



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: <u>www.innovation-policy.org/compendium</u>
- Construction of new repository of evaluations of research & innovation policies (SIPER, University of Manchester)

6 critical themes (6): Handling big data RISIS 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)
- 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