



First ideas on T2.2 – Funding schemes

João Bernardino, 02-02-2015, Chios, BENEFIT Kick-off meeting

TiS

MOVIMENTO INTELIGENTE



T2.2

Perspective: funding schemes

- **Funding schemes** in BENEFIT: how to **characterize** them
- Studying their **effect on performance** factors of the infrastructure Project



- Define a **list/classification** of funding schemes to cover
- Such a list/classification should become the basis for the remaining project activities.
- A proper list should be defined by basic aspects of characterization of funding schemes which are **relevant for further analyses**.



Essential dimensions of characterization of funding schemes:

- **Source:** general public budget, earmarked funds, user charging, other infrastructure commercial revenues, ...
- **Indexation:** element of indexation of revenues (e.g. earmarked funds indexed to a specific tax; pricing may be indexed to specific variables like traffic, congestion, pollution, etc)
- Specificity of **effect on performance factors:** having specific attributes that influence their relation to performance factors (economic, environmental, social, institutional)



Funding schemes

1. Overview funding schemes

Source

Users

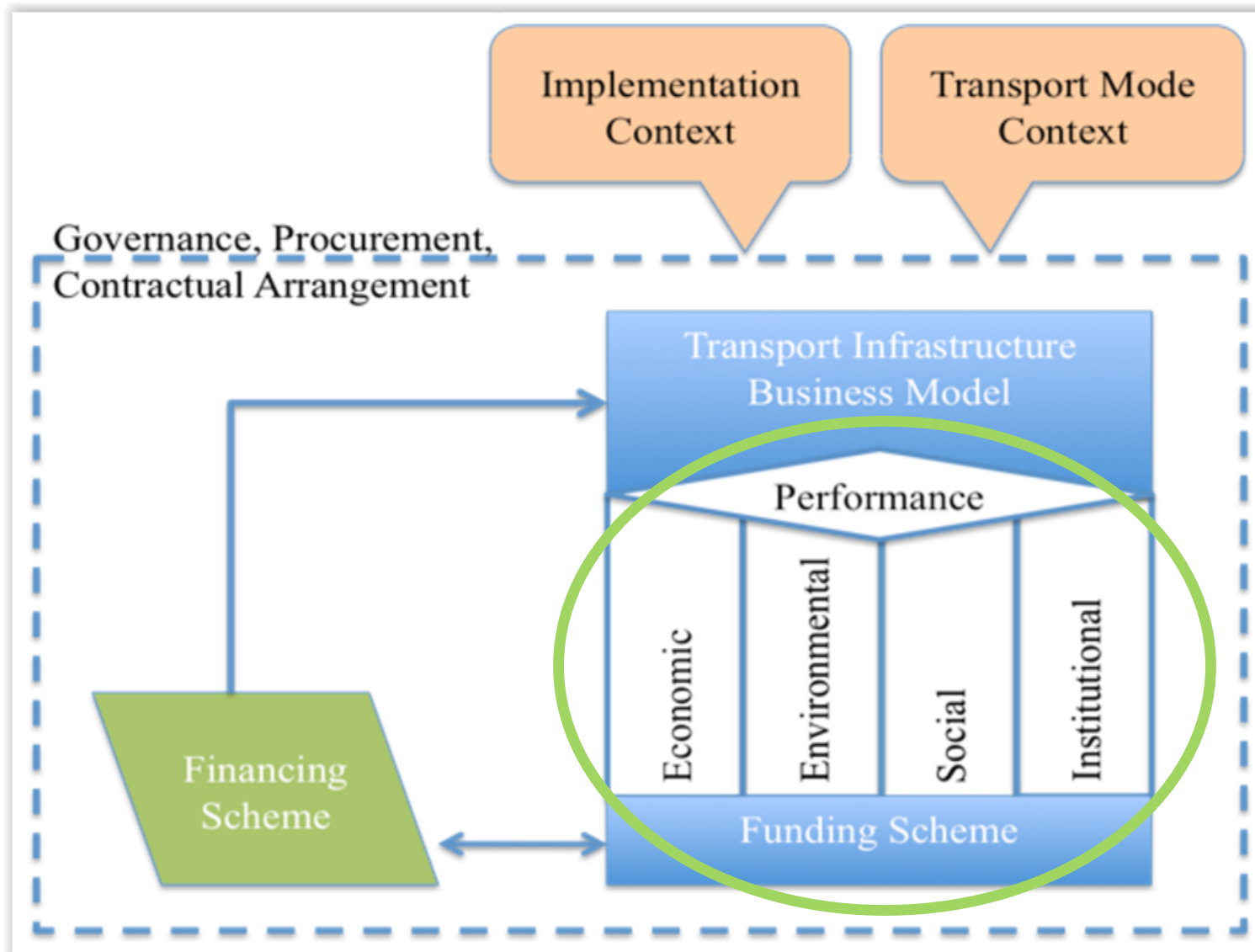
State

Consumers

Stakeholders

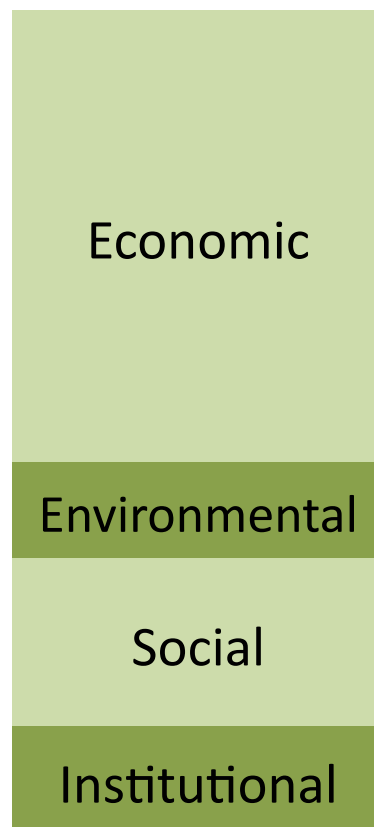
Preliminary aggregate **list** of types of funding:

- Infrastructure use pricing (user-pays)
- Marginal cost pricing (internalize external costs)
- General EU/State/local budget
- Fuel taxes
- Distance-based taxes or charges
- Vehicle use/registration taxes
- Commercial activities in infrastructure
- Value capture (land/property taxes, ...)





Which relevant performance factors should be considered?



- Revenue stability and risks
- Incentives to each party (private, public) (life-cycle investment, user benefits)
- Allocative efficiency (economic): infrastructure costs, congestion, safety
- Cost recovery
- Internalization of environmental costs
- Equity
- Acceptability
- ... subtasks (iii) transport mode context, (iv) implementation context and Task 2.4 – Governance, Procurement and Contractual Agreement



Overview of current knowledge on effects of funding schemes on performance factors...

Funding schemes	Economic				Environmental	Social		Institutional
	Revenue stability and risks	Incentives	Allocative efficiency	Cost recovery	Internalization of costs	Equity effects	Acceptability	... [(iv) and T2.4]
scheme 1								
scheme 2								
...								

... per **transport mode**



... per **transport mode**

1. Identify the most common funding practices in each mode and understand generally why they tend to follow such different approaches
2. Detail Economic, Environmental, Social and Institutional effects per mode



Indicators

“In a scale from 1 (very bad) to 5 (very good), how is funding scheme ... **rated** in relation to performance factor:”

- Revenue stability and risks
- Incentives to each party (private, public) (life-cycle investment, user benefits)
- Allocative efficiency (economic): infrastructure costs, congestion, safety
- Cost recovery
- Internalization of environmental costs
- Equity
- Acceptability

“And how much does that specific rate in each case depends on **context** aspects? (scale 1 to 3) Which aspects?”



Possible overall assessment of funding scheme

Funding schemes	Economic				Environmental	Social		Institutional
	Revenue stability and risks	Incentives	Allocative efficiency	Cost recovery	Internalization of costs	Equity effects	Acceptability	... [(iv) and T2.4]
scheme 1	Ratings							
scheme 2								
...								

+

Policy objectives + Business models: weight of each performance factor

Multi-criteria assessment?



Optimal scheme



Task 2.2/4.1 Template from perspective of pricing analysis (T4.1)

- I.9.2 Contract: (V) Type of expected revenues. Clarify:
 - **Source** and indexation of revenues
 - Who gets **collected** revenues? (concession, concessionaire)
 - How Is the concession **remunerated**?
 - What percentage of total Project costs are **covered** by each funding source?
- I.9.2 Contract: (VI) User charges
 - Clarify **objectives** behind pricing: cost recovery, market efficiency, environmental cost internalization
- I.11 Other details on economic, social and environmental impacts
 - **Detail performance factors to guide authors more closely**



Relation with other tasks: direct input to...

- T4.1: raising points for validation and key questions
- T3.1 Matching Framework: systemization of hypotheses



1. Define and validate list of funding schemes
2. Validate performance factors to be covered
3. Coordinate with mode analysis
4. Coordinate with institutional analysis
5. Overview on funding schemes
6. Effects on performance factors (general/theoretical)
7. Effects on performance factors (mode)



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