

- 13 partners from 10 countries, all public, 7 universities & 6 public research organisations
- Starting 1 January 2014
- 4 years
- 5 M € support
- Opening 9 existing & 4 new dataset, Opening 2 platforms
- Some 100 projects expected representing 1200 days for transnational access; equivalent number for platforms
- Choice for 0 cost access: 4% management, 5% for access, 56% for networking & integration, 35% for research

Ambitions, goals and expected impact

- The ambition: promote a distributed research infrastructure to advance science & innovation studies
- A public good (free access for European Researchers)
- The scientific goals:
  - consolidate and integrate existing datasets
  - complement by new datasets on key issues not covered
  - build specialised software platforms to support research: extract, integrate, structure and treat semantic data from the web – and integrate those with other databases
- The expected societal impact: provide a radically improved evidence base for research and innovation policies and for research evaluation (via enabling the development of new relevant indicators)

Indicator production: A fast changing environment

- Beyond input and output indicators: **positioning indicators** (Barré, Filliatreau & Lepori, 2008)
- 3 central characteristics
  - build upon publicly available data (the explosion of internet sources, the development of multiple public or private datasets)
  - keep the identity & strategies of actors (remember that 200 firms perform half of total world industrial R&D)
  - firmly rooted into explicit theories of change & innovation
- An explosion of experimental datasets since 2000 … mostly thanks to EC supported projects.
- Linked open data and 'alt metrics'

6 critical themes (1): Firm innovation capacities

- Issue 1 - the role of large firms: where do they invest in R&D? Is Europe attractive and for whom?
  → The approach: use patents as a marker of the geography of R&D investments
  → Corporate Invention Board (IFRIS, Paris) – see example
- Issue 2 – start-up firms and the critical issue: how do they grow.
  → A wide encompassing dataset of firms over 20 years for longitudinal analyses (including the role of venture capital)
  → VICO (Politecnico de Milano, Milano)
- Issue 3 – knowing more on European fast growing mid-sized firms: where they are? What forms of innovation? What roles for R&D?
  → A new experimental dataset

6 critical themes (2): European Integration

- Issue 1 – the extent and stabilisation of Networks promoted by EU level programmes
  → a longitudinal actor & theme based structuration of EU DB
  → EUPRO (AIT, Vienna)
- Issue 2 – the construction of Europe through 'joint' funding
  → A dataset on joint programming by member country funding agencies - next development: positioned within overall R&D public funding
  → JOREP (CNR, Roma)
- Issue 3 – how is Europe reconfigured by new emerging S&T
  → Nano S&T dynamics (IFRIS, Paris) as a major issue and as setting processes for other emerging themes (see platforms)

6 critical themes (3): Public sector research

- One critical issue for exploiting most datasets: the construction of registers at European level.
- Build on the long lasting work on universities: Aquameth, EUMIDA and ETER
  → see example for its mobilisation
- Develop a first version of a similar approach for Public Research organisations (with 'conceptual' issues about categorisations) (CSIC, Madrid)
- Develop flexible approaches to perimeters to take account of growing blurring of borders (e.g. KIT; UMCs)
- Favour an integrated view of excellence, whatever type of public sector organisation (University of Leiden with enlarged Leiden ranking)

6 critical themes (4): researcher careers

- The situation:
  - existing datasets mostly national and ad-hoc, focused on the staged academic career
  - transnational datasets focused on mobility (OECD, More in Europe)
- The strategy:
  - offer a detailed access to researchers for More (NIFU) and for the only longitudinal large-size panel of doctoral students (IFQ, Berlin)
  - develop, test and implement a framework to integrate multiple local datasets on careers)

6 critical themes (5): effects & impacts of research & innovation policies

- The problem
  - Learning about effects of policies mostly comparative
  - main instrument: evaluations made
  - However: not easily available
- A first experiment: the IPER repository (no longer accessible)
- One demonstration: the MIOIR/NESTA innovation policy compendium: www.innovation-policy.org/compendium
- Construction of new repository of evaluations of research & innovation policies (SIPER, University of Manchester)

6 critical themes (6): Handling big data
Data and tools integration platforms

- CORTEXT Manager (IFRIS, Paris)
  - for data cleaning, enrichment, treatment & visualisation
  - a ‘service’: registered researchers can do all activities on line, supported by a ‘warm line’
- SMS Platform (VUA, Amsterdam)
  - for building new datasets out of the web, using both direct screening and multiple available databases characterising information on the web
  - an ‘experiment’: researchers need to come on site & be supported by local researchers
  - the objective: turn it into a service before the end of the project.

Networking

- Moving from experimental to robust datasets: a joint preparation of opening
- Accompanying users: a very intensive training programme, work at community level with relevant international association (ENID) in particular for annual conferences
- Key tools for integration: (a) the annual RISIS week; (b) 2 major ‘problem oriented’ integration of datasets (organisational & geographical) (c) long term: integration platform.
- 6 thematic research activities to complement & deepen structured data sources – focusing on firms, public sector research (universities & PRO), research careers, European integration, policy evaluation, and data integration and handling.

A simple agenda

1. Month 1-18 - Prepare opening (technical, legal & cognitive)
2. Month 19-48 – over 100 projects and 1200 days by European researchers expected
   Two step process: accreditation (for legal & ethical reasons); project selection (by a specific 'review board')
3. A critical accompanying measure: training (30 sessions planned)
4. Month 18-42 Important work for integrating datasets around two key dimensions: organisational & geographical
5. Month 18-42 R&D activities for developing the new datasets & for deepening existing ones
6. Month 42-48 – Preparing business model to making the infrastructure lasting

Project organisation

1. The usual EU structures: scientific activities organised by a ‘facility coordination board’ (4 members), annual discussion of the work programme by Governing Board (13 members)
2. Major internal ‘networking’ element: annual RISIS week
3. Major dissemination mechanisms
   - academic: mobilise the ENID association & its annual conference
   - connection with stakeholders: specific days at RISIS annual weeks, a collection of policy briefs