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Jaspers

Joint Assistance to Support Projects in European Regions

Evaluation of Major Project Applications – Guidance for evaluators

This Guidance follows the structure of Annex XXI of the Commission Regulation (EC) No 1828/2006. It provides information about required content and format of the information included in the Application. It is intended as a supporting document for evaluators using Evaluation sheet for evaluation of major project Applications.

EVALUATION SUMMARY

Evaluation summary

1) In this section comments about following aspects of the Application should be summarized:
   - Relevance (consistence with OP)
   - Maturity (extent to which project is ready to start, technical maturity)

- Potential impacts (economic effects, environmental impacts)
- Quality (technical consistency, coherence between stated objectives and expected impacts, quality of the Application, sound financial package)

Recommendations

2) Approve/reject/improve the Application
3) Summarize main deficiencies and suggestions for improvements (of the Application, of the underlying documentation – feasibility studies, designs, traffic studies, CBA, etc.).

B PROJECT DETAILS

B.2 Categorization of project activity

4) Codes for the priority theme dimension, finance dimension, territorial dimension, and economic activity dimension are specified in Annex II – Part A of the Commission Regulation (EC) No 1828/2006.
5) NACE is the acronym for “Nomenclature statistique des activités économiques dans la Communauté européenne”. Codes are set out in Annex I of the Regulation (EC) of European Parliament and of the Council No 1893/2006.

B.4.1.a Description of the project (or project phase)

6) Here a non-technical project summary or project’s executive summary needs to be provided. This may include: location (e.g. region, between A and B), length of project, type of infrastructure (e.g. 4-lane motorway, second track of the existing railway line, electrification, etc.), type of works (e.g. new construction, reconstruction, rehabilitation).
7) It is recommended summarizing the works that are done outside the main alignment (e.g. necessary relocations and adjustments of lower category roads).
8) Detailed technical information should be provided under B.4.2.a, repetition of the information should be avoided.

B.4.1.b Where the project is a phase of an overall project, provide a description of the proposed stages of implementation (explaining whether they are technically and financially independent)

9) “Project” is a series of economically indivisible series of tasks related to a specific technical function and with identifiable objectives (EC CBA Guide, p. 18).
10) The term “stage” is usually applied for the linear division of larger infrastructure into shorter section, e.g. longer section between points A and C could be divided in two subsections A-B and B-C.
11) The term “phase” is applicable in cases where larger infrastructure project is divided in smaller sub-projects according to functional units, e.g.

implementation of ERTMS system can start with introduction of GSM-R, which later is complemented by ETCS. Another example: electrification of the railway line is part of improvement of the given line, which may include also improvement of the alignment, track reconstruction and signalling which may be defined as separate projects.

12) A project is technically independent if it is possible to produce a functionally complete infrastructure and put it into operation without dependence on other, subsequent projects (although it may happen that it will not be fully utilized just yet). EC Guidance is not clear what is meant by financial independence of the project, but it may be interpreted as situation where it is possible to identify sufficient financial sources and allocate it to the project, without conditionalities (e.g. funding available only in case if some other phase or stage of the overall project is implemented).

13) It is sometimes difficult to asses whether the project is part of the overall project or not. An overall project may be construction of the motorway between main generators/origins of the road traffic, rehabilitation of the rail corridor, etc. If the demand analysis is indicating that a full utilization of the project is expected only if and when entire corridor is improved, all of the projects on this corridor have to be presented.

14) Here it is not expected that technical or technological phases or stages of the project for which assistance is sought are presented, but to present the possible relations and interaction with other projects in the same area or corridor, which may contribute to achievement of the same objective, are covered by same general plan and are supervised by the same agency.

15) It is recommendable in some cases that a series of smaller but similar projects is treated as a package or single major project. This will allow possible economies of scale in administration and procurement, better appraisal and facilitate the funding. Examples may be grouping of shorter stretches of the same motorway (even if not adjacent) or traffic safety improvements in certain area or corridor (e.g. elimination of black spots).

16) It is required to identify the stages/phases, explain the stage of development (e.g. feasibility study, detailed design, under construction, completed) and actual or expected year of completion. Example:

Modernisation of Corridor IX Branch B (Section Kena - Vilnius - Kaisiadorys) and Branch D (Section Kaisiadorys - Kaunas - Kybartai)		
section		Time period
Kena - Vilnius	Design for track modernisation of Kena - Vilnius line	To be determined
	Modernisation of permanent way section Vilnius - Kena	To be determined
	Modernisation of signalling/ telecom and power supply Kena - Valciunai - Paneriai	To be determined
Vilnius - Kaunas	Technical Assistance (Design) for track modernisation on Vilnius - Kaunas line for speed up to 160 km/h (ongoing project)	2008-2011
	Technical Assistance (Design) for modernisation of signalling on Vilnius - Kaunas line for speed up to 160 km/h	To be determined
	Modernisation of permanent way section Kaisiadorys - Kaunas	2011 - 2013
	Modernisation of permanent way section Vilnius - Kaisiadorys	2013 - 2015
	Design for upgrading of the catenary system of the electrified section Vilnius - Kaunas	2009 - 2015
	Upgrading of the catenary system of the electrified section Vilnius - Kaunas	2011 - 2015

	Modernisation of signalling Vilnius - Kaunas line	To be determined
Kaunas - Kybartai	Design for track modernisation of Kaunas - Kybartai line	To be determined
	Modernisation of permanent way section Kaunas - Kybartai	To be determined
	Modernisation of signalling Kaunas - Kybartai (ongoing)	2009 - 2014
Vilnius Bypass	Technical Assistance (Design) for construction of second track on Kyviskes - Valciunai (Lot 1 and 2) and Pusynas - Paneriai (Lot 3) sections (ongoing project)	2008 - 2010
	Construction of second track on sections Kyviskes - Valciunai *(Assistance is sought by the present application)*	2011 - 2013
	Rearrangement of the junction Pusynas - Paneriai	2008 - 2011
Kaunas Bypass	Design for infrastructure modernisation Palemonas - Rokai - Jiesia bypass	2008 - 2011
	Design for new electrification of the sections Kena - Vilnius and Kaunas - Kybartai as well as the Vilnius and Kaunas bypasses	To be determined
	New electrification of the sections Kena - Vilnius and Kaunas - Kybartai as well as the Vilnius and Kaunas bypasses (Works to be performed in stages to be defined during design phase)	To be determined

B.4.1.c What criteria have been used to determine the division of the project into phases?

17) Plausible reasons for division of the project into phases or stages need to be provided. This may include: stage of project development cycle (e.g. for some parts of the projects documentation is advanced while some others are lagging behind due to some difficulties, like unresolved environmental concerns), administrative capacity (division of project in manageable, less risky packages), financial affordability (available funding), operational reasons (avoid too many disturbances of the traffic), other.

18) Special care should be devoted to the possibility of artificial splitting of the project (so called salami-slicing). This may be done to avoid certain thresholds which are applied in the environmental impact assessment, or in approval process or in procurement.

B.4.2.a Technical description of the investment in infrastructure (main characteristics and component elements)

19) This section needs to present preferred option and its technical feasibility. The purpose of technical description is: (i) to allow judgement about consistency with needs (presented in B.5.1) and project's objectives (presented in B.5.2); (ii) to allow some basic cost benchmarking, technical description should therefore be detailed enough; and (iii) present compliance with technical regulations, standards and agreements (including Technical Standards for Interoperability – TSI's for rail interoperability, where applicable).

20) Application should address issues of traffic safety, both on existing roads (after traffic will move on new one) and on new roads. Directive 2008/96/EC on road infrastructure safety management will have to be implemented by 19/12/2010. This Directive foresees road safety impact assessments to be carried out at the initial planning stage before the infrastructure project is approved and road safety audits of the design characteristics of an infrastructure project, both applicable for TEN-T projects.

21) Technical description should include: description of the alignment/location, map with main works components indicated, design standards/specifications, cost breakdown. Works on lower category roads should also be indicated on map.

22) It is recommended providing cost breakdown which allows basic cost benchmarking. Applications should explain the basis of the cost breakdown (based on priced preliminary estimates, priced BoQ, tender price, invoices received).

23) Examples:

Dimensions of the **motorway** are:
The width of the motorway is standard 29 m (15 m wide roadway - 2 x 2 x 3.75 m, a 3.5 m middle dividing strip, 2 emergency lanes each 2.5 m wide, guiding strips 4 x 0.75 m, and 2 lay-bys each 1.25 m wide).
Basic technical parameters of the motorway are:
- length of alignment: … km
- design speed 130 km/h

Motorway sub- and superstructure:
- Mastic Asphalt coat 4 cm
- Asphalt concrete 6 cm
- Bituminous Makadam 12 cm
- Cement Stabilisation 20 cm
- Crushed Gravel Sub-base 28 cm
- Total 70 cm

Major infrastructure objects to be constructed apart from the main motorway alignment are:
- Road junctions: 1
- Bridges/viaducts: 5 (total length 201 m)
- Tunnels: -
- Overpasses over the motorway: 6
- Underpasses under the motorway: 1
- Overpasses of railway: -
- Overpasses of agricultural roads: 7
- Underpasses of agricultural roads: -
- Length of relocated/reconstructed lower category roads (national, agricultural roads): 5 431 m and 4 626 m.

Relocation of public utilities:
- TT cables … m
- High voltage line (underground and overhead) …m
- Gas lines …m
- Drinking water pipes …m

Safety and environment protection measures:
- Crash-barriers …m
- Safety nets …m
- Protective screens …m
- Noise barriers …m
- Water management facilities …

Along the motorway 2 symmetrically placed service/rest areas are envisaged.

Earthworks: approximately 1 million m^3 of excavation, approximately 2 million m^3 of fill.

The alignment of the motorway with indicated main works components is presented on a map in Annex XY.

Cost breakdown:
- Earthworks
- Structures (bridges)
- Structures (tunnels)
- Pavements
- Utilities
- Protection measures
- Installations, equipment
- Resting areas
- Other (specify)

The project will deliver a fully modernised and electrified **railway line** between A and B, and resignalled and controlled line between A and C. The project will meet the requirements of the relevant TSI's (*list the applicable TSI's!*) as specified by the European rail Agency and AGC/AGTC (*present compliance!*) conditions with a design speed of 120 kph for freight and 160 kph. Overhead line and signalling will be capable of use by 200 kph tilting trains.

The project will comprise the following key elements:

Permanent way:
- Reconstruction of the railway line: original route distance …km, new route distance …km (new formation …km)
- Total length: … route km and …track km
- Track specification: Single running line with passing loops at control post stations.
- Track specification: Ballasted track
- Type of rails in class 1 tracks: UIC 60 continuously welded rail (main lines only)
- Type of rails in class 2 tracks: S49 rail (sidings and station loops only)
- Connecting rails: Continuously welded
- Type of sleepers: Concrete
- Type of rail fastening: …
- Type and number of turnouts: … units of turnouts UIC60-1:9-R300, 87 units of turnouts UIC60-1:18.5 –R1200, … units of turnouts S49-1:9-R300
- Drainage system: Track drainage provided by inclusion of geotextile blanketing in the ballast subgrade leading to parallel track drains. Embankments protected by 1m deep draining layer and capillary ways to track drains.
- Track axis distance (m): N/A for main lines (single track), 4.75m in stations
- Minimum line radius (m): 1,300 mm
- Maximum cant (mm): 70
- Maximum permitted axle weight (tons): 22.5 tonnes
- Maximum gradient (‰): 10‰
- Loading gauge: UIC GC
- Design speed: 160 kph conventional trains 200 kph tilting trains
- Line capacity (per section): number of trains per day

Stations:
- Number of stations to be rebuilt: x stations, y halts. 2 stations will be closed due to lack of traffic. Z station buildings will be reconstructed (A, B, C). Track layouts will be altered at D, E, F to accommodate new track alignments and revised turnouts.
- Number, length and height of platforms: stations will have 400 metre platforms. All other stations to have 220 metre platforms. All platforms to be 760 mm high. Total zz platforms zzz m length.
- Pedestrian subways or overbridges: in stations A, C, D, total length … m.
- Number and cumulated length of stabling tracks: in addition to passing loops at all stations the following stations are provided with additional loops of 700 metres length for stabling trains: B (4), D (6), F (1)

Structures:
- Bridges/viaducts: 5 (total length 201 m)
- Tunnels: -

- Overpasses: 6
- Underpasses: 1
- Overpasses of agricultural roads: 7
- Underpasses of agricultural roads: -
- Length of relocated/reconstructed lower category roads (national, agricultural roads): 5 431 m and 4 626 m.
- Buildings: specify purpose and m^2

Traction power supply:
- Type of voltage system: 25 kV AC overhead line.
- Type of catenary, works: … route km overhead catenary system capable of handling trains with a maximum speed of 200 kph, with galvanised steel poles.
- Substation works: 4 new traction power feeder stations, at A, B, C and D, plus upgrade of an existing feeder at F. 8.3 MVA transformers will be installed. Average distance between feeders is … km.
- High voltage feeder line: Each substation will be fed by 2 independent 3 Phase 110KV connections to the National Electricity grid supply
- Control system: describe locations.

Signalling system:
- ERTMS level 1 signalling will be installed using CBI interlocking with track occupation reported by axle counters.
- Interlockings: 9 CBI interlockings and local control points located at …

Line cabling: … km route long single composite fibre optic cable 9/125µm with 34 Mbps capacity.

Centralised Traffic Control (CTC) post established at A to cover the whole route from A to the B and junctions with connecting lines.

Route completely resignalled to LT standard practice with LED signal heads. Interface with existing signalling systems at B and connecting lines maintained to preserve current functionality.

Level crossings:
- The following existing level crossings will be closed and replaced by new road overbridges: A (at km 202.150), B (at km …), etc.
- The following existing level crossings will be fitted with new automatic barriers: ..
- The following existing level crossings will be closed, the road will be relocated to other crossings: ...

Passenger Information system will provided at each station platform and 1 Electronic information Board at all station platforms and waiting rooms. All equipment operated from CTC using track detection for reporting of train positions. Each platform also equipped with a digital radio controlled clock.

Route equipped with GSM-R communications equipment for communications with operational staff and train cabs, but not used for signalling data transmission.

Telecoms: Existing electro-mechanical PABX along the route will be replaced with digital PABX, linked by trunk lines. Modern Dispatcher Telephone Systems for operation of the railway shall also be provided, as well as interconnecting trunk lines for the digital exchanges, both new and existing, along the route. Emergency telephone plug-points will be provided every 1km, concentrating at the dispatcher's position at the CTC.

Earthworks: approximately 1 million m^3 of excavation, approximately 2 million m^3 of fill.

Cost breakdown:
- Earthworks
- Structures (bridges)

- Structures (tunnels)
- Substructure
- Superstructure
- Turnouts
- Platforms, stations
- Crossings with roads
- Catenary system
- Signalling and cables
- Interlocking
- Telecommunications
- Utilities
- Protection measures
- Other (specify)

B.4.2.b Technical description of the investment in infrastructure (key output indicators and core indicators)

24) Key output indicators are main physical quantities of infrastructure produced with the project which can be simply measured.

25) Output indicators will be included in EC decision and later compared with implemented project.

26) Core indicators are defined in Annex 1 of Working document No. 7 of the EC Indicative Guidelines on Evaluation Methods: Reporting on core indicators for the European Regional Development Fund and the Cohesion.

27) Examples:

Key output indicators (road):
- Length of the constructed **motorway** section: ...km;
- Road junctions: ...
- Bridges: 10 (total length 467 m)
- Overpasses of the roads from NRN: ...
- Underpasses of the roads from NRN: ...
- Overpasses of rail roads: ...
- Overpasses of agricultural roads: ...
- Underpasses of agricultural roads: ...
- Noise barriers (m) ...m
- Safety nets (m) ... m
- Resting/service areas (m2) ...m2

Core indicators:
(14) km of new roads …
(15) km of new TEN roads
(16) km of reconstructed roads
(20) Value for time savings in EUR/year stemming from new and reconstructed roads

Key output indicators (railway):
- Length of route upgraded: ...km
- Track km renewed: ...track km
- Overhead line track km installed: ...track km
- Station track layouts refurbished: ...
- Number and length of bridges: ...metres
- Level crossings eliminated: ...
- Stations resignalled: ...

Core indicators:
(17) km of new railroads
(18) km of new TEN railroads
(19) km of reconstructed railroads
(20) Value for time savings in EUR/year stemming from new and reconstructed railroads

B.4.2.c Technical description of the investment in infrastructure (main beneficiaries)

28) Main beneficiaries are those who benefit most from the project. This may include users of motorway, train passengers, train operators, infrastructure operators (e.g. through lower operation and maintenance cost), population exposed to negative impacts (if project is reducing their exposure to noise, emissions, accidents), etc.

29) It is recommended explaining what type of benefit they will enjoy and to quantify the number of the final beneficiaries as much as possible.

30) Identification of the main beneficiaries should be consistent with demand analysis and CBA (main impacts of the investment should be analyzed and monetized in CBA).

B.4.2.d Technical description of the investment in infrastructure (management of the infrastructure after completion)

31) If project is delivered through PPP explain main arrangements of the PPP, as requested by Application form (selection process for private partner, structure of PPP, infrastructure ownership arrangements, risk allocation arrangements, etc.). The evaluator has to make sure that the complete information is provided and formulate an opinion, e.g. “the very low concession fee leads to a need to subsidize the project during the operational phase. This has not been sufficiently addressed in the concession contract. Furthermore no analysis on the willingness to pay has been undertaken.”

32) If not a PPP: explain who will manage the infrastructure, status of the Agency, funding of the operation and management.

33) Some parts of the infrastructure may be handed over to local communities or other third parties after implementation (e.g. after bypass road is completed former main road through the settlement may be handed over to the municipality).

B.4.2.e Technical description of the investment in infrastructure (part of the TEN-T network)

34) Indicate if part of TEN-T network (identified in Decision No 1692/96/EC and its amendments). Assistance from the Cohesion funds will be given only for transport projects on TEN-T network, outside TEN-T possible only for projects contributing to sustainable transport (e.g. public transport, sub-urban rail, rail where environmental benefits are clearly presented).

35) If project one of 30 priority project this should be indicated too (in Lithuania this applies to Rail Baltica).

B.5.1 Current infrastructure endowment and impact of the project

36) The requested information to be provided in this section is twofold: (i) description of the problems and/or bottlenecks; (ii) reference to the objectives of long-term, strategic plans.

37) When specifying the problems that can be resolved with project the Application should focus on transport problems, not on overall development.

38) Example of transportation problems that can be addressed with a road or rail project: (i) insufficient capacity (2-lane road, single track rail; growing demand); (ii) traffic safety; (iii) location of infrastructure in settlements (noise,

pedestrian/cyclist safety, exhaust, separation); (iv) insufficient bearing capacity, energy supply, pavement/track/subgrade condition; (v) planned land use development, public transport development; etc.

39) Where possible the description of the problems should be quantified: volume and growth rate of traffic in past years with reasons for it, traffic safety record, technical indicators for deterioration of road (e.g. IRI) and track (e.g. length of restrictions in terms of speed and permitted axle load).

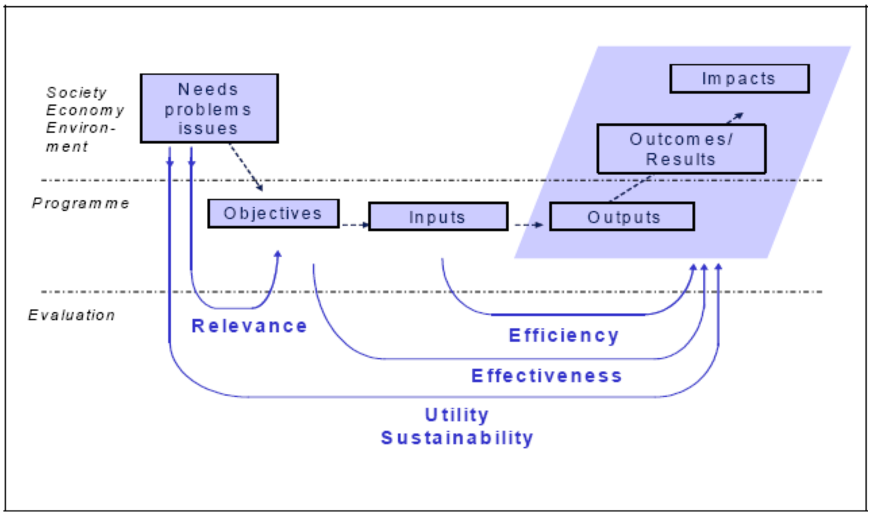
40) Reference to the strategic, long term development plan should demonstrate that the problems were recognized, and that there is a plan to resolve them. Also, the strategy should indicate how the project is fitting into the overall development plan.

41) Long term development plan may be national (LT to provide list of relevant documents) and international (international agreements, Operational programme).

B.5.2 Socio-economic objectives (and targets)

42) The requested information to be provided in this section is twofold: (i) definition of project's socio-economic objectives; (ii) definition of targets.

43) An objective is an outcome that we want to achieve. Objectives should be in a clear relation to the needs, presented in B.5.1. Objectives are relevant if they are solving the stated problems.



Source: Guide on evaluation and monitoring (Working Document 2)

44) In principle it is recommended to develop SMART objectives: Specific (objectives should specify what they want to achieve), Measurable (it should be possible to measure whether the objectives are met or not), Achievable, Realistic (with the resources available), Time (deadlines).

45) Usual socio-economic[1] objectives for road and rail projects are: (i) improve transport efficiency through reduction of travel time; (ii) improve transport efficiency through reduction of operation and maintenance cost (for users, infrastructure operator, train operators); (iii) improve traffic safety; (iv) reduce environmental impact; (v) improve accessibility.

46) The objective should not be to complete a road of a predetermined size between points A and B (this is an output). Also an objective saying: "… development of troubled regions …" is not a good objective. Such objective can be attributed to the programme, not to a single project. To address this a reference to higher level planning document, usually called a programme, strategy, long term development plan, or operational programme should be provided - this is in fact one of the requirements of the Application form in section B.5.1 where current situation must be presented. These long-term planning documents address those wider and more general problems and define a package of different measures to satisfy those needs.

47) A target is quantified aspect of the objectives. It is not possible to provide measurable targets for all objectives, but the Application should set at least following (where applicable): (i) reduction of travel time for xy min; (ii) improve capacity from x to y tonnes/trains; (iii) avoid collisions of certain type, avoid casualties in the intersection; (iv) reduction of noise exposure from x to y dB; etc.

48) Objectives are highly relevant for the CBA: by knowing the needs and purpose of the project the project is put in a context and the CBA assessment should be focused accordingly. If the project is about reducing environmental impact in populated areas this is an indication that scope of CBA should include more detailed evaluation of environmental impacts and not just a usual VOT and VOC calculation. CBA is a tool which will then tell us how good project objectives are met. Please be aware that EC will check the final CBA results against the objectives of the project; the results and objectives must be consistent (see also recommendations for section E.2.2).

B.5.3 Contribution to the achievement of the Operational Programme

49) Here a very specific reference to the Operational programme should be made. This includes identification of the priority axis and comparison with quantified indicators where possible.

50) Road and rail projects are included under priority axis No. 4 and 5 of Lithuanian "Operational programme for economic growth 2007 – 2013". Programme implementation indicators are defined in Chapter 4 Quantification of objectives. Indicators refer to expected results and outputs of the project.

51) Example: output indicator for development of TEN-T network is 315 km of build and reconstructed TEN-T roads. If a project will deliver 35 km, this means that project is contributing around 11% to the objective of the OP.

[1] The emphasis is on socio-economic aspects of the objectives, meaning which economic outcomes generated by the project may be enjoyed by the society.

C. RESULTS OF FEASIBILITY STUDIES

C.1 Provide a summary of the main conclusions of the feasibility studies conducted

52) The purpose of this section is to assure the funding agency (EC) that the best possible solution to the problem was sought and found. When preparing documentation for so called "decision-to-proceed" (or a funding request to bank or funding agency - EU) we usually deal with one option only. It is therefore necessary to present that this is the best one. Based on the information presented and his own experience evaluator has to be able to have an opinion whether the best option was found or not.[2]

53) In order to do that present maturity of the project, reasons why certain option was chosen (advantages against other options), how it was chosen (procedure, criteria – economic, environmental, other) and that the preferred option is feasible in technical, environmental and economic sense.

54) It is recommended listing and summarizing all the pre-feasibility and feasibility studies that were produced in the process of project development. This includes not only feasibility studies, but also some other studies and surveys (traffic surveys and studies, preliminary designs, geological surveys, etc.).

55) Applications requests information whether some form of Community assistance was already used for preparation of documentation or not. This may include studies which were financed through ISPA, CF, ERDF technical assistance, and grants from TEN-T budget for studies.

C.1.1 Demand analysis

56) Demand analysis should present past and future demand (forecast). This is a pre-requisite for CBA and main determinant of its quality.

57) In general, the selection of appropriate traffic forecasting method should depend on expected impact of the project on traffic flows. The principle of cost effectiveness applies here, so for the projects (i) where no change of existing traffic flows is expected or where the impact of the project is limited (e.g. renewal or replacement of existing infrastructure on relatively short sections without significant change in performance) or where the impact is limited to small part of network (e.g. improvement of local significance) the low cost traffic estimation techniques may be applied. This involves estimating future traffic flows based on traffic counts, use of justified growth factors for basic O/D relations of the traffic (either trend or relationship to socio-economic data), etc. (ii) For projects where significant part of traffic is generated by some specific economic activity (e.g. mine) specific well justified growth rates for this O/D relation should be elaborated (iii) For projects which have wider network effect, and possibly also an inter-modal effect traffic forecast should be based on traffic model. Specifically in cases ii) and iii) a network based and O/D related traffic analysis and the usage of a modern, state-of the-art and transparent transport planning model software is recommended. Traffic forecast should show a transparent relation to spatial socio-economic activities of relevant transport system users.

58) Network effects refer to the situation where one project is able to attract of generate new traffic, but as a consequence higher traffic will be recorded also

[2] Is preference for the motorway standard justified; are locations and type of intersections justified; is design speed of the railway line justified?

on adjacent sections. This is highly relevant for infrastructure with user charges (incremental revenue generated not only on the respective section).

59) Evaluator is required to verify that all the relevant sections with significant changes in traffic are included in the analysis and there is a balance in traffic flows in network.

60) Where significant improvements are expected also in road intersections (not only on sections) adequate surveys need to be carried out and state-of-the-art traffic engineering software should be used to simulate and analyze the impact of proposed investment scheme. Expected speed increase and time savings should be estimated using proper and thorough method.

61) It is possible that demand forecast and project's alignment and technical solutions were developed at different points in time. It is necessary to verify the consistency of the appraised project and demand forecast.

62) Traffic forecast could also be negative. It is not unusual to see that in the Without the project scenario for a rehabilitation or an upgrade projects decrease in traffic is forecasted. However this decrease should be plausible and clearly related to the technical characteristics of existing infrastructure (speed restriction, axle load restrictions). Catastrophic scenarios should be avoided; if Do nothing is catastrophic (i.e. leading to end of service), appropriate Do minimum scenario should be developed.

63) Regardless of the method, following information should be presented:

   a) Relevant network (identification of sections, length, basic characteristics), competing roads/modes?
   b) Past (for, say last 10 years) traffic on existing network, in terms of AADT for minimum 4 vehicle classes (rail: Number of freight/passenger trains – for capacity analysis, freight volume, number of passengers – for benefit calculation, trainkm – for revenue calculation; description of passenger traffic should distinguish between faster long distance trains and slower regional/suburban trains);
   c) forecasted traffic on relevant sections of future network (incl. existing sections), with indication if there is any induced traffic; format the same as above;
   d) Growth rates in "Without the project" scenario;
   e) Growth rates in "Do With the project" scenario, with supporting argumentation[3];
   f) Methodology used for traffic re-assignment, change of modal split (traffic model, surveys carried out); indication about O/D of the traffic (% transit, O/D and local traffic), indication of commodity groups carried (applicable for rail);
   g) Current and predicted average operating speed (with the project);
   h) Travel purpose, vehicle occupancy (case-by-case or standard values).

C.1.2 Options considered

64) An option is one of the technical solutions which are able to resolve certain problem. Options may differ in: (i) technology and technical parameters; (ii) location or alignment; (iii) size (design standard); and (iv) timing and division of a project into phases/stages.

[3] Following link provides useful reference: http://ec.europa.eu/dgs/energy_transport/figures/trends_2030_update_2007/energy_transport_trends_2030_update_2007_en.pdf

65) Normally, in this section options studied in the pre-feasibility and feasibility stage of the project should be presented, descriptive and on the map. For each option impact on traffic, environment, safety, investment and operation cost, etc. should be explained.

D. TIMETABLE

D.1 Project timetable

66) Project timetable should be filled in.

67) If a project is implemented with more then one works contract all contracts should be listed individually in lines 5, 6 and 8.

68) Gantt chart or other equivalent presentation of planned implementation of works should be attached.

69) Evaluator should undertake some common sense checks: (i) the dates should be in logical order (e.g. design should in principle be finished before tender is launched); (ii) is this table consistent with table I.5; (iii) is this table consistent with planned implementation in the Feasibility study and in the CBA; (iv) is the time table realistic given the presented maturity of the project?

70) Under environmental impact assessment process phase (item 3), provide the start date and end date of the EIA procedure starting with the application for environmental consent and the end of the EIA procedure after all appeals have been settled, if any, and the decision became final.

D.2.1 Project maturity (technical)

71) Technical maturity should be presented by listing all the technical studies and designs that have been undertaken for the specific project. Level of design detail and completion dates should be presented.

D.2.2 Project maturity (administrative)

72) Administrative maturity should be presented by listing all of the authorizations (e.g. development consents, construction permits) that need to be obtained and actual or expected date when the authorizations were or will be obtained.

73) Concerning EIA main milestones should be presented. Decisions stemming from EIA procedure leading to development consent are to be listed, such as EIA screening decision and/or environmental consent decision. The project can not be submitted for funding if EIA procedure is incomplete or if the final environmental consent decision has been appealed pending court decision. The EIA procedure is considered completed if public information phase after the EIA screening decision or environmental consent decision is finished and if any appeals are resolved and court decisions finished

74) Land use planning decision(s) concerning the project sites have to be provided.

75) Development consent decision(s) (i.e. construction permit(s) or information about expected decisions have to be provided).

76) Concerning land purchase it is recommended presenting percentage of the land procured. Delays, pending procedures (expropriations) should be explained. Evaluator should be able to determine whether there is major risk for delays related to land purchase.

77) Concerning tender procedures it is recommended to explain the current status and possible delays (e.g. appeals, possible re-tendering, etc.). Form of contract (e.g. FIDIC red or yellow book) should be indicated.

D.2.3 Project maturity (financial)

78) If possible a reference to the national budget or other long-term planning and financing documents should be provided.

79) Funding of the project may include borrowing, planned sources should be listed. Indication of the loan procedure should be included (e.g. loan requested, loan granted).

80) If part of the funding is going to be secured through own funds of the Beneficiary adequate commitments or agreements should be cited.

D.2.4 Current state of works (if started)

81) If may happen that project was already started. In such cases indicate which works were already done and a "percent complete" should be provided. If project implemented through more then 1 contract, information should be provided for each contract.

E. COST-BENEFIT ANALYSIS[4]

E.1 Financial analysis

82) It is evaluator's task to check if the methodology and assumptions used in the financial analysis are consistent with EC's "Guide to cost-benefit analysis of investment projects (2008)", national rules for revenue generating projects (*"Bendrai finansuojamų iš Europos Sąjungos fondų lėšų projektų pajamų skaičiavimo ir priežiūros metodika"*), road investment manual (*"Automobilių kelių investicijų vadovas"*). In this Evaluators guide only the main points which need verification are raised. Some of the relevant reference documents are mentioned in the Annex of this Guide.

83) Financial analysis is undertaken from the point of view of the owner of the infrastructure. If ownership and operation are separated, consolidated approach should be applied (e.g. cash flows between owner and operator are neglected).

84) Methodology of financial analysis should be based on discounted incremental cash flows, which are a difference between cash flows associated with "With" project case and cash flows associated with "Without project" case; Without the project (or Do Minimum/Do Nothing) option is a reference case for With the project (Do something option). A reference case is "business as usual" case, with continued operation, but no capacity or performance improvements, just normal maintenance and repairs.

85) Application should clearly present the two scenarios. In many cases Do Minimum = Do nothing (e.g. existing network without modifications, with maintenance continued as before). Please note that Do nothing is not "no change" option, there will still be traffic growth, user cost increase,

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[4] Scope of cost-benefit analysis and analytical steps that a project evaluator should consider when reviewing Major project application are provided in Chapter 2 of the "Guide to cost-benefit analysis of investment projects (EC, 2008)". Outline of project analysis for transport sector is provided in section 3.1, motorway case study in 4.1 and rail case study in 4.2. Main requirements are summarized in this Evaluator's guide, but further methodological explanations can be found in EC's CBA Guide.

maintenance, etc. however in some cases Do minimum scenario is more adequate reference for Do Something: (i) works in the network carried out regardless of the project; (ii) existing network requires improvements to avoid catastrophic scenario (e.g. discontinued operation of rail; if overcapacity demand for road outside peak hours is forecasted); (iii) traffic conditions can be approved without capital expenditure (e.g. optimized traffic flows in the intersections).

86) General assumptions to be verified:

a) Evaluation period (EC Guidance recommends 25-30 years for road, 30 years for rail),
b) Discount rate 5% in real terms (formula for nominal discount rate (1+n)=(1+r)*(1+i));
c) Price level: constant price (indicate the base year) or current price (inflation included). Current price recommended only if significant discrepancies in relative prices expected or if it is suitable for budgeting purposes, national rules for revenue generating projects require analysis in constant prices.
d) Exchange rate used for denomination in EUR.

87) Following cash flows are usually included in the financial assessment of the road and rail infrastructure project: (i) investment cost and residual value, (ii) operation and maintenance cost, (iii) revenues (including subsidies for certain aspects of financial analysis).

88) If possible investment cost should be benchmarked against other similar projects.

89) Calculation of residual value: At the end of the evaluation period infrastructure is not without the value; it will continue to generate revenue. In theory the value of an asset is NPV of all future cash flows, residual value is future value of all cash flows which appear after the evaluation period. EC Guide suggests three methods of calculation: (i) market value at the end of evaluation period; (ii) standard depreciation formulas; (iii) NPV of cash flows in the remaining life of the project. Usually (ii) is used; this method is based on assumptions about useful life of infrastructure components.[5]

90) Operation and maintenance cost should include routine maintenance, periodic maintenance, operation (e.g. toll system in road, traffic management, signalling in rail). With new motorway/rail there will be additional cost for new infrastructure (e.g. second track, new electrification, etc.), routine maintenance of existing infrastructure may remain the same (road) or decrease with decrease of loads (rail), periodic maintenance of roads probably will come later rather then decrease.

91) Periodic maintenance of roads may be calculated using fixed periods (e.g. wear course every 15 years, marking on 7 years, etc.) or spread over entire period or modelled (HDM).

92) Operational cost of reconstructed or rehabilitated rail is expected to decrease since in general new systems require less labour (e.g. signalling, telecommunications).

93) Revenues: Only payments paid directly by the users should be considered (tolls paid by drivers, rail access charges paid by train operators). Operating subsidies may not be included in FRR/C (project) and funding gap calculation,

[5] Road infrastructure: installations 15 to 30 years, road structure 30 years, excavations, embankments, bridges, tunnels 80 to 100 years, indefinite for land. Rail: see RAILPAG.

but may be included in FRR/K (capital) and sustainability. Following assumptions should be presented: (i) tariff, net of subsidies and tax; (ii) tariff changes in time in real terms (if planned); (iii) it may happen that classification of vehicles used for tolling is not consistent with classification of vehicles used for counting and modelling of the traffic; in such cases the relation between the two classifications needs to be explained.

94) Special case of revenue associated with use of infrastructure is vignette which is a time related access charge (in contrast to toll which is distance related payment). In the incremental analysis the key question is whether the project will raise additional revenues or not. Vignette revenue is in general not incremental to the project. Vignettes generally do not increase revenues, because users are buying them to access the network, not only the section in question (given that the price of the vignette doesn't change with extension of network). Despite that it is recommended to present the main elements of the vignette system: Vignette system presentation: (i) type of charge ("Euro" vignette, allowing time-limited access to the network, not a distance related toll); (ii) vehicle types for which it applies (e.g. for trucks over 12 tonnes only); (iii) the network where it applies (e.g. entire main roads and motorway network of … km); (iv) collection system (e.g. vignette revenue will be collected through the State Treasury and will be part of State budget); (v) allocation of collected funds (e.g. for maintenance and development of infrastructure).

95) Based on the above assumptions calculation of the financial performance of the project (FIRR_C, FNPV_C) and a funding gap may be calculated. Funding gap is a proportion of initial investment outlay that cannot be financed by the project itself (invested capital is not repaid with the proceedings from the project) and must be granted externally, without repayment (usual in transport and environmental infrastructure projects where externalities are the main impact of the project). When calculating the funding gap contingencies may not be included, VAT may be included only if eligible cost. Funding gap rate calculation applies in all cases where revenues are borne directly by users, except in following cases (art. 55 of Regulation 1083/2006): (i) projects do not generate net revenues (e.g. roads without tolls); (ii) projects whose revenues do not fully cover the operating cost (e.g. some railways); (iii) projects subject to state-aid rules.

96) After EU contribution was calculated (see section H) FIRR_K and FNPV_K can be calculated. EU contribution will cover only a part of funding gap; other part will have to be secured through national component, therefore FNPV_K will never be positive (but it should be less negative then FNPV_C)! It is used to check for over-compensation of the Beneficiary; this problem may appear if infrastructure manager is receiving subsidies for investment and operation (usually in public transport projects) and subsidies mechanism doesn't take properly into account the fact that part of the assets was financed with grant.

97) Financial sustainability is verified if cumulated total cash flow is equal to zero or positive for all the years considered. Otherwise it should be explained how the investment and operation of the project will be financed. The financiers of the project will want to see the road sector policy, which ensures that the investment is maintained according to the needs; this requires that road use fees are collected and re-channelled to the road sector. If negative only for some years then this is a cash flow problem which could be financed with short term loan or postponed maintenance.

98) Another dimension of sustainability is financial condition of the promoter. In a commercial financing one would check also the financial and operational capabilities of the agency operating the facility; this may be specifically relevant for port and airport operators. However currently this is not formally required and financial sustainability is strictly related to the project not the company. However this issue may be included in risk analysis (see section E.3.3).

99) CBA report is one of the obligatory attachments of the Application. Tables with calculations of financial performance indicators, financial sustainability and EU contribution should be included in the report, preferably also in a form of a spreadsheet which allows verification of calculations. Tables should contain year-by-year cash flows, disaggregated by individual cost and revenues, with formulas and inputs, for With, Without and incremental cases.

100) In the case of non-revenue generating projects financial analysis still applies; it is EC's requirement to calculate the financial performance indicators, table E.1.2 should be filled in (with funding gap set to 100%).

101) According to COCOF note on Art. 55 of Regulation No 1083/2006 it is possible that operating cost-savings can be ignored where it can be demonstrated that they are offset by an equal reduction in operating subsidies. This possibility is allowed also by national rules for revenue generating projects, but use of this option has to be elaborated in the attached documents and justified.

E.1.4 Revenues generated over its lifetime

102) If project is having a significant funding gap it is very unlikely that depreciation could be covered. The answer to the question about coverage of operational cost and depreciation should in principle be "*No*", with explanation if the project is able to cover operational cost (i.e. financial sustainability of the project) or not. If infrastructure use is not charged the answer to the E.1.4.a should be "*Not applicable*".

103) If should be explained that charges are differentiating between the users, except in case where there are no charges. In this case the answer to the E.1.4.b should be "*Not applicable*". If tariff is not already presented under main assumptions for financial analysis, it should be included here.

104) Where charges are applied it should be explained what is the base for the tariff (e.g. consumption of available capacity, wear and tear of the infrastructure that traffic is generating, pollution, etc.). If infrastructure use is not charged the answer to the E.1.4.c should be "*Not applicable*".

105) The aim of the financial sustainability check in road infrastructure projects is to prove that the project beneficiary will be able to bear all financial expenditures required to maintain the service operation of road infrastructure (including engineering structures, traffic management system) during the whole planning period. All costs need to be included, including the minimum routine maintenance costs as well as rehabilitation costs for each year of the project's life. A project beneficiary is obliged to prove that posses enough financial resources, which can consistently match disbursements year by year needed to keep the project operating and maintained. The cumulated net cash flows must be non-negative for all the years of the time horizon considered. In case of projects which do not generate the revenues, a project beneficiary has to prove that he is able to secure the minimal financial

resources to match all disbursements to keep the project operating and maintained.

E.2 Socio-economic analysis

E.2.1 Short description of methodology and key assumptions

106) It is evaluator's task to check if the methodology and assumptions used in the economic analysis are consistent with EC's "Guide to cost-benefit analysis of investment projects (2008)", national rules for revenue generating projects (*"Bendrai finansuojamų iš Europos Sąjungos fondų lėšų projektų pajamų skaičiavimo ir priežiūros metodika"*), road investment manual (*"Automobilių kelių investicijų vadovas"*). In this Evaluators guide only the main points which need verification are raised. Some of the relevant reference documents are mentioned in the Annex of this Guide.

107) Socio-economic analysis is undertaken from the viewpoint of the society. Inputs should be valued at their opportunity costs (which is different then market cost), and outcomes at users' willingness-to-pay (which may be different then market prices or there is no price market at all). This means economic analysis includes changes in the use of resources (time, fuel, health, etc.) but doesn't include transfers within society (toll payments, charges, taxes).

108) Generally only primary market impacts should be included, impacts on secondary markets (e.g. increase of property value) should in principle be omitted.

109) It is necessary that financial and economic analyses are consistent. It may happen that the two were made at different stages during the project development, but the main assumptions relevant for both should be the same (at least within reasonable margins): reference cases (With project; Without project), evaluation period, investment cost, residual value, operation and maintenance cost;

110) Financial values need to be properly corrected for fiscal effects (transfers!). This includes VAT and other indirect taxation (e.g. social security transfers). Indirect taxation is usually in order of 10-15% for capital expenditure, 25-30% for operational expenditure (after deduction of VAT). Fuel price should be net of VAT and excise duties.

111) Treatment of assets already owned by the Promoter (land, buildings) may be different in economic analysis compared to financial. In financial analysis no financial transaction would occur, however in economic analysis these should have been given a fair price and included in the economic evaluation (if they have alternative use then there is a opportunity cost of using these assets; cost of assets with no alternative use are sunk cost).

112) Following benefits are usually included in the economic assessment of road and rail projects: (i) investment cost (the same as for financial, but adjusted for fiscal effects); (ii) operation and maintenance cost (the same as for financial, but adjusted for fiscal effects), (iii) time savings, (iv) vehicle operating cost, (v) cost of traffic accidents, (vi) cost of environmental externalities.

113) Working document 4 recommends 5.5% discount rate (in real terms) unless there is nationally adopted rate and justified with macroeconomic situation.

114) Value of time is depending on following variables: (a) network travel time (veh h), (b) occupancy rate (pers/veh), (c) travel purpose mix, (d) travel time price (EUR/h/pers, per travel purpose). Similar logic applies for freight (cargo holding time).

115) Travel time in road projects is calculated during traffic modelling or when using evaluation software (e.g. HDM, TUBA, COBA, etc.) or in simpler cases using the speed/flow formulas (spreadsheet).

116) Travel time in rail projects is based on assumptions on changes in average operating speed[6] of different train types.

117) There are 3 main economic theoretic approaches for estimating the travel time price: (i) marginal labour productivity, (ii) Hensher approach, (iii) willingness-to-pay. For work trips labour productivity approach (average wage or GDP/capita is widely adopted, for non-work trips WTP approach is used (DGREGIO, WB). HEATCO study is used by DGREGIO as a reference, also published in their CBA Guide, a reference. Can be used for appraisal if no better sources available. Study recommends elasticity of VoT unit values to GDP of around 0.7 (HEATCO values have base year 2002).

118) Vehicle operating cost (VOC) is depending on distance, speed, alignment (geometry), road condition (speed; wear and tear). It is recommended to model minimum 4 vehicle classes (car, bus, light goods vehicle, heavy goods vehicle). Usually this is done with specialized software (in which case main inputs concerning network, vehicle fleet characteristics, speed, unit price for vehicles, fuel, lubricants, tyres, etc. should be presented or explained. Important VOC savings can be expected for shortened route (bridges, tunnels to pass natural obstacles) or significantly improved vertical profile of alignment; VOC can also increase with the project (higher speeds, longer route to avoid settlements).

119) Accident cost include medical treatment and rehabilitation, legal and emergency services, material damages, production loss (premature death, reduced working capacity and extended leave for medical reasons); also value of safety per se (reduced quality of life) may be included (estimated by willingness to pay). Accident cost is depending on: (a) transport work (veh km), per road type, (b) risk of accident (casualties, serious injury, slight injury, material damage only) per veh km, per road type, (c) cost per casualty, serious injury, slight injury, material damage. First two points describe the physical impact of the project, the third one a price.

120) In railway projects following costs and benefits (apart from investment cost) usually appear: (i) time savings for passengers and freight, (ii) changes in train operating cost (if train-km change), (iii) changes in infrastructure maintenance (lower after rehabilitation, higher for newly laid track), (iv) changes in infrastructure operation (lower because of improved efficiency), (vi) environmental effects (if some traffic is attracted from road), (vii) lower road maintenance cost (if significant volume of traffic is attracted from road).

<u>E.2.2 Main economic cost and benefits</u>

121) The table should be filled in, including unit values in second column.

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[6] Design speed – maximum speed depending on technical parameters; commercial speed – speed according to the train schedule; operating speed – real speed achieved.

122) Composition of the benefits can be compared against project objectives. If the project objectives are, say reduction of travel time and maintenance cost, this should ideally be the main benefit of the project (and not perhaps reduced VOC on road).

E.2.5 Main non-quantifiable/non-valuable effects

123) These may include: (i) noise in the settlements (if not included in the calculation of externalities); it is recommended estimating how much population would benefit; (ii) separation effect in settlements (applicable in road bypass type of projects), etc.

E.3 Risk and sensitivity analysis

124) Following variables are recommended to be tested in the sensitivity analysis: (i) investment cost, (ii) operation and maintenance cost, (iii) time, (iv) VOC, environmental savings, (v) traffic volume and growth.

125) Critical variable is the one where 1% change in variable causes variation of financial or economic performance for more then 1 %.

126) Switching value is the % change of the variable where ENPV equals zero.

127) (Detailed) risk analysis is a condition for eligibility of the contingencies, see Working document 4. EC Guidance is requesting quantified risk analysis, based on sensitivity analysis: for variables which proved to be critical probability distribution should be established and simulated (Monte Carlo) how it affects the probability distribution of the ENPV. Beneficiary is requested to present assumptions (form of probability distribution, applied parameters) and results of risk simulation (probability distribution of NPV: most likely value, % probability for negative result, % probability of economic result being in certain range).

128) Beneficiary should identify risk mitigation measures. We note that in this respect EC Guide is insufficient; risk mitigation measures can only be identified if risk analysis is including qualitative risk analysis which allows understanding the reasons, for say cost increase. Usual risk mitigation measures are: (i) contingencies, (ii) geological surveys, (iii) traffic surveys, (iv) risk transfer (yellow FIDIC), etc.

F. ANALYSIS OF ENVIRONMENTAL IMPACTS

F.1 How does the project contribute to the environmental policy objectives?

129) Give separate and distinct answers to each of the points from (a) to (c)

130) Be concise and check the European and Lithuanian policy documents related to environmental protection and sustainable development.

131) Seek the answers in the project description, but do not repeat information and do not copy-paste information provided earlier in the form. If needed, reformulate to answer the specific question.

F.1(a) How does the project contribute to the objective of environmental sustainability?

132) Use related operational programme and/or related EC Directives implementing the corresponding environmental policy. Operational programme contains references to the sustainable development objectives and how they are reflected in the programme. Use EU or national sustainable development strategy.

133) Other relevant policies are climate change and clean energy, such as Climate action and renewable energy package "20 20 by 2020, Europe's climate change opportunity", sustainable transport policy, social inclusion, demography and migration, etc.

F.1(b) How does the project respect the principles of preventive action and that environmental damage should as a priority be rectified at source

134) Use EIA report and other studies such as pre-feasibility study, feasibility study, general design, detailed design or specific environmental studies as sources to explain briefly if any of environmental damage is likely to occur and what preventive actions and mitigation measures the project provides.

135) Discuss techniques, approaches and tools rather than the detailed measures, avoiding overlap with Section F.6

136) Provide information how the project complies with the European Directive on road infrastructure safety management or a relevant national regulation transposing it.

F.1(b) How does the project respect the "polluter pays" principle

137) Pay attention that information is directly linked with E.2.2 regarding main economic costs and benefits identified in the cost-benefit analysis (identification of negative and positive environmental externalities).

138) For road projects refer to the cost recovery schemes such as road charges and fuel taxes aimed at Road Fund or new schemes planned to recover the costs, including environmental costs. If this information is provided earlier in the Application, provide a reference and do not repeat information.

F.2 Consultations with environmental authorities: Have the environmental authorities likely to be concerned by the project been consulted by reason of their specific responsibilities?

139) Give names and addresses of relevant authorities consulted and explain their responsibilities.

140) Refer not only to the EIA competent authorities, but also to all other “statutory consultees” with responsibilities in environmental sector, if it was the case.

141) Mention, if outside the EIA procedure other authorities have made any comments or raised any issues.

F.3 Environmental Impact Assessment

F.3.1 Development consent

142) The answer should be YES only if the development consent was issued. The development consent, based on Article 1(2) of EIA Directive (as amended), is “the decision of the competent authority or authorities which entitles the developer to proceed with the project”. EIA decision (environmental consent decision) does not equal the development consent decision. In most cases it is a construction permit.

143) The answer to this point is YES only if all development consents (in case there are several decisions expected) are issued. List the intermediary development consents and identify the status.

144) Information provided here has to be consistent with D 2.2.

145) A project can be submitted even if the development consent is not issued yet, but only after the EIA decision is issued.

146) Under F.3.1.5 provide information on the competent authority or authorities, which are entitled to issue the development consent.

F.3.2 Application of Council Directive 85/337/EEC on Environmental Impact Assessment (EIA)

147) Check the project classification as appropriate, based on the classification of the EIA Directive 85/337/EEC (as amended):

- Mark the section F.3.2.1 point 1 as YES, in case the project falls under the Annex I of the Directive and proceed to point F.3.2.2;
- Mark the section F.3.2.1 point 2 as YES, in case the project falls under the Annex II of the Directive and proceed to point F.3.2.3;
- Mark the section F.3.2.1 point 3 as YES, in case the project does not fall under either of the two annexes and proceed to point F.3.3;

148) For the section 3.2.2, when covered by Annex I and EIA has been undertaken include the following documents referred to in Article 9 (1) of the Directive:

- EIA decision(s) or construction permit(s), if they include (take into account) EIA decision(s) and other supporting decisions.
- Information on how these documents where made available to the public (when, where, how, for how long, comments received or not, etc.). This information may be contained in the final EIA decision(s), development consent(s) but if not, evidenced is needed regarding the consultation procedure, and how comments received during it have been taken into account during the decision making process. Use a

timetable to outline the EIA consultation procedure carried out for the project in order to provide the required information about the consultations with relevant authorities, the public concerned and, if applicable, with other Member States. Such a table can be included in the end of section F.3.2 or as attachment.

- o Non-technical summary (NTS) of the environmental impacts study carried out for the project. EIA Report is not a part of the funding application and the NTS should speak about the project. It is important that the NTS, which was used in the consultation and decision making process is attached to the funding application. Modified or amended document is not acceptable. In case NTS is incomplete and does not satisfy the requirements of the EIA Directive, a full environmental impact study may be attached. NTS is not a brief summary of the project, but a detail summary of the environmental impact study prepared in non-technical language during the EIA procedure to enable the public to understand the project and to provide comments.

149) For the section F.3.2.3, if the answer is YES (the project is an Annex II project and EIA has been undertaken (based on a screening decision requiring an EIA to be performed), include the documents referred to in Article 9 (1) of the Directive (the same as listed in the point above of the Guidance).

150) Make sure these documents are listed in the content of the funding application and make a reference to the documents in this section also. Make sure nothing is omitted.

151) For the section F.3.2.3, then the project is covered by the Annex II and a negative screening decision was issued, mark the point NO. Attach a negative screening decision to the funding application. Make sure that it contains the explanation of the reasons and give the thresholds, criteria or details case by case examination procedure which was undertaken to reach this conclusion.

152) If the decision of the competent authority, which issued the negative EIA screening decision, does not contain justification using EIA Directive Annex III criteria, the Beneficiary should request a justification based on Annex III from the relevant authority and attach it to the Application. Thresholds, if they are used to do screening, may not replace the screening determination based on the Annex III criteria.

153) Be aware that consultations with other Member States are developed only for projects with potential cross-border impacts. In such a case, the Ministry of Environment and/or Ministry of Foreign Affairs assume the full responsibility for all consultation actions involved. If is not the case, the Beneficiary might insert the text: "The project was not assessed as likely to have cross-border impact."

154) If cross-border impacts are likely the affected MS should have been informed and the relevant documents submitted to the affected MS. It is recommending specifying if the MS indicates that it intends/or not to participate in the EIA procedure. If documents were not yet submitted it is recommended providing details, including the date by which these documents will be submitted. The Application should also explain the arrangements for the information received from the MS to be made available to the authorities and the public concerned in the territory of the MS likely to be affected defined. Where public consultation has been carried out information on the comments received and on other arrangements for informing the public should have been provided.

155) When covered by Annex II of the Directive and a full EIA has been screened out (negative EIA screening decision), explain the reasons and give the thresholds, criteria or case by case examination carried out to reach this conclusion. Thresholds, if they are used to do screening, may not replace the screening determination based on the Annex III criteria. Specifically, the so called “salami slicing” should be avoided.

156) If the decision of the competent authority, which issued the negative EIA screening decision, does not contain justification using EIA Directive Annex III criteria, the Beneficiary should request a justification based on Annex III from the relevant authority and attach it to the Application.

157) When checking screening decision following information is required: (i) reasons and justification that the project will not have significant impacts on the environment are provided in the screening decision; (ii) screening decision should have been made available to the public, details on the comments received, if any, should be provided; (iii) relevant authorities should have been consulted on the screening decision and given chance to provide their opinion; information about consulted authorities and the way their opinion has been considered in the screening decision should be provided.

F.3.3 The application of European Parliament and Council Directive 2001/42/EC on strategic environmental assessment of certain plans and programmes (SEA)

158) If the project is not a part of the programme/plan, which was the subject to SEA procedure, check NO. This is very unlikely, since most projects have already been included in the sectoral operational programmes which were subject to SEA.

159) In case the plan or the programme, which preceded the project, did not have an SEA, provide justification. A screening decision may be available, or justified letter from the competent authority on the lack of SEA can be provided. Explanation has to be provided in the textbox.

160) If the is a programme or plan, which was the subject to SEA procedure, check YES. Provide the full title of the plan or programme, when it was carried out and approved, provide the title of the SEA and its approval date as well as the authority, which issued it. An internet link to the NTS of the SEA in question must be provided.

161) It is not enough to refer only to plans and programmes (and their SEAs) in the framework of the planning for SF. Other relevant plans and programmes are national, regional and local transport plans and programmes, land use and urban development plans and programmes.

162) Projects, which may not have other than SF related plans and programmes, may be non-infrastructure related such as purchase of equipment, devices or rolling stock and soft measures such as training programmes and education campaigns.

F.4 Assessment of impacts on Natura 2000 sites

163) If the project is likely to have significant negative effects on sites included or intended to be included in the Natura 2000 network, the answer should be marked YES and the summary of the conclusions of the assessment carried out according to Article 6(3) of the Habitats Directive should be provided with the funding application.

164) If carried out, the environmental information provided for the assessment should be a separate document attached to, or a separate distinct chapter included in the environmental impact statement. This information has to be also provided along with the funding application.

165) The Beneficiary is required to identify the conclusions of this document and to insert them in a text box in the funding application form

166) If compensation measures were deemed necessary (see Article 6(4) of Habitats Directive), provide a copy of the notification sent to DG Environment by the competent authority. Ask the competent environmental authority to provide a copy of the Information with which the Commission has been notified and/or the Commission approval, if the site host priority species or habitats.

167) If the project is not likely to have significant negative effects on sites included in the Natura 2000 network, mark the form with NO and attach a completed Appendix I declaration filled in by the relevant authority responsible for the Natura 2000 network.

168) The Declaration should be based on the standard format provided in the funding application form. The Declaration itself should cover the following issues for each Natura 2000 site:

- o Name and location of nearest Natura 2000 site(s). Distance to the project boundaries should be clearly indicated on the map;
- o Site's conservation objectives, for which the site was included in the Natura 2000 network;
- o Mention that the appropriate assessment screening was done, if any and if so, provide information on the procedure carried out within the national regulations with the date and the number of screening decision issued;
- o Conclusions of the screening i.e. why the project is not likely to have significant negative effects on sites included or intended to be included in the Natura 2000 network, either individually or in combination with other projects.
- o The map attached to the Declaration should be stamped and dated by the relevant authority responsible for the Natura 2000 network in the scale at least 1:100,000 or the nearest possible scale.

169) If no formal screening has been done at the time of the EIA procedure to identify the likelihood of significant negative effects on sites included in the Natura 2000 network, Declaration has to be attached anyway, stating that no administrative procedure was carried out. Declaration must be supported by the screening decision and justified.

170) Declaration can not be omitted, since it an integral part of the funding application. Projects, such as rolling stock or equipment purchase also have to have Declarations provided from the relevant authorities.

171) Declaration should be dated, stamped and signed by the relevant authority.

F.5 Additional environmental integration measures

172) Every project has to have environmental integration measures planned into their design identified either by the pre-feasibility study, feasibility study or environmental impact assessment. Examples of the measures for major road and rail projects are:

- Environmental monitoring measures, such as noise and air pollution (monitoring equipment is also an eligible cost);
- Mitigation measures to reduce negative effects, such as noise protecting walls, indoor installations to reduce noise and vibration;
- Elements of the project aimed at pedestrians and bicycle transport;
- Measures aimed at raising the environmental awareness of public or employees (such as campaigns, and trainings) as well as measures aimed at increasing traffic safety, etc.;
- Special landscape improvement measures;
- Surface water run off control, clean up and management systems;
- Animal below grade or above grade crossings;
- Protection of trees and landscape;
- Post construction rehabilitation of the landscape.

173) If the project is already constructed or under implementation, information has to be included how the environmental integration measures have been implemented, which can be prepared in a form of a table.

174) All mitigation measures have to be included. Separation can be made for measures introduced due to the EIA procedure, FS or project detailed design.

F.6 Cost of measures taken for correcting negative environmental impacts

175) This must be an estimate (%) of total cost of measure provided in the section above. There must be a link between F.5 and F.6. (F.5 can be more than F.6).

176) Explain the proportion of cost of measures taken to reduce and/or compensate negative environmental impacts. If measures were explained before in the application, no need to go into details, but to make reference to them (group or categorize) and quantify costs.

G JUSTIFICATION FOR THE PUBLIC CONTRIBUTION

G.1 Competition

177) Investments in public road and rail infrastructure do not constitute State aid. The answer in the Application form should be “No”.

G.2 Impact of Community assistance on project implementation

178) The rationale for the Community assistance is to accelerate the necessary investments in the key infrastructure of international and national importance. The answer in the Application form should be “Yes” for questions. The text box below could be used to explain what would be the consequences of non-approval of the Assistance (e.g. delayed or partial implementation, financing through more expensive loans, postponement of the project to indefinite future, etc.).

H. FINANCING PLAN

H.1 Cost breakdown

179) Cost breakdown should be disaggregated following the requested format.

180) Following rules concerning eligibility of the cost apply: (i) cost must be incurred during the eligibility period; (ii) must be eligible under national rules; (iii) cost of land is eligible up to 10% of the total cost (excl. VAT); (iv) there may be some project components which are not presented for co-financing from EU funds because not directly linked to the project objectives; such cost should be declared ineligible; (v) contributions from Cohesion fund are intended for investments in TEN-T and to lesser extent for investment outside TEN-T corridors which have a nature of providing sustainable transport, which clearly present environmental benefits.

181) Contingencies are eligible up to 10% of total cost (excl. contingencies). These contingencies are project or budget contingencies, allocated to cover any additional works which are outside the scope of the tender or the contract and which fall under the responsibility of the project promoter (i.e. force majeur, unexpected works, legal claims, unexpected environmental mitigation measures, etc). This amount is not related to a single contract but covers all activity belonging to the project. These should be distinguished from the contractual or technical contingencies which cover risks of changes in quantities, risk from subcontracts, etc. and are usually included in the priced BoQ which is part of the contract.

182) A price adjustment may be included, where relevant, to cover expected inflation where the eligible cost values are in constant prices. In this case it is necessary to provide calculation of price adjustments (including timing of spending and assumed inflation rates).

H.3 Annual financing plan of Community contribution

183) The table H.3 should contain Community contribution calculated in H.2.1.5 distributed over the time.

184) The planned financial realization should be broadly consistent with planned physical realization, as indicated in section D (e.g. no major financial flows before start of works).

I. COMPATIBILITY WITH COMMUNITY POLICIES AND LAW

I.1 Other Community financing sources

185) It should be indicated in I.1.1 (for the project which is subject of the Application) and in I.1.2 (for adjacent projects or projects on the same corridor) if other EU funds were or are going to be requested for the project. In such cases information should be provided following the requirements of Application form. Similar applies for EIB loans in I.1.3.

186) It is possible that for road and rail projects on TEN-T network financing from TEN-T funds was used for studies or that studies were financed through technical assistance ISPA, etc. If this is the case, the information should be provided here.

GENERAL

187) Consistency check: After individual chapters of the Application have been verified, it is recommended verifying the consistency between them. It may also happen that Application and supporting studies (traffic forecast, feasibility studies, design, EIA) were done at different points in time and based on different assumptions.

188) EIA: One general problem is related to the long preparatory stage of project cycle, spanning sometimes over many years. In many cases, EIA procedures started before accession, and analyses were developed during the period in the context of various procedures (EIA, territorial decisions, building permits). As a consequence, it is not easy to exactly identify which documentation has to be submitted with the application. Therefore the decision on which documentation to attach should be taken on a case by case basis.

189) Scope of the project: it is very important to make sure that the scope of the project in the approving documentation, i.e. EIA decision(s) and construction permit is the same as described in the feasibility study and the Application. This has to be checked very thoroughly.

190) If there are changes to the project scope after the EIA decision, the significance of the changes must be assessed by the authorities. A screening decision may be required from the decision making authority with justification regarding the need of the new EIA procedure.

191) If the development is planned in several stages and the Application only refers to one stage, the procedure for other stages of the development has to be explained and if necessary, additional documentation provided. From EIA point of view, if several EIA procedures were undertaken for the stages, clarification must be made if salami slicing effect has not occurred (i.e. slicing the project into segments and screening out the EIA)

192) Experience with evaluation of received Applications shows following main typical remarks[7]:

a) Inconsistencies between individual parts of the Application (timetable, CBA, procurement),
b) Technical description, components included in the project,
c) Weak option analysis,
d) Development on the corridor,
e) Investment cost breakdown and justification of cost,
f) Eligibility of cost,
g) Verifiable CBA model (tables, spreadsheets),
h) Incomplete EIA documentation (lacking prove of public consultation process, lack of justification according to the EIA Directive Annex III criteria in a negative EIA screening decision);
i) Incomplete application: lack of Declaration or weak Natura 2000 justification in the Declaration.

193) Where Application is covering a project which is part of larger overall project, it is sometimes more sensible to have CBA done for entire section/corridor; because only in this case time savings and improved service will be able to attract new traffic. It is still required that each of the stages/phases is technically, financially, operationally independent, however it is accepted that economic analysis could cover entire corridor. For funding gap calculation the cost part is specific for the stage/phase, but the revenues, operating cost,

[7] This is a generalized summary, situation is very much dependent on the country and project specifics.

residual value could be taken from financial analysis of entire investment in proportion to km or cost of the stage. Alternatively, if the stage is having it's own efficiency which is not depending on implementation of the adjacent projects, the project may be appraised as independent project.

194) No guidance can cover large variety of projects that appear in the reality. It may be used as a check list to ensure that all relevant aspects for the design and completion of the road and rail infrastructure have been taken into consideration. The evaluator of the application has to check the application on correctness, completeness, consistency, plausibility and quality of information. The appraisal should follow certain questions and boxes could be ticked, but it is the examiners judgement if the presentation of the project is satisfactory or not. This judgement should be driven by experience, understanding for the project and common sense and not undertaken in an automatic manner. While all sections and sub-sections may be applicable, some might require more detailed attention than others depending on the particular features of the project (e.g. technical solution, traffic safety, traffic modelling, CBA, EIA). The evaluator will have to judge on a case by case basis and decide if the key aspects of the project are satisfactory or not.

ANNEX: Reference methodological papers and studies

EC CBA Guidelines (2008)
http://ec.europa.eu/regional_policy/sources/docgener/guides/cost/guide2008_en.pdf

Working document 4
http://ec.europa.eu/regional_policy/sources/docoffic/2007/working/wd4_cost_et.pdf

World Bank Transport notes
http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTTRANSPORT/0,,contentMDK:20457194~isCURL:Y~menuPK:337136~pagePK:210058~piPK:210062~theSitePK:337116,00.html

World Bank Handbook on economic analysis of investment operations
http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2007/06/25/000020439_20070625152441/Rendered/PDF/207330REVISED.pdf

HEATCO
http://heatco.ier.uni-stuttgart.de/

Handbook on estimation of external costs in the transport sector (IMPACT)
http://ec.europa.eu/transport/costs/handbook/doc/2008_01_15_handbook_external_cost_en.pdf

Rail Project Appraisal Guidelines (RAILPAG) http://www.railpag.com/

Project Risk Management Handbook
http://www.dot.ca.gov/hq/projmgmt/documents/prmhb/caltrans_project_risk_management_handbook_20070502.pdf

EC Guidance on EIA EIS review
ec.europa.eu/environment/eia/eia-guidelines/g-review-full-text.pdf

EC Guidance on EIA screening
ec.europa.eu/environment/eia/eia.../g-screening-full-text.pdf

EC Guidance on EIA scoping
ec.europa.eu/environment/eia/eia-guidelines/g-scoping-full-text.pdf

EC Guidance document on Article 6(4) of the'Habitats Directive' 92/43/EEC (2007) and Guidance document on the Assessment of Plans and Projects significantly affecting Natura 2000 sites (November 2001)

http://ec.europa.eu/environment/nature/natura2000/management/guidance_en.htm

Interpretation of definitions of certain project categories of annex I and II of the EIA Directive
ec.europa.eu/environment/eia/pdf/interpretation_eia.pdf