Implementation Approach for Project Prioritization in the TRACECA Corridor

-Working Document-

1 Scope of this document

Based on the consensus reached during the TRACECA Coordination Meeting in Brussels on September 24, 2009, this document describes an approach to derive and apply a unified methodology acceptable for TRACECA member states and the EC for prioritizing infrastructure projects within the framework of the TRACECA corridors. The projects will be promoted based on their priority ranking.

So far, the TRACECA Technical Assistance projects collected the suggested projects from the individual TRACECA countries. It is unclear to what extent the regional dimension is taken into account as well as the level of coordination among neighbouring countries. The Projects constitute a long list of potential investments for the development of the TRACECA corridors. A streamlined and accepted methodology is required to evaluate and prioritize the long list resulting in a ranked short list of projects.

This document illustrates the prioritization approach, its methodology, the underlying principles and the actions required reflected in a Road Map. The methodology includes the background, the evaluation categories and criteria.

2 Prioritization Approach

Objective

The objective of this exercise is to obtain a list of priority infrastructure projects of genuine TRACECA regional or sub-regional significance. The projects should be prioritized according to the degree of contribution to balanced sustainable development of the TRACECA corridor in terms of their economic, environmental and social impacts.

The prioritization approach represents a first step in the process of identifying a short list of projects to be presented at the envisaged first TRACECA Finance Forum, once they have undergone a pre-feasibility study. It is also the aim to select, among the short listed projects, two highest ranking projects considered bankable and launch feasibility studies.

The Methodology

Given the best practice in prioritizing corridor projects, the Value Analysis (VA) approach is used in combination with an analytic Hierarchy Process (AHP) and adapted to the specifics of the region, bearing in mind the regional dimension of the countries. Such a method; the Value Analysis approach offers transparency in the decision-making process and is frequently adopted in European countries (e.g. Germany) for prioritizing transport investment projects. The approach returns the value of different decision options (or projects) with respect to each other (ranking). The result of the analysis for each of the projects is a number that reflects the utility value compared to the other projects. The "best value" options receive the highest value compared to other option (projects). It should be noted that results can only be seen relative to each other, because the values are derived from a comparison.

Such a method is particularly suitable at the prioritizing stage, as most criteria cannot be expressed in monetary terms such as regional integration, etc. The procedure for prioritizing projects consists

of the following steps:

1- Priority Projects options
    a. Compile an updated list of projects for priority ranking
    b. Obtain description for each project
2- Identify evaluation criteria and their values (weighing)
3- Set a scale of the target compliance for evaluation
4- Run evaluation

The weighing process of the criteria is critical for acceptance of the final ranking of projects. Using the AHP allows a transparent and streamlined process of comparative ratings between pairs of criteria to arrive at numerical values (percentage) for the weight of each criterion.

The entire approach will run on participatory basis involving the TRACECA member states to add their views in the criteria selection, the weighing and ultimately in the project evaluation. This will be granted through work sessions in the respective country and circulation of documents. The participatory approach is important to arrive at a TRACECA owned prioritization methodology.

The advantage offered by this methodology does not only lie in the transparency of results; it also lies in the fact that the criteria utilized can be subject to scrutiny and consensus among TRACECA countries. This allows the focus on creating comparable results and ultimately the acceptance of the projects' prioritization list.

The following underlying principles shall apply for the evaluation methodology of projects to be prioritized:

- The prioritization methodology will be developed and deployed in a participatory fashion involving all TRACECA member states.
- The methodology is considered TRACECA owned methodology and results are acknowledged and accepted by all countries. The results are committing for the TRACECA projects prioritization.
- The methodology and evaluation process should take into account the characteristics of the different countries in the region; while considering the regional dimension and impact of the projects on the TRACECA corridors.
- This projects prioritization process may not be carried out with a merely national approach. Instead, criteria that prioritize the projects' regional component and impact on the TRACECA corridors receive adequate consideration.
- Evaluation will be carried out in three regional sessions for western TRACECA, Caucasus and Central Asian, facilitated and moderated by the IDEA team.

The Projects Options

The following underlying principles shall apply for the pre-selection of projects to be prioritized (long list):

- The infrastructure projects form part of the TRACECA routes or provide an access to it.
- The prioritization exercise will be done on the most updated list of priority projects. Priority projects also need very strong ownership and political support at the national level.
- Projects must have a profile that is responsive to the criteria of evaluations. Projects may

need to be paired (bundled) to qualify for prioritizations

- Only projects requiring the TRACECA intervention will be evaluated. Projects in the construction phase or with committed finance will not be considered for prioritization.

It is also important to stress that the projects proposed should respect relevant EU legislation and international conventions and that environmental assessment, transparent and fair public procurement procedures etc. must be carried out in accordance with donors' funding rules and best international standards and practices of good governance.

The approach will make best use of all data and information collected from the previous applications. To enable evaluation, a project "description" will be required to support the evaluation process. The IDEA team will prepare a template of this description and will also fill in the template with all the information already available from the predecessor Traffic Flow project. The National Secretary of the TRACECA countries will check information, add the missing data to the project profile if available and prepare templates for new projects, in case these exist. The IDEA team will also prepare a presentation template to be use by the countries National Secretary at the regional evaluation meetings.

Targets System

The projects prioritization will be based on the degree of the contribution of each project to fulfill the goals TRACECA is pursuing. The choice of the targets is made in analogy to the exercise to define the priority projects of the TEN-T by the Hi-level group and also made by the MEDA projects, pursuing the following three targets:

- **Improving transport operation, safety and security** - reduction in the number and severity of accidents caused by international traffic and in security incidents to international operators, e.g. through modal shift or re-routing to safer modes or infrastructure.
- **Improving economic efficiency** – notably cost savings, including time savings, to international users of the transport system and to operators offering transport services.
- **Enhancing environmental sustainability** of the transport system - reduction in air pollution, noise, green house gases and other environmental impacts.

Evaluation Criteria

Departing from the target system, the evaluation criteria are developed at this stage for the functional dimension i.e. for investment projects. A parallel exercise, if endorsed by the Secretary General and national secretaries, might be launched to prioritize institutional dimension and its measures such as technical assistance, tariffs, legal harmonization, border crossing process, TRACECA Visa, etc.

For investment decisions, it is favorable to limit the evaluation criteria and the corresponding indicators. When dealing with too many criteria, the weighting factors are very close and end up being counterproductive failing to produce relatively strong results.

Paying particular attention to the most pressing bottlenecks for international traffic along the TRACECA routes, five criteria are defined for the evaluation:

- Regional Integration
- Technical
- Economic

- Environmental
- Policy-based.

As mentioned above most of the given indicators will be evaluated subjectively. The presentation of each project will need therefore to address each criteria with as many illustrative arguments as possible and available.

1. Regional Integration Criteria

These criteria attempt to evaluate the project contribution to regional integration by looking at the connections between regions within the same country and between different countries (cross-border projects); a further distinction is introduced between direct and indirect connections. The regional criteria and their evaluation scale are given in the table below:

- **Project location**: whether the project is part of a TRACECA route or provides / improves an access link to the TRACECA routes, or neither of them.
- **Regional cooperation**: to what extent the project is expected to have positive impact (increase) trade and services exchanges between regions directly or indirectly connected by the project; the indication of measurement might be the flows of trade and services.
- **Regional development**: to what extent the project is expected to have positive impact on the regional development; the indication for measurement might be either GDP improvements, or value added or employment.
- **Interconnection between regions**: to what extent the project is physically improving connections between countries; this indicator deals with the physical characteristics of the infrastructure.

Regional integration criteria	Evaluation and corresponding points			
– **The project is located on:**	TRACECA Route	On access link to a TRACECA Route	No	
–	2	1	-1	
– **The project impact on regional cooperation is**	High	Medium	Low	No
–	3	2	0.5	0
– **The project impact on regional development is**	High	Medium	Low	No
	3	2	0.5	0
– **The infrastructure directly interconnects**	More than two countries	Two countries	One country	
–	2	1	0	

2. Technical Criteria

These criteria consider the project relevance in terms of its transportation / technical characteristics and the main impacts expected on transport demand and networks interoperability.

- **Links Improvement:** The first distinguishes between new or improved existing links or nodes. The following ones look at the main transport impacts and therefore at the potential benefits, i.e. increased inter modality, travel cost and/or travel time reductions, increased safety

and/or reliability.

- **Inter-modality:** Project impacts on inter-modality can be considered "high" when, inter-modality operation become the favorable option based on the project's intervention, "medium" when the project is improving intermodal connections, "low" when it only indirectly influences inter-modality, "none" when no effects on inter modality are expected.
- **Travel costs:** Project impact on travel costs can be classified "high" if the costs are expected to be significantly reduced so that the attractiveness of the routes is positively affected, "medium" if the reduction is not significant, "low" if the reduction is not a focal issue or compensated by other measures such as tolls or other levies.
- **Travel time:** The same classification is applied to project impact on travel time: "high" if time savings are significantly reduced, "medium" if the reduction is not significant, "low" if the reduction is trivial.
- **safety and reliability:** Increase in safety and reliability is "significant" when serious safety and reliability problems are eliminated, "medium" when reliability and safety are slightly improved, "low" when the project has only indirectly impacts.

Technical criteria				
– **The project is creating a new link or node or upgrading an existing ones**	Upgrade	New		
	1	0.5		
– **The project impacts on inter-modality are**	High	Medium	Low	No
	1.5	1	0.5	0
– **The project impacts on travel costs reduction for international transport are**	High	Medium	Low	No
	3	2	1	0
– **The project impacts on travel time savings for international transport are**	High	Medium	Low	No
	2,5	2	1	0
– **The project impacts on reliability/safety are**	Significant	Medium	Not relevant	No
	2	1,5	0.5	0

3. Economic Criteria

These criteria consider the status of the project as far as economic and financial soundness is concerned, with the aim of capturing its "degree of maturity". The first criterion looks at the implementation status: whether the project has already a feasibility study, a prefeasibility study, an overall estimation of investment and operating costs or it is in an earlier stage and studies are still underway or, lastly, if no actions have been undertaken.

The second criterion evaluates the estimated investment and distinguishes between three thresholds: **1)** below 12 million Euro, **2)** between 12 and 20 million Euro and **3)** over 20 million Euro.

The estimated investment period is also considered. This affects both costs and pay back period. Both are project characteristics that enter in the evaluation of project risk and therefore are carefully considered by any financial decision. Also here, three thresholds are suggested: **1)** below five years, **2)** between five and twelve years, **3)** above twelve years.

The next indicator deals with two specific issues: the possible support from private funding, assuming that a project that already has some support / interest from private funding, has already undergo some financial scrutiny,

The final indicator for evaluation looks at**)** the status of the legal framework for concession, which is a prerequisite for private participation into the project.

Economic Criteria					
Economic assessment	Feasibility	Pre-feasibility	Estimated costs	Ongoing studies	No action
	4	3	1	0.5	0
Estimated Investment volume	Below 12 million Euro		Between 12 and 20 million Euro		More than 20 million Euro
	2		1		0
Estimated Investment Period	Equal or below 5 years		Between 6 and 12 years		Longer than 12 years
	2		1		0
There is private funding interest in the project	Yes		No		
	1		0		
Legal framework for concession is	In place		In process		Not available
	1		0.5		0

4. Environmental Criteria

Given the difficulty to analyze the effects of each project in detail where no pre-feasibility has been made, these criteria consider the project impact on the environment on a subjective basis.

Negative environmental impacts are generally associated with the completion of transportation infrastructure projects and might require (i) mitigation interventions and therefore increase investment cost, or (ii) negotiating with the affected people and therefore increase completion time. For instance there might be negative impacts because the infrastructure goes through a sensitive area (coastal zone, protected area) , represents a barrier or deviates a river course.

Positive effects of transport projects largely coming from reduction in fuel consumption and hence reduced emissions, noise, etc. thanks to routes shortening, traffic diversion, elimination of congestion, etc.

The first criterion deals with the negative environmental impacts of the infrastructure: what has to be assessed here is whether the infrastructure has “no” effects, “minimal” effects (only minor mitigation interventions might be required), “serious” effects (expensive intervention required), “irreversible” effects (no intervention is possible).

The traffic external impacts are also subdivided in four classes, “sensible reduction” in emissions, noise, energy consumption, “medium”, “minimal” or “none” and, lastly, whether there is an increase in emissions.

Environmental criteria					
Infrastructure negative environmental effects	None	Minimal	Serious	Irreversible	
	5	-3	-3	-5	
Changes in emission due to traffic	Sensible reduction	Medium	Minimal	NO	Increasing
	5	3	1.5	-1.5	-3

5. Policy- Criteria

These criteria consider how the projects fit into each country's strategy for developing the infrastructure network and look at their status with regard to government commitment and dependency on other projects.

Whether a project is included in the National or regional Transport Plan, or it's mentioned in other planning or policy official documents can help in assessing the degree of government commitment.

Dependency on other projects completion, even not in the transport sector, is an external variable that might affect the project feasibility. The criterion identifies three possibilities, the project is not depend on any other project, or is dependent on an project that is already ongoing, or finally depend on investment not yet started.

The project "readiness to go" for financing is the third criterion considered under this section. There are many issues in an infrastructure decision making process, it can be considered that a project is ready to go when no major obstacles (legal, procedural, technical etc.) are foreseen, or it might still require some time to reach this point, a threshold of three years has been established.

Policy based criteria			
The project has a firm commitment of government and countries	Master Planning or Similar	Other Governmental papers	None
	3	1	0
The project depends on the completion of other upstream investments	No	Yes on investment already ongoing or ready	Yes on investment not yet started
	2	1	0
The project is ready for implementation	Immediate	Less than 3 years	More than 3 years
	5	2	0

Setting the relative importance of criteria for project prioritization

The weighing of the Criteria above will be made using the relative importance (paired comparison) of the above given criteria. The following table illustrates this approach.

Regional Criteria	Are		compared to	Technical Criteria
Regional Criteria	Are		compared to	Economic Criteria
Regional Criteria	Are	**4 More Important**	compared to	Environment Criteria
Regional Criteria	Are	**3 Slightly more Important**	compared to	Policy Criteria
Technical Criteria	are		compared to	Economic Criteria
Technical Criteria	are	**2 Equally Important**	compared to	Environment Criteria
Technical Criteria	are	**1 Slightly less Important**	compared to	Policy Criteria
Economic Criteria	are	**0 Less Important**	compared to	Environment Criteria
Economic Criteria	are		compared to	Policy Criteria
Environment Criteria	are		compared to	Policy Criteria

The team of the project Transport **I**nteroperability and **D**ialogue between the **E**U Caucasus and **A**sian prepared initial relative importance table. This (paired) comparative importance will be discussed with the SG and the TRACECA member countries to arrive at final judgment.

Set a scale of the target compliance for evaluation

Each project will be evaluated based on the 5 criteria listed above using the given indicators in terms of fulfilling the TRACECA project goals.