



6th EU Framework Programme



International Conference on

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

*Deadline for abstract submission  
1<sup>st</sup> April 2006*

University of Lugano, Switzerland  
16-17<sup>th</sup> November 2006

### GENERAL INFORMATION

The conference aims to celebrate the centennial of STI statistics (1906-2006) and look at the future.

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 (so-called positioning indicators).

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.

### THEMES

The conference will focus on two issues:

- The historical roots of the today's STI indicators, both concerning conceptual aspects and the organization of their production.
- New perspectives on STI indicators, the notion of "positioning indicators" and the development of an European indicators platform.

#### *Lessons from the History*

This part looks at history in order to identify what lessons 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.

- 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?

#### *New perspectives for STI indicators*

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

- Requirements and needs of users, both institutional and academic.
- Limitations of current statistics.
- Methodological challenges for producing renewed statistics.
- New and promising avenues.
- Examples of recent innovative works.
- Perspectives for a European Science and Technology Indicators Platform (ESTIP).

## PRELIMINARY PROGRAMME

### Thursday 16 November 2006

*S&T indicators: lessons from the history*  
B. Godin, INRS Urbanisation, Montréal.  
M. Sokal, Worcester Polytechnic Institute.  
A. Young and G. Westholm.

*Paper presentations on history of STI indicators*

*Paper presentations on new developments  
in STI indicators*

Keynote speech: Jean-Jacques Salomon.

### Friday 17 November 2006

*Paper presentations on new developments  
in STI indicators*

*Scenarios and institutional perspectives*  
Institutional case studies of the development of STI indicators and scenarios for a European of Science and Technology Indicators Platform.

16.30 Closure of the conference

### Paper submission

Extended abstracts for papers should be submitted to [lepori@unisi.ch](mailto:lepori@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. They 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 1st 2006.

## ORGANISATION

The Conference is organized in the framework of the European Network of Excellence on Policies for Research and Innovation in a Move towards the European Research Area (PRIME; [www.prime-noe.org](http://www.prime-noe.org)) by its project on a European Network of Indicator Producers (ENIP; [www.enip-europe.org](http://www.enip-europe.org)).

The conference follows the European Workshop on New Perspectives on Science and Technology Indicators organized by ENIP in September 2005 in Lisbon.

### Honour Committee

**John Dryden**, *OECD STI directorate.*  
**Gabriele Gendotti**, *Minister of Education of Canton Ticino.*  
**Charles Kleiber**, *Swiss Secretary of State for Education and Research.*  
**Piero Martinoli**, *President of University of Lugano.*

### Scientific Committee

**Rémi Barré**, *CNAM Paris.*  
**Andrea Bonaccorsi**, *Università di Pisa, Italie.*  
**Alessandra Colecchia**, *OECD STI Directorate.*  
**Ghislaine Filliatreau**, *Observatoire des Sciences et Techniques, Paris.*  
**Philippe Larédo**, *LATTS, ENPC, Paris.*  
**Jean-Jacques Salomon**, *CNAM, Paris.*  
**Anthony F.J. van Raan**, *CWTS, Leiden.*

### Conference Chair

**Benoît Godin**, *INRS Urbanisation, Culture et Société, Montréal.*  
**Benedetto Lepori**, *Università della Svizzera italiana, Lugano*

## PRACTICAL INFORMATION

### Deadline for abstract submission

1<sup>st</sup> April 2006

### Date

16-17 November 2006

### Venue

University of Lugano, Switzerland  
([www.unisi.ch](http://www.unisi.ch))

### Conference website:

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

### Accommodation

See some hotels on the conference website or book directly through  
[http://www.lugano-tourism.ch/online\\_booking/en/](http://www.lugano-tourism.ch/online_booking/en/)

### Transportation

Lugano can be reached by plane either through the Lugano-Agno airport served by Swiss ([www.swiss.com](http://www.swiss.com), 20 minutes from the town centre) or through the Milan-Malpensa Airport ([www.malpensa.it](http://www.malpensa.it), about one hour from the town centre)

### Tourism

For general tourist information, please visit [www.lugano-tourism.ch](http://www.lugano-tourism.ch) or the official website of the town [www.lugano.ch](http://www.lugano.ch)

### Contact information

**Benedetto Lepori**  
*Università della Svizzera italiana*  
Via Lambertenghi 10a  
6904 Lugano, Switzerland  
Phone : +41 58 666 46 14  
e-mail : [blepori@unisi.ch](mailto:blepori@unisi.ch)