





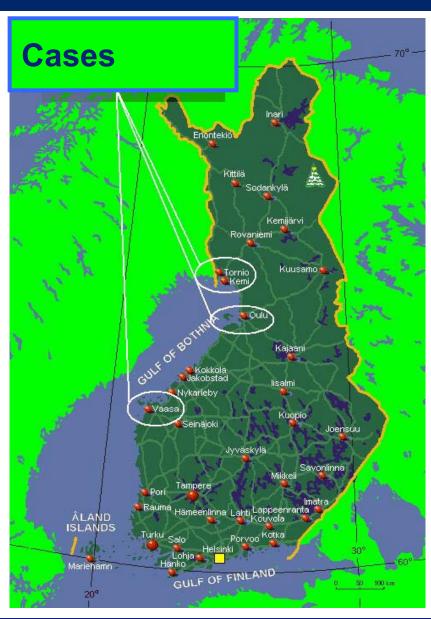
ISSUE: Who watches over socio-economic development?

Natural environment is already well enough under control:

- National legislation is usually very strict
- European NATURA 2000 Network
- Recognition and knowledge of Impacts contributes to well-organised follow-up
- Public awareness puts pressure on activities

Socio-economic development has no Master:

- Regulations for follow-up in EIA legislation are vague practices are unestablished
- Authorities responsible for infrastructure development focus on direct impacts of projects
- Spatial planning rests on Municipalities and Regions with no resources to follow-up
- Managing socio-economic development calls for multidisciplinary approach difficult, laborous and expensive task
- Cooperation between different authorities is voluntary and therefore based on occasional activity



- Fixed link to Raippaluoto Island, bridge opened to traffic 1997
- Motorway between Tornio and Kemi opened to traffic 2001
- <u>Fixed link to Hailuoto Island</u>, not constructed
- EIAs for all the projects were carried out 1992-1996
- All project areas include valuable natural environment, especially Hailuoto
- Small communities on the Islands
- Investments barely cost-effective (like in many cases in Finland due to low traffic volume)
- Investments partly reflect government's regional policy (to keep the remote areas inhabited and capable of living)

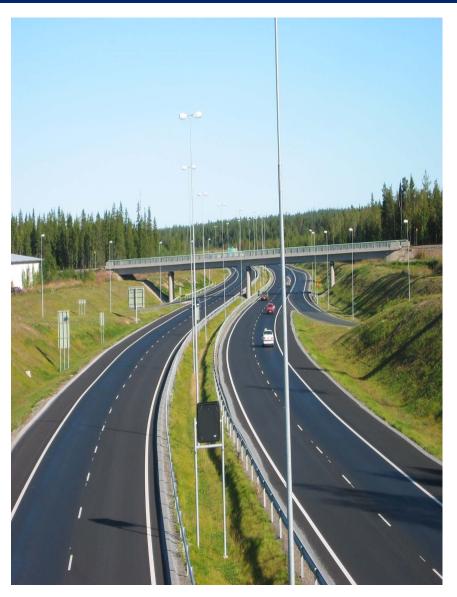




Fixed link to Raippaluoto

- Traffic managed earlier by ferries
- Longest bridge (1045 m) in Finland
- About 2000 inhabitants on the Island, ADT on the bridge is 1800 vehicles
- Identified impacts in the EIA: risks to natural environment deterioration, growing crime, loss of services on the Island, original (swedish speaking) people escaping and new "immigrants invading" the island
- Follow-up focusing on socio-economic issues





Tornio-Kemi Motorway (E75)

- The motorway (20 km) connects three municipalities and reaches to Swedish border. It forms a part of the most important tourism route in Finland (Gateway to Lappland)
- Substantial wood processing industry and steel industry generate heavy traffic.
- Identified impacts in the EIA: risks to threatened species, less noise, good conditions for business life development, significant impacts on landscape and cultural heritage
- Follow-up focusing on groundwater and noise level monitoring, traffic and road structure issues. Some threatened plants were relocated and monitored in the botanic garden of the Oulu University.





Fixed link to Hailuoto

- Traffic managed by two ferries (distance from the mainland 7 km), during winter time on the ice-cap of the sea
- About 1000 inhabitants on the Island, ADT on the ferries is 500 vehicles, which is tripled during the three summer months
- The Island is in many ways unique: biggest island in the Gulf of Bothnia, one of the most valuable bird areas in Finland, 75 % of the island is protected (landscape, bird areas, coasts, wetlands, hogbacks, sea waters)
- Identified impacts in the EIA: significant risks to natural environment deterioration, growing crime, loss of services on the Island, original people escaping, new settlements being developed and tourism growing double. The amount of summer cottages would increase and the way of life would change radically.



What has happened after EIA?

Fixed link to Raippaluoto

Construction (with mitigation measures)



Follow-up

Tornio-Kemi Motorway (E75)

Construction (with mitigation measures)



Follow-up

Fixed link to Hailuoto

- The project itself is still pending
- The Regional Master plan is being ratified by the Ministry of Environment
- The project resurfaces every now and then into public discussion
- The Regional Council is pushing the "final" decision of the connection

Lifespan-thinking?



How was follow-up organised and carried out?

Fixed link to Raippaluoto

- Follow-up started already before construction!
- Strict focus on socio-economic issues
- The Regional Council was the responsible Authority, other parties includied the Road Administration, the Municipality and the Regional Environment Centre
- Reporting 1997, 2000, 2004
- Methods included questionnaires to residents, authorities and entrepreneurs
- Various statistical sources were used (traffic, residents, work places, real estate, etc)

Tornio-Kemi Motorway (E75)

- Some follow-up activities began before construction (noise, ground water)
- Focus on noise, ground water, traffic and road structure
- The Road Administration was solely responsible for the follow-up, the Regional Environment Centre was represented in the Steering Group
- First report 2004
- Methods included questionnaires (mainly about socio-economic issues) to authorities
- Ground water analyses, noise measurements and traffic data used



Main findings in the follow-up studies

Fixed link to Raippaluoto



- Significant growth in traffic volumes
- Distinct growth in the population on the island, especially in the number of young people
- Work places and services (both public and private) have remained on the island
- No evidence on increased crime
- The bridge has strengthened the attract of the island as a good place to live in, to work and spend summer holidays

Kemi-Tornio Motorway



- Traffic volume has gone up a little, especially short trips have increased
- Traffic safety has increased (particularly on the old road)
- Noise problems have decreased significantly (noise barriers)
- No big change in ground water quality or levels
- Revenues of some (traffic dependent) companies have collapsed due to their new, remote location
- New companies are emerging in the vicinity
- Existing companies trust their future stronger
- People's travelling habits seem to be changing



General problems of follow-up studies

- Who actually makes the decision on the scope of the studies?
- On what grounds are the issues for follow-up selected?
- Should public participation be included when deciding upon the scope?
- What role is EIA playing in this process?
- Which (legal?) instrument should be steering the process?



As long as local and individual interests or fascinations set the priorities, the whole concept of follow-up is an illusion.



Specific issues

- Understanding the purpose
- Follow-up should include all the issues categorised significant in the EIA
- Follow-up and monitoring are still mixed up
- Results can be obtained also upon difficult and complex cases
- Development of guidelines, methodologies and tools



Vision of Impact Management



Is there any medicine at hand?

Project scheme:

Analyses of EIAs and follow-up studies for different (transportation) cases

Assessment methods, forecasted impacts, actually detected changes

Focus on socio-economic issues

Indicators for different socioeconomic phenomena will be sought

Assessment methods for different types of projects/phenomena

Recommendations for follow-up practical arrangements



Future?

Better with the whole forest still there!