

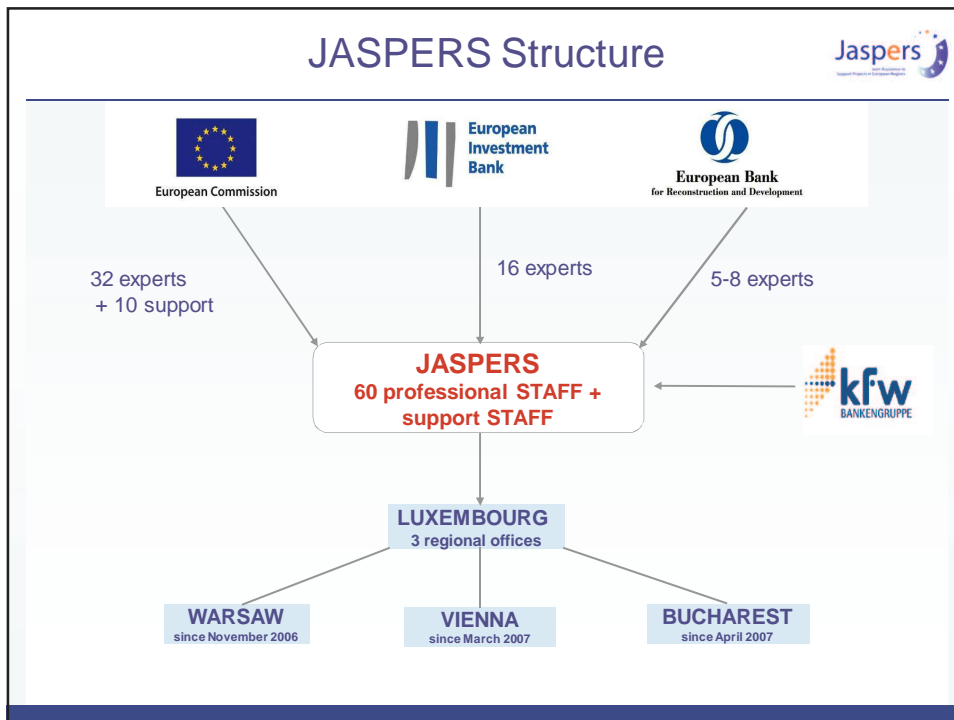
National CBA Guidance Framework

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What is JASPERS

- 'Joint Assistance to Support Projects in European Regions'
- **Objective:** increasing the capacity of the beneficiary countries to make the best use of EU Structural Grant funding
- A technical assistance partnership to prepare major projects between **DG REGIO-funded** (32 professionals + 10 support staff), **EIB** (16 professionals), **EBRD** (5-8 professionals) and now **KfW**.
- **Value added:** draws on past experience and expertise of the EIB and the other banks involved
- **JASPERS** is managed within the EIB but separated from its lending activities



- ## JASPERS activities
- ☞ Focus on 12 'new' Member States
 - ☞ Objectives:
 - Increase the capacity of beneficiary countries, make best use of EU funding
 - Improve absorption of funds
 - Improve projects quality
 - JASPERS concentrates on Major Projects :
 - Transport and other sectors €50 M > capital cost
 - Environment €25 M > capital cost
 - JASPERS priorities are :
 - large projects supported by Cohesion Fund and ERDF
 - other Cohesion Fund projects
 - other ERDF projects
 - Horizontal Issues covering more than one country/sector (as CBA)

What does JASPERS offer?



- Assistance from early stages of project through to the decision to grant assistance
- Preparatory work required to deliver a mature project e.g.
 - ✓ Advice on **conceptual development** and **project structuring**
 - ✓ Advice on **project preparation** e.g. cost-benefit analysis, financial analysis, environmental issues, procurement planning.
 - ✓ **Review of documentation**: feasibility studies, technical design, tender documents.
 - ✓ **Advice on compliance** with EU law (environmental, competition and others) and conformity with EU policies

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Rationale for CBA Guidelines



- ❑ Council Regulation 1083/2006
 - Art. 40 - Major Projects: MS to provide the Commission with (...) a cost-benefit analysis, including a risk assessment and the foreseeable impact on the sector concerned and on the socio-economic situation of the MS
 - European Commission to provide guidance on CBA
- ❑ EC Guidance
 - Working Document 4: clarifications for period 2007-2013
 - MS encouraged to develop own CBA framework
 - EC CBA GUIDE– revised version published in June 2008
- ❑ Ultimate Goals for CBA Guidelines and JASPERS support
 - ☞ *Ensure soundness and consistency across project (quality of projects)*
 - ☞ *Facilitate and speed up approval process (absorption of funds)*
 - ☞ *Minimise risks of future refunding to EU (due to Funding Gap miscalculations)*

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Objectives of the National CBA Framework

- (i) **strengthening the capacity of Romanian authorities** to assess the quality of Major Project Applications for projects to be financed by the Cohesion and ERDF Funds, as laid down in the relevant Operational Programmes.
- ii) to **develop a suitable methodological framework** to carry out the CBA of EU funded project in accordance to applicable regulations and requirements from the European Commission;
- iii) to **support the implementation of this framework** through institutional strengthening and training of the relevant Romanian authorities (ACIS, MAs, IBs) to provide guidance (to beneficiaries and consultants) and supervise the CBA of the different EU funded projects.

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Initial CBA needs assessment

General topics

- ✓ Previous experience with CBA analysis and critical issues identified
- ✓ Available manuals and documentation produced under previous projects and/or used currently in project assessment
- ✓ National procedures currently enforced for project preparation, assessment and selection (and relevant legislative references)
- ✓ Planned projects for 2007-2013 and needed CBA input

Specific data requirements

- ✓ Macroeconomic data and general assumptions (inflation, GDP growth national/local, unemployment at local level, etc.)
- ✓ Info on affordability issues (households' disposable income at local level, statistics on expenditures) and policy
- ✓ Info on tariff systems at sectoral level (road tolling/vignettes, water fees, landfill taxes and tipping fees)
- ✓ Specific sectoral forecasts (e.g. energy intensity trend forecast)
- ✓ Data for economic benefits (value of life/time, WTP for municipal services, etc.) if already available

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MEF- ACIS Experts Working Group



- a) Main counterpart to the Jaspers team and overall management of the process
- b) Help with access to relevant stakeholders
- c) Provision of background information, available studies and data
- d) Access to relevant legislation and advice on its applicability
- e) Access to relevant statistics (aggregated/disaggregated data) both at national and local level, including macroeconomic forecasts
- f) Access to sectoral data and other info – desktop analysis if needed
- g) Translations
- h) If need arises, implementing surveys and direct data collection
- i) After finalisation, performing maintenance and updates of the Guidelines (Jaspers could provide specific technical support)
- j) If envisaged, logistics and workshops/conference organisation (including its financing)
- k) Dissemination and support to Final Beneficiaries
- l) Provision of training to final beneficiaries

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National CBA Guidelines



- ☞ **Developed jointly by Romanian Authorities and JASPERS - based on experience first approved projects and dialogue with EC**
- ☞ **National CBA Guidelines to be consistent with EC and Romanian requirements (HG 28/2008)**
- ☞ **Valid for ALL projects co-financed by Structural Funds**

- 📖 **General CBA Guidance document**
 - Rationale and objectives
 - What is a CBA and why/when perform it (small projects)
 - General methodological Approach (discount rates, reference period, etc.)
 - Macroeconomic assumptions and data to be used
 - Valid for all sectors
 - To be formally embedded in national approval process

- 📖 **Sectoral CBA Guidelines for Water, Transport, SW, DHs & Energy**
 - Strategic approach and definition of objectives
 - Project identification and demand assessment
 - Feasibility and Option Analysis
 - Financial Projections
 - Economic Analysis
 - Risk and Sensitivity analysis
 - Conclusions and presentation of results

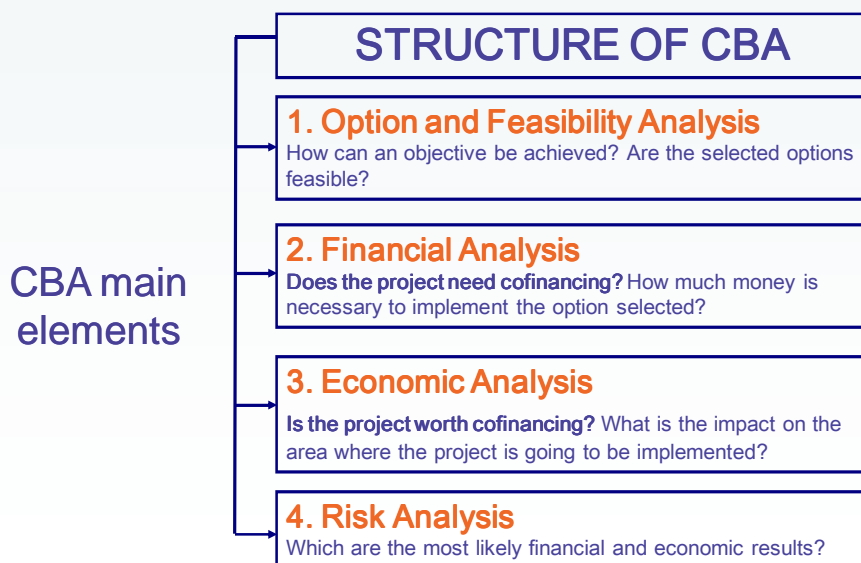
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Sectoral guidelines

- To provide operational guidance for CBA application in specific sectors
- Expert audience (consultants, MAs and IBs, Beneficiaries)
- First round of guidelines on sectors where JASPERS can provide direct support:
 - ✓ **Integrated water projects:** water treatment, network rehab+extension, wastewater collection and treatment, storm water and drainage.
 - ✓ **Waste management:** waste collection, transport, treatment and disposal
 - ✓ **Energy:** energy efficiency, RES, transport networks, environmental standards, district heating.
 - ✓ **Transport:** roads, railways, ports and airports, urban transport

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CBA Structure as required by EC



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Sequence of CBA for National Guidelines



- ⇒ *Investment identification and definition of objectives*
- ⇒ *Option Analysis and Selection*
- ⇒ *Financial Analysis*
- ⇒ *Economic Analysis*
- ⇒ *Risk and Sensitivity analysis*
- ⇒ *Conclusions and presentation of results*

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Definition of Project Objectives



SOP Objectives – Priority Axis 1

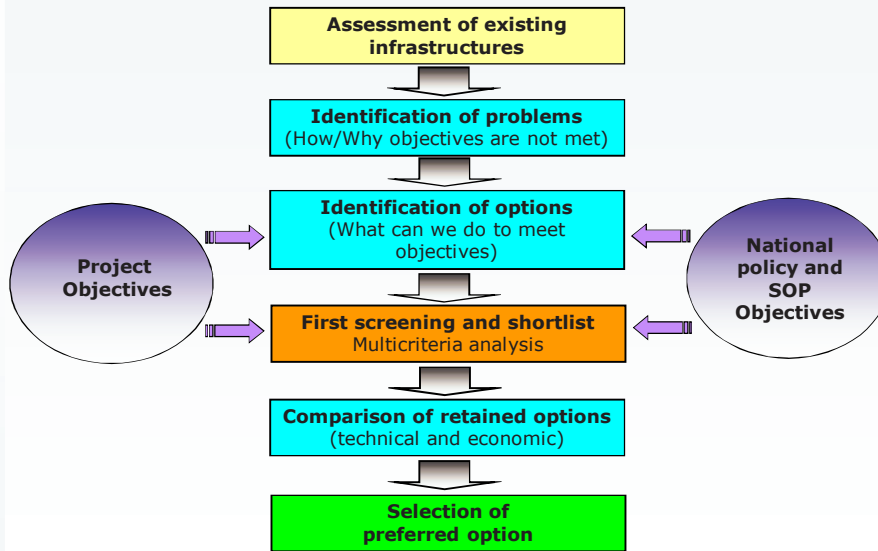
Objective 1	Provide adequate water and sewerage services, at accessible tariffs
Objective 2	Provide adequate drinking water quality in all urban agglomerations
Objective 3	Improve the purity of watercourses
Objective 4	Improve of the level of WWTP sludge management
Objective 5	Create innovative and efficient water management structures

Example Project Objectives

Specific Objective	Values without project	Expected value after completion
1. Increase in coverage of water and sewerage services	% of population connected to water supply and sewerage systems	% of population connected to water supply and sewerage systems
2. Improvement of quality of drinking water to meet EU standards (98/83/EC)	% of population with drinking water meeting EU standards	% of population with drinking water meeting EU standards
3. Increase of coverage of wastewater treatment to meet Urban WWT Directive	Number of agglomerations with adequate wastewater treatment	Number of agglomerations with adequate wastewater treatment
4. Establish efficient operators and associated structures (ROCs, IDAs)	Number of ROC/IDA with adequate set up and capacity to manage water/ww systems	Number of ROC/IDA with adequate set up and capacity to manage water/ww systems

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Option Analysis and Selection



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Financial Analysis

To establish:

- ☞ Level of financial self-sufficiency and performance indicators
- ☞ Funding Gap and project financing structure
- ☞ Financial sustainability of the project (cumulative cash flows)
- Projections of financial flows of the project for **without** (baseline) and **with project** scenarios:
 - ✓ Revenues (demand evolution and tariff increases)
 - ✓ Operating and maintenance costs (also estimate cost savings)
 - ✓ Total planned investment (including residual value)
- Reference period depends on economic life of the project
- Financial discount rate set at 5% in real terms
- **Project impact** = Difference between with and without scenario (incremental approach)

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Project profitability indicators



- Incremental cash flows used to determine **financial performance indicators** before and after EU grant
 - ✓ If not state aid, FNPV/C needs to be <0 (or $FRR/C < 5\%$)
 - ✓ If revenue generating: Funding Gap calculation
- **Project assessment with requested EU grant:**
 - ✓ financial package completed with cofinancing & loans
 - ✓ ensure FRR/K (return on “national” capital) not excessive
- **Financial sustainability**
 - ✓ requires cumulative cash flow positive for all years
 - ✓ ideally at project level, surely needed at operator level

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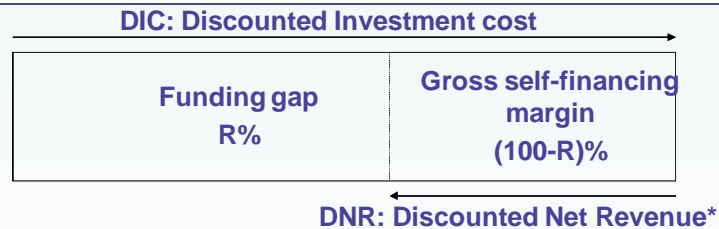
Funding Gap (1)



- For revenue generating projects (as per Art. 55 of Regulation 1083/2006) is the way to determine EU Grant cofinancing
- If project revenues do not cover O&M costs, then the project is not revenue-generating
- Calculation based on incremental cash flows, and normally using constant euros
- Non cash items (depreciation) and contingencies not to be included
- See details in Working Document 4: Guidance on the Methodology for Carrying Out Cost-Benefit Analysis, prepared by the Commission in August 2006

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Funding Gap (2)



The “funding gap” is the part of the investment cost which is not going to be paid back by the project net revenues. The funding-gap rate is the complementary to 100% of the gross self-financing margin.

$$\text{Funding gap rate: } R = \frac{DIC - DNR}{DIC}$$

* **Discounted net revenue** = + discounted revenue – discounted operating costs (including replacement of E&M equipm.) + discounted residual value

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Factors to consider in establishing FG

Article 55(2): “Eligible expenditure on revenue-generating projects shall not exceed the current value of the investment cost less the current value of the net revenue from the investment over a specific reference period (...)

In the calculation, the managing authority shall take account of the reference period appropriate to the category of investment concerned, the category of project, the profitability normally expected of the category of investment concerned, the **application of the polluter-pays principle**, and, if appropriate, **considerations of equity linked to the relative prosperity of the Member State** concerned.”

- ✓ **Polluter pays principle:** Relevant for setting infrastructure user charges that should reflect the correct application of the Polluter Pays Principle.
- ✓ **Affordability (equity):** Practically, total charges paid by the users of the infrastructure/project services should not exceed certain commonly accepted thresholds.

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Economic Analysis

- ☞ To establish if the project has a positive net contribution to society (ENPV>0, ERR> social discount, B/C ratio positive)
- Similarly to financial analysis comparisons between benefits and costs, but:
 - ✓ Costs measured in term of “opportunity” foregone
 - ✓ Benefits reflects both saving in costs and external benefits not valued by financial prices
- Social discount rate set at 5,5%
- **Incremental impact on society** = Difference between with and without ‘economic’ scenario

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Sensitivity and Risk Analysis

- Purpose is to assess the robustness of the project financial and economic profitability indicators (FRR/C, FNPV/C, ERR, ENPV)
- First, identification of key variables and their impact in terms of changes in the profitability indicators
- Second, calculate “switching values” for those variables for which a variation of 1% results in a variation of more than 5% in the profitability indicators
- Finally, estimate probability distributions for the profitability indicators based on the probability distribution of all the key variables/

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CBA Conclusions

- ✓ Standard format for presenting CBA results (Application Form info requirements)
- ✓ Does the project need co-financing??
 - ☞ Financial analysis → FNPV/C < 0;
 - ☞ Revenue Generating → Funding Gap
 - ☞ Financial sustainability ensured
- ✓ Is the project worth co-financing??
 - ☞ Economic analysis results
 - ☞ ENPV, ERR and B/C ratio
 - ☞ Other benefits/costs not monetised needs to be listed

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