



### Call for papers

#### Indicators on Science, Technology and Innovation. History and new Perspectives

An international Conference

Lugano, Università della Svizzera italiana

16-17 November 2006

The European Network of Excellence on Policies for Research and Innovation in Europe (PRIME) is organizing an international conference on Indicators on Science, Technology and Innovation in the framework of its European Network of Indicator Producers project (ENIP). The conference aims to celebrate the centennial on STI statistics (1906-2006) and look at the future of indicators.

In 1906 James McKeen Cattell, an American psychologist and editor of *Science* for fifty years (1895-1944), published the first edition of a directory of scientists entitled *American Men of Science*. Based on the directory, Cattell produced regular statistical analyses for thirty years on the demography, geography and what he called the performance of scientists. In the early 1920s, these statistics and their sources became institutionalized and, from the 1940s to the 1950s, new ones were constructed, among them on money spent on R&D. It was no longer scientists, but government departments and national bureaus of statistics which produced the statistics, those on which most of us rely today.

Over the past hundred years, thanks to national statistical offices, we have gained in terms of the diversity, quality and robustness of statistics. One now has indicators on input, output and (some) outcomes. One also has historical series for studying trends at the national level. However, statistics are now at a crossroads. Users of statistics are asking for a lot more information than before because their analyses and/or decisions are more fine-grained. National aggregates are no longer enough, and neither are standard classifications. Many think that indicators should characterize the elements of national innovation system as such, considering it is made of differentiated, (semi-)autonomous and strategic agents. Equally, many consider important to describe the interactions of elements, linkages as well as their complementarities, competition and cooperation, to figure out the different types and categories they belong to.

The conference will focus on two closely related issues:

- The historical roots of the today's STI indicators, both concerning conceptual aspects and the organization of their production.
- New perspectives and developments on STI indicators, centered around the notion of "positioning indicators" (indicators on National System of Innovation) and the aim of building an European platform for these indicators.

#### Themes

The conference is organized around the two above themes. We invite presentations on the following subjects:

### 1. Lessons from the History

This session looks at history in order to identify what lessons have been or could be learned from past practices. It will study the origins of S&T statistics, their characteristics, the rationales for their development and the uses that have been made of them. Topics discussed are:

- What explains the origins of statistics on science, technology and innovation?
- Who were the forerunners, the pioneers and the followers?
- What were the motives of early statisticians?
- What type of statistics was developed?
- What uses were made of the statistics developed?
- What was the "politics" of measurement?
- How to make a sociology of statistics?

### II. New perspectives for STI indicators

This session looks at the future and examines the conditions required to produce new and better measurements. Topics discussed are:

- The requirements and needs of users, both institutional and academic.
- The misses and holes in current statistics.
- The methodological challenges for producing renewed statistics.
- The new and promising avenues.
- Examples of recent innovative works.
- Positioning indicators.

#### **Submission**

Extended abstracts for papers should be submitted electronically to [blepori@unisi.ch](mailto:blepori@unisi.ch) until 1<sup>st</sup> April 2006. Abstract should indicate name and affiliation of the authors, research subject and methodology as well as (preliminary) results and conclusions. Selected references should be provided. Abstracts should not exceed three pages (10'000 signs). Submission of joint papers for thematic sessions are encouraged.

Answer on acceptance will be given to the authors not later than June 1<sup>st</sup> 2006.

For additional information please refer to Conference Website:

[www.ticinoricerca.ch/conference.html](http://www.ticinoricerca.ch/conference.html)

Benoit Godin  
Conference Chair

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