MINUTES OF DISCUSSIONS

ON

NORTH-SOUTH EXPRESSWAY CONSTRUCTION PROJECT

(DA NANG – QUANG NGAI SECTION)

BETWEEN

JAPAN INTERNATIONAL COOPERATION AGENCY

AND

THE GOVERNMENT OF THE SOCIALIST REPUBLIC OF VIETNAM

Date: October 21, 2010
Place: Hanoi, Vietnam

A mission of Japan International Cooperation Agency (hereinafter referred to as "JICA") had detailed discussions with officials of Ministry of Planning and Investment (hereinafter referred to as "MPI"), Ministry of Finance (hereinafter referred to as "MOF"), Ministry of Transport (hereinafter referred to as "MOT"), the Executing Agency, Vietnam Expressway Corporation (hereinafter referred to as "VEC") and the Implementing Unit, Project Management Unit No. 85 (hereinafter referred to as "PMU85").

The JICA mission and the officials of MPI, MOF, MOT, VEC, and PMU85 hereby confirm the results of their discussions as follows subject to approval by the competent higher authorities of both sides. The JICA mission stated that the results of the discussions will be reported to the Government of Japan for its decision regarding a prospective Japanese ODA Loan for the Project.

1. The JICA mission and the officials of Vietnamese side confirm the main points discussed as shown in Annex I (Project Status Report: PSR) attached hereto.

2. The JICA mission and the officials of Vietnamese side confirm the description of the Project and its estimated cost, implementation schedule, measures to be adopted for the implementation of the Project and other details as shown in Annex II attached hereto.

For JICA

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For PMU85

Mr. Nguyen Ngoc Canh
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Main Points Discussed

I. General Issues for Japanese ODA Loan

1. General Issues

The JICA mission requested that the Vietnamese side pay due attention to the following issues/principles which are to be applied in any project funded by Japanese ODA Loan, in view of sound understanding of the general framework of the Japanese ODA Loan as well as for purpose of smooth implementation of the Project. The Vietnamese side agreed to it and confirmed to take necessary measures to widely diffuse this information to the stakeholders of the Project for their better understanding and better implementation of the Project.

(1) New Procurement Method

The JICA mission explained that JICA's new Guidelines for the Employment of Consultants under Japanese ODA Loans (hereinafter referred to as "Consultants Guidelines") and Guidelines for Procurement under Japanese ODA Loans (hereinafter referred to as "Procurement Guidelines") were introduced in March 2009. The main revised points of the guidelines are as follows;

(1-1) New Method of Consultants Selection

The Consultants Guidelines introduces Quality-and Cost-Based Selection (QCBS), a method that takes into account the quality of the proposal and the cost of the services. However, for cases where QCBS is not the most appropriate, other methods of selection, such as Quality-Based Selection (QBS) or Single-source selection (SSS), are applied.

Quality-Based Selection (QBS) is a method based on evaluating only the quality of the technical proposals and the subsequent negotiation of the financial terms and the contract with the highest ranked consultant.
QBS should be applied only for the following types of assignments:
(a) complex or highly specialized assignments for which it is difficult to define precise TOR and the required input from the consultants;
(b) assignments where the downstream impact is so large that the quality of the service is of overriding importance for the outcome of the project (for example, engineering design of major infrastructure);
(c) assignments that can be carried out in substantially different ways such that financial proposals maybe difficult to compare; and
(d) assignments including supervision of large and complex construction works for which it is particularly important to take safety measures.

SSS shall be used only in exceptional cases. SSS may be appropriate only if it presents a clear advantage over competition:
(a) for tasks that represent a natural continuation of previous work carried out by the firm;
(b) in emergency cases, such as in response to disasters;
(c) for very small assignments; or
(d) when only one firm is qualified or has experience of exceptional worth for the assignment

(1-2) Debriefing to unsuccessful consultants or bidders

Consultant Guidelines introduces the Borrower's debriefing to unsuccessful consultants as

follows: “If any consultant who submitted a proposal wishes to ascertain the reasons why its proposal was not selected, such consultant should request an explanation from the Borrower. The Borrower shall promptly provide an explanation as to why its proposal was not selected.”

Procurement Guidelines introduces the Borrower’s debriefing to unsuccessful bidders as follows: “If any bidder who submitted a bid wishes to ascertain the reasons why its bid was not selected, such bidder should request an explanation from the Borrower. The Borrower shall promptly provide an explanation as to why its bid was not selected.”

(2) Terms and Conditions of the Japanese ODA Loans

(2-1) Interest rate and repayment period

The JICA mission explained that the current terms and conditions of the Japanese ODA Loan, which would be committed by GOJ on and after 1 April 2010, are as follows and they would be confirmed at the time of GOJ’s commitment for the Project.

- Interest rate for construction: 1.20%, 0.55%, 0.25% and 0.20% in case of “General Terms,” “Preferential Terms,” “Climate Change Terms” and “Special Terms for Economic Partnership (STEP)” respectively with options.
- Interest rate for consulting services: 0.01%;
- Repayment Period: 30 years (including 10 years grace period) and 40 years (including 10 years grace period) in case of “General terms” as well as “Preferential Terms” “Climate Change Terms” and “STEP” respectively with options.
- Commitment charges: 0.1%; and
- Coverage of a Japanese ODA loan over total costs of a project: 100% of the eligible cost. The Vietnamese side agreed on it.

(2-2) Commitment Charge

(a) The JICA mission and the Vietnamese side confirmed that interest during construction and commitment charge will be covered by Japanese ODA loan. The Vietnamese side agreed that commitment charge, with the rate of 0.1% per annum of the amount of undisbursed balance (loan commitment amount minus disbursed amount), would be accrued from 120 days after the signing of Loan Agreement (hereinafter referred to as “L/A”) for the Project.

(b) The amount of the commitment charge should be calculated on the prorated daily basis. If the L/A is not effectuated in 120 days from the signing date, the commitment charge should be paid on the first payday after the effectuation retroactively from the accrual of commitment charge.

(c) The following amount will be reserved in the loan amount exclusively for the payment of the commitment charge: Loan Amount×number of years of the disbursement period×0.1%. Since the loan amount and disbursement period will be fixed at a later stage of the loan processing in consultation with the Government of Japan, the accurate amount to be reserved in the loan for the payment of commitment charge will be announced to the Vietnamese side at the time of prospective loan negotiation.,

(2-3) Terms and Conditions for procurement

The JICA mission explained that repayment and grace periods and conditions for procurement of consulting services will be the same as those for main components.

(3) Counterpart Fund

In spite of the coverage of a Japanese ODA loan over total project cost mentioned above, the Vietnamese side is requested to prepare counterpart fund for non-eligible cost such as (a)

administration, (b) tax and duties, and (c) land acquisition and resettlement. The Vietnamese side is also requested to mobilize additional financial resources in case the actual project cost overrun the original cost estimate and JICA's contribution becomes insufficient.

(4) Status of the present Minutes of Discussion

The present Minutes of Discussion constitutes the sole common project document shared by JICA and the Vietnamese side while several other technical documents are issued by the Vietnamese side to meet requirements arising from its internal procedures (i.e. bidding plan, F/S, etc.). Both side agreed that, should there be discrepancies between the present Minutes of Discussion and those internal documents, the former should precede the latter so as to implement the project in accordance with the schedule and procedure which have been agreed in Minutes of Discussion. Both sides also agreed that, when any serious issue may happen, the Vietnamese side would consult with JICA for necessary modification.

(5) Procurement Procedures

(5-1) Documents on Procurement Procedures

A copy of the following documents was handed over to the Vietnamese side for their reference and appropriate actions at the implementation stage:

- Handbook for Procurement under Japanese ODA Loans (March 2009)
- Sample Bidding Documents

Detailed Procurement Schedule is also annexed as Attachment 5 to share common understanding on the timeframe and important milestones in relation to the procurement process.

(5-2) Selection of Consultant

Both sides shared the view that timely employment of consultant will be definitively important for smooth implementation of the Project. In this context, the Vietnamese side requested that, in order to compile a short list for selection of consultant as soon as possible, JICA provide, even before signing of the prospective Loan Agreement, information on consulting firms having adequate capacity to carry out the tasks described in the draft Terms of Reference included in the Annex I of the present Minutes of Discussion

(6) Safety of the Project

(6-1) The Vietnamese side agreed to notify JICA immediately in case that any fatal, major or other accident, which may involve serious injuries, occurs during the implementation of the Project.

(6-2) In an effort to assure the safety during the construction work of the Project, the Vietnamese side shall take following actions;

(a) Bidding documents for procurement of works and those for procurement of supply and installation of plant require that:

(i) The personnel for key positions to be proposed by bidders shall include an accident prevention officer. (Refer to Clause 2.3 Personnel, Section III. Evaluation and Qualification Criteria (following prequalification) or Clause 2.5 Personnel, Section III. Evaluation and Qualification Criteria (without prequalification) of the Sample Bidding Documents under Japanese ODA Loans (Procurement of Works), June 2009)

(ii) Bidders shall furnish a safety plan. (Refer to Clause 16. Documents Comprising the Technical Proposal, Section I Instructions to Bidders of the Sample Bidding Documents under Japanese ODA Loans (Procurement of Works), June 2009)

(iii) Contractors shall include concrete safety measures in the programme stipulated in the

Clause 8.3 Programme, Section VII General Conditions of the Sample Bidding Documents under Japanese ODA Loans (Procurement of Works), June 2009 (hereinafter referred to as "the Programme"), reflecting the contents of safety plan mentioned above.

(b) The following tasks shall be included in Scope of assignments of the Terms of Reference (TOR) for the consultancy services:

(i) When preparing or reviewing bidding documents for procurement of works and those for procurement of supply and installation of plant, the consultants shall make sure to meet (a) above.

(ii) The consultants shall review the safety plans submitted by the bidders from the point of view of securing the safety during the construction. (Refer to Paragraph (2), Section 4.02 Scope of the Project and of the Consulting Services of the Guidelines for the Employment of Consultants under Japanese ODA Loans, March 2009).

(iii) The consultants shall review the Programme submitted by the contractors from the point of view of securing the safety during the construction and require them to submit further details, if necessary.

(iv) During the supervision of the construction work, the consultants shall confirm that an accident prevention officer proposed by the contractor is duly assigned at the project site and that the construction work is carried out according to the safety plan as well as the safety measures prescribed in the Programme. If consultants recognize any questions regarding the safety measures in general including the ones mentioned above, the consultants shall require the contractors to make appropriate improvements.

(7) Submission of Reports

- Progress report: The progress report for the Project should be submitted by the Vietnamese side to JICA on a quarterly basis until the Project is completed in the form of the Aligned Monitoring Tool (AMT) which has jointly been introduced by major donors to Vietnam in view of aid efficiency;
- Project Completion report: A project completion report should be submitted by the Vietnamese side to JICA promptly, but in any event not later than six months after completion of the Project, in the form of Project Status Report (PSR) attached hereto as per Annex II.

(8) Publication of Ex-Ante Project Evaluation Report

JICA will publish the "Ex-Ante Project Evaluation Report" soon after the signing of a Loan Agreement for the Project. The report consists of eight major items: 1) project name, 2) necessity and justification of the Japanese ODA Loan, 3) objectives of the Project, 4) project description, 5) operation and effect indicators (performance indicators), 6) risk due to external factors, 7) evaluation results of past similar projects and lessons learned, and 8) evaluation plan.

(9) Independent Audit

If a loan is approved by JICA, an ex-post procurement audit may be carried out during/after the implementation stage by independent auditors, who will be designated by JICA, in order to ensure the fairness and competitiveness of procurement process, in case where JICA considers it necessary. The cost of employment of the auditor will be born by JICA.

(10) Public Relations (PR) of the Project

(10-1) In an effort to foster the friendship between Japan and Vietnam, the Vietnamese side agreed to inform the general public of the use of the Japanese ODA for the Project Loan through mass media (TV and Press, etc.) and to publicize at appropriate occasions such as the

inauguration and completion of the Project. In such occasions, the Vietnamese side agreed to announce accurate information of Japanese assistance by referring to Japanese ODA Loan. The Vietnamese side agreed to invite officers from the Japanese Embassy and JICA to the opening and completion ceremonies.

(10-2) The Vietnamese side agreed that they would install items such as commemorative panels which describe the use of the Japanese ODA Loan at the project sites. The example for design of the panels is shown in Attachment 14**.**

2. Environmental Consideration

3. HIV/AIDS Prevention

(1) Both sides agreed that HIV/AIDS prevention program should be included under this Project, considering that the Project would gather a lot of workers for civil works during the implementation stage, which may raise risk of HIV/AIDS infections.

(2) The Vietnamese side informed the JICA mission that HIV/AIDS activities for the whole section of the Project, including both Japanese ODA Loan portion and the WB Loan portion, will be financed under the WB loan. The JICA mission agreed on it.

(3) VEC further informed the JICA mission that the objectives of the above mentioned activity are several folds: (i) lower the risk of HIV/AIDS transmissions among targeted groups: road agency staff, construction works, sex workers, and residents in the project affected areas; (ii) reduce in the rate of HIV infections among the targeted groups; and (iii) support institutional strengthening with MOT by increasing awareness of the importance of HIV/AIDS in the transport sector. Draft TOR of the activity is as shown in Attachment 15.

Project Status Report
on
North-South Expressway Construction Project
(Da Nang – Quang Ngai Section)
Loan Agreement No XX-XXX

Organization Information

Borrower	**Ministry of Finance** Person in Charge: Ms. Nguyen Thi Thanh Ha, Deputy General Director Department of Debt Management and External Finance Contacts: Address: 28 Tran Hung Dao , Hanoi, Vietnam Phone/FAX: +84 -4- 2202828 / +84-4-2208020
Line Agency	**Ministry of Transport** Person in Charge: Ms. Nguyen Thanh Hang, Deputy Director General, Planning and Investment Department Contacts: Address: 80 Tran Hung Dao St., Hanoi, Vietnam Phone/FAX: +84-4-3942-0197 / +84-4-3943-291
Executing Agency	**Vietnam Expressway Corporation (VEC)** Person in Charge: Mr. Mai Tuan Anh, Deputy Director General Contacts: Address: Hamlet 2-Linh Nam Ward, Hoang Mai Dist. Hanoi, Vietnam Phone/FAX: +84-46430273/+84-46430270
Implementing Unit	**Project Management Unit No. 85** Person in Charge: Mr. Nguyen Ngoc Canh, General Director Contacts: Address: 184 Nguyen Sy Sach St., Vinh City, Nghe An, Vientam Phone/FAX: +84-38-356-2823 / +84-38-384-1253

Outline of Loan Agreement:

Source of Finance	JICA: Not exceeding ¥ _____ mil. World Bank: Not exceeding $ 615.15 mil. Government of Vietnam: rest of the project cost
Terms and Conditions	For JICA TO BE FIXED AT THE TIMING OF L/A NEGOTIATION -Interest Rate: 1.2 % p.a.(construction), 0.01 % p.a.(consulting services) -Repayment Period: 30 years, including 10 years of grace period -Tying Status: Untied

* Note: "the Project" indicates the whole area to be funded under World Bank loan and Japanese ODA loan, namely, "the North-South Expressway Construction Project (Da Nang- Quang Ngai Section)" in this PSR, and "the JICA portion" indicates the project scope to be funded under Japanese ODA loan in this PSR.

1: Project Description (Relevance)

1-1 Project Objective

Original:(*P/M*)
The objective of the Project is to meet increasing traffic demand, to reduce travel time and uncertainly for passenger users and freight, and to enhance travel safety for road users, by constructing an expressway from Da Nang to Quang Ngai – a top priority section of the North-South Expressway, thereby contributing to economic growth and international competitiveness of Da Nang City and Central Vietnam.

Modified objective and its reason(s):(*P/R and PCR*)
During implementation: E/A: Indicate reason for change as part of progress report
Upon completion: E/A: Indicate reason for change upon completion, as PCR.

1-2 Necessity and Priority of the Project

- Consistency with development policy, sector plan, national/regional development plans and demand of target group and the recipient country.

Original: (*P/M)*

1) To meet the future demand in increased traffic volume

The transport sector has made significant contributions to the country's socio-economic development, by providing necessary access for the population to basic social infrastructure commercial opportunities. Due to the economic development, the demand for more transport infrastructure and related services continues to increase. Much of the road transport development projects to date were based on rehabilitation and upgrading of the existing roads. This has certainly contributed to facilitating the economic activities in the country. The GDP growth of the country and the project area has significantly increased as shown in Table 1 However, rapid economic growth has in turn accelerated the country's traffic growth, in particular in urban areas, including Da Nang city. The expansion of the vehicle fleet since 1995 is over 150%, and it is forecasted to grow by an additional 300% by 2020. This has started to creating new capacity constrains on the country's road network, and the expected rapid increase in vehicle ownership will likely place further pressure on the need to increase road network capacity.

Table 1: GDP of the Whole Country and the Project Area (current price)

Unit: Million dong

Province	1995	2000	2005	2006	2007
Da Nang	2,340,881	4,952,000	11,517,018	13,869,063	15,201,798
Quang Nam	2,205,102	4,243,500	8,802,368	10,596,565	13,005,853
Quang Ngai	1,805,894	3,229,700	6,572,200	7,697,400	10,112,700
Total of project area	**6,351,877**	**12,425,200**	**26,891,586**	**32,163,028**	**38,320,351**
Overall country	**228,900,000**	**441,700,000**	**839,200,000**	**974,300,000**	**1,144,000,000**

Source: Statistical Yearbook from provinces and Statistical Yearbook of Vietnam

2) To promote in socio-economic development of Central Vietnam

The Project is expected to be an important infrastructure in promoting inter-provincial connection and supporting socio-economic development of Central Vietnam. Saving of travel time and cost contribute to attract tourists and to create better investment conditions for industrial parks and economic zones. Existing and planned industrial parks and economic zones are as shown in Attachment 2.

3) To promote traffic safety
Reduction of traffic accident is one of major issues in traffic policy in Vietnam because there are presently more than 13,000 victims per year and still increasing. National Traffic Safety Committee (NTSC) and Provincial Traffic Safety Committee (PTSC) under MOT and Provincial People's Committee are being active for this mission.
One of major reason of traffic accident is "Mixed traffic", especially during night time, consists of industrial traffic and living traffic, long trip traffic and short trip traffic. Industrial traffic with long trip shall be carried by expressway and to be separate from living traffic.
Da Nang – Quang Ngai expressway shall be built in order to reduce number of traffic accidents by provision of industrial logistic corridor separate from living traffic on NH1A.

4) To align the national Expressway network proposed by the Master Plan of Expressway in Vietnam
Given the needs of the expanding economy, the Government of Vietnam (hereinafter referred to as "GOV") has embarked on the development of an expressway network. An expressway network master plan was completed in 2007, supported by the Asian Development Bank, and approved by Prime Minister in 2008 as "Vietnam Expressway Network Developing and Planning until 2020 and the view for post 2020" (Decision No. 1734/QD-TTg). The plan emphasizes the development of the north-south corridor parallel to National Highway No. 1, with expressways forming radial and circular links around the major cities. The plan includes a total of length of 3,262 km of the North-South Expressway and prioritizes the section of the Project, Da Nang – Quang Ngai, as the center of road network of Central Vietnam. The Da Nang- Quang Ngai section is also included in the Detailed Plan of the Eastern North-South Expressway issued as the Decision No. 140/QD-TTg dated 21/01/2010.

5) Agreement between Vietnam Prime Minister Nguyễn Tấn Dũng and Japanese Prime Minister Abe: The North-South Expressway Project, including the section of the Project, was proposed to Japanese Prime Minister Abe from Prime Minister, Nguyễn Tấn Dũng at the Vietnam-Japan bilateral summit meeting on 19th November, 2006. In response to this request, on May 2007 when Deputy Prime Minister Pham Gia Khiem visited Japan, Japanese Prime Minister Abe intended to sincerely consider the project as Japanese ODA.

Attachment 2: List of Industrial Parks and Economic Zones around the Project Area

Actual: *(P/R,PCR)*
During implementation :E/A: Indicate reason for change as part of progress report
Upon completion: E/A: Indicate reason for change upon completion, as PCR.
Attachment(s): required only when they are revised.

1-3 Rationale of the Project Design

- Timing, scale, technology of the project

Original: *(P/M)*
1) Rationale of the location
The Project is connecting the nation's forth largest city, Da Nang and the provincial capital of Quang Ngai, trough the provincial capital of Quang Nam , Tam Ky. The route starts from the south of Da Nang city to the west of Quang Ngai city, passing Chu Lai Open Economic Zone and Dung Quat Industrial Zone. The route justifies as with the reason that the route is one of the top priorities of expressway network in the Expressway Master plan.

2) Rationale of the Timing
According to the Detailed Plan of North-South Expressway (Decision No. 140/QD-TTg), the route should be started implementing by 2011 and completed by 2014 to meet the demand of traffic volume as analyzed below. While there are still ample NH1 road capacities as indicated in Table 2, the very high travel demand growth projected for the section (Table 3) mean that the

NH1 would likely be very heavily trafficked after 2020. In this regard, the Project is supposed to be implemented immediately.

Table 2: Base Year Modeled Flows and V/C Ratios

Link	Car	Bus	Light Truck	Heavy Truck	All Vehicle	All PCU	V/C
Phu Hoa - Hoa Cam	2,102	1,745	4,913	2,850	11,610	21,865	68%
Hoa Cam - Ho An	2,093	1,841	3,781	1,781	9,496	17,604	42%
Hoi An - Long Xuyen	2,107	1,857	3,798	1,709	9,471	17,470	42%
Long Xuyen - Ha Lam	2,155	1,866	3,860	1,718	9,600	17,676	57%
Ha Lam - Tam Ky	2,199	1,885	3,950	1,736	9,769	17,966	40%
Tam Ky - Chu Lai	1,525	1,589	3,371	1,278	7,762	14,335	47%
Chu Lai - Dung Quat	1,570	1,538	3,431	1,264	7,804	14,378	38%
Dung Quat - Binh Son	1,523	1,652	2,640	1,096	6,910	12,654	33%
Binh Son - Quang Ngai	1,463	1,627	2,655	1,097	6,841	12,602	33%
Quang Ngai - La Ha	1,359	1,416	2,647	1,052	6,474	11,780	38%

Source: Review of the Feasibility Study for Da Nang – Quang Ngai Expressway Project (CPCS, 2010)

Table 3: Traffic Indices

Year	Base case			Low case		
	Car	Bus	Truck	Car	Bus	Truck
2009	1.000	1.000	1.000	1.000	1.000	1.000
2015	2.383	1.885	1.522	2.202	1.773	1.459
2020	4.246	3.009	2.170	3.627	2.654	1.980
2025	6.761	4.513	3.064	5.392	3.749	2.657
2030	9.980	6.390	4.218	7.474	5.017	3.472
2035	13.738	8.571	5.585	9.722	6.388	4.374
2040	17.955	10.939	7.128	12.057	7.772	5.321

Source: Review of the Feasibility Study for Da Nang – Quang Ngai Expressway Project (CPCS, 2010)

Actual: (*P/R,PCR)*
During implementation: E/A: Indicate reason for change as part of progress report
Upon completion: E/A: Indicate reason for change upon completion, as PCR.

2: Project Implementation (Efficiency)

2-1 Project Scope

Table 2-1-1a: Comparison of Original and Actual Location

Location	**Original:** *(P/M)* Beginning point of the Project: Crossing with National Highway No. 14B at about KM23+908 of QL14B, Hoa Vang district, Da Nang City. Ending Point of the Project: Crossing with the planning road of the West of Quang Ngai City. **Attachment 1: Project Location Map**	**Actual:** *(P/Rand PCR)* During implementation: E/A Upon completion: E/A **Attachment(s):Map**

Table 2-1-1b: Comparison of Original and Actual Scope

Note: the scope below is only for the JICA portion. The detailed items are all mentioned in the Attachment 6: Cost Breakdown and Scope of Work for Construction. The demarcation of scope between JICA, World Bank and GOV is mentioned in the Attachment 3.

<table>
<tr><th>Items</th><th>Original</th><th>Actual</th></tr>
<tr><td>Construction works of 4 lane expressway between Da Nang – Tam Ky section</td><td>Expressway: 65 km (Design Speed 120km/hr)
Intersection (number): 4
<table>
<tr><th>Name</th><th>Sections</th><th>Intervals (Km)</th><th>Connection to</th><th>Type</th></tr>
<tr><td>Tuy Loan</td><td>Km0</td><td>0.00</td><td>QL14B</td><td>cloverleaf</td></tr>
<tr><td>My Son</td><td>Km20.2</td><td>19.990</td><td>ĐT 610A</td><td>trumpet</td></tr>
<tr><td>Ha Lam</td><td>Km41.121</td><td>20.921</td><td>QL14E</td><td>trumpet</td></tr>
<tr><td>Tam Ky</td><td>Km64.2</td><td>23.079</td><td>ĐT616</td><td>trumpet</td></tr>
</table>
Major Bridges (number): 2
<table>
<tr><th>Name</th><th>Km</th><th>Length</th><th>Type</th></tr>
<tr><td>Ky Lam bridge</td><td>Km17.7</td><td>962 m</td><td>Pressed box girder (Height of girder changes)</td></tr>
<tr><td>Chiem Son bridge</td><td>Km20.2</td><td>410 m</td><td>Pressed box girder (Height of girder changes)</td></tr>
</table>
Tunnel (number and Km): 2 @ 540m</td><td rowspan="2">During implementation : E/A: Indicate reason for change as part of progress report</td></tr>
<tr><td>Works for Serving Management and Operation</td><td>Tollgate (number): 9
<table>
<tr><th>Name</th><th>Section</th><th>Up or Down line</th><th>Type of toll collection</th><th>Toll lane</th></tr>
<tr><td>Main Toll Plaza No.1</td><td>Km4.75</td><td>Up</td><td>Semi automatic</td><td>12</td></tr>
<tr><td>My Son Toll Plaza</td><td>Km20.2</td><td>Up and Down</td><td>Semi automatic</td><td>7</td></tr>
<tr><td>Ky Lam Toll Plaza</td><td>Km41.121</td><td>Up</td><td>Semi automatic</td><td>7</td></tr>
<tr><td>Tam Ky Toll Plaza</td><td>Km64.2</td><td>Up</td><td>Semi automatic</td><td>7</td></tr>
<tr><td>Chu Lai Toll Plaza</td><td>Km 84</td><td>Up</td><td>Semi automatic</td><td>7</td></tr>
<tr><td>Dung Quat Toll Plaza</td><td>Km 102.4</td><td>Up</td><td>Semi automatic</td><td>7</td></tr>
<tr><td>Binh Son Toll Plaza</td><td>Km 122.62</td><td>Up and Down</td><td>Semi automatic</td><td>7</td></tr>
<tr><td>North Quang Ngai Toll</td><td>Km 124.2</td><td>Up and Down</td><td>Semi automatic</td><td>7</td></tr>
<tr><td>Main Toll Plaza No.2</td><td>Km 129.6</td><td>Up</td><td>Semi automatic</td><td>12</td></tr>
</table>
Expressway Management Center (number): 1*
- Total construction area: 51,000m2
- 3-storey office building: floor area is 1870m2.
- 2-storey accommodation building for staff: floor area 2700m2
- 1-storey garage + store: 180m2 floor
- Canteen: 385m2
- Guard house: 2storey x 12m2 =24m2 floor
- 2-wheel vehicle shed 36m2
- Water tank pump station: 100m3
- Transformer 320KVA.
- Gate 10m
- Protecting fence (brick fence combined with iron grillwork fence)</td></tr>
</table>

	Operation and Maintenance Center (number): 2* - Total construction area of one station: 3,100m2 + 1-storey office building: floor area 149m2 + 1-storey accommodation building for staff: 121m2 floor - 1-storey garage + store: 113m2 floor - 1-storey entertainment house: 450m2 floor - 1-storey canteen for working shifts: 90m2 floor - 1-storey Bathroom, toilet: 22m2 floor - 2-wheel vehicle shed 16m2 **Parking station: 4*** - 02 lay-by stations, in each station there are 2 lay-by zones on 2 roadsides. Total construction area: 5980 m2. + Service house (1 storey): floor area 445m2 + Public toilet (1 storey): 175m2 floor + Large vehicle parking lot: 1,860m2 + Sedan parking lot: 600m2 + Fence **Service station: 2*** - 2 service stations are constructed on 2 road sides. The total construction area of one station is 37,000m2 + Service house: Constructed floor area 870m2 + Motel: 945m2 floor + Toilet: 115m2 floor + Office: 520m2 floor + Accommodation building for staff: 350m2 floor + Repair garage: 300m2 floor + Petrol station: 258m2 floor + Guard house: 8m2 floor + Water tank, pump station + Transformer 560KVA (2 stations). + Car-washing + Fence **Intelligent Traffic System*** - CCTB System: 34 pcs - Vehicle Detection System: 300 set - Weather sensor system: 1 set - Variable Message Sign System: 12 pcs - Communication system: 1 - Emergency Telephone System: 130 pcs - Internal Telephone System: 1 switchboard and 240 phones - Walkie-talkie System: 1 receiving and transmitting antenna, 120 vehicle-installed sets and 120 hand held sets - Weight in Motion: 9 - Toll Collection System: 12 - Center Operating System: 1 - Maintenance and Emergency Installation: 1 (* Facilities and equipments will be reviewed at the conceptual design stage.)	

Consulting Service	Project management and Construction supervision for JICA portion (Package 1-7) Review of Tender Document and Tender Assistance of O&M/ITS package (Package 13) Technology transfer / Engineering training for site personnel of VEC and PMU 85 Assist Midterm and Terminal Review and Environmental Monitoring etc.	During implementation, Upon completion: E/A: Indicate reason for change upon completion, as PCR.

2-1-2 Reason(s) for the modification if there have been any.

(P/R and PCR)
During implementation :E/A: Indicate reason for change as part of progress report
Upon completion: E/A: Indicate reason for change upon completion, as PCR.

2-2 Implementation Schedule

Table 2-2-1: Comparison of Original and Actual Schedule

Items	Original	Actual
Completion of D/D (World Bank Portion)	2012.2	*(P/R,PCR)* As of (Date of Revision) Please state not only the most updated schedule but also other past revisions chronologically.
Land acquisition	2010.10 – 2012.7	
Employment of Consultant	2012.2 – 2015.7	
Tendering for Construction on expressway	2010.11 – 2012.8	
Tendering for O&M/ITS facilities	2012.11 – 2014.1	
Commencement of Construction on expressway	2012.2	
Completion of Construction on expressway	2015.7	
Project Completion Date*	2015.7	

* Project Completion is defined as the end of construction works. Detailed Project Implementation Schedule is shown in Attachment 4.

2-2-2 Reasons for any changes of the schedule, and their effects on the project.

(P/R and PCR)
During implementation :E/A: Indicate reason for change as part of progress report
Upon completion: E/A: Indicate reason for change upon completion, as PCR.

2-3 Project Cost

2-3-1

Table 2-3-1a: Comparison of Original and Actual Cost BY ITEM

Unit: (million Japanese Yen)

Breakdown Of Cost	Original								
	Foreign Currency Portion			Local Currency Portion			Total		
	Total	JICA Portion	GOV	Total	JICA Portion	GOV	Total	JICA Portion	GOV
Item	( )	( )	( )	( )	( )	( )	( )	( )	( )
1.Civil Works	7,532	7,532	0	38,736	38,736	0	46,268	46,268	0
2.Priced Escalation	511	511	0	15,694	15,694	0	16,204	16,204	0
3.Physical Contingencies	402	402	0	2,721	2,721	0	3,124	3,124	0
4.Consulting Services	1,816	1,816	0	684	684	0	2,500	2,500	0

5.Land Acquisition	0	0	0	3,575	0	3,575	3,575	0	3,575
6.Administration Cost	0	0	0	3,584	0	3,584	3,584	0	3,584
7.Taxes and Duties	0	0	0	7,654	0	7,654	7,654	0	7,654
8.Interest During Construction	3,632	3,632	0	0	0	0	3,632	3,632	0
9. Commitment Charge	502	502	0	0	0	0	502	502	0
Total	14,395	14,395	0	72,648	57,835	14,813	87,043	72,230	14,813

Note:

(1) Exchange rate: USD1 = JPY85.5, USD1 = VND 18,544, VND1 = JPY 0.00461
(2) Base year used in cost estimation: October 2010
(3) Assumed rate of price escalation (including consulting services)
Foreign currency portion: 1.8% per annum
Local currency portion: 10.5% per annum
(4) Physical contingency: 5%
(5) Price Escalation and IDC above is estimated based on the schedule shown in Table 2-2-1

Unit: (million Japanese Yen)

Breakdown of Cost	Actual								
	Foreign Currency Portion			Local Currency Portion			Total		
	Total	JICA Portion	GOV	Total(	JICA Portion	GOV	Total	JICA Portion	GOV
Item	( )	( )	( )	( )	( )	( )	( )	( )	( )
(P/R,PCR)									
Total									

(Note) Exchange Rate: US$1=LC =¥ (LC1=¥)

Base Year for Cost Estimation:

Table 2-3-1b: Comparison of Original and Actual Cost BY YEAR

*Fiscal Year starting in January and ending in December Unit: (million Japanese Yen)

Breakdown of Cost	Original			Actual		
	JICA Portion	GOV	Total	JICA Portion	GOV	Total
Year	( )	( )	( )	( )	( )	( )
(P/M)	*(P/M)*	*(P/M)*	*(P/M)*	*(P/R,PCR)*	*(P/R,PCR)*	*(P/R,PCR)*
2010	0	0	0			
2011	72	2,007	2,078			
2012	15,959	3,803	19,763			
2013	17,272	2,678	19,950			
2014	23,245	3,719	26,964			
2015	13,903	2,151	16,054			
2016	883	0	883			
2017	896	1	897			
Total	72,230	14,359	86,589			

Note: Exchange Rate used: USD1 = JPY85.5, USD1 = VND 18,544, VND1 = JPY 0.00461

2-3-2 Reason(s) for the wide gap between the original and actual, if there have been any, the remedies you have taken, and their results.

(P/R, PCR) During implementation :E/A: Indicate reason for change as part of progress report Upon completion: E/A: Indicate reason for change upon completion, as PCR.

2-4 Organizations for Implementation

2-4-1 Executing Agency:

- Organization's role, financial position, capacity, cost recovery etc,
- Organization Chart including the unit in charge of the implementation and number of employees.

Original: *(P/M)* Line Ministry: Ministry of Transport Executing Agency: Vietnam Expressway Corporation (VEC) Project Implementation Unit: Project Management Unit No. 85 (PMU 85) **Attachment 11: Organization Chart for the Project Implementation** **Attachment 12: Organization Chart of VEC** **Attachment 13: Organization Chart of PMU 85**
Actual, if changed: *(P/R and PCR)* During implementation :E/A: Indicate reason for change as part of progress report Upon completion: E/A: Indicate reason for change upon completion, as PCR.

2-4-2 Contractor(s)/ Supplier(s), and Consultant(s) and Their Performance:

2-4-2-1 Procurement and Consultant

(1) Procurement

All items to be financed by JICA shall be procured in accordance with *Guidelines for Procurement under Japanese ODA Loans dated March 2009.*

(2) Consulting services for the Project

The selection and employment of consultant shall be done in accordance with *Guidelines for Employment of Consultants under Japanese ODA Loans dated March 2009.*

Table 2-4-2: Procurement of Contractor(s)/Supplier(s) and Consultant(s)

Contract Package	Selection Method	
	Original: *(P/M)*	**Actual:** *(P/R and PCR)*
Contractor(s) ■ Package 1(Km0 – Km8): (ICB with PQ) - Construct 6.86km road - Construct 1,136 lin.m bridge - Construct 371 lin.m Overpass Bridge - Construct 01 intersection: Tuy Loan ■ Package 2 (Km8 – Km17): (ICB with PQ) - Construct 7.72km road - Construct 1,276 lin.m bridge - Construct 45 lin.m Overpass Bridge ■ Package 3 (Km17 – Km22): (ICB with PQ) - Construct 3.27km road - Construct 1,727 lin.m bridge - Construct 255 lin.m Overpass Bridge - Construct 01 intersection: My Son ■ Package 4 (Km22 – Km32): (ICB with PQ) - Construct 9.04km road	All items to be financed by JICA shall be procured in accordance with *Guidelines for Procurement under Japanese ODA Loans dated March 2009.*	During implementation : E/A: Indicate reason for change as part of progress report

- Construct 418md bridge - Construct 01 tunnel, L= md. ■ Package 5 (Km32 – Km42): (ICB with PQ) - Construct 9.35km road - Construct 650md bridge - Construct 01 intersection: Ha Lam ■ Package 6 (Km42 – Km52): (ICB with PQ) - Construct 9.42km road - Construct 585md bridge ■ Package 7 (Km52 – Km65): (ICB with PQ) - Construct 12.41km road - Construct 856md bridge - Construct 290 lin.m Overpass Bridge - Construct 01 intersection: Tam Ky ■ Package 13 (ICB with PQ, EPC contract, 1 stage-2 envelopes) - Construct 9 tollgates, 02 Operation and maintenance center, 01 Expressway management centre, 02 Service stations and 04 Parking stations. Package 8 – 12 will be financed by the World Bank.		
Consultant(s) **-** Applied by Short List Selection Method for selection of the consultant - TOR: Project management and Construction supervision for JICA portion (Package 1-7) Review of Tender Document and Tender Assistance of O&M/ITS package (Package 13) Technology transfer / Engineering training for site personnel of VEC and PMU 85 Assist Midterm and Terminal Review and Environmental Monitoring etc.	The selection and employment of consultant shall be done in accordance with *Guidelines for Employment of Consultants under Japanese ODA Loans dated March 2009* and apply QBS method.	During implementation, Upon completion: E/A: Indicate reason for change upon completion, as PCR.

2-4-2-2 Performance

(P/R and PCR) **Information on the Contractor(s)/ Supplier(s):** During implementation: E/A **Evaluation:** Upon completion: E/A （Or during implementation, as necessary）
Information on the Consultant(s): During implementation: E/A **Evaluation:** Upon completion: E/A: Write evaluation of consultant. （E/A to fill in during implementation as necessary. Upon completion of sub-component; such as completion of instruments）

2-5 Precautions (Measures To Be Adopted/Points Which Require Special Attention)

- Risks and issues, if any, which may affect the project implementation and planned

countermeasures to be adapted, in terms of physical, environmental or social aspects.(e.g., land acquisition, resettlement , HIV awareness and prevention program, gender consideration and EIA clearance)

- Environmental Checklist or report of monitoring indicator (if applicable)

Original issues and Countermeasure(s)	Actual issues and Countermeasure(s)
(P/M) (1) Progress of D/D D/D consultant is scheduled to be selected by December 2010. The delay of procurement of D/D consultant may affect the implementation schedule of the Project. VEC will work closely with the WB in order to smoothly select the D/D consultant. When it delays, VEC immediately inform JICA and JICA provide possible support VEC to accelerate the consultant selection. (2) Traffic Safety A multi-stage Road Safety Audit of the Project will be financed by the WB loan so that the road safety issues could be dealt with in a proactive manner and potential risks can be minimized. These stages would at least include (i) feasibility study and preliminary design, (ii) detailed design; (iii) construction; and (iv) pre-opening. (3) O&M/ITS Package Since the national guidelines and regulations for O&M of expressway are not yet established, equipments and specifications of the O&M package cannot be specified. The O&M component will be finalized when the national guidelines and regulations are established by utilizing the JICA Study and Technical Cooperation on Expressway O&M and ITS standardization. In the case that the national guidelines and regulations are not established by the time of procurement of O&M/ITS contractor, VEC will utilize the result of JICA Study and Technical Cooperation on Expressway O&M and ITS standardization. (4) Coordination with relevant organization With many parties involved – JICA, WB, MOT, VEC, PMU85, Provincial Committee – good communication is essential for the project success. VEC, Executing Agency of the project, will act as a coordinator and inform all parties immediately if any changes or problems occur at pre-, during- and post- implementation stage. (5) Environmental Checklist The environmental and social considerations made for the Project are as summarized in the Environmental Checklist (Attachment Env001). In case of modification of the content of the Environmental Checklist, PMU85 will submit the modified version to JICA in a timely manner. (6) Environmental Monitoring during the construction phase - During construction phase, selected environmental monitoring consultant will conduct monitoring and write reports of the monitoring results to VEC on quarter basis. VEC will submit the results to JICA on quarterly basis by filling in the Monitoring Form as attached (Attachment Env00X). - The monitoring structure during construction is as per	*(P/R and PCR)* During implementation: E/A: Indicate reason for change as part of progress report. Upon completion: E/A: PCR

Attachment Env00X. (7) Resettlement and Land Acquisition - The area of land acquisition in JICA funding portion is expected to be 4,563,214 ㎡. The number of resettlement is expected to be 2,204 households. - Resettlement and land acquisition will be implemented in accordance with the Resettlement Plan (RP) which will be updated after Detailed Measurement Survey. - The estimated schedule for resettlement and land acquisition is as per Attachment Env00X. Progress of implementation of all aspects of RPs will be submitted by VEC to JICA in the quarterly regular Progress Report. **Attachment Env001: Environmental Checklist** **Attachment Env00X: Schedule for key activities of RP implementation** **Attachment Env00X: Organizational framework for monitoring in construction phase** **Attachment Env0XX: Monitoring Form**	

2-6 Photographs of Output of the project (P/R and PCR): Attachment

3: Benefit Derived from the Project (Effectiveness)

3-1 Operational and physical condition of each facility developed/supplied by the project.

Facilities	Description of condition	Problems, its Background and Remedial Action Plan
(P/R and PCR) During implementation: E/A: Upon completion: E/A	*(P/R and PCR)* During implementation: E/A: Upon completion: E/A	*(P/R and PCR)* During implementation: E/A: Upon completion: E/A

3-2 Precautions (Measures To Be Adopted/Points Which Require Special Attention)

- Risks and issues, if any, which may affect the project outcome and planned countermeasures to be adapted, in terms of physical, environmental or social aspects.
- Environmental Checklist or report of monitoring indicator (if applicable)

Original issues and Countermeasure(s)	Actual issues and Countermeasure(s)
(P/M) (1) HIV/AIDS Risk WB is going to include a soft component on the HIV/AIDS prevention activities to the workers of the whole sections by sub-contracting the activity to consultant. (2) Environmental Monitoring during the operation phase -During construction phase, selected environmental monitoring consultant will conduct monitoring and write reports of the monitoring results to VEC twice a year. VEC will semiannually submit the results to JICA by filling in the Monitoring Form.	*(P/R and PCR)* During implementation: E/A: Upon completion: E/A

-The monitoring structure during operation is as per Attachment Env00X. **Attachment Env00X: Organizational framework for monitoring in construction phase.**	

3-3 Environmental and Social Impacts

- Major environmental and social impacts have occurred during project implementation (e.g. involuntary resettlement, poverty reduction, natural environment)

Issue(s)	Action or countermeasure(s) taken and remaining problem(s)
(PCR) During implementation and upon completion: E/A: Write problems.	*(PCR)* During implementation and upon completion: E/A: Write solutions.

3-4 Qualitative and Quantitative Data of Monitoring Indicators

3-4-1 Operating Effectiveness Indicators

Indicators	Original (Yr 2009)	Target (Yr 2017)
(P/M)	*(P/M)*	*(P/M)*
Annual Average Daily Traffic (CPU)	(tbd)	(tbd)
Reduced travel time for freight and passenger vehicles	58 min	(tbd)
Reduced coefficient of variation of travel time for freight and passenger vehicles	(tbd)	(tbd)
Reduced number of traffic accidents	(tbd)	(tbd)
Establishment of Vietnam Expressway (Management) Authority and Public Private Participation cell in MOT	0	1
Length of Expressway constructed (km)	0	131.5
Roads in good and fair condition as a share of total classified roads (%)	(tbd)	(tbd)
Percentage of ITS equipments installed as compared to original plan	0	100

3-4-2a EIRR

Original (P/M): 22.10%
Cost: Project Cost, O&M Cost Benefit: Time Saving, Motorway Bonus, Vehicle Operation Cost, Road Safety Benefits, and Flooding Mitigation Benefits. Project Life: 25 years **Appendix 22: Supporting data for computing EIRR**

3-4-2b FIRR

Original (P/M): 2.08%
Cost: Project Cost, O&M Cost Benefit: Revenue from toll fee Project Life: 25 years **Appendix 23: Supporting data for computing FIRR**

3-5 Monitoring Plan for the indicators

- Monitoring methods, section(s)/department(s) in charge of monitoring, frequency,

the term and so forth.

Original*:(P/M and PCR)* In project implementation process, PMU 85 shall construct and submit the following report to VEC. VEC will review the report and submit to JICA, MOT, MPI, MOF, Local Authorities: a) Monthly report, the latest is 10 days after ending of month; b) Quarterly report, the latest is 15 days after ending of quarter, in the form of the Aligned Monitoring Tool (AMT); c) Yearly report, the latest is on 31st December of the earlier year; d) Project completion report, the latest is 6 months after finishing project implementation, in the form of Project Status Report (PSR); e) Report on changes (if any) in comparison with the contents of the signed particular Agreement on the Project; The monitoring cost shall be covered by the counter-part fund of the Project.
Actual*:(P/R and PCR)* During implementation: E/A Upon completion: E/A

3-6 Achievement of the Project Objective

(PCR) Upon completion: E/A

4: Operation and Maintenance (O&M) (Sustainability)

4-1 O&M and Management

- Organization chart of O&M
- Operational and maintenance system (structure and the number ,qualification and skill of staff or other conditions necessary to maintain the outputs and benefits of the project soundly, such as manuals, facilities and equipment for maintenance, and spare part stocks etc)

Original*: (P/M)* O&M structure will be determined when the national guidelines and regulations on Expressway O&M, including ITS standard, are established by utilizing the result of the JICA Study and Technical Cooperation on Expressway O&M and ITS standardization.
Actual: (*PCR*) Upon completion: E/A

4-2 O&M Cost and Budget

- The actual annual O&M cost for the duration of the project up to today, as well as the annual O&M budget.

(PCR) Upon completion: E/A

5: Evaluation

5-1 JICA and Borrower/Executing Agency Performance

Please evaluate the performance of the two bodies.

JICA: *(PCR)* Upon completion: E/A
Borrower/Executing Agency: *(PCR)* Upon completion: E/A

5-2 Overall evaluation

Please describe your evaluation on the overall outcome of the project.

(PCR) Upon completion: E/A

5-3 Lessons Learnt and Recommendations

Please raise any lessons learned from the project experience, which might be valuable for the future JICA assistance or similar type of projects, as well as any recommendations, which might be beneficial for better realization of the project effect, impact and assurance of sustainability.

(PCR) Upon completion: E/A

II. Project Specific Issues

1. Project Objective

The Vietnamese side and the JICA mission agreed to set the project objective as follows;

> The objective of the Project is to meet increasing traffic demand, to reduce travel time and uncertainly for passenger users and freight, and to enhance travel safety for road users, by constructing an expressway from Da Nang to Quang Ngai – a top priority section of the North-South Expressway, thereby contributing to economic growth and international competitiveness of Da Nang City and Central Vietnam.

The above objective was set in line with that of the World Bank (hereinafter referred to as "WB").

2. Background and Necessity of the Project

2-1.Vietnam Expressway Development Master Plan

The Vietnamese side updated the progress of the North-South Expressway Projects as shown in Attachment 16 and stressed that the Project is one of the prioritized sections among 16 sections. The JICA mission took note of it.

2-2. Regional Development Plans

VEC and PMU85 informed the JICA mission that the Project is placed in the Socio-Economic Development Plan of Da Nang City, Quang Nam Province and Quang Ngai Province as one of the important infrastructure projects for stimulating economic growth of the area. The Vietnamese side further explained that the Project is specifically expected to create better investment conditions for the Economic Zones and Industrial Parks along the project site, and provided a list and a map as shown in Attachment 1 and 2.

3. PPP Potential and Possible Options

The Vietnamese side explained that the Project is projected to be economically strong (EIRR 22.1%) but financially weak (FIRR 2.08%) and therefore it will be difficult to apply PPP. The JICA mission asked the Vietnamese side whether there exists selection criterion in determining the finding source – ODA, PPP or BOT. The Vietnamese side answered that there is no such criterion at present, even though they realize the necessity. The Vietnamese side further informed the JICA mission that, given that the fragile global financial markets, there will be a very limited number of expressway projects which can be applied PPP scheme. Once the expressway constructed, however, there could be some options for PPP in Operation and Maintenance (O&M) works of the expressway including operation of service areas. The JICA mission understood the difficulty in applying PPP scheme in design and construction of the Project and proposed to consider possible options for PPP at the O&M stage. (Possible options for PPP at the O&M stage are mentioned in the Section 11-1. of this MD.)

4. Scope of the Project

4-1 Demarcation between World Bank Loan, Japanese ODA Loan and GOV counterpart fund

The Vietnamese side, the WB mission, and the JICA mission confirmed the demarcation of

the Project components as summarized below and shown in detail in Attachment 3. Financial portion shown below is only initial estimation and subject to change.

- **Japanese ODA Loan portion:**
  - A section from km 00 in Da Nang city to km 65 in Tam Ky (hereinafter referred to as the "JICA section").
  - The portion mainly covers: 1) Bridges and Viaduct of the JICA section, 2) Road works of the JICA section, 3) O&M service and ITS portion for the whole section km 00-131.5, 4) Construction supervision of the JICA section, and 5) Tender Assistance and Review of Conceptual Design for the O&M service and ITS portion.
- **World Bank Loan portion:**
  - A section from km 65 in Tam Ky to km 131.5 in Quang Ngai (hereinafter referred to as the "WB section").
  - The WB section will be financed under IDA principal for 80 million and IBRD principal for 500 million.
  - The portion covers: 1) Bridges and Viaduct of the WB section, 2) Road works of the WB section, 3) 8.02km of connecting road connecting the ending point and NH1, 4) Detailed Design (hereinafter referred to as "D/D") of the whole section km 00-131.5, 5) Construction supervision of the WB section, 6) HIV/AIDS campaign program, and 7) Traffic Safety Audit program.
- **Counterpart Fund:**
  - Fee for Land Acquisition and Resettlement for the whole section km 00-131.5.
  - Tax and administration cost

4-2. Scope of D/D Works

The JICA mission confirmed that TOR of the D/D consultant under WB Loan will cover 1) D/D of the whole section (km 00 –131.5) including both the JICA section and the WB section, 2) preparation of the bidding documents and tendering assistance for the JICA section in line with JICA guideline and the WB section in line with WB guideline, and 3) drafting conceptual design and tender documents for the O&M/ITS portion. TOR of D/D consultant is shown as Attachment 17.

Regarding Conceptual Design (Basic Design) of the O&M/ITS portion (package 13), it will be drafted by the WB D/D consultant and reviewed by the JICA supervision consultant. Before its approval, VEC will send it to JICA for comments. Tender assistance of the O&M portion will be included to the TOR of the JICA supervision consultant. Both consultants are requested to well refer the national standard and regulation on O&M services and ITS specifications to be established with support of JICA Technical Cooperation.

VEC informed the JICA mission that the D/D prepared by WB consultant shall be reviewed by independent consultant to be hired by VEC and approved by VEC. If the JICA supervision consultant finds any defects in the D/D, VEC will solve the issue. Product warranty up to VEC's approval will be clearly stated in the contract document of both the WB consultant and the independent consultant.

4-3. Future Expansion Plan of Road and Bridge

VEC explained that in order to secure the investment's efficiency, the phasing is necessary. VEC has an idea to expand the roads and bridges from 4 lanes to 6 lanes in the future but not during the implementation stage of the Project.

4-4. Specifications of O&M facilities and ITS equipments (O&M/ITS package)

MOT has yet to formulate any national standards and regulations regarding O&M/ITS of Expressway in Vietnam. JICA, therefore, has been providing technical assistances on 1) ITS standardization through conducting a study named "Study for Supporting ITS Standards & Operation Plan Development in Vietnam" and 2) development of O&M system through dispatching a policy advisor to Transport Infrastructure Department under MOT. In addition, JICA soon dispatches project preparation study team for Technical Cooperation project named "Project for Strengthening Operation and Maintenance System for Expressway" with intention of selecting the Project as pilot case of the TC project.

The JICA mission stressed the purpose of above mentioned assistances are to prepare the necessary solutions in order to secure the integration of O&M system and ITS specifications among the expressway sections implemented under different financial sources; it is not to impose Japanese system but rather to facilitate and support MOT to establish necessary regulations and standards in the Vietnam context.

The Vietnamese side explained recent progress in preparation of regulations on Expressway O&M. There are two circulars under preparation, namely 1) MOT Circular on Operation and Maintenance of Expressway and 2) MOT-MPS Inter-ministerial Circular on Settlement of Incidents and Accidents on Expressway.

As for 1), Transport Infrastructure Department under MOT is in charge of drafting and already collected comments from relevant stakeholders such as international consultants of on-going expressway projects. Attachment 18 is the latest draft and to be submitted to relevant ministries (Ministry of Public Security, Ministry of Construction and Ministry of Finance) and local authorities (Hanoi City People's Committee and HCMC People's Committee) for their comments. Transport Infrastructure Department further informed the JICA mission that the circular is planned to be approved by June 2011 to meet the opening of Cau Gie – Ninh Binh Expressway. It will take further two months to get approval of the Minister of Transport.

Regarding ITS standards, JICA study team has almost finished their survey and the final report will be submitted by the end of December 2010. Based on the report, Information Technology Center and Science and Technology Department under MOT will draft a proposal on standard of ITS and submit it to Ministry of Science and Technology for its approval.

MOT additionally informed the JICA mission that when the new expressway agency "Vietnam Expressway Management Administration (VEMA)" is established, VEMA is expected to take responsibility in preparing the above mentioned circulars. The JICA mission took note of it and asked for further detailed information when it is available.

In conclusion, both sides agreed that it is ideal to develop necessary regulation and standards before Conceptual Design of the O&M/ITS package will be finalized, and in the case that the national standard and regulations are not promulgated by that time, the result of JICA Study and Technical Cooperation mentioned above will be utilized utmost for finalizing the Conceptual Design. Given the above situation, the facilities and equipments of the O&M/ITS portion listed in the Section 2-1 of PSR (Annex I) are still initial idea and subject to be revised at the stage of Conceptual Design.

4-5. Soft Soil Treatment

Both sides agreed that geotextile with high intensity or counterweight berm shall be applied to the soft soil treatment works of the Project and, if necessary, additional countermeasures such as combination of Prefabricated Vertical Drain (PVD) and Sand Drain (SD) methods shall be applied in order to shorten the construction period.

4-6. Engineering Geological Survey of Tunnel

VEC informed the JICA mission that engineering geological survey of tunnel will be carried out by the D/D consultant and finalize the design and construction method. The JICA mission took note of it.

Drill one hole at the expressway center line per 50m. Depth of boring must be enough to meet the requirement of detailed design. Testing 17 undisturbed soil samples/each boring and 8 disturbed samples/each boring. Seismic measurement at 4points at the depth of 50m and 8 points at the depth of 100m is carried out to identify strata structure.

5. Consulting Service

5-1. TOR for Consulting Service:

Both sides agreed the draft TOR for Consulting Service of Japanese ODA Loan potion shown as in Attachment 8. Both sides further agreed that the draft TOR includes assistance of the Vietnamese side to conduct mid-term and terminal evaluation of the project based on Decree No. 131.

5-2. Selection Method of Consultants

The Vietnamese side proposed to apply QCBS method for the selection of the supervision consultant. The JICA mission explained that, referring to “Guidelines for the Employment of Consultants under Japanese ODA Loans”, given that the assignments for the consultant include supervision of tunnel and bridge works which could be considered as “supervision of large and complex construction works for which it is particularly important to take safety measures”, QBS method would be more suitable. In response to the mission’s explanation VEC agreed to apply QBS method.

6. Implementing Schedule

6-1. Schedule of the D/D works

VEC explained that selection of D/D consultant is at the stage of concurrence of Technical Proposal Evaluation and to be contracted by December 2010. The detailed schedule is shown in Table 1. The JICA mission requested VEC to immediately inform JICA of any delay in the schedule below, since it will affect to the schedule of Japanese ODA Loan portion.

Table 1: Schedule for the D/D Consultant Selection

Action	Expected Due Date	Agency in Charge
Review and Approval of Technical Proposal	Aug.- Oct. 2010	VEC, WB
Review and Approval of Financial Proposal	Mid of Nov. 2010	VEC, WB
Contract Negotiation	End of Nov. 2010	VEC
Contracting	End of Dec. 2010	VEC

The Vietnamese side and the JICA mission agreed the implementation schedule shown in

Attachment 4 and confirmed that supervision consultant and contractor of the JICA section should be mobilized by February 2012 to synchronize with the schedule of the WB D/D consultant. The Vietnamese side, therefore, insisted the necessity of L/A signing by the end of FY 2010. JICA took note of it.

6-2. Revision of Construction Schedule

Both sides agreed that the construction schedule (Attachment 4) and the cost estimate (Attachment 6,7) shall be revised in line with the construction strategy to be updated during the Detailed Design stage, since supportive documents to determine construction periods are not available at present.

6-2. Project Completion

Both sides agreed that Project Completion is defined as the end of construction works of both Japanese and WB loan portion. According to the schedule agreed between the JICA mission and the Vietnamese side (Attachment 4), Project Completion is scheduled in July 2015. VEC has a responsibility to keep the schedule. VEC will inform and coordinate all related parties when any delays occur.

7. Cost Estimation

7-1. STEP Application

The JICA mission informed the Vietnamese side that the Project is eligible for Special Terms for Economic Partnership (STEP) since the Project includes tunnel works and O&M facilities and services which require goods from Japan and services provided by Japanese firms and those goods and services procured from Japan account for more than 30 percent of total project cost. The Vietnamese side informed the JICA mission that the tunnel works will apply a common tunneling method (NATM) and goods and services for the tunnel works are available other than Japan. Therefore, the Vietnamese side does not have intention to request STEP application for the Project. The JICA mission took note of it.

7-2. Possibility of Time-Sliced Loan

The JICA mission explained VEC that there is a possibility of providing the loan to the Project in a time-sliced manner since the whole amount of the Project (Japanese ODA Loan portion) is estimated to XXXX million Japanese Yen, which is quite large for one time loan agreement as one project. VEC understood the nature of time-sliced loan, and acknowledged the proposal by the JICA mission, and this matter will be decided by the time of LA negotiation.

7-3. Estimated M/M for Consulting Service

The JICA mission explained VEC that according to Note 2 of Section 3.05 of the “Guidelines for the Employment of Consultants under Japanese ODA Loans (March 2009)” and Section 2: Data Sheet of the “Sample Request for Proposal under Japanese ODA Loans – Selection of Consultants (September 2009)”, the Executing Agencies are expected to indicate “Estimated M/M” for both international and local consultants in the Request for Proposal for selection of consultants. The reason for setting “Estimated M/M” is that, it gives the candidates an indication on the required quantities of services, thus ensuring a sound and appropriate competition. Both sides agreed the “Estimated M/M” calculated as shown in Attachment 9.

7-4. Advanced Payment and Retention Money

VEC informed the JICA mission that, according to the Decree on Contracts in Construction

Activities (No. 48/2010/ND-CP), the ratio of the Advanced Payment and Retention Money shall be set as 10% and 5%, respectively. The both sides agreed to calculate the cost based on the ratio above.

7-5. Import Tax Ratio

VEC explained the JICA mission that Import Tax Ratio is set by Vietnamese regulations and may differ by item. Both sides agreed to tentatively set the ratio as 10% for calculation of the project cost.

8. Organization Structure

8-1. Organization Responsible for the Project

VEC explained that the tasks and responsibility of the project implementation agencies are as follows. They are defined by MOT decision (No. 2656/QD-BGTVT) and related regulations as listed below. The JICA mission took note of it.

MOT is a **Line Ministry** of the Project. MOT is responsible for appraisal of F/S, approval of the bidding plan, chair of Project Steering Committee, and supervision of VEC in preparing project documents and implementing land acquisition activities.

VEC is a **Project Owner** who is responsible for preparation, implementation and O&M of the Project. VEC takes overall responsibility for financial arrangements, investment, and implementation including changes during project implementation, taking the necessary procedures for approval of relevant documents (survey methodology/plans detailed design, cost estimate, prequalification documents, bidding documents, request for proposals, bid evaluation results for civil works and O&M/ITS packages and a consulting services package); engage directly in procurement of all packages and unexploded ordinance clearance; and sign contracts with the consultant and contractors in accordance with the procurement law and donor's regulations. VEC is in charge of post-review for acceptance and payment documents; payment to the consultant and contractors, signing of disbursement documents, and on-lent procedures. During the payment procedures, PMUs will be invited to engage in review works and assist in all relevant issues. Regarding the land acquisition and resettlement activities, VEC is responsible for approval and hand over of sub-projects. VEC authorizes PMUs to coordinate and provide necessary support to the Provincial People's Committees (PPCs) in carrying out the above activities.

PMU85 and PMU1 (PMUs) are **Implementation Agencies** for the Project, in charge of Japanese ODA Loan portion and WB Loan portion, respectively. PMUs will establish a working team for the Project to work directly with the Project Owner and to delegate appropriate persons to engage in procurement activities. PMUs are responsible for management of civil works, goods and consultancies for the section, monitor and report to VEC the Project's physical and financial progress. PMUs also prepare relevant documents such as relevant studies, detailed designs, cost estimates, prequalification documents, bidding documents, and request for proposals. They are also responsible for review and submission of the technical and financial audit reports, social and environmental monitoring reports, project evaluation and monitoring reports and other project related studies and reports. As for the D/D works, PMU 85 directly manages the contract with the D/D consultants, ensures the implementation progress and quality, report and submit their outputs to VEC for review and approval.

Provincial/City People's Committees of the project area implement land acquisition and resettlement activities. The cost for such activities arranged by the State budget will be transferred directly to the above authorities.

Organization chart and project experience of VEC and PMU 85 are shown in Attachment 12 and Attachment 13, respectively.

8-2. Coordination Mechanism

VEC proposed to hold a quarterly meeting of the Project, chaired by MOT leaders, with participation of WB, JICA, MOT, VEC, PMU85, local authorities, consultants, contractors and all other related agencies in order to review the progress and discuss the issues related to the Project. The JICA mission and MOT agreed on it. In addition, the JICA mission requested and MOT and VEC agreed, that MOT and VEC shall send a copy of all decision and official document related to the Project as soon as it is issued.

VEC further informed the JICA mission that VEC will be responsible for overall coordination and oversight of implementation of the Project, including 1) coordination and liaison between the Project Implementing Agencies and other ministries; 2) monitoring the Project's progress; 3) review of the technical and financial audit reports, social and environmental monitoring reports, the project evaluation and monitoring reports, and the project related studies, and 4) ensuring that the project related policies are achieve.

8-3. Financial Viability of VEC

VEC provided financial statements of VEC for 2007 – 2009 and the result of financial analysis conducted by WB (Attachment 19). The JICA mission noted that the debt to equity ratio (DER) has rapidly increased from 35:65 at the end of 2007 to 81:19 by the end of 2009. Given that actual borrowing requirements will be significant in 2010, it appears likely that the DER will further increase during the year.

Since IDA, IBRD and Japanese ODA funds would be on-lent from MOF to VEC, the actual financial charges on the project depend on the grant/loan nature of these funds to VEC. Based on the WB's analysis, if IDA and Japanese ODA funds would be considered as grants to VEC (Scenario A), IBRD repayment scheduled would be tailored to VEC operating profits and no further government subsidies would be needed. Revenues would be sufficient from the first year of operation to cover IBRD financial charges, and MOF on-lend service charges on IBRD, IDA and Japanese ODA loans. Under the second scenario (Scenario B), both WB and Japanese ODA funds would be considered as loans to VEC, and subsidies will be needed for the first five years of operation (the combination of IBRD, IDA, and JICA financial charges, principal repayments in 2021 at the end of the 10-year grace period, and MOF on-lent service charge will far exceed operating profits until revenues pick up).

Among the two scenarios above, Scenario B is approved by the Government and stated in the F/S approved in October 2010. Furthermore, internal procedure for Scenario A is complecated and affect to the implementation schedule. The JICA mission agreed to apply Scenario B on a condition that government subsidies will be provided to VEC to make up for shortfalls of VEC's revenues to cover repayment and O&M expenditures. The Vietnamese side agreed on the condition.

9. Procurement Arrangements

9-1. Approval Authority on Procurement

According to the Management of Construction Investment Projects (Decree No.12/2009/ND-CP), VEC is authorized in approval on D/D and it is not necessary to obtain approval from MOT unless there are any discrepancies compared with the F/S. In this regard, the procurement procedure for the Project is shown in the Attachment 5.

9-2. Number of Procurement Packages

At the time of FF mission in August 2010, both sides agreed on the package division as proposed in the F/S (one consulting service package, six civil work packages and one O&M/ITS package). VEC, however, proposed to separate the civil work packages into eight packages instead of six which was agreed at the time of FF mission.

(1) Separation of package 2 (km8-22)

VEC proposed to divide package 2 (km8-22) into two packages with the reason that the size of the package is too large as the cost of the package is estimated more than twice of average cost of other packages. While commented that the size of the package, around 13,000 million JPY, is not extraordinary large for such a large-scale infrastructure project, the JICA mission agreed the division proposed by VEC.

(2) Separation of works for lighting and traffic safety equipment

VEC proposed that the scope of lighting system and traffic safety equipment, originally included to each civil work package, shall be separated from each civil work package in order to ensure consistency in specification of equipments. The JICA mission pointed out that the timing of installation for each section will be influenced by the progress of civil work, and hence it will be difficult for the contractor to manage the schedule. (under discussion)

9-3. Procurement Method

Both sides agreed that the procurement method to be applied to the O&M/ITS package shall be EPC contract and D/D of the O&M/ITS package shall be included to its TOR with conditions of applying national standards and regulations on Expressway O&M/ITS or, in the case that they are not available, result of JICA's technical assistances. Both sides also agreed that procurement of EPC contract will apply one-stage two-envelope bidding procedure.

10. Project Performance

10-1. Operation and Effect Indicators

Both sides agreed the operation and effect indicators are as indicated in Section 3-4-1 of PSR. The indicators were set in line with that of WB since WB and JICA are going to conduct a Joint Project Evaluation in two years after the Project Completion. Some of the figures are not yet set and VEC will collect all figures under the consultation of WB consultant **by the time of LA negotiation**. Both sides agreed on it.

10-2. EIRR and FIRR

VEC informed JICA that VEC will apply EIRR and FIRR calculated under CPCS study and they are 22.1% and 2.08%, respectively. The JICA mission pointed out that the figure is different from that of VITRANSS2 study (11.3% and 8.0%, respectively). VEC explained that CPCS study conducted further detailed analysis with the latest data available, so the figure is more precise. The JICA mission agreed to apply the figures calculated under CPCS study.

11. Operation and Maintenance

11-1. O&M Structure and Training Plan

Institutional structure and arrangements for O&M of the Project is yet to be decided, although VEC intends to carry out O&M of the Project by VEC O&M, one of the organizations under VEC, before it is conducted through concession. VEC O&M was established in 2010 as a subsidy company with joint venture of VEC, 194 Construction Company, and Truong Tho Construction Company. However, it will be reformulated as one of the organizations under VEC to participate in implementation of O&M service of the Cau Gie-Ninh Binh Expressway Project. VEC further informed the JICA mission that VEC and NEXCO Central concluded MOU in June 2010 to agree on their strategic partnership for O&M services and investment promotion. Both sides agreed that more concrete plan of O&M for the Project should be developed before the later phase of the Project.

11-2. Toll Fee

Both sides confirmed that VEC is authorized to prepare the toll fee for Expressway in Vietnam based on MOT decision 1202/QD-TTg dated 10th September, 2007, and ask for the approval of MOF. VEC intends to set the fee at 800-1000 VND/km/PCU as proposed in the F/S. The JICA mission recommended VEC to set the fee in view of securing financial variability of the Project.

11-3. Maintenance Cost

Both sides agreed that the maintenance cost will be calculated in the course of detailed analysis of O&M models. VEC informed JICA that the tentative cost estimate calculated under CPCS study is shown in Table 2 and used as the basis of EIRR and FIRR calculation. JICA took note of it.

Table 2: Operating and Maintenance Costs (VND millions; 2010 prices)

Cost Item	DQE Cost	NH1 Saving*
Road, Bridge and Tunnel		
Routine Maintenance	46,453	5,070
Intermediate Periodic Maintenance @ Every 5 Years	389,650	67,504
Major Periodic Maintenance @ Every 15 Years	3,085,840	512,752
Toll Operation		
Staff	15,245**	2,721
Routine Maintenance	57,956	15,000
Periodic Maintenance @ Every 10 Years	579,558	150,000

* This is NH1 with widening with all traffic maintenance cost minus, with DQE, NH1 without widening without heavy traffic maintenance cost.
** This includes a haircut of 25% for over-manning.
Source: CPCS Team's estimates.

12. Considerations during Construction

12-1. Safety Measures during Construction

VEC filled out the Safety and Quality Control System Check list is as shown in Attachment 21. The JICA mission agreed on its content and commented that XX (under discussion).

12-2. Traffic Safety Measures

VEC explained the JICA mission that the traffic safety is well considered in the Detailed Design. The roadway cross-section has a width of a 3 meter shoulder which is used as emergency lane in case of breakdown or is used by emergency vehicles. 16 emergency exits will be provided along the expressway sections to be financed under the Japanese ODA Loan.

Traffic signs and road markings give drivers the necessary guidance, warnings, and instructions to ensure a safe and smooth traffic flow. Types of traffic signs are: Informative Signs (e.g. exit notice); Danger Warning Signs (e.g. traffic merge); and Prohibitory Signs (e.g. speed limit). Electronic speed warning signs will also be installed at the entrance and exit of the expressway so that the driver is alerted to control the vehicle speed.

Thus, traffic safety measures are taken into account in the expressway design, whilst there has been no policy or regulation concerning the traffic rules for expressway.

Furthermore, VEC informed the JICA mission that WB will provide assistance on traffic safety audit. Draft TOR of consultant is as per Attachment 22. It aims to carry out a multi-stage RSA of the proposed Da Nang – Quang Nai Expressway Project so that the road safety issues could be dealt with in a proactive manner and potential risks can be minimized. These stages would at least include (i) feasibility study and preliminary design, (ii) detailed design; (iii) construction; and (iv) pre-opening. The JICA mission took note of it.

13. Pro-poor Activities

The JICA mission explained to VEC and PMU 85 that pro-poor activities should be considered in any Japanese ODA Loan project, especially in the case of the projects in rather poor provinces. VEC and PMU 85 answered that the local authorities are implementing pro-poor activities as shown in Attachment 23 and further, they are considering two activities below:

1. During the construction stage of the Project, contractors will be encouraged to employ local labor, especially those from poor-households. VEC will state in tender documents that creation of opportunities for the poor from local communities will be one of the criteria of bid evaluation.
2. During the O&M stage of the Project, VEC will consider to create employment opportunities for the local poor such as guard, shop assistant and cleanup workers in service area and lay-by stations. Besides, for those who are qualified, VEC will give priority to the local poor in providing job opportunities in O&M works.

III. Environmental Considerations

IV. Further Actions to Be Taken

Both sides agreed that the following documents shall be prepared by The Vietnamese side and submitted to JICA (via JICA Vietnam Office) in writing **by the time of L/A negotiation.**

No.	Items to be submitted to JICA	Agency in Charge
1	Operation and Effect Indicator	VEC
	English Version of Supplemental EIA	End of November, 2010

<end>

II. Các vấn đề cụ thể của dự án

1. Mục tiêu dự án

Phía Việt Nam và Đoàn công tác JICA đã thống nhất các mục tiêu của dự án như sau:

> Mục tiêu của dự án để đáp ứng nhu cầu vận tải đang tăng lên, giảm thời gian di chuyển và đảm bảo giao thông thông suốt và đảm bảo an toàn giao thông cho người sử dụng đường, bởi việc xây dựng đường cao tốc Đà Nẵng – Quảng Ngãi – đoạn tuyến ưu tiên nhất của hệ thống đường cao tốc Bắc - Nam, và cuối cùng góp phần tăng trưởng kinh tế và cạnh tranh quốc tế của thành phố Đà Nẵng và miền Trung Việt Nam.

Mục tiêu trên được thiết lập phù hợp với WB.

2. Bối cảnh và sự cần thiết của Dự án

2-1. Kế hoạch tổng thể phát triển đường cao tốc Việt Nam

Phía Việt Nam đã cập nhật tiến độ các dự án đường cao tốc Bắc – Nam như trong Attachment XX và nhấn mạnh Dự án là một trong 16 đoạn tuyến ưu tiên. Đoàn công tác JICA ghi nhận việc này.

2-2. Kế hoạch phát triển khu vực

VEC và PMU85 đã thông báo cho Đoàn công tác JICA rằng Dự án nằm trong Kế hoạch phát triển Kinh tế - Xã hội của thành phố Đà Nẵng, tỉnh Quảng Nam và Quảng Ngãi như một trong những dự án hạ tầng giao thông quan trọng thúc đẩy phát triển kinh tế khu vực. Phía Việt Nam đã giải thích thêm rằng dự án đặc biệt được mong đợi để cải thiết điều kiện đầu tư cho các Khu công nghiệm dọc tuyến dự án, Đoàn công tác đã được cung cấp danh sách và bản đồi như trong Attachment XX, XX.

3. Phương án PPP và các phương án khác

Phía Việt Nam giải thích rằng Dự án có hiệu quả kinh tế cao (EIRR 22.1%) nhưng hiệu quả tài chính thấp (FIRR 2.08%) và do đó khó để sử dụng mô hình PPP. Đoàn công tác đã yêu cầu phía Việt Nam có tiêu chí lựa chọn sử dụng các nguồn vốn khác nhau – ODA, PPP hoặc BOT. Phía Việt Nam trả lời chưa có những tiêu chí như vậy hiện nay dù họ biết sự cần thiết phải có. Phía Việt Nam thông báo thêm cho JICA rằng, căn cứ thị trường tài chính toàn cầu, sẽ có rất ít các dự án đường cao tốc có thể áp dụng phương án PPP. Sau khi dự án hoàn thành, có thể có một số phương án PPP trong giai đoạn khai thác và bảo dưỡng (O&M) bao gồm việc khai thác các khu dịch vụ. Đoàn JICA đã hiểu khó khăn khi sử dụng phương án PPP trong giai đoạn thiết kế và xây dựng dự án và đề nghị xem xét các phương án PPP trong giai đoạn O&M. (Các phương án PPP trong giai đoạn O&M được minh họa tại Đoạn 11-1 của Biên bản này.)

4. Phạm vi dự án

4-1 Phân chia công việc giữa khoản vay WB, khoản vay JICA và đối ứng của Chính phủ

Phía Việt Nam, Đoàn công tác WB và JICA xác nhận các công việc tài trợ như tóm tắt chi tiết tại Attachment X. Phần tài chính chỉ ra dưới đây chỉ là tính toán ban đầu và có thể thay đổi.

- **Phần khoản vay ODA Nhật Bản:**
  - Đoạn tuyến từ km 00 tại Đà Nẵng đến km 65 tại Tam Kỳ (dưới đây gọi là Đoạn JICA).
  - Phần JICA bao gồm: 1) Cầu và Cầu cạn của Đoạn JICA, 2) Phần đường của Đoạn JICA,

3) Dịch vụ O&M và ITS cho toàn dự án km 00-131.5, 4) Dịch vụ tư vấn giám sát xây dựng cho Đoạn JICA, và 5) Hỗ trợ đấu thầu và xem xét thiết kế cơ sở phần O&M và ITS.

- **Phần khoản vay WB:**
  - Đoạn tuyến từ Km65 tại Tam Kỳ đến Km131,5 tại Quảng Ngãi (dưới đây gọi là Đoạn WB).
  - Đoạn WB sẽ được tài trợ từ nguồn vốn IDA 80 triệu USD và IBRD 535,15 triệu USD.
  - Phần WB sẽ bao gồm: 1) các cầu và cầu cạn của Đoạn WB, 2) Đường của Đoạn WB, 3) 8.02km đường nối từ điểm cuối tuyến cao tốc đến QL 1A, 4) Thiết kế kỹ thuật (sau đây gọi là TKKT) của toàn bộ tuyến km00-131.5, 5) Tư vấn giám sát xây dựng Đoạn WB, 6) chương trình phòng chống HIV/AIDS, và 7) Chương trình kiểm soát an toàn giao thông.
- **Vốn đối ứng:**
  - Chi phí GPMB và TĐC cho toàn tuyến km 00-131.5.
  - Thuế và chi phí hoạt động.

4-2. Phạm vi dịch vụ TKKT

Đoàn JICA đã xác nhận TOR của dịch vụ TKKT được tài trợ bởi WB sẽ bao gồm 1) TKKT toàn tuyến (km 00 –131.5) bao gồm cả Đoạn JICA và WB, 2) chuẩn bị HSMT và hỗ trợ đấu thầu đoạn JICA theo hướng dẫn của JICA và đoạn WB theo hướng dẫn của WB, và 3) dự thảo thiết kế cơ sở và hỗ trợ đấu thầu phần O&M/ITS. TOR của tư vấn TKKT như trong Attachment 17.

Về Thiết kế cơ sở của phần O&M/ITS (gói 13), Tư vấn TKKT của WB sẽ dự thảo và được xem xét bởi Tư vấn giám sát của JICA. Trước khi chấp thuận, VEC sẽ gửi cho JICA có ý kiến. Hỗ trợ đấu thầu phần O&M sẽ bao gồm trong TOR của Tư vấn giám sát JICA. Cả hai tư vấn được yêu cầu tham khảo cụ thể các quy định và tiêu chuẩn của dịch vụ O&M và ITS được phát hành với sự hỗ trợ của Hợp tác kỹ thuật JICA.

VEC đã thông báo cho JICA rằng TKKT được chuẩn bị bởi Tư vấn WB sẽ được xem xét bởi tư vấn độc lập được thuê bởi VEC và chấp thuận bởi VEC. Nếu Tư vấn giám sát JICA thấy bất kỳ sai sót nào trong TKKT, VEC sẽ giải quyết vấn đề. Quy định về bảo hành được nói rõ trong tài liệu hợp đồng của cả Tư vấn WB và tư vấn độc lập.

4-3. Kế hoạch mở rộng trong tương lai.

VEC giải thích rằng để đảm bảo hiệu quả đầu tư, việc chia giai đoạn là cần thiết. VEC có ý tưởng mở rộng đường và cầu từ 4 làn thành 6 làn trong tương lại nhưng không phải trong quá trình thực hiện dự án.

4-4. Tiêu chuẩn O&M và thiết bị ITS (Gói O&M/ITS)

MOT chưa hình thành được các quy định và tiêu chuẩn quốc gia cho hệ thống O&M/ITS của đường cao tốc Việt Nam. JICA, do đó, đã cung cấp hỗ trợ kỹ thuật về 1) tiêu chuẩn ITS qua việc thực hiện một nghiên cứu có tên "Nghiên cứu hỗ trợ tiêu chuẩn ITS & Phát triển kế hoạch khai thác tại Việt Nam" và 2) phát triển hệ thống O&M qua tư vấn chính sách dành cho Vụ cơ sở hạ tầng của Bộ GTVT. Hơn nữa, JICA sẽ sớm triển khai nhóm nghiên cứu chuẩn bị dự án cho dự án Hợp tác kỹ thuật có tên "Dự án tăng cường hệ thống khai thác và bảo trì đường cao tốc" dự định lựa chọn Dự án này thí điểm.

Đoàn công tác JICA nhấn mạnh mục đích của hỗ trợ trên là để chuẩn bị các biện pháp cần thiết để đảm bảo tính đồng bộ của hệ thống O&M và tiêu chuẩn ITS trong các đoạn tuyến cao tốc được thực hiện bởi nhiều nguồn vốn khác nhau; nó không có nghĩa sử dụng hệ thống Nhật

Bản mà là hỗ trợ Bộ GTVT có được các quy định và tiêu chuẩn cần thiết cho Việt Nam.

Phía Việt Nam đã giải thích tiến độ chuẩn bị quy định O&M đường cao tốc hiện nay. Có 02 Thông tư đang được chuẩn bị, tên là 1) Thông tư của Bộ GTVT về Khai thác và Bảo trì đường cao tốc và 2) Thông tư liên Bộ về giải quyết các vấn đề tai nạn trên đường cao tốc.

Đối với Thông tư 1), Vụ hạ tầng giao thông thuộc Bộ GTVT chịu trách nhiệm dự thảo và đã thu thập các ý kiến của các bên liên quan như tư vấn quốc tế của các dự án cao tốc đang hoạt động. Attachment 18 là dự thảo mới nhất sẽ được trình các bộ ngành liên quan (Bộ công an, Bộ xây dựng và Bộ tài chính) và các địa phương (UBND thành phố Hà Nội, HCM) để lấy ý kiến. Vụ cơ sở hạ tầng đã thông báo với Đoàn JICA rằng thông tư này có kế hoạch phê duyệt trước tháng 6/2011 để kịp tiến độ khai thác của Dự án Cầu Giẽ - Ninh Bình. Sẽ mất hơn 02 tháng để Bộ GTVT có thể phê duyệt.

Đối với tiêu chuẩn ITS, nhóm nghiên cứu của JICA cũng gần hoàn thành nghiên cứu và báo cáo cuối cùng của họ sẽ được nộp vào cuối tháng 11/2010. Theo báo cáo này, Trung tâm khoa học và kỹ thuật giao thông thuộc Bộ GTVT sẽ dự thảo quyết định tiêu chuẩn ITS và trình Bộ Khoa học kỹ thuật phê duyệt.

Bộ GTVT thông báo với Đoàn JICA ngay khi Cục quản lý đường cao tốc Việt Nam (VEMA) được thành lập, VEMA sẽ chịu trách nhiệm chuẩn bị các thông tư nêu trên. Đoàn JICA ghi nhận việc này và yêu cầu thêm thông tin chi tiết ngay khi có thể.

Kết luận, cả hai bên đồng ý rằng sẽ rất tốt để phát triển quy định và tiêu chuẩn cần thiết trước khi Thiết kế cơ sở của gói O&M/ITS hoàn thiện, và trong trường hợp các tiêu chuẩn này không được ban hành đúng hạn, kết quả nghiên cứu của JICA và Hợp tác kỹ thuật trên sẽ được sử dụng tối đa để hoàn thiện Thiết kế cơ sở. Căn cứ tình hình trên, thiết bị hạng mục O&M/ITS theo danh sách của Mục 2-1 của PSR (Phụ lục 1) vẫn là ý tưởng ban đầu và sẽ thay đổi tại bước thiết kế cơ sở.

4-5. Xử lý đất yếu

Đoàn JICA đề nghị kết hợp cả hai phương pháp Bấc thấm (PVD) và Giếng cát (SD) cho việc xử lý đất yếu của dự án, dựa trên đề xuất của F/S. (sẽ được thảo luận)

4-6. Khảo sát địa chất hầm

VEC thông báo cho JICA rằng khảo sát địa chất hầm sẽ được thực hiện bởi tư vấn TKKT và hoàn chỉnh phương án thiết kế và xây dựng. JICA ghi nhận việc này.

Drill one hole at the expressway center line per 50m. Depth of boring must be enough to meet the requirement of detailed design. Testing 17 undisturbed soil samples/each boring and 8 disturbed samples/each boring. Seismic measurement at 4points at the depth of 50m and 8 points at the depth of 100m is carried out to identify strata structure.

5. Dịch vụ tư vấn

5-1. TOR cho dịch vụ tư vấn:

Cả 2 bên thống nhất dự thảo TOR cho Dịch vụ tư vấn của phần vốn ODA Nhật Bản như trong Attachment 8.

5-2. Phương pháp lựa chọn tư vấn

Phía Việt Nam đề nghị sử dụng phương pháp QCBS để lựa chọn tư vấn giám sát. Đoàn JICA, tham khảo "Hướng dẫn sử dụng tư vấn thuộc Khoản vay ODA Nhật Bản", nhấn mạnh nhiệm vụ của tư vấn bao gồm giám sát hầm và cầu có thể được coi như " giám sát các công trình xây lắp lớn và phức tạp như vậy quan trọng sử dụng phương pháp an toàn", phương pháo QBS nên được sử dụng. Với ý kiến mạnh mẽ của Đoàn công tác về việc sử dụng QBS cho dự án, VEC đã chấp nhận phương pháp này.

6. Kế hoạch thực hiện

6-1. Kế hoạch cho công tác TKKT

VEC đã giải thích việc tuyển chọn tư vấn TKKT đang ở giai đoạn chấp thuận Đánh giá đề xuất kỹ thuật và sexkys hợp đồng trước tháng 12/2010. Kế hoạch cụ thể tại Table 1. Đoàn JICA đã yêu cầu VEC ngay lập tức thông báo cho JICA nếu có bất kỳ sự chậm trễ nào trong kế hoạch dưới đây vì sẽ ảnh hưởng đến kế hoạch vốn vay JICA.

Table 1: Kế hoạch tuyển chọn Tư vấn TKKT

Hành động	Thời hạn dự kiến	Chịu trách nhiệm
Xem xét và phê duyệt Đề xuất kỹ thuật	Tháng 8 – 10/2010	VEC, WB
Xem xét và phê duyệt Đề xuất tài chính	Giữa tháng 11/2010	VEC, WB
Thương thảo hợp đồng	Cuối tháng 11/2010	VEC
Ký hợp đồng	Cuối tháng 12/2010	VEC
(phê duyệt TKKT của gói đầu tiên)	(tháng 6/2011)	--
(Thiết kế cơ sở gói O&M)	(tháng 11/2011 – 2/2012)	--
(Hoàn thành thiết kế kỹ thuật)	(tháng 2/2012)	--

Phía Việt Nam và Đoàn công tác JICA thống nhất kế hoạch thực hiện trong Attachment 4 và xác nhận tư vấn giám sát và nhà thầu của Đoạn JICA nên được huy động trước tháng 2/2012 để thống nhất với kế hoạch của tư vấn TKKT WB. Phía Việt Nam, do đó, nhấn mạnh sự cần thiết của việc ký Hiệp định vay vào cuối năm tài chính 2010. JICA ghi nhận việc này.

6-2. Revision of Construction Schedule

Both sides agreed that the construction schedule (Attachment 4) and the cost estimate (Attachment 6,7) shall be revised in line with the construction strategy to be updated during the Detailed Design stage, since supportive documents to determine construction periods are not available at present.

6-2. Hoàn thành dự án

Cả hai phía đồng ý việc Hoàn thành dự án được định nghĩa khi kết thúc việc xây dựng các công trình của cả phần vay WB và Nhật Bản. Theo kế hoạch đã thống nhất giữa Đoàn JICA và phía Việt Nam (Attachment 4), Hoàn thành dự án dự kiến vào tháng 7/2015. VEC có trách nhiệm đảm bảo kế hoạch này. VEC sẽ thông báo và phối hợp với tất cả các bên khi có sự chậm trễ.

7. Dự toán

7-1. Sử dụng STEP

Đoàn JICA đã thông báo cho phía Việt Nam rằng Dự án có thể áp dụng Điều kiện đặc biệt cho các Đối tác kinh tế (STEP) vì Dự án bao gồm công trình hầm và thiết bị, dịch vụ O&M yêu cầu hàng hóa từ Nhật Bản và dịch vụ được cung cấp bởi các công ty Nhật và những hàng hóa

và dịch vụ này được đấu thầu tài khoản Nhật Bản hơn 30% tổng chi phí dự án. Phía Việt Nam đã thông báo cho Đoàn JICA rằng công trình hầm sẽ sử dụng phương pháp hầm thông thường (NATM) và hàng hóa và dịch vụ cho các công trình hầm có sẵn không chỉ từ Nhật Bản. Do đó, phía Việt Nam không có ý định yêu cầu sử dụng STEP cho dự án. Đoàn JICA ghi nhận việc này.

7-2. Khả năng sử dụng khoản vay theo thời gian

Đoàn JICA đã giải thích cho VEC rằng có khả năng sẽ cung cấp khoản vay cho dự án theo thời gian vì giá trị dự án (phần vốn vay ODA Nhật Bản) được tính khoảng XXXX triệu Yen Nhật, số tiền khá lớn cho hiệp định vay một lần million Japanese Yen, which is quite large for one time loan agreement as one project. VEC understood the nature of time-sliced loan, and acknowledged the proposal by the JICA mission, and this matter will be decided by the time of LA negotiation.

7-3. Estimated M/M for Consulting Service

The JICA mission explained VEC that according to Note 2 of Section 3.05 of the "Guidelines for the Employment of Consultants under Japanese ODA Loans (March 2009)" and Section 2: Data Sheet of the "Sample Request for Proposal under Japanese ODA Loans – Selection of Consultants (September 2009)", the Executing Agencies are expected to indicate "Estimated M/M" for both international and local consultants in the Request for Proposal for selection of consultants. The reason for setting "Estimated M/M" is that, it gives the candidates an indication on the required quantities of services, thus ensuring a sound and appropriate competition. Both sides agreed the "Estimated M/M" calculated as shown in Attachment 9.

7-4. Advanced Payment and Retention Money

VEC informed the JICA mission that, according to the Decree on Contracts in Construction Activities (No. 48/2010/ND-CP), the ratio of the Advanced Payment and Retention Money shall be set as 10% and 5%, respectively. The both sides agreed to calculate the cost based on the ratio above.

7-5. Import Tax Ratio

VEC explained the JICA mission that Import Tax Ratio is set by Vietnamese regulations and may differ by item. Both sides agreed to tentatively set the ratio as 10% for calculation of the project cost.

8. Organization Structure

8-1. Organization Responsible for the Project

VEC explained that the tasks and responsibility of the project implementation agencies are as follows. They are defined by MOT decision (No. 2656/QD-BGTVT) and related regulations as listed below. The JICA mission took note of it.

MOT is a **Line Ministry** of the Project. MOT is responsible for appraisal of F/S, approval of the bidding plan, chair of Project Steering Committee, and supervision of VEC in preparing project documents and implementing land acquisition activities.

VEC is a **Project Owner** who is responsible for preparation, implementation and O&M of the Project. VEC takes overall responsibility for financial arrangements, investment, and implementation including changes during project implementation, taking the necessary procedures for approval of relevant documents (survey methodology/plans detailed design, cost estimate, prequalification documents, bidding documents, request for proposals, bid

evaluation results for civil works and O&M/ITS packages and a consulting services package); engage directly in procurement of all packages and unexploded ordinance clearance; and sign contracts with the consultant and contractors in accordance with the procurement law and donor's regulations. VEC is in charge of post-review for acceptance and payment documents; payment to the consultant and contractors, signing of disbursement documents, and on-lent procedures. During the payment procedures, PMUs will be invited to engage in review works and assist in all relevant issues. Regarding the land acquisition and resettlement activities, VEC is responsible for approval and hand over of sub-projects. VEC authorizes PMUs to coordinate and provide necessary support to the Provincial People's Committees (PPCs) in carrying out the above activities.

PMU85 and PMU1 (PMUs) are **Implementation Agencies** for the Project, in charge of Japanese ODA Loan portion and WB Loan portion, respectively. PMUs will establish a working team for the Project to work directly with the Project Owner and to delegate appropriate persons to engage in procurement activities. PMUs are responsible for management of civil works, goods and consultancies for the section, monitor and report to VEC the Project's physical and financial progress. PMUs also prepare relevant documents such as relevant studies, detailed designs, cost estimates, prequalification documents, bidding documents, and request for proposals. They are also responsible for review and submission of the technical and financial audit reports, social and environmental monitoring reports, project evaluation and monitoring reports and other project related studies and reports. As for the D/D works, PMU 85 directly manages the contract with the D/D consultants, ensures the implementation progress and quality, report and submit their outputs to VEC for review and approval.

Provincial/City People's Committees of the project area implement land acquisition and resettlement activities. The cost for such activities arranged by the State budget will be transferred directly to the above authorities.

Organization chart and project experience of VEC and PMU 85 are shown in Attachment 12 and Attachment 13, respectively.

8-2. Coordination Mechanism

VEC proposed to hold a quarterly meeting of the Project, chaired by MOT leaders, with participation of WB, JICA, MOT, VEC, PMU85, local authorities, consultants, contractors and all other related agencies in order to review the progress and discuss the issues related to the Project. The JICA mission and MOT agreed on it. In addition, the JICA mission requested and MOT and VEC agreed, that MOT and VEC shall send a copy of all decision and official document related to the Project as soon as it is issued.

VEC further informed the JICA mission that VEC will be responsible for overall coordination and oversight of implementation of the Project, including 1) coordination and liaison between the Project Implementing Agencies and other ministries; 2) monitoring the Project's progress; 3) review of the technical and financial audit reports, social and environmental monitoring reports, the project evaluation and monitoring reports, and the project related studies, and 4) ensuring that the project related policies are achieve.

8-3. Financial Viability of VEC

VEC provided financial statements of VEC for 2007 – 2009 and the result of financial analysis conducted by WB (Attachment 19). The JICA mission noted that the debt to equity

ratio (DER) has rapidly increased from 35:65 at the end of 2007 to 81:19 by the end of 2009. Given that actual borrowing requirements will be significant in 2010, it appears likely that the DER will further increase during the year.

Since IDA, IBRD and Japanese ODA funds would be on-lent from MOF to VEC, the actual financial charges on the project depend on the grant/loan nature of these funds to VEC. Based on the WB's analysis, if IDA and Japanese ODA funds would be considered as grants to VEC (Scenario A), IBRD repayment scheduled would be tailored to VEC operating profits and no further government subsidies would be needed. Revenues would be sufficient from the first year of operation to cover IBRD financial charges, and MOF on-lend service charges on IBRD, IDA and Japanese ODA loans. Under the second scenario (Scenario B), both WB and Japanese ODA funds would be considered as loans to VEC, and subsidies will be needed for the first five years of operation (the combination of IBRD, IDA, and JICA financial charges, principal repayments in 2021 at the end of the 10-year grace period, and MOF on-lent service charge will far exceed operating profits until revenues pick up).

Among the two scenarios above, Scenario B is approved by the Government and stated in the F/S approved in October 2010. Furthermore, internal procedure for Scenario A is complecated and affect to the implementation schedule. The JICA mission agreed to apply Scenario B on a condition that government subsidies will be provided to VEC to make up for shortfalls of VEC's revenues to cover repayment and O&M expenditures. The Vietnamese side agreed on the condition.

9. Procurement Arrangements

9-1. Approval Authority on Procurement

According to the Management of Construction Investment Projects (Decree No.12/2009/ND-CP), VEC is authorized in approval on D/D and it is not necessary to obtain approval from MOT unless there are any discrepancies compared with the F/S. In this regard, the procurement procedure for the Project is shown in the Attachment 5.

9-2. Number of Procurement Packages

At the time of FF mission in August 2010, both sides agreed on the package division as proposed in the F/S (one consulting service package, six civil work packages and one O&M/ITS package). VEC, however, proposed to separate the civil work packages into eight packages instead of six which was agreed at the time of FF mission.

(1) Separation of package 2 (km8-22)

VEC proposed to divide package 2 (km8-22) into two packages with the reason that the size of the package is too large as the cost of the package is estimated more than twice of average cost of other packages. While commented that the size of the package, around 13,000 million JPY, is not extraordinary large for such a large-scale infrastructure project, the JICA mission agreed the division proposed by VEC.

(2) Separation of works for lighting and traffic safety equipment

VEC proposed that the scope of lighting system and traffic safety equipment, originally included to each civil work package, shall be separated from each civil work package in order to ensure consistency in specification of equipments. The JICA mission pointed out that the timing of installation for each section will be influenced by the progress of civil work, and hence it will be difficult for the contractor to manage the schedule. (under discussion)

9-3. Procurement Method

Both sides agreed that the procurement method to be applied to the O&M/ITS package shall be EPC contract and D/D of the O&M/ITS package shall be included to its TOR with conditions of applying national standards and regulations on Expressway O&M/ITS or, in the case that they are not available, result of JICA's technical assistances. Both sides also agreed that procurement of EPC contract will apply one-stage two-envelope bidding procedure.

10. Project Performance

10-1. Operation and Effect Indicators

Both sides agreed the operation and effect indicators are as indicated in Section 3-4-1 of PSR. The indicators were set in line with that of WB since WB and JICA are going to conduct a Joint Project Evaluation in two years after the Project Completion. Some of the figures are not yet set and VEC will collect all figures under the consultation of WB consultant **by the time of LA negotiation**. Both sides agreed on it.

10-2. EIRR and FIRR

VEC informed JICA that VEC will apply EIRR and FIRR calculated under CPCS study and they are 22.1% and 2.08%, respectively. The JICA mission pointed out that the figure is different from that of VITRANSS2 study (11.3% and 8.0%, respectively). VEC explained that CPCS study conducted further detailed analysis with the latest data available, so the figure is more precise. The JICA mission agreed to apply the figures calculated under CPCS study.

11. Operation and Maintenance

11-1. O&M Structure and Training Plan

Institutional structure and arrangements for O&M of the Project is yet to be decided, although VEC intends to carry out O&M of the Project by VEC O&M, one of the organizations under VEC, before it is conducted through concession. VEC O&M was established in 2010 as a subsidy company with joint venture of VEC, 194 Construction Company, and Truong Tho Construction Company. However, it will be reformulated as one of the organizations under VEC to participate in implementation of O&M service of the Cau Gie-Ninh Binh Expressway Project. VEC further informed the JICA mission that VEC and NEXCO Central concluded MOU in June 2010 to agree on their strategic partnership for O&M services and investment promotion. Both sides agreed that more concrete plan of O&M for the Project should be developed before the later phase of the Project.

11-2. Toll Fee

Both sides confirmed that VEC is authorized to prepare the toll fee for Expressway in Vietnam based on MOT decision 1202/QD-TTg dated 10th September, 2007, and ask for the approval of MOF. VEC intends to set the fee at 800-1000 VND/km/PCU as proposed in the F/S. The JICA mission recommended VEC to set the fee in view of securing financial variability of the Project.

11-3. Maintenance Cost

Both sides agreed that the maintenance cost will be calculated in the course of detailed analysis of O&M models. VEC informed JICA that the tentative cost estimate calculated under CPCS study is shown in Table 2 and used as the basis of EIRR and FIRR calculation. JICA took note of it.

Table 2: Operating and Maintenance Costs (VND millions; 2010 prices)

Cost Item	DQE Cost	NH1 Saving*
Road, Bridge and Tunnel		
Routine Maintenance	46,453	5,070
Intermediate Periodic Maintenance @ Every 5 Years	389,650	67,504
Major Periodic Maintenance @ Every 15 Years	3,085,840	512,752
Toll Operation		
Staff	15,245**	2,721
Routine Maintenance	57,956	15,000
Periodic Maintenance @ Every 10 Years	579,558	150,000

* This is NH1 with widening with all traffic maintenance cost minus, with DQE, NH1 without widening without heavy traffic maintenance cost.
** This includes a haircut of 25% for over-manning.
Source: CPCS Team's estimates.

12. Considerations during Construction

12-1. Safety Measures during Construction

VEC filled out the Safety and Quality Control System Check list is as shown in Attachment 21. The JICA mission agreed on its content and commented that XX (under discussion).

12-2. Traffic Safety Measures

VEC explained the JICA mission that the traffic safety is well considered in the Detailed Design. The roadway cross-section has a width of a 3 meter shoulder which is used as emergency lane in case of breakdown or is used by emergency vehicles. 16 emergency exits will be provided along the expressway sections to be financed under the Japanese ODA Loan.

Traffic signs and road markings give drivers the necessary guidance, warnings, and instructions to ensure a safe and smooth traffic flow. Types of traffic signs are: Informative Signs (e.g. exit notice); Danger Warning Signs (e.g. traffic merge); and Prohibitory Signs (e.g. speed limit). Electronic speed warning signs will also be installed at the entrance and exit of the expressway so that the driver is alerted to control the vehicle speed.

Thus, traffic safety measures are taken into account in the expressway design, whilst there has been no policy or regulation concerning the traffic rules for expressway.

Furthermore, VEC informed the JICA mission that WB will provide assistance on traffic safety audit. Draft TOR of consultant is as per Attachment 22. It aims to carry out a multi-stage RSA of the proposed Da Nang – Quang Nai Expressway Project so that the road safety issues could be dealt with in a proactive manner and potential risks can be minimized. These stages would at least include (i) feasibility study and preliminary design, (ii) detailed design; (iii) construction; and (iv) pre-opening. The JICA mission took note of it.

13. Pro-poor Activities

The JICA mission explained to VEC and PMU 85 that pro-poor activities should be considered in any Japanese ODA Loan project, especially in the case of the projects in rather poor provinces. VEC and PMU 85 answered that the local authorities are implementing pro-poor activities as shown in Attachment 23 and further, they are considering two activities below:

1. During the construction stage of the Project, contractors will be encouraged to employ

local labor, especially those from poor-households. VEC will state in tender documents that creation of opportunities for the poor from local communities will be one of the criteria of bid evaluation.

2. During the O&M stage of the Project, VEC will consider to create employment opportunities for the local poor such as guard, shop assistant and cleanup workers in service area and lay-by stations. Besides, for those who are qualified, VEC will give priority to the local poor in providing job opportunities in O&M works.

III. Environmental Considerations

IV. Further Actions to Be Taken

Both sides agreed that the following documents shall be prepared by The Vietnamese side and submitted to JICA (via JICA Vietnam Office) in writing **by the time of L/A negotiation.**

No.	Items to be submitted to JICA	Agency in Charge
1	Operation and Effect Indicator	VEC
	English Version of Supplemental EIA	End of November, 2010