

Linking Science & Management through demanding research funding mechanism

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About the authors

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 - PhD Student in Political Sciences

Introduction : Question scientists first !

- Issue: Linking science and management
- Hypothesis → Question:
 - Implicit: Science is reliable, Management is questionable → What is at stake to improve the way Management interact with Science ?
 - Reformulated: Both side experience shift in practices → What is at stake from the Scientist side ?
- Plan :
 - Developing a strategy
 - LITEAU Programme
 - Lessons from an external audit and self-assessment
 - Discussion

Funding Research: Developping a Strategy

■ **General Approach from the Ministry of Ecology**

- 1985 – A Research Service within the Ministry for Ecology
- 1998 – A Comprehensive Strategy from the Ministry to address the issue of linking Science & Management
- 2006 – Self-assessment, Launch of external audit by programmes
- 2009 – A PhD Thesis studying National Programme from the Ministry of Ecology

■ ...

■ **Coastal Zone as Thematic Example**

- 1998 – LITEAU Programme is engaged ; First Phase, 3 Calls, 30 Projects, 2.5M€ of incentive funding
- 2002 – Second Phase : 2 Calls, 20 projects, 2 M€ of incentive funding
- 2006 – Third Phase : 2 Calls, 21 projects, 2.8 M€ of incentive funding
- 2011 – Fourth Phase is engaged

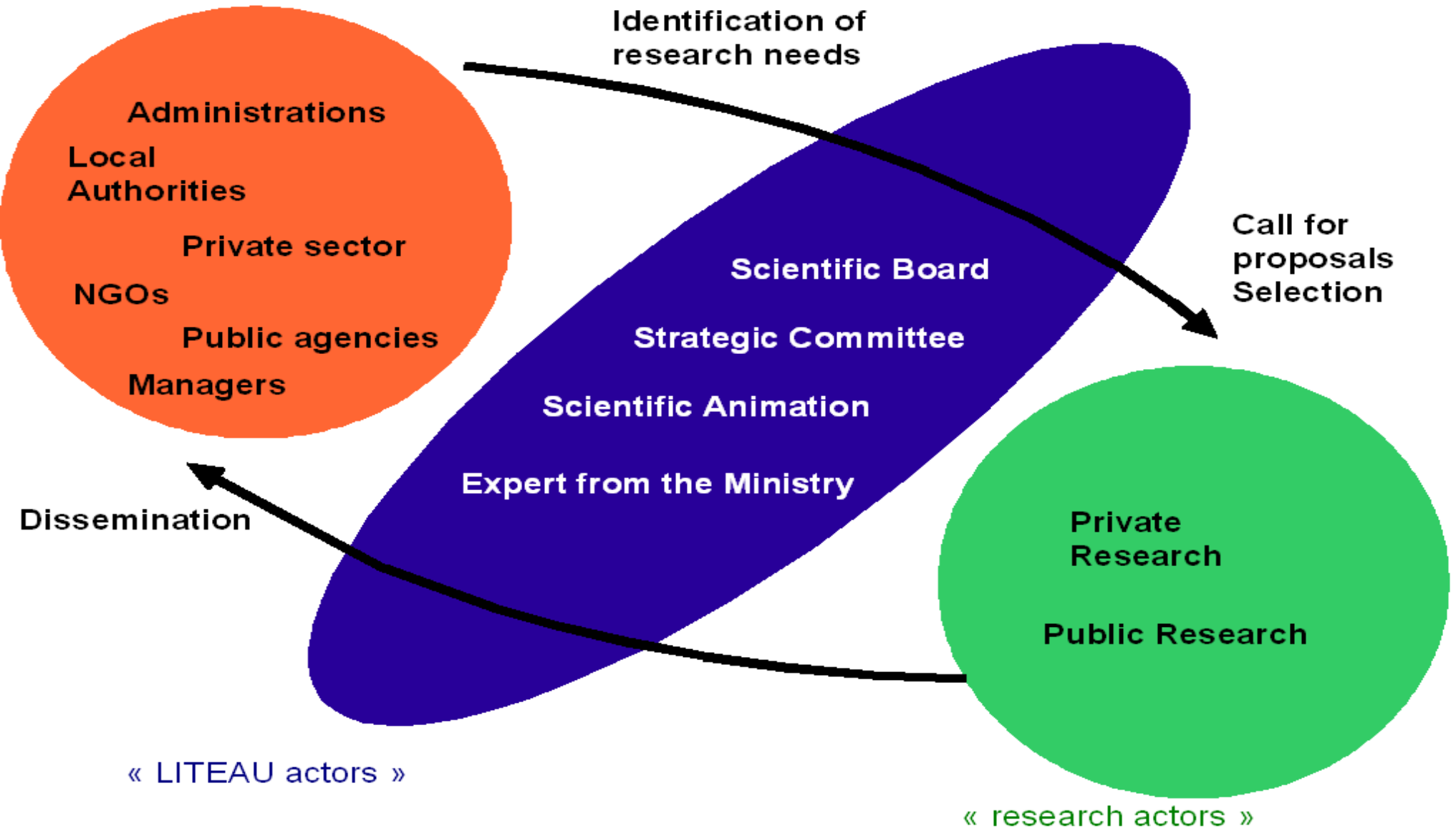
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Funding Research: Rationales

« research needs & potential users »



Funding Research: Implementing the Strategy

- **1998 – A Comprehensive Strategy from the Ministry to address the issue of linking Science & Management:**
 - Programme Governance: Bridging gaps between a Scientific Board and a Management Board
 - Interconnected dynamics between Scientists and Managers from Calls for proposal, to Results Dissemination, through Project in progress
- **2006 – Third Phase: Funding as a binding mechanism for Research practices**
 - Scientific excellence
 - Ecosystemic approach
 - Emerging scientific issues
 - Fulfilment of social or management needs

Results from Selection Process

- **Programme Governance**

- Poor impetus from Management Board
- Increasing independence (autonomy and self-sufficiency) from Scientific Board
- No dynamic at the scale of the programme

but

- Good investment of Boards members in terms of projects monitoring and advising

- **Self-assessment of a Selection process: Call 2007**

- Significant Selection Effects:
 - On relevance of research projects for management
 - On Ecosystemic approach
- Poor Selection Effect on the quality of non-scientists involvement in the projects
 - Difficult to assess correctly
- No projects selected that would be insufficient from scientific point of view

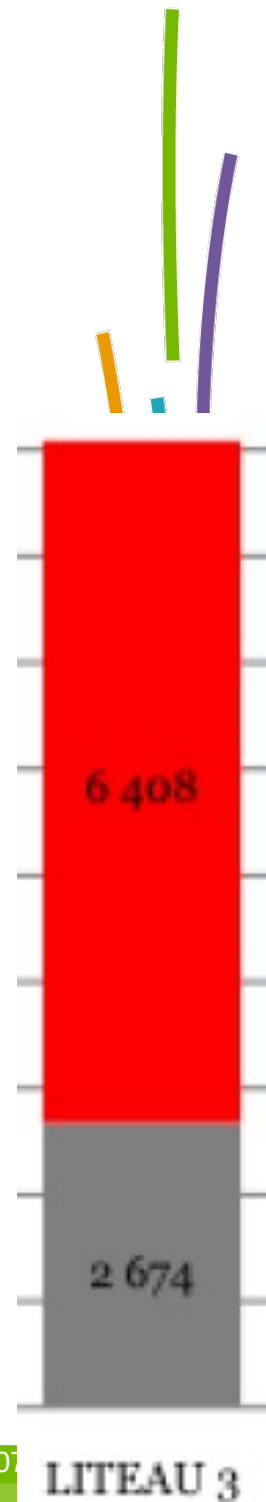
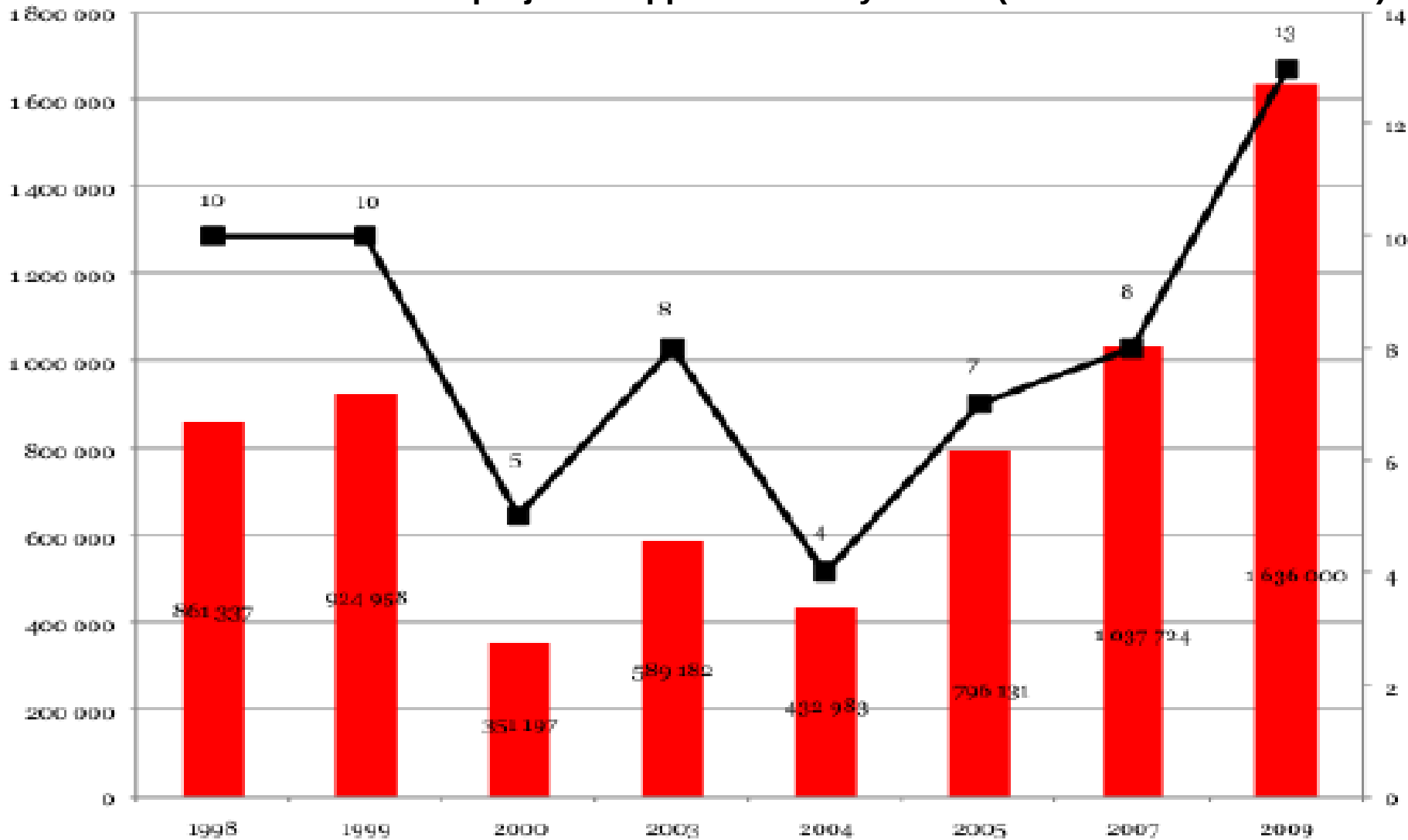
Adaptations of practices

- **Programme Governance**
- Focus on project monitoring and supervision by members of the boards
 - *Ensure project evolution according to the proposal*
 - *Ensure swift reaction from the programme*
 - *Ensure better understanding and dissemination of results*
- Current reflections for next stage of the programme
- **Relations to projects**
- Assess continually the effectiveness of linkage between science & management through the project
 - Adaptation of proposals
 - Early warning from monitoring by boards members and Ministry expert
- Offer opportunities for unexpected developments of projects if necessary or attractive

Some results :

0 – Basic data

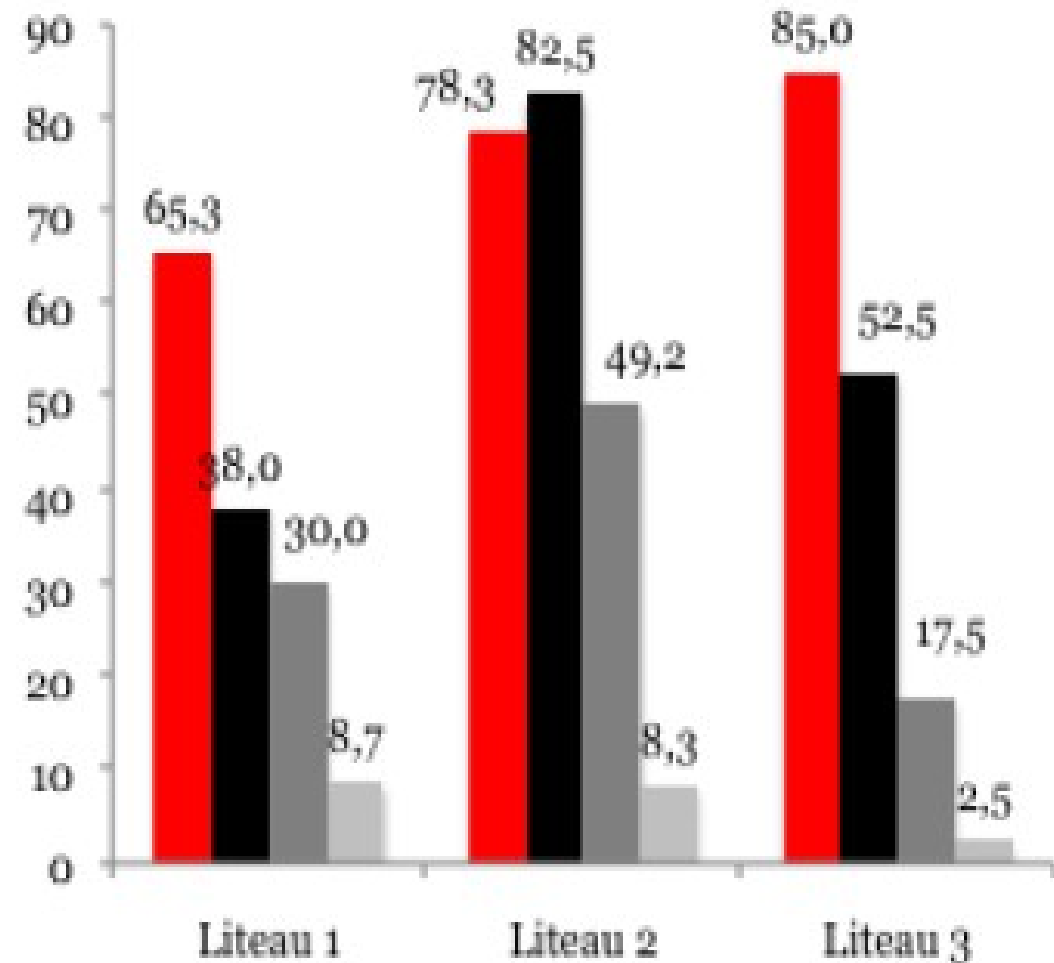
- Left: Number of projects (black) and total funding from Ministry (red, €) by call
- Right: Funding from Ministry (grey, k€) compared to global cost (calls 07 & 09)
- Mean subvention/project is approximatively 120 k€ (mean total coast 450 k€)



Some results :

1 – Scientific quality

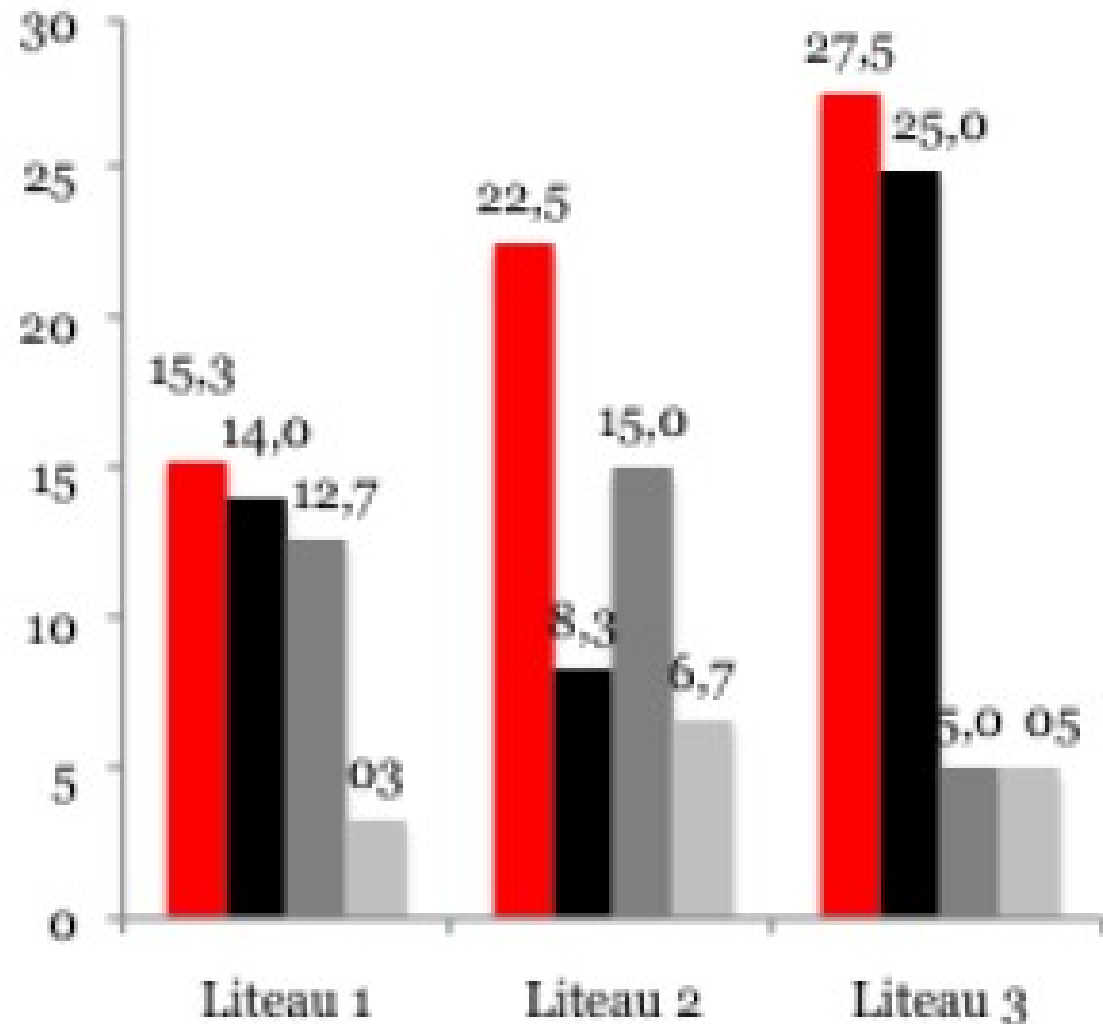
- **Scientific outputs for 10 projects, by phase**
- Liteau 1 : 1998 – 2002
- Liteau 2 : 2002 – 2006
- Liteau 3 : 2007 – 2011
- Types of outputs (left to right)
 - *Communications*
 - *Articles*
 - *Books (inc. chapters)*
 - *PhD*



Some results :

2 – Dissemination

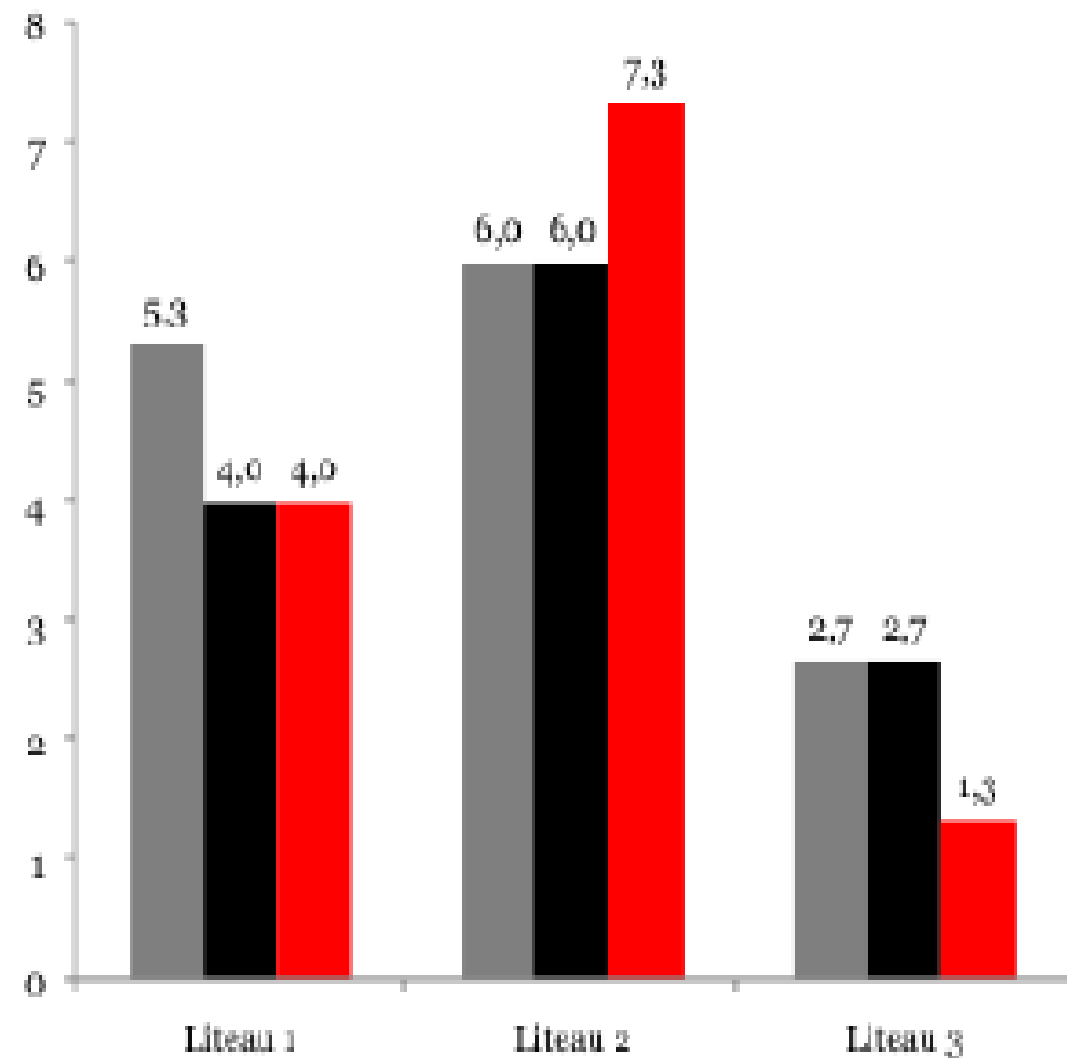
- **Dissemination outputs for 10 projects, by phase**
- Liteau 1 : 1998 – 2002
- Liteau 2 : 2002 – 2006
- Liteau 3 : 2007 – 2011
- Types of outputs (left to right)
 - *Press articles*
 - *Scientific reviews for general public*
 - *Public debates*
 - *Internet*



Some results :

3 – Usefulness for public decision

- **Scientific recommendations for public decisions for 10 projects, by phase**
- Liteau 1 : 1998 – 2002
- Liteau 2 : 2002 – 2006
- Liteau 3 : 2007 – 2011
- Types of decisions (left to right)
 - *National*
 - *Regional*
 - *Local*



Discussion

- **Conclusions: Funding mechanisms play a key role in linkage between science and management**
- Requirements on proposals submitted for funding clearly affect practices, outputs and outcomes of research, including the way we can address the science-management gap.
- These effects could be measured to assess the efficiency of funding procedures. But there isn't enough information yet to study properly this issue.
- Although it is key, the subject is poorly studied.
- **Questions:**
- How to improve these funding mechanisms ?
- How to develop research on this field ?

Thank you for your attention



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