How to Improve Japanese EIA legislation by Utilizing International Experience

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Abstract: The Japanese national EIA law was enforced in 1999. After ten years, the EIA law is planning to be revised. There are several issues to be addressed in the revision process, for example, facilitating public communication, target and simplified EIA, environmental authority involvement. This study focuses on how other countries addressed above issues in their systems. England, Canada and South Korea were investigated. The conclusion is that a flexible simplified EIA system combined with the mandate EIA of expanded class 1 category may be one option for a Japanese new system. Then public communication and environmental authority involvement should be improved by utilizing two-way communications especially for in scoping stage starting before a scoping report development.

Keywords: EIA, Japan, England, Canada, Korea, legislative system

1. INTRODUCTION

In 1974 Japanese government introduced the Environmental Impact Assessment (EIA) cabinet directive. After two decades, the Japanese EIA law has introduced as a first national legislation. Main revised points from the directive to the law were the followings. 1) Target projects were expanded and screening process has firstly introduced. 2) Scoping process has newly introduced. 3) Minister of the Environment can make a comment on a final environmental impact statement (FEIS) before its public inspection.

Several practices revealed that there are some issues to be solved in the Japanese EIA. After ten years of implementation, Japanese government has to revise it according to annex article 7 of the law. Kobayashi (2008), Harashina (2008) etc. pointed out that the issues included effective public communication, screening, scoping, environmental authority involvement, etc. Scoping process invites comments from the public through public inspection without holding explanatory meetings. The number of comments to a scoping report was usually small compared with that of a DEIS because of insufficient public communication, such as lack of explanatory meetings. Kurimoto (2008) mentioned that further study needed to get knowledge from other countries practices. It needs to lean from world practices for further improvement of the Japanese EIA law.

2. STUDY METHOD

Japanese Environment Agency(1996), Japanese Ministry of the Environment(2004, 2005) etc. researched world EIA systems. Hayashi(2006) compared several EIAs. These previous studies focused on the analysis of each EIA system but not so much on the detailed comparative study of these.

Purpose of this study is to learn from other countries on the issues to improve the Japanese EIA law. In our whole study, EU directive, England, Germany and France from Europe, USA and Canada from North America and South Korea and China from Asia were picked out. However, in this paper, as a first step three national EIA systems, England, Canada and South Korea¹ were focused (Table1). The results of other country study will be reported in the future. Firstly national legislations, guidances, DEIS/FEISs were collected through literature survey. Second interview survey was done². Comparative study of EIA systems was conducted especially for legal requirements supported by practical examples.

Main points for discussion were the followings: targets and simplified EIA: enhancing environmental authority involvement, and facilitating public communication.

3. LESSONS FROM EIA SYSTEMS

3.1. Scope of targets and simplified EIA

A positive list is utilized in Japan, England and Korea. A negative list is utilized in NEPA of USA. Canada employed both lists.

Canada is applied to all federal projects except not included in the Exclusion List Regulations. EIA requirements are different depending on project characteristics and impacts on the environment. Big projects listed in the Comprehensive Study List Regulations are applied comprehensive study. Except these, screening type EIA is conducted (Canadian EIA act article18.).

In the Japanese EIA law (article2.Definitions 1. and 2.definitions 3.), there are class 1 and 2 categories. Class 1 is for big projects. Class 2 projects are applied screening that is smaller than that of class 1 (article4.). Until now 27 projects were suited for application of screening from Japanese EIA law establishment. But, all

¹ Korean EIA act, its Presidential Decree and its Ministerial Decree were studied.

² The interviews was conducted for the Office of the Deputy Prime Minister, Highways Agency and Environment Agency in England; Environment Canada, Canadian Environmental Assessment Agency, Infrastructure Canada and Natural Resource Canada; and Korean Ministry of Environment and KEI in Korea.

projects have conducted EIA under the law. This indicated screening was not effectively conducted. Harashina (2008) mentioned that the size criteria of class 2 may be too big. Figure 1 compared road project size in each EIA. The size of comprehensive study is biggest. The class 1 of Japan and the schedule 1 of England follows. The coverage of Japan, class 1 and 2, is bigger than that of other country EIAs. The smaller size projects are covered by local governmental systems in Japan. Because all prefectures and government ordinance cities have EIAs in Japan and to avoid duplication between Japanese EIA law and local systems, local EIAs apply smaller size projects excluded from the Japanese EIA law application.

On consequence of the bigger size application by the Japanese EIA law is that the number of FEISs in average was small, namely, less than 20 per year in Japan and around 50 per year by Japanese local governmental EIAs. National total in England and Korea are around 500 and 250 without local FEISs. In Canada the total number was over 5600 although the number of comprehensive study was only 10 in 2003. Apparently the number of Japanese FEIS is small.

The other issue is the treatment of new type projects for Japan, for example, CO_2 storage, deep-sea water intake, dam and buildings removal, wind power, fuel conversion in a power plant (Kurimoto, 2008). In Canada new type projects have to be applied screening type EIA. The Japanese EIA can't deal with new type projects without amendment of the EIA legislative system.

Among 4 EIAs, Canada only has a simplified EIA system. Screening type EIA is simple in process requirement. By utilizing for both Screening type EIA and Comprehensive study, Canada covers almost all type of projects by their system.

3.2. Enhancing environmental authority involvement

In Japan, environmental authority involvement is only one time before FEIS public inspection. In other EIAs, environmental authority is more frequently involved (Figure 2(in the last of the paper)).

England provides opportunities for environmental authorities to be involved, in screening, scoping and FEIS review. In scoping a scoping opinion is prepared by a local planning authority after consultation with statutory consultation bodies(England EIA regulations article10.(1), 10.(2) and 10. (4)). A scoping direction is prepared by the Secretary of State in the case of responsible authority requirement for producing it after consultation with statutory consultation bodies(England EIA regulations article10.(7)). Similar communications are included in screening (England EIA regulations article6.(1)). Canada ensures to be involved for Canadian Environment Assessment Agency and the Environmental Minister in scoping and FEIS review. Korea includes the mandatory involvement of the Korean Ministry of Environment and the Korea Environment Institute (KEI) in DEIS review as well as in voluntary scoping meetings. Mostly environmental authority involvement is conducted in scoping stage.

Two-way communications between a competent authority and/or a proponent and environmental authorities are included: in FEIS review in Japan; in screening, scoping and FEIS review in England; in FEIS review in Canada; and FEIS review in Korea.

3.3. Facilitating public involvement

In the Japanese EIA law, one issue in scoping stage is how to facilitate public involvement (Kobayashi, 2008, Yoshida, 2008 and Harashina, 2008). The number of comments in scoping stage is smaller than that of a DEIS

| | Japan | England | Canada | South Korea | | | | | |
|---------------------------------|---|--|--|--|--|--|--|--|--|
| Name of sys- tem | EIA law | Town and Country Plan- ning (EIA) (England and Wales) Regulations 1999 | Canadian Environmental Assessment Act | Impact Assessment Act on Environment, Traffic and Disasters | | | | | |
| Introduction | 1999 enforced | 1995 revised in2003 | 1988 revised in 1999 | 1999 revised in 2003 | | | | | |
| Target projects | 14 type Class-1 and Class-2 | 20 types for Schedule 1, 11 types for Schedule 2 | Federal action | 17 types | | | | | |
| Local EIA | Most local governments have EIAs. | No local EIA | Each state has an EIA. | Several local govern- ments have EIAs. | | | | | |
| Process | Screening, scoping, im- pact assessment, DEIS, FEIS and follow-up | Screening, scoping, im- pact assessment, FEIS and follow-up | Scoping, impact assessment, FEIS and follow-up | (Voluntary scoping), im- pact assessment, FEIS and follow-up | | | | | |
| Number of EIA cases per year | Around 20 (1998-2007) | Around 500 | Screening 5641 and com- prehensive study 10 in 2003 | 265 in 2006 | | | | | |

Table 1. EIA systems

| Four-la | ne road developme | nt | 2km | 4km 5km | 7.5km | 10km | 50km | | | | | | |
|---------|-----------------------|-------|-----------|-------------------------|---------|-----------|---------------------|--|--|--|--|--|--|
| Japan | | | Local (e | .g.Kanagawa prefecture) | Class 1 | | | | | | | | |
| England | in sensitive area | Sched | ule 3 | | | | | | | | | | |
| | not in sensitive area | | Over 1h | a and schedule 3 | | Schedule1 | | | | | | | |
| Canada | | Scree | ning type | EIA | | | Comprehensive study | | | | | | |
| Korea | | | | | | | | | | | | | |

Figure 1. Size of road projects in each EIA

(Kasaki, 2008, etc). One reason for that is the lack of public communication in scoping stage, namely, without explanatory meetings during public inspection. Also public access to EIA documents is not effectively secured. So it is recommended to improve access to EIA documents, such as, the utilization of a public library and internet during a public inspection period.

In Korea, public involvement is conducted in voluntary scoping meetings composed of local government, Korean Ministry of Environment, KEI, the proponent, experts and citizen group although until now there is no scoping example. Both Japan and Canada have public involvement process in scoping but its characteristic is different. Public involvement of comprehensive study starts before development of a scoping report The way of public communication includes variety of voluntary methods, such as, public hearing, open house, stakeholder meetings etc. Then comments provided by the public are summarized in a scoping report which is submitted to the Environment Minister(Canadian EIA act article 21.(1) and 21(2)). On the other in Japan only public display is obligatory required after development of a scoping report by a proponent.

Summary of comments to a scoping report by the public are included in a DEIS/FEIS for both Japan and Canada. In Canadian EIA act(article21.1(1)) for a project getting big concerns from the public, the other way is prepared, namely, mediation and review panel. However, there is no such system in Japan.

Four EIAs have similar process of DEIS/FEIS review(Figure2.). The difference between England and Canada is that comments from the public are provided to local planning authority(England EIA regulations article21.(1)) and to Canadian Environmental Assessment Agency in a comprehensive study(Canadian EIA regulations article22.(1)). On the other, in Korea, multi-step approach is employed in DEIS/FEIS review. When the number of comments for holding a public hearing exceeds threshold level, a public hearing is organized (Korea EIA law, article6. 1.). In a public hearing, specialists recommended by citizen gives an oral statement. After submission of a FEIS the Minister of Environment consults with the KEI and the specialists(article20. 1.).

The Japanese EIA is the only system which requires only a proponent to organize public inspection. In some case, it causes some troubles. For example, a scoping report was displayed only in a few remote places even though this got nationwide attention. Only way to access it was to go to the places. In the England EIA regulations (article13.(1)), local planning authority proceeds to make a public notice and public inspection for a FEIS. In Canada, a responsible agency makes a public notice through the Canadian Environmental Assessment Registry. In Korea (EIA presidential decree article6. 3.), public notice and public inspection are conducted by local government.

4. DISCUSSION AND CONCLUSION

Firstly regarding the issues on the coverage of Japanese EIA application, the coverage is limited and can 't deal with new emerging project type. This means the important projects which may have potential impacts on the environment may be excluded from EIA application. To overcome the issues, combination with expanding the scope of class 1 and the introduction of simplified EIA instead of class 2, which applies to almost all projects and can treat new type project, seems to be one of the useful option, for example, similar to Canadian concept.

Second as for the issues on environmental authority involvement of Japanese EIA system, the opportunity of the environmental authority involvement is limited and also the chance of two-way communication is smaller than other advanced countries. It is recommended that the Japanese environmental authority involvement should be expanded to scoping stage by possible two-way communications similar to England and Canada.

Third important points for facilitating public communication are timing and two-way communications. Two-way public communications starting before finalizing a scoping report seems to be effective like in Canada. Then public notice and inspection should be conducted by a competent authority or an environmental authority like in England, Canada and Korea, as well as a proponent by effectively utilized web-site.

The conclusion is that a flexible simplified EIA system combined with the mandate EIA of expanded class 1 category may be one option. Then public communication and environmental authority involvement should be improved by utilizing two-way communications especially for in scoping stage starting before developing a scoping report.

Future task for the study is to expand the scope of analysis for wider area of countries.

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Figure 2. EIA process of each system

| | Japan | | Proponent | Competent authority | Local Governments | MUE | Public | England | Proponent | l ocal planning authority | The community of State | The secretary of otate Consultation bodies | Public | - | Canada | Proponent | Responsible agency | Environment Assessment Agency | Environment Minister | Public | Korea | Proponent | Approval agency | Local governments MOE KEI | Public | Not • |
|-----------|-------------------------|--------|-----------|---------------------|-------------------|-----|--------|---|-----------|---------------------------|------------------------|---|--------|---|------------------------|-----------|--------------------|----------------------------------|----------------------|--------|--------------------|----------------------|-----------------|---------------------------------|--------|----------|
| | Notice of screening | | s | R | | | | Request for a screening opinion | s | R | | | | | Project description | s | R | | | | Consultation | s | R | | | • |
| | | , | _ | | | | _ | * | | | | - | | T | | | | | | | N I | | | | | |
| Screening | Screening judgment | | R | s | | | | Screening opinion | R | s | | | | | | | | | | | | | | | | |
| Scre | | | | | | | | Request for a screening direction | s | | F | 2 | | | | | | | | | | | | | | |
| | | | | | | | | ¥ Screening direction | R | | s | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | Request for a scoping opinion | s | R | | | | | | | | | | | | | | | | |
| | | | | | | | | \downarrow | | | | | | | Public consultation | | с | | | с | 1/ | voluntary process | | | | • |
| | | | | | | | | Consultation with statutory consultation bodies | С | с | | С | | | | | | | | | | | | | | |
| 5 | Scoping re | port | s | | R | F | २ | Scoping opinion | R | s | | | | 5 | Scoping report | | s | | R | | scoping report | s | R | | | • |
| Scoping | | | | | | | | Request for a scoping direction | s | | F | 2 | | | | | | | | | scoping meeting | R | s | r <mark>r</mark> r | R | |
| | Public com | iments | R | | | s | 3 | Consultation with statutory consultation bodies | С | | С | c | | | | | | | | | Scoping results | R | s | | | |
| | Summary o public com | | s | | R | | | Scoping direction | R | | s | | | | | | | | | | | | | | | |
| | Comments governor | by | R | | s | | | | | | | | | | | | | | | | | | | | | |

Note:

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- This Figure shows each EIA from the perspective of document-sending process between actors.
- Green cord means stakeholder related to environmental authority.
 - "S" and "R" stand for document sender and document receiver. For example, in the screening in Japan, proponent, as a document sender "S", sends notice of screening to a competent authority, as a document receiver "R".
- There is no screening in the Korea EIA and Canadian EIA. Scoping is obligation to all except the Korean EIA.
- In the scoping, England and Canada start scoping process before development of a scoping report.



Figure 2. EIA process of each system cont.