

Generic TOR for transport infrastructure SEA

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Question: What specific aspects of SEA should SEA preparers focus on when they apply SEA to the transport sector?

Disclaimers:

- 1) decisions in the transport sector may vary widely in scope and content, e.g. from tax policy to routing. It is thus very difficult to answer this question generically. Below the focus is on corridor and network level (choice of mode, choice of route), although most key issues are relevant for demand management en fiscal measures too.**
- 2) below the focus is on economic, social and environmental issues. Specific transport issues such as mobility, congestion, travel time, etc. are not mentioned. It is assumed these will always be assessed in the transport planning itself. However, transport information is crucial as basis for impact identification in the SEA.**
- 3) Transport issues in SEA may be different in developing countries as compared to developed countries. E.g. noise issues are very important in Europe, but not so much in Africa. HIV/Aids the other way round. The below is aimed at both contexts, with an emphasis on developing countries.**

Answer: Focus should be on the following aspects:

Define context and purpose of SEA

- Before scoping and designing SEA as part of the planning process, define its context and purpose:
 - What is the decision about? What is the level of decision making?
 - policy level (national/regional): regulatory measures, fiscal measures (e.g. tax policy to make petrol more expensive), economic measures, inter-modal alternatives, scenario's – time horizon 25 years
 - plan level (corridor/network): choice of mode; choice of route; spatial alternatives; land use plans, land suitability – time horizon 15 years
 - program level (action plans): choice of potential projects, specific programs such as traffic safety – time horizon 5 – 10 years
 - Who is competent to make that decision? And when will decision be taken? When should which information be available?
 - Who are stakeholder and what do they think?
 - To which other sectors and planning processes is the planning connected and should it be linked? E.g. spatial planning; technical and financial planning; socio-economic planning.

The answer to these questions will determine 1) design of SEA, 2) timing of the SEA, 3) the kind of alternatives to examine, 4) the issues to consider and 5) the methodology to do this and 6) presentation of final findings

Design the SEA (process issues):

- Integration into planning:
 - Does a clear transport planning process exist?
 - If yes, how is ensured that SEA is fully integrated in this (rather than being a separate process)?
 - If not, is the aim of the SEA to serve as the planning process itself? If yes, describe how is dealt with elements such as:
 - transparency, e.g.:
 - how is ensured everybody knows the policy process is starting
 - consistency analysis: new versus existing objectives
 - Take a decision and motivate it in the plan

- participation, e.g.:
 - Find the major stakeholders and contact them
 - Develop a shared vision on problems/ objectives/ alternatives
 - Discuss with all stakeholders the alternative to prefer
- information, e.g.:
 - Set TOR for the assessment & have its quality checked
 - Do the assessment & have its quality checked
 - Monitor the implementation and discuss the results
- Timing:
 - When should which stakeholder be involved?
 - When does which stakeholder need what information?
 - When will key decisions be taken and how to ensure EA report(s) is/are ready in time?
 - When should monitor start and when should it report?
- Resources:
 - Is sufficient staff allocated for the SEA?
 - Are sufficient funds available?

Select the right alternatives

- According to level the following kind of alternatives may be examined (from most strategic to concrete project level):
 - Demand management (how to prevent the need for transport; includes choice of location of housing and working area)
 - Choice of transport mode (water versus rail versus road; modal split)
 - Choice of technology (e.g. technical demands to cars and trucks)
 - Routing of new infrastructure
 - Mitigation, e.g. noise barriers

Consider the key impacts

- In designing and assessing alternatives most important strategic impacts to consider are:
 - Economic and social impacts because of better connections
 - economic:
 - national/regional: more financial profit through better connections (e.g. agriculture, trade, tourism, industry) – link to poverty reduction
 - local: possible economic developments alongside infrastructure, e.g. more income and employment for local communities – link to poverty reduction
 - social:
 - positive: more income for local communities through induced development along line infrastructure (see above; linkage between economic and social effect) – link to poverty reduction
 - negative: disruption of social structure and values
 - influx of workers and truck drivers from outside;
 - migration of young people or males from rural areas to urban areas
 - Economic and social impacts because of construction
 - positive: employment (short term)
 - negative: employment (long term: what happens after construction is ready?)
 - involuntary resettlement
 - Biodiversity
 - loss of area
 - direct: construction of infrastructure

- indirect through encroachment (access to formerly isolated area e.g. conversion of forest into agriculture)
 - fragmentation
 - disturbance
 - direct from road and rail
 - indirect
 - induced development along infrastructure
 - encroachment: increased hunting and poaching; increased legal and illegal hunting; increased firewood collection
- Health/safety:
 - smog and dust in living area
 - HIV/Aids through influx of outside workers and truck drivers
 - road and rail accidents
- Disturbance
 - noise in living area
- Changing land use patterns, e.g. because of induced development and improved transport options
- Climate change (in the case of transport planning at the highest strategic level)

Involve the right people

- Decide how to involve stakeholders:
 - Directly
 - Indirectly:
 - e.g. representative of local communities (e.g. mayors; local NGOs)
 - e.g. representatives of national NGOs
 - e.g. governments agencies (local or regional)
 - Choice of participation methods depend on purpose of involvement, education level and size of the study area
 - Obtain commitment of stakeholders to participate.
 - Involve people timely, i.e. when options are still open. Otherwise participation may backfire and just upset people or de-motivate them
 - Make a communication plan
- How to make a communication plan:
 - Define the purpose of stakeholder involvement
 - Let steam off and sense the emotions
 - Prepare people for next steps in plan development
 - Survey ideas (e.g. local values)
 - Survey ideas (e.g. strategic issues)
 - Involve people in both the SEA and the plan
 - Then decide on methods
- Tackle general problems in participation:
 - Not in my back yard feeling
 - Attention only in the case of people being directly affected
 - Limited authority of the decision maker in the eyes of the public
 - Complexity of the issue.

Choose the correct methodology

- Questions to address before deciding on SEA methodology:
 - Which scope? Which impacts? Which alternatives?
 - How to forecast impacts of alternatives?
 - How to involve stakeholders?
 - How to present the results?
- Methods for scoping:

- Checklists (World bank; EC manual on SEA of transport plans)
- Ask other agencies (small meetings)
- Ask NGOs (larger meetings)
- Identify affected groups: make a first expert assessment; announce in news papers or on the radio and see who comments
- Methods for addressing SEA questions:
 - Expert judgement (experts should be seen as reliable by planners and decision makers)
 - Models (SEA models are more broad-brush than those used in EIA; more emphasis on economic modelling)
 - Maps and GIS
 - Workshops
 - Scenario analysis (scenarios for future development)
- Use of GIS in land use planning in relation to roads:
 - Define bounding of study area: where could the roads potentially be situated?
 - Set the base line: vulnerability mapping; where are the sensitive areas? This has to be done in cooperation with stakeholders from the area; this is not a technical exercise.
 - Develop optimal routes that avoid the vulnerable area. Optimise these routes. Keep in mind that this is not a technical issue; opinions on what is important in an area is a subjective choice (e.g. cost important? Nature important? People important?)
 - The choice of the final route is a political choice. It is not determined by the SEA. The SEA substantiates this choice.

Make information accessible for all stakeholders

- Presentation of findings
 - In the SEA report: maps, tables and texts
 - Make a short integrated report for Parliament and NGOs (i.e. on environmental, social and economic issues)
 - Make brochures for lower governments and the general public
 - Always explain the choices that were made