

Comparative Evaluations of Innovative Solutions in European Fisheries Management

Work Package 7: Evaluating Cost Effectiveness of Fisheries Management



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- **Project description**
- **Objectives**
- **Methods used**
- **Country Case Studies**
- **Management Regimes**
- **Conclusions**

CEVIS assesses innovations for European fisheries management regimes in respect to four management objectives:

- biological robustness;
- economic efficiency;
- **the cost effectiveness of management activities WP7;**
- and social robustness.

CEVIS examines four types of regime-level innovations:

- the use of participatory approaches to fisheries governance;
- rights-based regimes;
- effort-control regimes and
- decision rule systems.

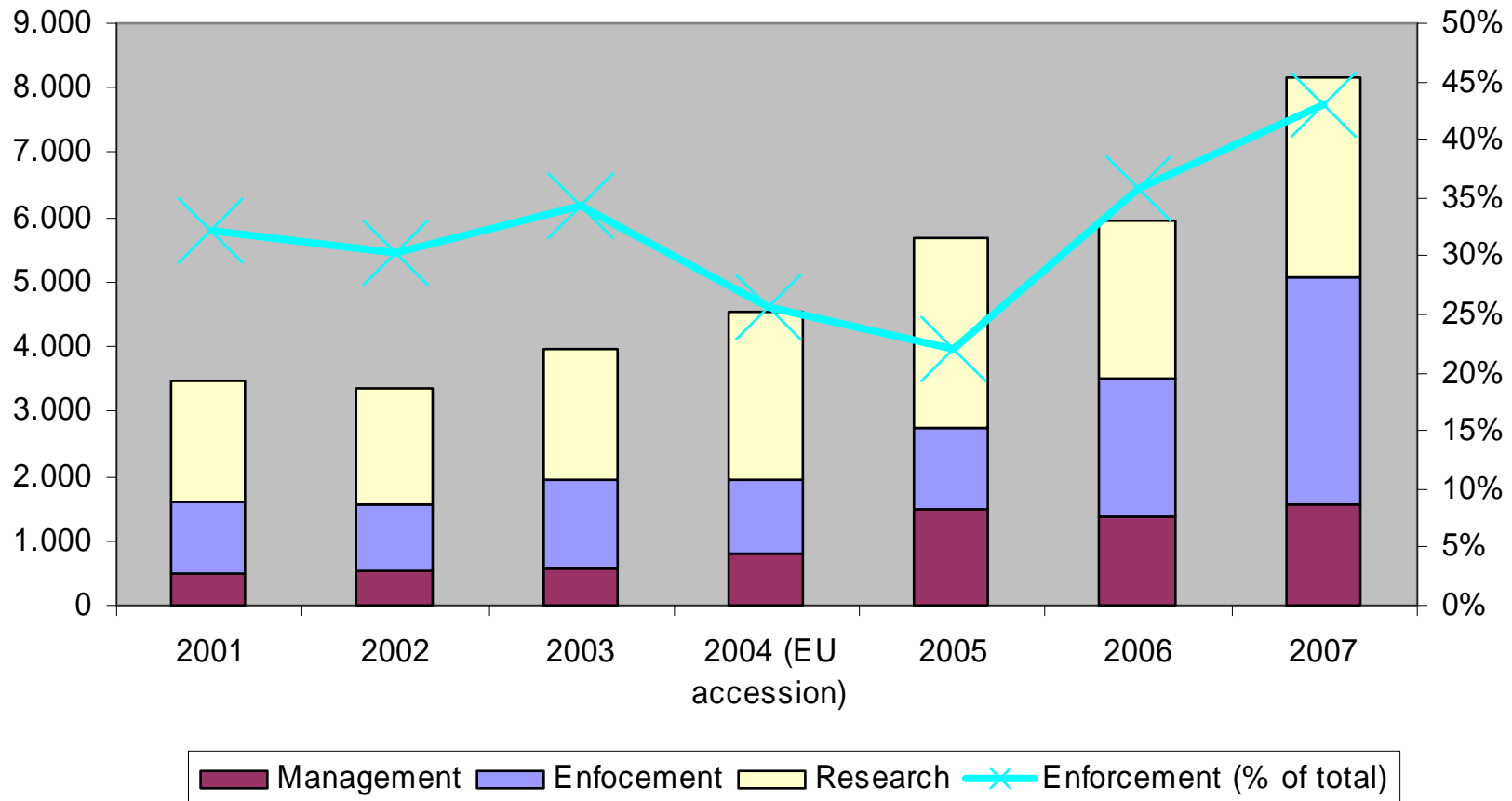


- Decision rules, participatory governance, TAC;
- Complex fisheries, management costs in relation to value of landings increased by **10%**;

Results

- More (better) enforcement and research;
- In future: less research because more reliable catch data;
- More hardship for fishermen now, healthy stocks in future.

Management costs of Polish fisheries, 1000 EUR (total)



- ITQs, technical conservation, TACs;
- Biesheuvel co-management - fishers rent or barter quotas;

Results

- Biesheuvel - less uncertainty, maximized returns, increased profitability and transparency;
- Management costs not reduced, more management functions introduced;
- **Government involved in management;**
- Management costs not related to management regime.

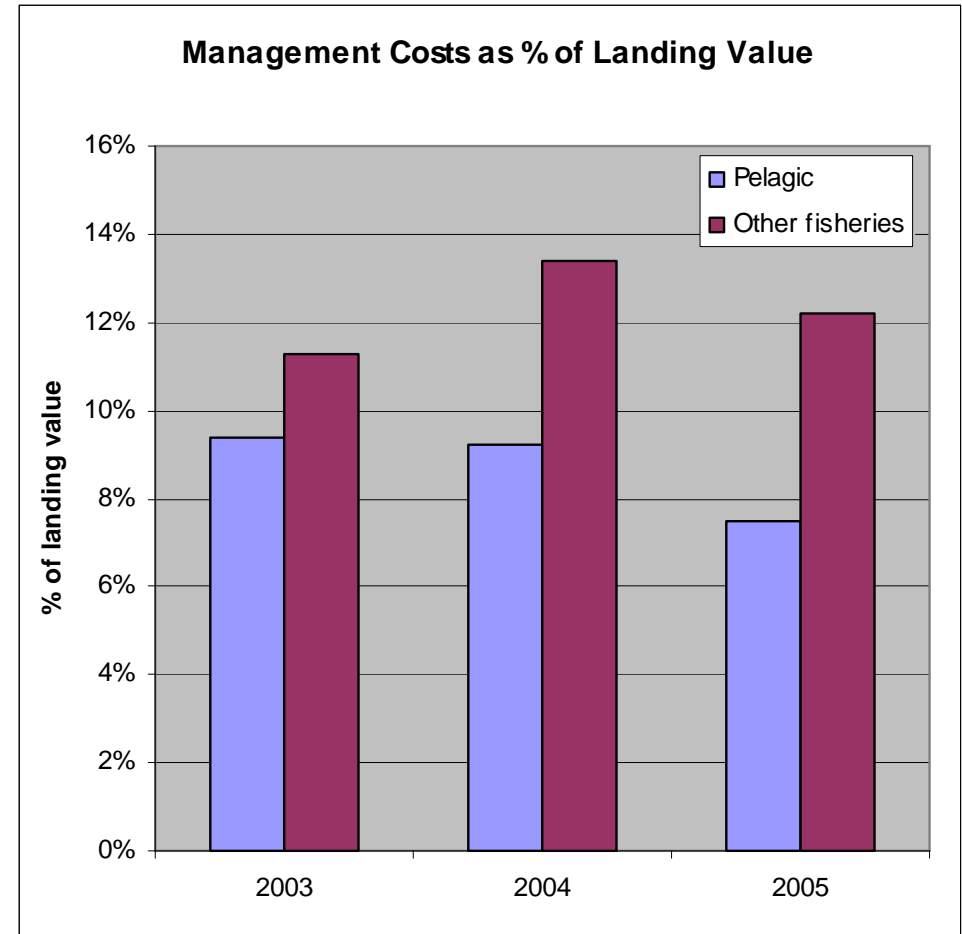
From TAC to **ITQ** (pelagic), **IVQ**

ITQ -

- Management costs lower than average

IVQ -

- No change in budget,
- stock state and political focus on enforcement most important
- **Management system maybe not be an important cost driver**



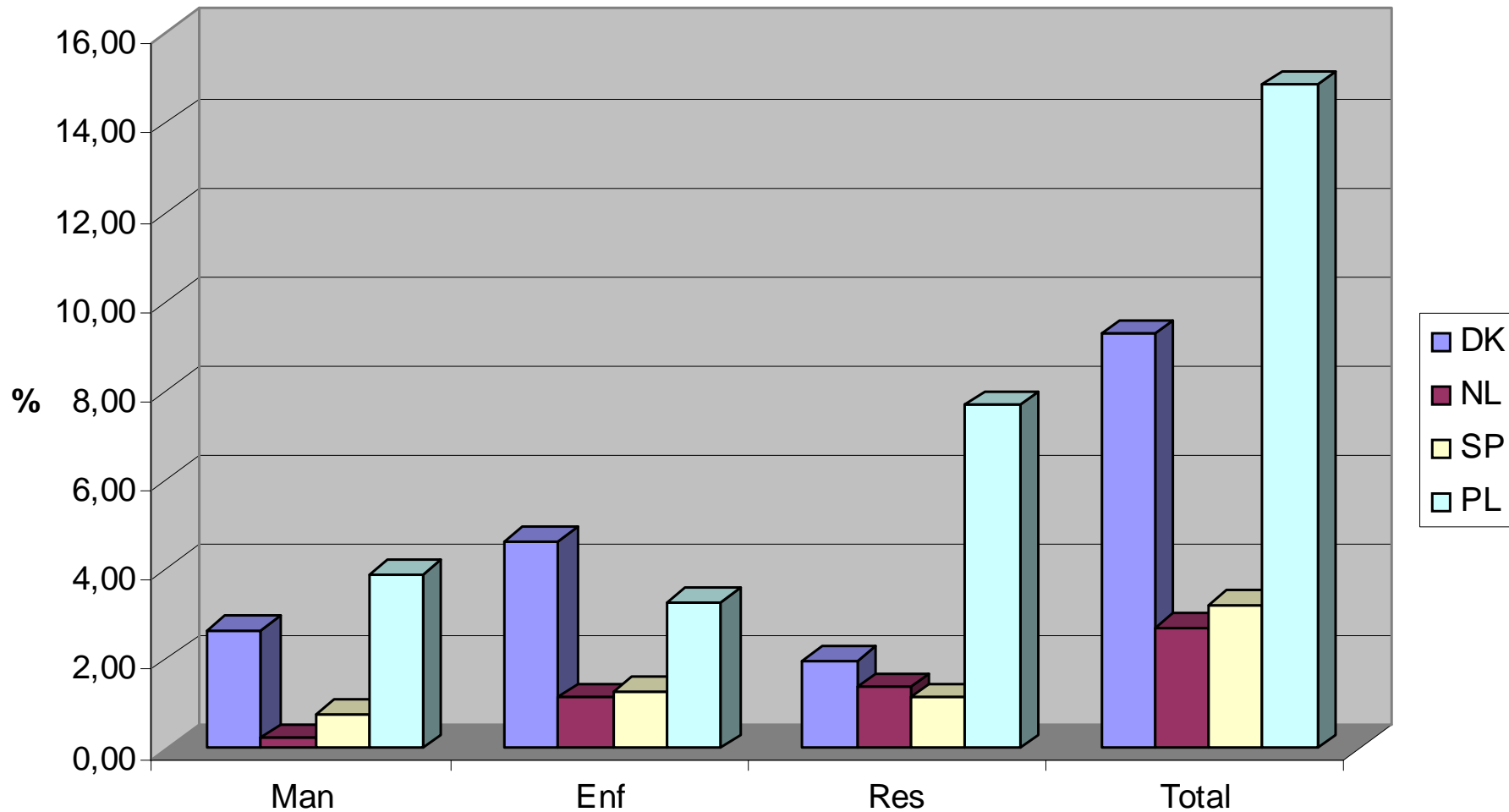
Hypothesis

- Total management cost increase;
- Research cost decrease: fishermen provide better quality data and knowledge;
- Enforcement cost decrease: fishermen through participation increase self compliance;

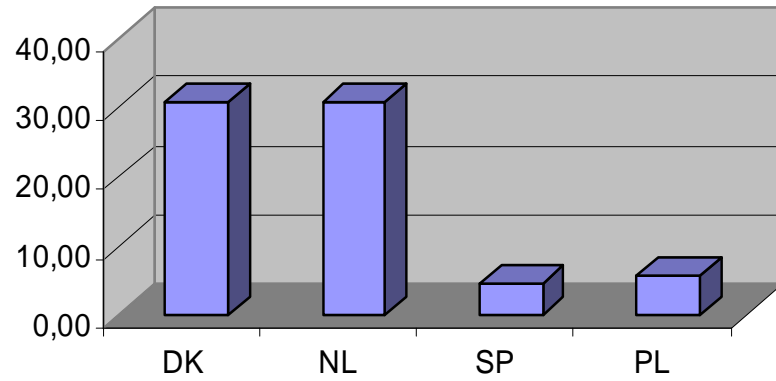
Results

- RACs recently created. Long term effects not clear;
- **Management cost increased** - MS contributions for RACs. No private costs involved;
- Research and Enforcement costs: no change;

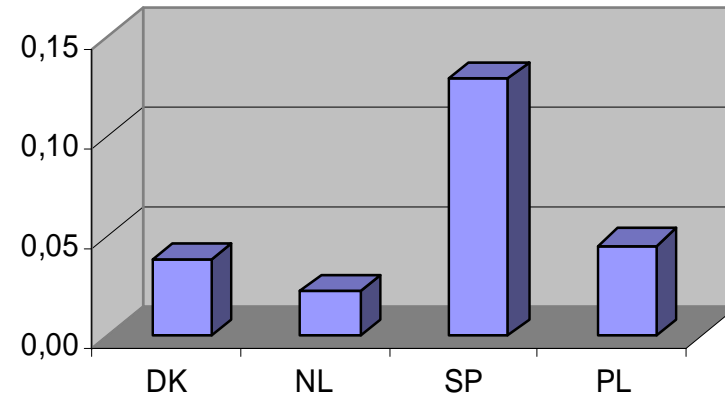
Management cost in relation to value of fish % (2005)



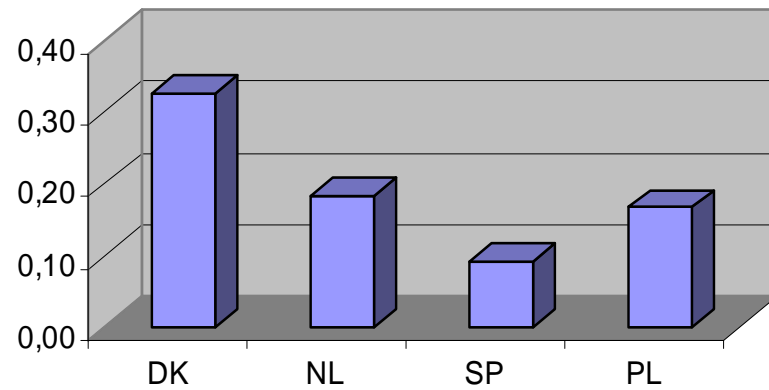
EUR per vessel



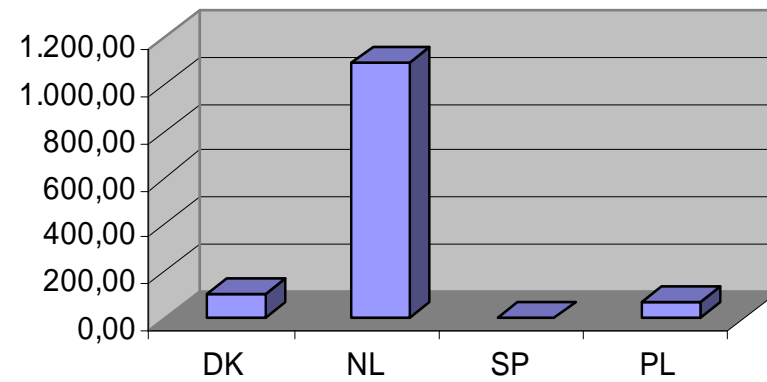
EUR per t



EUR per km2



EUR per port



Effort management (EM)

- EM reduces fishing pressure, is easy to enforce;
- In Baltic cod fishery (Poland) costs **increased** (EU accession);
- In Netherlands control **efforts** decreased in some areas, **but budget did not (controlled by government)**

Harvest control rules (HCRs)

- HCRs define conditions of TAC.
- European cod management with HCRs proved to be complicated because of uncertainties in stock size and catch estimates. **That implies more research, bigger costs.** Monitoring HCR implementation proved costly administratively and to enforce

Rights based management (ITQs)

- ITQs supported by fishermen, though they pay for that;
- Governments role should decrease through time;
- Biesheuvel Groups in the Netherlands acquired many administrative duties, **at the same time government is still heavily involved in management functions.**

Participatory Governance (PG)

- In Northern hake Basque fishery costs **did not decrease**. On the contrary: management costs increased after introduction of RAC, research and enforcement costs continue historic increasing trend;
- There are indications in future management costs continue to increase, while enforcement and research costs decrease or remain stable.

Hypothesis (long term)			
	Man	Enf	Res
Effort	▲	▼	▲
Particip	▲	▼	▼
Harvest	▼	◄►	◄►
Rights	▲	▼	▼

Actual Change in Management Costs While Implementing New Management Regimes

	Management	Enforcement	Research
Effort control	◄►	◄►	◄►
Participatory governance	▲	◄►	◄►
Harvest rules	≅ / ▲	≅ / ▲	≅ / ▲
Rights based regimes	▲	◄►	◄►