

Study of the implementation of SEA (Strategic Environmental Assessments) in road projects

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1. Introduction — Amendment of the Environmental Impact Assessment Law and Introduction of SEA—

Under the amendment of the Environmental Impact Assessment Law (promulgated in April 2011), the procedures of the Planning Stage Environmental Consideration Statement (SEA) will be carried out beginning April 1, 2013. SEA legislates environmental impact statements when a project’s position and scale etc. are studied at an earlier stage than the existing Environmental Impact Assessment (EIA), in order to effectively avoid or mitigate serious environmental impacts.

In a road project, at the concept stage (stage when the general route and the basic structure are decided), flexible and smooth communications (PI) with the residents and other concerned parties are accompanied by comprehensive judgments and setting of plans from a variety of perspectives including the environmental, social, economic, etc. Guidelines to the implementation of legally designated SEA at the concept stage of road projects are studied.

2. Analysis of the process of concept stage PI cases

Four cases were abstracted from among concept stage PI implementation cases (24 cases) at projects subject to the Environmental Impact Assessment Law (National Expressways and national highways with 10km of four lane sections or more) etc., and the following situations and challenges were clarified by collecting information and conducting interviews.

- The system is operated as follows in line with the “Plan Enactment Process Guideline at the Concept Stage of a Public Works Project (April 2008, Ministry of Land, Infrastructure, Transport and Tourism)”.

[1] Initiation→[2] sharing challenges→[3] setting multiple proposals and evaluation items→[4] comparative evaluation→[5]selecting proposed plan

- The introduction of SEA legislates part of these processes (evaluation from the environmental perspectives). It is necessary to clearly display this operating guideline at a site.

3. Effectiveness of introduction of concept stage PI

A project planned without performing concept stage PI (case without introduction of PI) and a project planned by performing PI (case with introduction of PI) in adjoining sections on a single route were compared. In a case with PI introduction in a city in particular, the time and cost etc. required at the EIA and city plan setting stage are greatly reduced, clarifying the importance of obtaining the residents’ understanding of the project at the concept stage (Table 1).

Table 1. Comparison of Cases With and Without Introduction of Concept Stage PI

		Yokohama ring road, Northwest route (PI introduced)	Yokohama ring road, North route (PI not introduced)	
EIA, city planning period		Approx. 5 years	Approx. 14 years 3 months	
Cost at EIA, city planning stage	Explanation meetings/public hearings	<ul style="list-style-type: none"> • Environmental impact statement explanation meeting: 4 times, 201 participants • Public hearing: once, presentation by one person 	<ul style="list-style-type: none"> • Environmental impact statement explanation meeting: 9 times, 1,470 participants • Public hearing: 4 times, presentation by 83 people • Supplementary explanation meetings: 191 times 	
	Position document	EIA	<ul style="list-style-type: none"> • 398 (Scoping documents) • 11 (Draft Environmental impact statements) 	<ul style="list-style-type: none"> • 295,947 (Draft Environmental impact statements) • Opinions on all environmental items
		Proposed city plan	<ul style="list-style-type: none"> • Opinions in opposition to the proposed city plan 1, opinions of approval 17. 	<ul style="list-style-type: none"> • Opinions in opposition approx. 134,000, opinions of approval approx. 83,000.
	Discussion of need for and suitability of the project		Opinions limited	Opinions diffused
Environmental countermeasures	Opinions on environmental conservation measures	Two items are objects of submission of opinions, contents limited	Nine items are objects of submission of opinions, contents diffused	
	State of implementation of environmental conservation measures	Environmental conservation items implemented for 9 of 17 items	Environmental conservation items implemented for all items (15 items)	

4. Study of correct operation of SEA

Based on the above, a committee of young academic experts (Chairman: TERABE Shintaro, Associate Professor, Tokyo University of Science) in related specialized fields (civil engineering planning, public administration) was established to study how to correctly operate SEA at the concept stage. It has compiled the Correct Operation of SEA at the Concept

Stage of a Road Project (Material for Further Discussion). (Fig. 1)

1. It is most important to operate it to obtain (not reduce) trust in administration.		
2. Precautions during each process		
[1] Initiation	Specifying implementation of SEA	
[2] Sharing of challenges	Environmental side challenges are essential.	
[3] Setting multiple proposals/evaluation items	Environmental side items are essential	
[4] Comparative evaluation	SEA procedures	Evaluation of environmental aspect for each proposed plan (preparing the Consideration Statement etc.)
		Later, comparative evaluation including social and economic aspects.
[5] Selecting proposed plan	Comprehensively judging environmental, social, and economic aspects	
3. Hearing opinions of the Consideration Statement done as a process integrated with the concept stage PI.		
4. Selection of appropriate experts and clarification of their roles		

Figure 1. Outline of Correct Operation of SEA (Material for Further Discussion)

5. Future Plans

The items changed by the amendment of the Environmental Impact Assessment Law including SEA, and the most recent scientific knowledge will be reflected in the Environmental Impact Assessment Technique for Road Project (Manual) (see below) which will be revised by the middle of 2012.

<http://www.nilim.go.jp/lab/dcg/gijutsu/gijutsu.htm>