

# Valutazione della Ricerca

SEBD 2010

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Informatics Europe

# Problemi

- ❑ **come gestire valutazioni di ricercatori in contesti molto differenziati (es: valutazioni di Ateneo per la ripartizione di risorse) ?**
  - ❑ è possibile pensare ad un metodo che confronti opportunamente ricercatori di settori molto diversi?
  
- ❑ **esistono reali peculiarità nella valutazione della ricerca degli informatici rispetto ad altri settori delle scienze classiche (matematica/chimica/fisica/biologia/ingegneria) ?**
  - ❑ come valutare il ruolo delle pubblicazioni in atti di conferenze informatiche rispetto alle riviste?
  
- ❑ **è sensato applicare gli indici bibliometrici classici all'informatica (es: impact factor, citation index, H-Index e misure collegate) ?**
  - ❑ esiste una base di dati di citazioni che cattura adeguatamente l'impatto delle pubblicazioni informatiche? ISI/Scopus/Google Scholar?
  
- ❑ **quale classificazione adottare per valutare il prestigio delle sedi di pubblicazione informatiche ?**
  
- ❑ **siamo abbastanza maturi come settore per proporre una serie di linee guida condivise per la nostra stessa valutazione ?**

# Informatics Europe: origin and goals



In 2004: first ideas, ETH/EPFL Computer Science, then ECSS 2005: ETH Zurich, October

- Informal start: need for cooperation recognized, Board formed
  - Inspired by CRA
- 
- ❑ To **foster** the **development** of high-quality research and of research-oriented university education (BSc, MSc, and PhD) in Informatics, Computing, ... at the **European level**.
  - ❑ To **promote** the **public understanding** of the (past and potential) contribution of Informatics to the technological, economic, and social development of society.
  - ❑ To **create effective relations** (at the European level) between Informatics departments and research institutes at universities and in industry, and with governmental authorities, for the benefit of the field, by bringing the leadership the respective institutions for research and education together.
  - ❑ To **represent** the European research and education departments in Informatics, in relevant international organizations.
  - ❑ To **serve the interests** of our members and of Informatics in any other issues related to the **'knowledge triangle'** (Research, education, innovation) for Informatics at the European level.

# EUROPEAN COMPUTER SCIENCE SUMMIT – ECSS 2010

6th Annual Informatics-Europe Conference

11–13 October 2010

Prague - Czech Republic

*Informatics  
The Changing Landscape*

**Featured speakers (partial list):**

**Moshe Vardi** - Rice University

**Carlo Ghezzi** - Politecnico di Milano

**Alfred Spector** - VP Research, Google

**Jan Sedivy** - Formerly IBM and Google

**Sabine Kruspig** - European Patent Office

**Featured topics:**

- \* Future of European IT scientific societies
  - \* European research funding
  - \* Educational techniques for informatics
    - \* Research policies
- \* Country-specific issues, Central and Eastern Europe
  - \* Research careers in informatics

**Conference Chairs**

**Bertrand Meyer (ETH-Zurich)**

**Pavel Tvrđík (CTU Prague)**

Early registration deadline

**31 July 2010**

Information & registration

# Efforts on this subject matter

- Working group: Research Evaluation
  - Coordinated by: Christine Choppy
  - Report at ECSS 2008
  - Opinion paper: CACM 52:4 (2009) 31-34
- Working group: Department Evaluation
  - Coordinated by: Letizia Tanca , Hans-Hulrich Heiss

# 10 research evaluation principles

(CACM 52:4 (2009) 31-34)



1. Computer science is an original discipline combining science and engineering. Researcher evaluation must be adapted to its specificity.
2. A distinctive feature of CS publication is the importance of selective conferences and books. Journals do not necessarily carry more prestige.
3. To assess impact, artifacts such as software can be as important as publications.
4. The order in which a CS publication lists authors is generally not significant.
5. Numerical measurements such as citation counts must never be used as the sole evaluation instrument. They must be filtered through human interpretation and complemented by peer review and assessment of outputs other than publications.

# 10 research evaluation principles



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6. Publication counts are not adequate indicators of research value. They measure productivity, but neither impact nor quality.
7. Any evaluation criterion, especially quantitative, must be based on clear, published criteria.
8. Numerical indicators must not serve for comparisons across disciplines.
9. In assessing publications and citations, ISI Web of Science is inadequate for most of CS and must not be used. Alternatives include Google Scholar, CiteSeer and (potentially) ACM's Digital Library.
10. Assessment criteria must themselves undergo assessment and revision.

## IE as a Department Evaluation Agency

- Has the expertise to do it
- Is truly international
- Learns more about research in Informatics in different European countries
- Provides the service also outside Europe
- Gives discount for its members
- It will not be:
  - Accreditation (attestation of compliance with minimum standards for study programmes)
  - Ranking (comparing the performance of different departments on a one-dimensional scale)



## General Principle

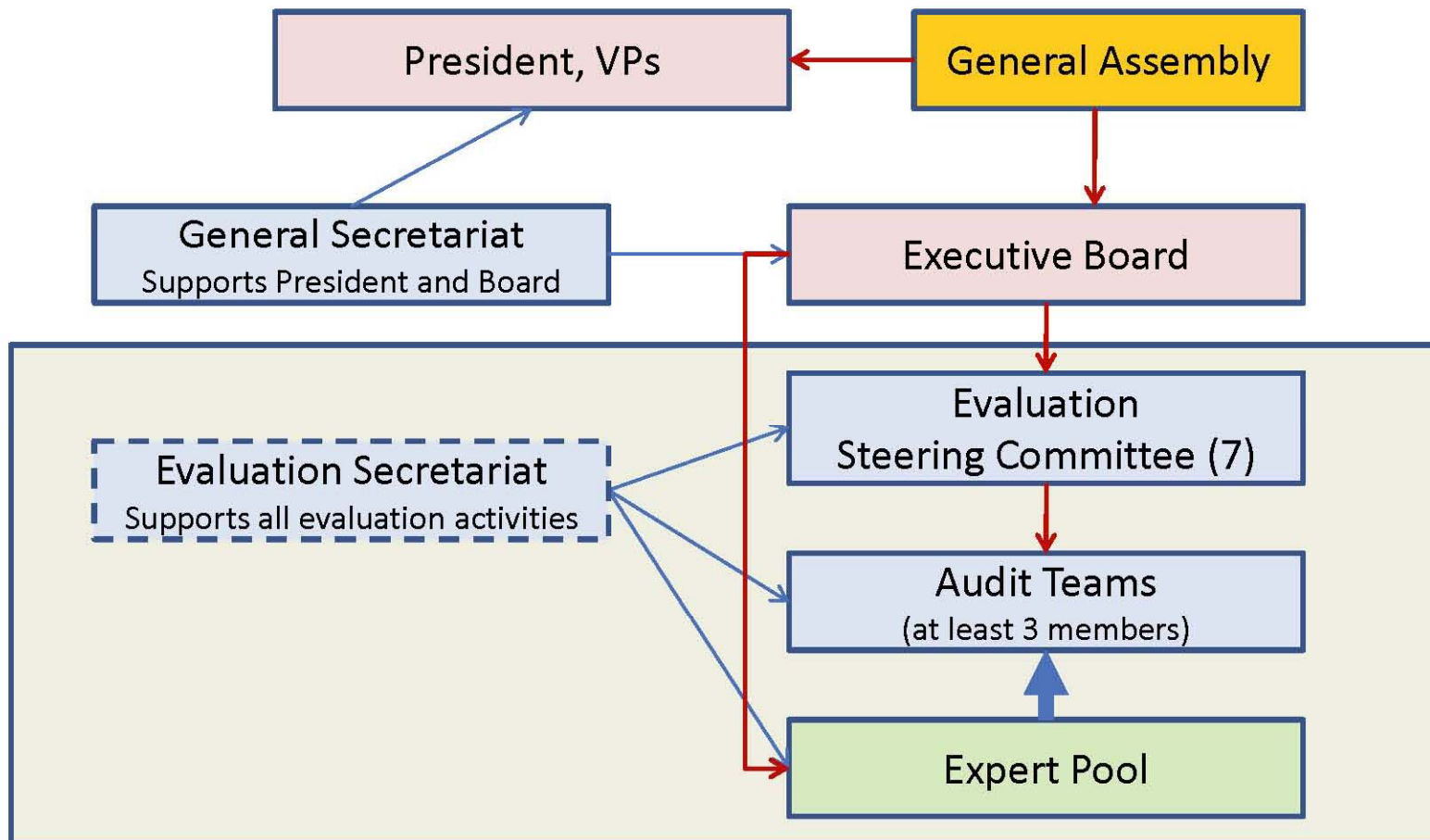
- Collect facts and numbers (last 3 years)
  - Ask the department to provide a self-report structured by IE
  - Collect information from external sources (e.g. databases like DBLP etc.)
- Collect "soft" indicators by on-site audit
  - Audit team selected by IE
  - Visit structured by IE

## Scope of Evaluation

- Research
- Innovation and technology transfer
- Internationalisation
- Education (optional in cooperation with EQANIE)

# IE Evaluation

## Organisational Structure



- > supports
- > elects, nominates, appoints

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**THANKS !**