Statistics for R&D&I policies

Challenges and cooperation

Carsten Olsson
Head of Unit G4 "Innovation and information society"
Eurostat - European Commission

Accueil > L'organisme > Présentation du CNRS

Présentation

Le Centre national de la recherche scientifique est un organisme (Établissement public à caractère scientifique et technologique, placé sc l'Éducation nationale, de l'Enseignement supérieur et de la Recherche). I savoir au service de la société.

Sa gouvernance est assurée par Alain Fuchs, président du CNRS, assis délégués : Anne Peyroche à la science, Christophe Coudroy aux ressou valorisation : Nicolas Castoldi.

Avec près de 32 000 personnes (dont 24 617 statutaires - 11 106 chercheurs et 13 511 ingénieurs, techniciens et administratifs), un budget pour 2015 de 3,3 milliards d'euros dont 769 millions d' ressources propres, une implantation sur l'ensemble du territoire national, le CNRS exerce so dans tous les champs de la connaissance, en s'appuyant sur plus de 1100 unités de recherch service.

Avec 21 lau
Chaque ann
française.

– 2015.

of

s about
ure

3. **PRIORITIES 2013-2015**

3.1. **Sustainable Professional Excellence**

OTKA's strengths include the continuity of its goals and structure for almost twenty-five years and its flexibility and adaptation to local needs; it also builds on international experience and learns from its own practice.

In the coming years, given the presence of other basic research funding resources and structures, OTKA plans to reorganize its proposal types and to redefine the amounts available in the given calls. In the future, the OTKA Board will devote special attention to calls for proposals announced by other research funders and adjusts its own announcement cycles accordingly.

Start / Research funding / Apply for grants / The Swedish system of research funding

The Swedish system of research fun

Sweden is among the nations worldwide that devote the most mon research relative to its population. Sweden's expenditures for R&D 3.42% of GDP.

The business sector accounts for around 70 percent and the higher educa sector for 27% of this spending. Companies largely fund their own researcl receive some contributions from the government and abroad.

Public sector research funding

The public sector finances R&D through grants paid directly to higher edu

eurostat | newsrelease

EMBARGO: Thursday 24 November 2016 - 11:00 C

2xx/2016 - 24

First estimates of Research & Development expenditure

R&D expenditure in the EU remained st 2015 at just over 2% of GDP

Almost two thirds spent in the business sector

In 2015, the Member States of the **European Union** (EU) spent all together almost €300 Development (R&D). The R&D intensity, i.e. R&D expenditure as a percentage of GDP, st the same as in 2014. Ten years ago (2005), R&D intensity was 1.74%.

With respect to other major economies, R&D intensity in the **EU** was much lower than in **S**

Policy initiatives driven by evidence

- **New policy initiatives**
  - Information readily available?
- **Implementation of policies**
  - Information needed for monitoring
- **Evaluation of policies**
  - Information needed to assess results (vs expectations)

Europe-2020 Headline Target

- **3% R&D**

Scoreboards and publications

- **European Innovation Scoreboard**
- **ERA Roadmap indicators**
- **Reports on…**

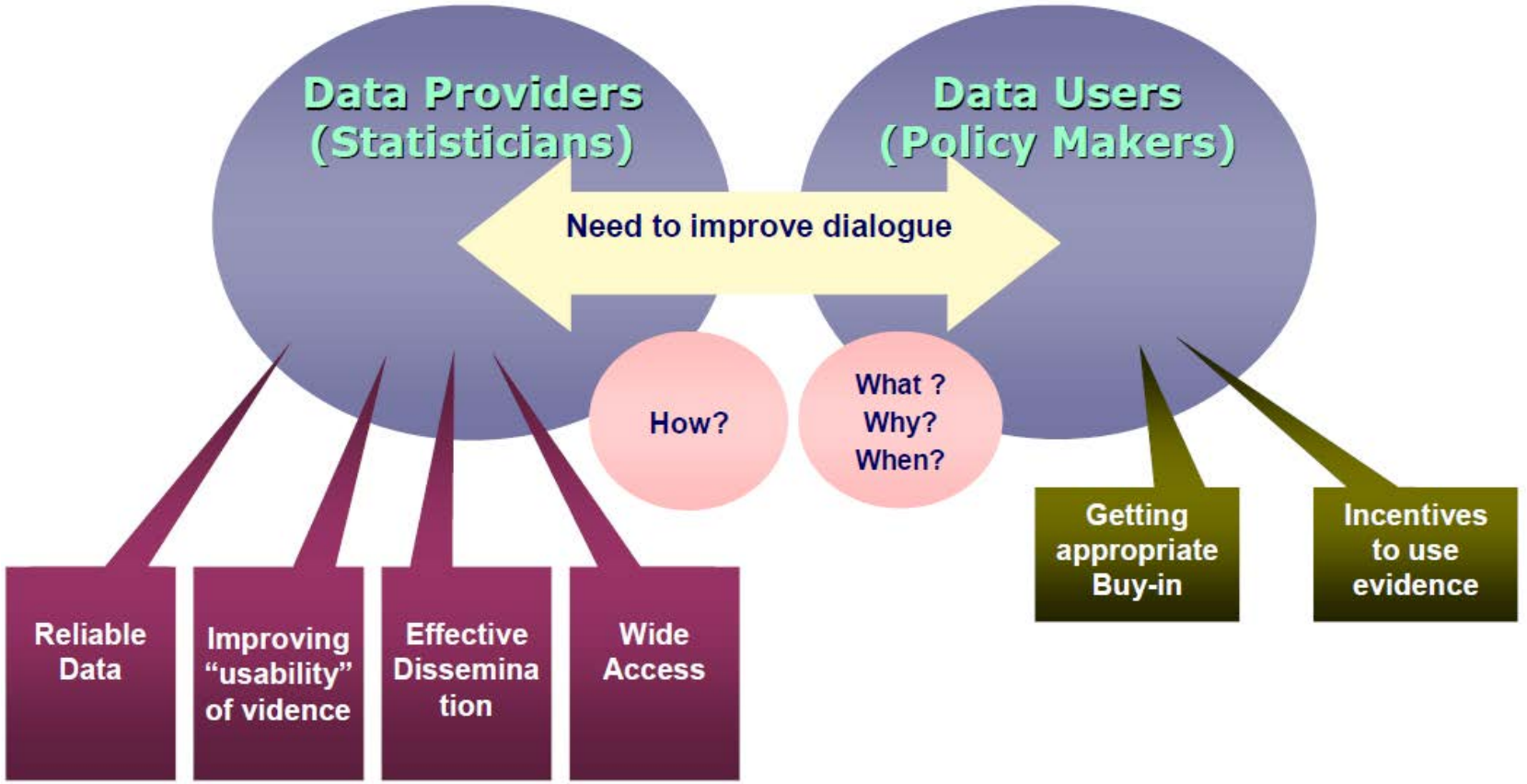
But also breakdowns of headline indicators

- **Sector, branch, gender, seniority, Regions, etc.**

Aims: Understanding & comparing systems – benchmarking and progress

European Commission

Strategic intent of statistics: Matching technical rigour to policy relevance



Source: The role of statistics in evidence-based policy making, UNECE Work Session on Statistical Dissemination and Communication, Geneva, 13-15 May 2008, Marco Segone and Nicolas Pron

EIS 2017

Proposed changes to Measurement Framework

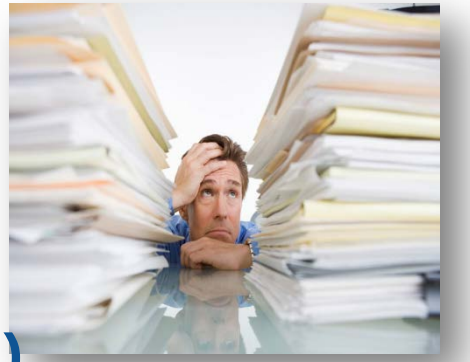
- 4 major blocks of indicators
  1. Framework conditions
  2. Investments
  3. Innovation activities
  4. Innovation impacts

- Novelties:
  - "Innovation-friendly environment" (digital and entrepreneurship)
  - Focus on data **relevance, quality and timeliness**
  - Analyses of impact of differences (MS size, industry structure)
  - Number of indicators increased to at most 30
  - Big data for forward-looking section
- Planned release: June 2017, together with RIS

Production of official statistics

- R&D and Innovation statistics
  - **Surveys (traditional) and some administrative data**
  - **International manuals: R&D (Frascati, OECD) and Innovation (Oslo, Eurostat & OECD)**
- Following financial and economic crisis 2008-09
  - **Need to extend usage of Administrative data**
  - **And explore Big Data and other sources**
- Maintain Quality Criteria
  - **Relevance, reliability / comparability, timeliness, burden on respondents and costs**

Administrative versus survey data



Data from administrative sources

- E.g. when setting up national or EU funding programmes
  - **Foresee reporting needs (administration)**
  - **Ensure comparability and reliability (statistics)**
  - **Result: Cost-effective – less burden and lower cost**

Data from business surveys (e.g. on innovation)

- Set priorities, support NSIs in data collection, quality, timeliness (other statistics are also important)

Council Conclusions of 29 May 2015 on ERA Roadmap

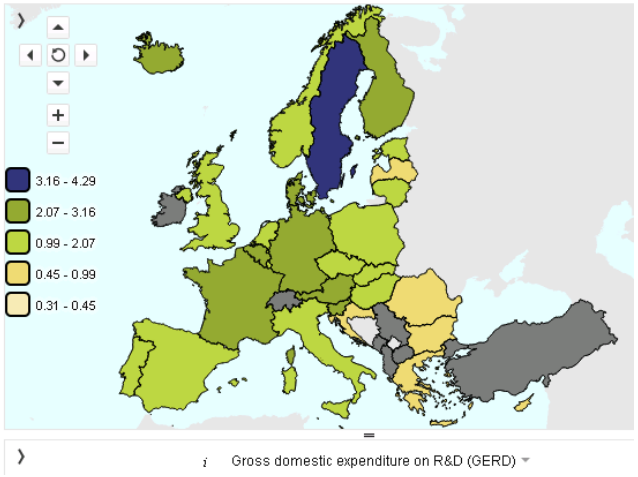
2015: **ERA roadmap** - core high level indicators for monitoring and performance

A limited set of high level indicators:

- **Politically relevant for measuring progress**
- **Should not require large amounts of additional interpretative material**
- **Output / outcome indicators preferred to input ones**
- **One high level indicator per priority in Roadmap**
- **indicators also available for Associated Countries**
- **Avoid additional burden on national administrations, stakeholders and other relevant actors**

Producing statistics for ERA
Conclusions

- Dialogue between policy makers, data providers, and data producers needed
  - **Use readily available data, such as citations, patents if relevant**
  - **Use administrative data**
  - **Only use surveys where no other source is available**
- Data collection and processing is costly - Support National Statistical Institutions (NSIs)



Europe 2020 strategy headline indicators, EU28

	Headline indicator	Past situation	Current situation		
		2008	2013	2014	20
Employment	**Employment rate, total** (% of the population aged 20-64)	70.3	68.4	69.2	70
R&D	**Gross domestic expenditure on R&D** (% of GDP)	1.85	2.03	2.04	2.0
	Greenhouse gas emissions* (index 1990=100)	90.29	80.24	77.05	
	Share of renewable energy in				

Thank you very much !

Carsten.olsson@ec.europa.eu