List of Attachments

Existing and Planned Industrial/Economic Zone

Attachment 1

No	Name of Industrial/Economic Zone	Area (ha)	Occupancy rate (%)	Completion Year	Name of Japanese Companies in the Economic/Industrial Zone	Name of interested Japanese Companies in the Economic/Industrial Zone
1	Hoa Khanh IZ	395.72	93.05		Daiwa Vietnam Company	
					Property Company Japan-Vietnam	
					Dairoku Vietnam Co.,Ltd	
					Hanoi Steel Center Danang Co.,Ltd Branch	
					FNT Vietnam Co.,Ltd	
					Mabuchi Motor Vietnam Co.,Ltd	
					U-tokiwa Vietnam Co.,Ltd	
					Vifon Acecook joint venture Branch	
					Les Gants Vietnam Co.,Ltd	
					We Are Engineering Danang Co.,Ltd	
					Hoso Vietnam Co.,Ltd	
					Michelle Co.,Ltd	
2	Hoa Khanh Expansion	212.12	18.86		Seto Vietnam Co.,Ltd	
3	Danang IZ	50	100		T.T.T.I Danang Co.,Ltd	
					Logitem Vietnam Corp Branch	
4	Lien Chieu IZ	374	47.40	2012		
5	Hoa Cam IZ	137	78.86	2011	Foster Electronic Danang Co.,Ltd	
					Yonezawa Vietnam Co.,Ltd	
					Net-Export Danang Co.,Ltd	
6	Danang service and aquiculture IZ	77	58.71	2011	D&N Food Processing Co.,Ltd	
7	Hoa Khuong IZ	400	--	2012		
8	Hoa Minh IZ	200	--	2015		
9	Dien nam- Dien ngoc IZ	418	80	2013	INAX Company ($ 30 million) production of ceramic decoration	
10	Thuan Yen IZ	130				
11	Tam Hiep IZ	120	--			
12	Northern Chu Lai IZ	120	50			
13	Tam Thang IZ	292	--			
14	Western Que Son IZ	381	--	2015		
15	An Hoa-Nong Son IZ	300	--			
16	Phu Xuan IZ	350	--			
17	Chu Lai EZ	27,400			TOKASEN Company ($500.000) production of plastic for moulds	
18	Dung Quat East IZ	5,054	42			JFE Steel Corporation (in EZ expansion)
19	Dung Quat West IZ	2,100	52			
20	Tinh Phong IZ	350	60			
21	Quang Phu IZ	147	70			
22	Pho Phong IZ	138				
23	Son Tinh Western IZ	80				

Project Location Map

Attachment 2

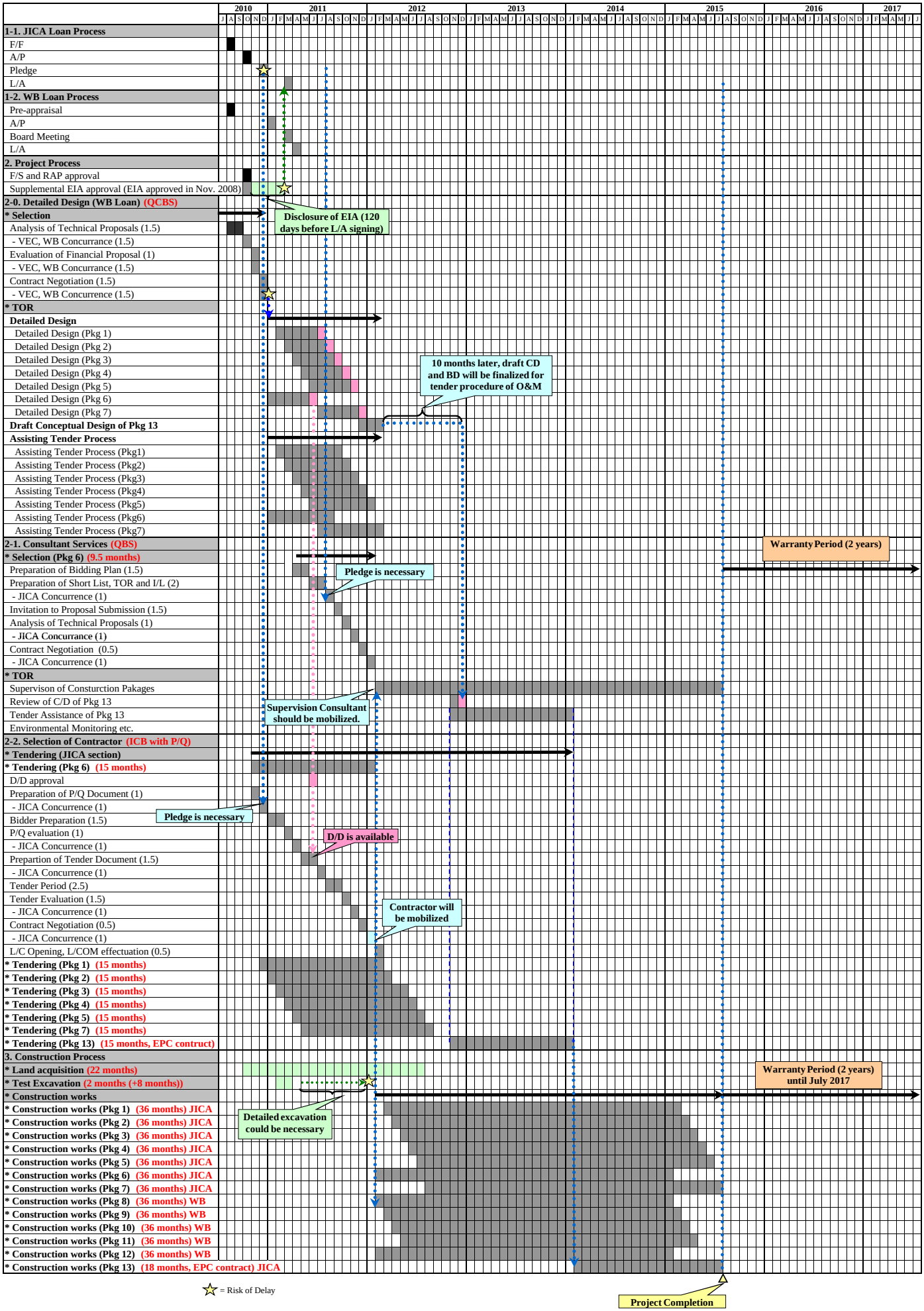
Demarcation between JICA – World Bank – GOV

Attachment 3

		JICA	WB	GOV
Construction Works				
1	Section from Da Nang (Km0) to Tam Ky (Km65)			
	Land Acquisition, Field Survey			○
	Bridge (5,232 m) and Viaduct (1,147 m), Road works (65km), flyover (7), Lighting and Safety Equipments within the section including contingencies	○		
	Tax VAT			○
2	Section from Tam Ky (Km65) to Quang Ngai (Km131.5)			
	Land Acquisition, Field Survey			○
	Bridges (3,373 m), Viaduct (1,884 m), Road works (66.5km), flyover (23), Lighting and Safety Equipments within the section including contingencies		○	
	Tax VAT			○
3	Section of road linking to NH1A from ending point of the expressway to NH1A (Km 1063+700 on NH1A)			
	Land Acquisition, Field Survey			○
	Bridge (609 m) and Road works (8.02km), Lighting and Safety Equipments within the section including contingencies		○	
	Tax VAT			○
4	Detailed Design, Construction and Installation of O&M works including ITS and Maintenance equipments for whole sections	○		
	Tax VAT			○
Consulting Services				
	Detailed Design and Tender Assistance for Section from Da Nang to Tam Ky		○	
	Detailed Design and Tender Assistance for Section from Tam Ky to Quang Ngai; and linking road to NH1A		○	
	Drafting of Conceptual Design for O&M/ITS Portion		○	
	Supervision Consulting Service for Section from Tam Ky to Quang Ngai; and linking road to NH1A		○	
	Supervision Consulting Service for Section from Da Nang to Tam Ky	○		
	Tender Assistance and Review of Conceptual Design for O&M/ITS Portion	○		
	Integrated Project Performance Review and Monitoring Services		○	
	Financial Audit		○	
	Financial Capacity Building for VEC		○	
	Strengthening Institutional Capacity for DPI		○	
	Training, Workshops, and Implementation of the Governance, Transparency, and Anti-corruption Plan (GTAP)		○	

Implementation Schedule of North-South Expressway Construction Project (Da Nang - Quang Ngai Sectic

Attachment 4



Attachment 5

Detailed Procurement Schedule (Da Nang - Quang Ngai Expressway)

Org	Dept.	F/S	Bidding Plan	Selection of Consultant				Procurement stage						
				TOR, LOI, short list	Tender period	Analysis of Technical Proposal	Contract with Consultant	Detail Design under WB Loan	P/Q documents	P/Q evaluation	Bidding Document	Tender period	Tender evaluation	Contract negotiation/ agreement
VEC		-	*(0.5month) in advance preparation*	*(2month) in advance preparation*	1.5 month	1 month	0.5 month	6 months/each package	*(1month) in advance preparation*	1 month	1.5 month	2.5 month	1.5 month	0.5 month
MOT	Technical Control Quality Mangement Dept.	---	*(1 month) in advance preparation*	---	---	---	---	---	---	---	---	---	---	---
Final approval authority			MOT	VEC	VEC	VEC	VEC	VEC	VEC	VEC	VEC	VEC	VEC	VEC
Sub-total period for procedure of Vietnamese side		---	*(1.5 month) in advance preparation*	*(2month) in advance preparation*	1.5 month	1 month	0.5 month	7months/each package	*(1month) in advance preparation*	1 month	1.5 month	2.5 month	1.5 month	0.5 month
Bidder		---	---	---	1.5 month	---	---	---	1.5 month	---	---	2.5 months	---	---
JICA		---	---	1month	--	1 month	1 month	---	1 month	1 month	1 month	---	1 month	1 month
Grand Total period for procurement after Pledge		---	*(1.5 month) in advance preparation*	1	1.5	2	1.5	not countable for JICA portion	2.5	2	2.5	2.5	2.5	1.5

(advance:3.5months) 6

(advance:1month) 13.5

Attachment 6

CONSTRUCTION COST BREAKDOWN (F/C: million JPY, L/C: million VND])

No.	Work Item	Distribution of Construction Cost																	
		Package 1		Package 2		Package 3		Package 4		Package 5		Package 6		Package 7		Package 14		Total	
		F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C	F/C	L/C			F/C	L/C	F/C	L/C
A	**Road Work**	**342**	**489,808**	**385**	**551,148**	**163**	**233,567**	**451**	**645,212**	**466**	**667,184**	**470**	**671,840**	**619**	**885,844**	**0**	**0**	**2,897**	**4,144,602**
I	Embankment and Pavement	**342**	**277,043**	**385**	**311,737**	**163**	**132,109**	**451**	**364,942**	**466**	**377,369**	**470**	**380,003**	**619**	**501,046**	**0**	**0**	**2,897**	**2,344,248**
1	Embankment	0	181,994	0	204,785	0	86,784	0	239,736	0	247,900	0	249,630	0	329,145	0		0	1,539,974
2	Pavement	342	87,161	385	98,076	163	41,563	451	114,815	466	118,725	470	119,554	619	157,635	0		2,897	737,530
3	Soft Ground Treatment	0	7,888	0	8,876	0	3,761	0	10,390	0	10,744	0	10,819	0	14,266	0		0	66,745
II	Others	**0**	**212,765**	**0**	**239,410**	**0**	**101,458**	**0**	**280,271**	**0**	**289,815**	**0**	**291,837**	**0**	**384,797**	**0**	**0**	**0**	**1,800,354**
1	Traffic Safety+Landscape	0	128,979	0	145,132	0	61,504	0	169,901	0	175,687	0	176,913	0	233,266	0		0	1,091,383
2	Drainage	0	15,190	0	17,092	0	7,243	0	20,009	0	20,691	0	20,835	0	27,472	0		0	128,533
3	Lighting	0	9,804	0	11,032	0	4,675	0	12,915	0	13,354	0	13,448	0	17,731	0		0	82,959
4	Slope Protection	0	11,371	0	12,795	0	5,422	0	14,979	0	15,489	0	15,597	0	20,565	0		0	96,220
5	Frontage Road	0	8,581	0	9,655	0	4,092	0	11,303	0	11,688	0	11,770	0	15,519	0		0	72,608
6	Service Road and Rehabilitating of Local Road	0	38,840	0	43,704	0	18,521	0	51,163	0	52,905	0	53,274	0	70,244	0		0	328,651
B	**Bridge**	**367**	**582,132**	**284**	**570,801**	**451**	**755,883**	**88**	**238,022**	**137**	**330,838**	**123**	**306,011**	**223**	**396,381**	**0**	**0**	**1,673**	**3,180,068**
I	Main Bridges	239	441,693	268	496,285	363	671,454	88	162,590	137	252,838	123	227,467	123	227,855	0		1,341	2,480,183
II	Bridges in Interchange and Flyover	128	83,175	16	10,080	88	57,123	0		0		0		100	64,962	0		332	215,340
III	Box culvert for Pedestial	0	57,263	0	64,435	0	27,306	0	75,432	0	78,000	0	78,545	0	103,564	0		0	484,545
C	**Tunnel**	**0**	**0**	**0**	**0**	**354**	**314,453**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**354**	**314,453**
I	Tunnel	0		0		354	314,453	0		0		0		0		0		354	314,453
3	Envilonmental Monitoring	0		0		0		0		0		0		0		0		0	0
D	**Toll Plaza, O&M Office, SA/PA+ITS**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2,523**	**461,569**	**2,523**	**461,569**
1	Building WorkCost: Toll Plaza, O&M Office, SA/PA	0		0		0		0		0		0		0		0	461,569	0	461,569
2	O&M Equipments	0		0		0		0		0		0		0		227		227	0
2	ITS System	0		0		0		0		0		0		0		2,296		2,296	0
E	**Other Cost**	**0**	**38,193**	**0**	**39,526**	**0**	**47,099**	**0**	**31,191**	**0**	**35,208**	**0**	**34,507**	**0**	**45,648**	**86**	**30,488**	**86**	**301,860**
	- Insurance Cost;	0	9,561	0	9,883	0	11,808	0	7,801	0	8,805	0	8,630	0	11,427	0	8,012	0	75,928
	- Cost for Mobilizing and Demobilizing	0	12,258	0	12,671	0	15,139	0	10,001	0	11,288	0	11,064	0	14,650	0	10,272	0	97,344
	- Cost for International Standard	0	172	0	180	0	209	0	141	0	160	0	156	0	205	0	74	0	1,296
	- Cost for traffic safety in constructing	0	12,258	0	12,671	0	15,139	0	10,001	0	11,288	0	11,064	0	14,650	0	10,272	0	97,344
	- Project Auditing cost	0	392	0	405	0	484	0	320	0	361	0	354	0	469	0	329	0	3,115
	- Other fee and levy	0	177	0	185	0	215	0	146	0	165	0	161	0	212	0	76	0	1,337
	- Unidentified items	0	3,374	0	3,531	0	4,104	0	2,780	0	3,141	0	3,078	0	4,036	0	1,453	0	25,497
	- Additional. Lab. And Equipments	0		0		0		0		0		0		0		86		86	0
				0		0		0		0		0		0		0		0	
Total Construction Cost		**710**	**1,110,133**	**669**	**1,161,475**	**968**	**1,351,002**	**539**	**914,425**	**603**	**1,033,230**	**593**	**1,012,358**	**843**	**1,327,873**	**2,608**	**492,057**	**7,532**	**8,402,552**

Attachment 7

Annual Fund Requirement

Base Year for Cost Estimation: Oct, 2010 — FC & Total: million JPY
Exchange Rates: VND = Yen 0.00461 — LC : million VND
Price Escalation: FC: 1.8% LC: 10.5%
Physical Contingency 5%
Physical Contingency for Consultant 5%

Item	Total			2010			2011			2012			2013			2014			2015			2016			2017		
	FC	LC	Total	FC	LC	Total	FC	LC	Total	FC	LC	Total	FC	LC	Total	FC	LC	Total	FC	LC	Total	FC	LC	Total	FC	LC	Total
A. ELIGIBLE PORTION																											
Ⅰ) Procurement / Construction	8,445	12,397,140	65,596	0	0	0	0	0	0	1,537	2,913,351	14,968	1,546	3,175,247	16,183	3,395	3,985,799	21,770	1,967	2,322,743	12,675	0	0	0	0	0	0
Km0+000Km8+000	710	1,110,133	5,827	0	0	0	0	0	0	238	373,128	1,959	201	314,538	1,651	201	314,538	1,651	69	107,930	567	0	0	0	0	0	0
Km8+000-Km17+000	669	1,161,475	6,024	0	0	0	0	0	0	209	362,961	1,882	190	329,084	1,707	190	329,084	1,707	81	140,345	728	0	0	0	0	0	0
Km17+000-Km22+000	968	1,351,002	7,196	0	0	0	0	0	0	280	390,289	2,079	274	382,784	2,039	274	382,784	2,039	140	195,145	1,039	0	0	0	0	0	0
Km22+000-Km32+000	539	914,425	4,754	0	0	0	0	0	0	143	242,577	1,261	153	259,087	1,347	153	259,087	1,347	91	153,674	799	0	0	0	0	0	0
Km32+000-Km42+000	603	1,033,230	5,366	0	0	0	0	0	0	146	249,697	1,297	171	292,749	1,520	171	292,749	1,520	116	198,036	1,029	0	0	0	0	0	0
Km42+000-Km52+000	593	1,012,358	5,260	0	0	0	0	0	0	213	364,168	1,892	168	286,835	1,490	168	286,835	1,490	44	74,521	387	0	0	0	0	0	0
Km52+000-Km65+000	843	1,327,873	6,964	0	0	0	0	0	0	184	289,550	1,519	239	376,231	1,973	239	376,231	1,973	181	285,861	1,499	0	0	0	0	0	0
ITS and O&M	2,608	492,057	4,876	0	0	0	0	0	0	0	0	0	0	0	0	1,616	304,802	3,021	992	187,255	1,856	0	0	0	0	0	0
Base cost for JICA financing	7,532	8,402,552	46,268	0	0	0	0	0	0	1,413	2,272,370	11,889	1,395	2,241,307	11,728	3,011	2,546,109	14,748	1,713	1,342,766	7,904	0	0	0	0	0	0
Price escalation	511	3,404,248	16,204	0	0	0	0	0	0	51	502,251	2,367	77	782,737	3,685	223	1,249,890	5,985	160	869,370	4,168	0	0	0	0	0	0
Physical contingency	402	590,340	3,124	0	0	0	0	0	0	73	138,731	713	74	151,202	771	162	189,800	1,037	94	110,607	604	0	0	0	0	0	0
Ⅱ) Consulting services	1,816	144,796	2,484	0	0	0	0	0	0	558	37,660	731	474	36,096	641	545	46,998	761	237	23,931	347	0	0	0	3	111	3
Base cost	1,632	98,763	2,088	0	0	0	0	0	0	513	29,374	648	428	25,479	546	483	30,022	622	206	13,835	270	0	0	0	2	52	3
Price escalation	97	39,139	278	0	0	0	0	0	0	19	6,492	49	24	8,898	65	36	14,738	104	19	8,957	61	0	0	0	0	53	1
Physical contingency	86	6,895	118	0	0	0	0	0	0	27	1,793	35	23	1,719	31	26	2,238	36	11	1,140	17	0	0	0	0	5	0
Total (Ⅰ + Ⅱ)	10,261	12,541,936	68,079	0	0	0	0	0	0	2,095	2,951,011	15,699	2,020	3,211,343	16,824	3,940	4,032,797	22,531	2,203	2,346,674	13,022	0	0	0	3	111	3
B. NON ELIGIBLE PORTION																											
a Procurement / Construction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Base cost for JICA financing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Price escalation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Physical contingency	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
b Land Acquisition	0	722,264	3,330	0	87,345	403	0	386,066	1,780	0	248,852	1,147	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Base cost	0	610,031	2,812	0	83,186	383	0	332,744	1,534	0	194,101	895	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Price escalation	0	77,839	359	0	0	0	0	34,938	161	0	42,901	198	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Physical contingency	0	34,394	159	0	4,159	19	0	18,384	85	0	11,850	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
c Administration cost	0	774,502	3,570	0	4,367	20	0	19,303	89	0	182,717	842	0	182,473	841	0	244,372	1,127	0	141,232	651	0	0	0	0	37	0
d VAT	0	1,476,778	6,808	0	0	0	0	0	0	0	340,549	1,570	0	364,946	1,682	0	488,744	2,253	0	282,464	1,302	0	0	0	0	74	0
e Import Tax	0	183,189	844	0	0	0	0	0	0	0	33,351	154	0	33,525	155	0	73,646	340	0	42,666	197	0	0	0	0	0	0
Total (a+b+c+d+e)	0	3,156,732	14,553	0	91,713	423	0	405,370	1,869	0	805,470	3,713	0	580,944	2,678	0	806,762	3,719	0	466,362	2,150	0	0	0	0	112	1
TOTAL (A+B)	10,261	15,698,668	82,632	0	91,713	423	0	405,370	1,869	2,095	3,756,481	19,413	2,020	3,792,287	19,502	3,940	4,839,559	26,250	2,203	2,813,037	15,172	0	0	0	3	222	4
C. Interest during Construction	3,632	0	3,632	0	0	0	0	0	0	180	0	180	376	0	376	642	0	642	802	0	802	811	0	811	821	0	821
Interest during Construction(Const.)	3,631	0	3,631	0	0	0	0	0	0	180	0	180	376	0	376	642	0	642	802	0	802	811	0	811	821	0	821
Interest during Construction (Consul.)	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D. Commitment Charge	502	0	502	0	0	0	72	0	72	72	0	72	72	0	72	72	0	72	72	0	72	72	0	72	72	0	72
GRAND TOTAL (A+B+C+D)	14,395	15,698,668	86,766	0	91,713	423	72	405,370	1,940	2,347	3,756,481	19,664	2,468	3,792,287	19,950	4,654	4,839,559	26,964	3,077	2,813,037	16,045	883	0	883	896	222	897
E. JICA finance portion incl. IDC (A + C + D)	14,395	12,541,936	72,213	0	0	0	72	0	72	2,347	2,951,011	15,951	2,468	3,211,343	17,272	4,654	4,032,797	23,245	3,077	2,346,674	13,895	883	0	883	896	111	896

2.3. Scope of Works for Consulting Services

2.3.1. Represent VEC/PMU85 in reviewing of previous studies, and checking and comparing with the actual situation in construction sites

1. Review and reassess design criteria for road and bridge section; Review technical design, check and ensure documents to be in accordance with standard frameworks and sign checked working drawings to submit VEC/PMU85 for approval. During the project implementation, if there are requirements for changes of technical issues, the Engineer shall assist VEC/PMU85 in checking and submitting these issues for approval;
2. Review the situation of land acquisition for the right-of-way and discuss with concerned agencies and authorities, if necessary, and report the result to VEC/PMU85;
3. Check the Contractors in terms of reviewed and approved data for alignment work, check the data on site clearance; Represent VEC/PMU85 to work with local authorities and concerned agencies in conducting site clearance;
4. Check and survey the centreline alignment done by the Contractors; Survey structure locations and vertical control benchmarks;
5. Cooperate with, advise and support VEC/PMU85 in planning and removing public infrastructure systems, structures and obstacles according to their functions and responsibilities;
6. Study the phasing of construction, if necessary, and management of traffic during the construction period;
7. Check and assess progress of works, issue orders to suspend or allow work(s) according to the rights stipulated in the contract;
8. Check and assess the quality of works, issue orders to suspend or allow work(s) according to the rights stipulated in the contract;
9. Check the qualification of the civil works contractors in practice compared with submitted bid documents and construction contracts, including:

    9.1 Check personnel resources, equipment and plan of construction, plan for mobilizing materials and site clearance of the civil works contractors in the construction sites;

    9.2 Check the quality control system, traffic safety and labour safety of the civil works contractors, participate in settling problems relating to civil works and timely report them to the relevant levels of authorities according to the existing regulations. It means that:

    (i) Prepare or review bidding documents for procurement of works and those for procurement of supply and installation of plant, the consultants shall make sure to meet following requirements:

    - 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).

    - 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).

    - 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.

(ii) 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) 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, 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 any questions are recognized regarding the safety measures in general including the ones mentioned above, require the contractors to make appropriate improvements.

9.3 Check permits for the use of machinery, equipment and materials and ensure that they are safe enough for civil works; and,

9.4 Check the laboratories of the civil works contractors and the manufacturers concerning construction materials, structural elements and products for civil works;

10. Review and examine the contract estimates and bidding price;
11. Review the construction quantity elements and unit prices required for the construction cost estimates. The Engineer shall check, verify and recommend solutions for the unexpected quantities of work outside the bid BoQ, and timely inform VEC of these issues; and
12. Monitor and summarize issues relating to price escalation as a basis for the VEC’s approval during the implementation process;

2.3.2. Represent VEC and assist PMU85 to carry out the following tasks in construction supervision

1. Represent VEC’s interests in any issues related to the construction contract and the proper execution thereof. In this regard the Engineer will (i) explain and revise unclear or non-agreed points in contracts and assist VEC/PMU85 in settling conflicts with the Contractors; (ii) review, clarify and specify work items in the contract; (iii) provide specific instructions to the Contractors in proposing optimal solutions in contract implementation; (iv) provide guidance to VEC/PMU85 in settling issues relating to the Contractors’ claims and making proposals for solutions.
2. Provide the Contractors with guidance in conformity of regulations, laws, policies of Government of Vietnam and JICA during the construction
3. Cooperate with the Contractors in receiving, checking and verifying necessary ground surface and topographic data for the contractor to establish bridge and road alignments and grades from technical design consultants. Check and verify, in writing, the handing-over of construction sites to the civil works Contractors (centreline, elevation, Row, vertical control benchmarks, etc.) and the Contractor’s preparation at the construction site.
4. Check and supervise the civil works process, including but not limited to the followings:

4.1 The Engineer must complete all work requirements described in the Regulation on Civil Works Engineering in the Transport Sector which is issued together with the Transport Minister’s Decision No. 22/2008/QD-BGTVT, dated September 20, 2008 (hereinafter as “regulations”);

4.2 Propose and present to VEC/PMU85 for approval of any changes in the plans deemed necessary for ensuring the quality and schedule; provide VEC/PMU85 with relevant information that affects changes of contract values and the time of project

completion; inform VEC/PMU85 of any problems or potential problems, which may arise in connection with the contract; and recommend solutions;

4.3 Inspect, check and sign for concurrence of surveys and working drawings that the Contractors shall submit to VEC/PMU85 for approval;

4.4 Arrange at least one full-time international residence engineer for each package for monitoring and guiding; arrange enough site inspectors at suitable locations ensuring the monitoring efficiency.

4.5 Establishing the required forms for handing-over, provide guidance and supervising the contractor to comply with the technical standards and regulations of JBIC and Vietnam Government

4.6 Monitor and supervise implementation of surveys and compliance with working drawings made by the Contractors submitted to VEC/PMU85;

4.7 Check and sign for concurrence of the Contractor's working methodology and organization of construction that the Contractors shall submit to VEC/PMU85 for approval;

4.8 Regularly, timely and systematically monitor, supervise and verify, in writing, the Contractor's working performance at sites; the results must be recorded in the supervision diary or minutes of inspection and acceptance according to the regulations in Vietnam specified in the previous section 4.1.;

4.9 Monitoring, supervising, verifying and providing guidance to Contractor to comply with the bidding documents, supervising the quantity of works and other related issues as required by Construction law No.16.

4.10 Measure and compute the approved and accepted quantities of work and materials; check and identify the Contractor's certificates of monthly and final payments and give relevant evaluation of contractor's work.

4.11 Maintain and file accepted warrants, warranty certificates and project-related documents as required;

4.12 Inspect and supervise the quality of construction, materials and equipment, supplied by the Contractors according to the requirements of the design, including:

+ Inspect and verify, in writing, the quality of the laboratories as required in the bidding documents, and only allow the Contractors to conduct the works when all equipments for testing materials are available All responsibilities shall be borne by the Contractors and experiment engineers;

+ Check manufacturers' quality certificates, experiment results of standard laboratories and results of inspection for the equipment quality recognized by the authorized state offices regarding materials, structural elements, construction products and equipment before they are used for the project;

+ Monitor, supervise, verify and accept, in writing, the construction quality including: dimensions, specifications, quantity, quality of construction items in accordance with the approved technical instructions, the technical requirements and the working schedules;

+ If there is any doubt about the quality, re-inspect the quality of construction item(s). If there is any doubt about inspection results of material and/or equipment supplied by the Contractors, report to and request VEC/PMU85 to directly check or conduct an inspection of materials and equipment used for the project;

+ Evaluate the accuracy and completeness (with conclusion of pass or fail) of material experiments supplied by the Contractors; request the Contractor to implement special material experiments, reject and replace irrelevant materials or work items; filing the results of all experiments;

+ Supervise, report about environmental impacts during and after the construction period, traffic safety, labour safety, as well as recommend solutions to improve the situation, as required;
+ Report and propose solutions to VEC/PMU85 if there is any delay of implementation compared with the schedule: The Engineer shall (i) request regularly the Contractors to adjust the construction progress to the current situation at sites taking such delay into account; (ii) adjust supervising plans regularly at sites in accordance with the current requirements.
+ Check, provide guidelines to the contractor and verify the drawings of complete works;
+ Organize the acceptance procedures of construction works according to Article 23 of Government Decree No. 209/2004/ND-CP, dated December 16, 2004 and Government Decree No. 49/2008/ND-CP dated April 18,2008 on amendment and supplementation of several articles in Decree 209;
+ Collect and check documents for the acceptance of construction works, parts of works, civil works period, equipment, the completion of each construction work item and the whole project (including the documentary pictures reflecting important events);
+ Measure and record works, contracts done which are accepted for payments in progress;
+ Review, and verify the Contractor's requests for the advance payments; monthly and final payments submitting to VEC/PMU85 for approval;
+ Detect errors and unreasonable issues in design and other matters arising during the construction; report and submit them to VEC/PMU85 for instructions on revisions; nominate the design consultants, if necessary, to revise and get approval from the higher level authority;
+ Comment and make proposals about any changes of construction, if necessary;
+ Support VEC/PMU85 to chair meetings and cooperate to relevant parties to solve any issues arising during the construction; participate in any required meetings;
+ Assist VEC/PMU85 during temporary hand-overs and contract completions
+ Assist VEC/PMU85 in planning maintenance schedules for the completed works;
+ Perform all other work items not specifically mentioned above but deemed to be necessary and essential to successfully supervise and control construction activities according to the plans, instructions and contract conditions. The Engineer shall be responsible for works until a Certificate of Completion is issued by the State Acceptance Committee;
+ Before issuing the Certificate of Completion of the Project and during the maintenance period, the Engineer will carry out the necessary inspection, identify areas that need repairs, verify them and provide guidance in writing and supervise any remedial works until VEC/PMU85 will complete the final inspection; After the repair, the Engineer will make detailed reports about the repair and submit to VEC/PMU85;
+ Following the results of JICA study named "Study for Supporting ITS Standards& Operation Plan Development in Vietnam", assist and make recommendations to VEC for setting up an operation and maintenance (O&M) scheme after completion if any;
+ instruct the Contractors to complete the final reports and Records of Complete Works in English and Vietnamese according to the regulations of the Vietnamese Government and requirement from relevant agencies;

+ Prepare and submit reports on work completion according to the regulations.

2.3.3. Assisting VEC/PMU85 in Transfer of Technology

The consultants shall conduct a transfer of technology during this project. It includes components listed below.

1. Overseas Training: Introduce and study advanced technology on design, construction, construction management of the road and bridge construction and operation and maintenance of expressway in Japan.
2. Domestic Training: Train the Vietnamese engineers on the job by assigning them to get involved in the implementation process of the consulting services. Instruct the PMU85 staff at the project site about the construction management, quality control and international contract administration.

The consultants shall submit plan of these training to VEC/PMU85 and make necessary arrangements with coordinating related organizations.

2.3.4. Assisting VEC/PMU85 in Environmental Consideration Management / Monitoring

1. Make necessary coordination to conduct mitigation measures of impacts to environment to be provided by the Contractors;
2. Monitor the environment influence impacts during the construction and provide guidance to the parties concerned. If necessary, conduct environmental programs which help improve the situation;
3. Provide guidance to the Contractors to prepare reports about environmental issues which will be submitted to the Engineer quarterly after completion of construction items relating to environment.
4. Support VEC/PMU85 to prepare environmental monitoring reports to JICA.

2.3.5. Assisting VEC/PMU85 in social management/supervision activities

1. Assist VEC/PMU85 in monitoring the progress of Resettlement Action Plan.
2. Assist VEC/PMU85 in conducting the monitoring after resettlement.
3. Assist VEC/PMU85 in preparing the resettlement monitoring report to JICA.

2.3.6. Assisting VEC/PMU85 in Capacity Building for Expressway Operation and Maintenance System

1. The Consultants shall assist in establishing a new O&M unit for operation and maintenance for expressway. The Consultant shall assist VEC to establish management systems which may include the following:
   1.1 Management Information System (MIS)
   1.2 Expressway Operations Management
   1.3 Expressway Maintenance Management
   1.4 Organization and Personnel Management
2. The Consultants shall develop a training plan for VEC staff and manage the implementation of the plan that will make O&M unit become fully capable to manage and maintain Central Vietnam Expressway once it has been completed.

2.3.7 Assist VEC/PMU85 and supervise ITS activities

The consultants will assist in VEC/PMU85 and supervise ITS activities including:

1. Check and review conceptual design and assist VEC/PMU85 in procurement activities for EPC package such as: assistance in preparation of bidding documents, clarification of bidding documents, bid evaluation, etc on VEC/PMU85's request.
2. Appraise detail design for ITS system for VEC's approval.
3. Supervise the implementation of ITS package including procurement, construction and installation of ITS system.
4. Assist and work with VEC/PMU85 in technology transfer and operation of ITS system.

2.4. Staffing and Other Inputs

The consulting services will be undertaken by an international consulting firm with support of national consulting firm. It is estimated that 674 person-months of foreign professional staff will be required for the consulting services.

At least one resident international engineer will be stationed at the construction site for supervision and instruction during the whole period of the Contractor's work; stationing sufficient Inspectors who are responsible for organizing the supervision of works at all proper locations and of work items in order to ensure effective execution of services.

Positions and number of personnel to be estimated to require is as follows:

No.	Position	Class	No. of Expert
	International Consultants (A)		
1	Team Leader	A	46
2	Senior Highway Engineer	A	42
3	Senior Structual Engineer	A	42
4	Senior Geotecnical Engineer	A	24
5	Senior Material/Pavement Engineer	A	36
6	Senior Quantity/ Contract Specialist	A	42
7	Resident Engineer/Highway Engineer	A	216
8	Resident Engineer/Structure Engineer	A	36
9	Tunnel Engineer	A	30
10	Resettlement Specialist	A	8
11	Environmental Specialist	A	3
12	ITS Senior Expert	A	21
13	Traffic Safety Facility Specialist	A	18
14	Toll Collection System Specialist	A	18
	Sub-Total		**582**
	Domestic Consultants (B)		
	Main team at head office		
1	Co-Team Leader	B	46
2	Highway Engineer	B	126
3	Structural Engineer	B	126
4	Geotechnical Engineer	B	42
5	Cost Estimator/Quantity Surveyor	B	126
6	Material/Pavement Engineer	B	42
7	Resettlement Specialist	B	6

No.	Position	Class	No. of Expert
8	Environmental Specialist	B	42
9	ITS Specialist	B	36
	Sub-Total		**592**
	At site office		
10	Assist. Resident Engineer	B	252
11	Material/Pavement Engineer	B	252
12	Survey Engineer	B	252
13	Inspector (Electrical Works)	B	18
14	Inspector (Building Works)	B	18
15	Inspector (ITS Facility Works)	B	18
16	Inspector (ITS Cable Works)	B	18
17	Toll Collection System Specialist	B	18
	Sub-Total		**846**
	Capacity Development		
18	Expressway Operation Specialist	B	18
19	Expressway Maintenance Specialist	B	18
	Sub-Total		**36**
	Supporting Staff		
1	Office Manager	C	42
2	Bilingual Secretary 1 (Core Team)	C	42
3	Secretary	C	252
4	Translator	C	126
5	Accountant	C	42
6	Inspector	C	1,189
	Sub-Total		**1,693**
	Grand Total		**3,749**

2.5. Reports and Time Schedule

2.5.1. Reports

The Consultant shall submit the following reports and documents in English and Vietnamese. The number of copies will be decided later if it is note mentioned herein.

Monthly Reports: The Consultant will submit monthly progress reports and extraordinary reports (including mid-term evaluation reports of the Project based on Decree No. 131/2006/ND-CP dated 9 November 2006 by the Government) in approved formats according to the Vietnam to VEC and

to JICA for information. The reports briefly describe all activities and progress of civil works of the previous month. It is necessary to clarify outstanding issues and potential problems as well as taken or recommended actions to settle those issues, results of solutions or recommendations. These reports also include items of equipment, personnel resources and financial estimations of the Contractor. Number of copies is at least ten (10) in English and ten (10) in Vietnamese.

Quarterly Reports: The Consultant will assist VEC to submit progress reports for the Project on a quarterly basis (in March, June, September and December of each year) to JBIC in accordance with the form and the detail JICA may request. Number of copies is at least ten (10) in English and ten (10) in Vietnamese.

Final Report: Within a month after the completion of civil works, the Consultant shall submit the final report on civil works, which summarizes the Consultant's activities and work progress relating to the supervision of the Project. The quantities of these reports shall be agreed upon before preparation;

Monitoring Reports on Environment: The Consultant will assist VEC to submit monitoring reports on environment in such form and in such detail as JICA will request.

Monitoring Reports on Resettlement: The Consultant will assist VEC to submit monitoring reports on resettlement in such form and in such detail as JICA will request.

Report on the quality of civil works: After civil works and any remedial works of the project are completed, the Consultant must submit a report on the quality of civil works to VEC as a basis for overall acceptance and commissioning of the structure.

Records of complete works: The Consultant is responsible for submitting copies of the records of complete works to VEC as contracted between VEC and the Consultants.

Data on civil works: Within a month after the completion of civil works, the Consultant shall provide VEC with data on civil works, including a set of drawings of completed civil works, 3 sets of records that gather data, notes, site diaries which are listed according to a table of contents.

Final report on civil works: Within 3 months after the completion of civil works, the Engineer must submit the final report on civil works, which summarizes activities of civil works, reviewing impacts due to the changes of contract, complaints, disputes or other important issues that affect contract values, costs and schedule of service implementation.

Report on the completed defect liabilities period for the structure: A month before the completion of the defect liabilities period for the structure, the Consultant must submit the report for finalizing procedures of the defect liabilities period for the structure according to the regulation of the civil works contract;

Report on the completion of services and report on O/M study: The report on O/M study should be submitted as soon as the structure is commissioned. The quantities of reports depend on the contract terms. If there needs to be another report after the operation process, the Investment Owner shall have particular agreements on the time of submitting this report in the contract.

Report on the completion of services must be submitted as soon as the 24-month duration of defect liabilities, stipulated in the civil works contract, is completed. This report summarizes the whole process of service work and is used for issuing the Certificate of Service Completion as a basis for final payment.

Project Completion Report: The Consultant will assist VEC to submit Project Completion Report (PCR) to JICA promptly, but in any event not later than six (6) months after completion of the Project. PCR will be in such form and in such detail as JICA will request later.

Other Reports: The Consultant will submit or support VEC to submit other reports as required from time to time by VEC itself or other authorities concerned.

Operation and Maintenance Manual: The Consultant shall prepare Operation and Maintenance Manual in course of setting up O&M unit in VEC as mentioned in 2.3.6 above.

2.5.2 Schedule

1. Contract of the detailed design consultant to be financed under the WB loan is concluded January 2011.
2. Prequalification for the civil work will be estimated to start in January 2012.
3. Construction supervision of the civil works financed (and to be financed) under the JICA ODA loan(s) will be estimated to finish by the end of 2015.
    1) Tendering assistance and Supervision of ITS is estimated for 10 months.
    2) Construction supervision is estimated for 42months.
4. There will be defect liability period which is supervised by the Consultant for 24 months.

2.5.3 Services and Facilities to be provided by VEC

The following facilities and provisions will be made available to the Consultant:

1. VEC will assist the Consultant in customs clearance for equipment and materials required for carrying out the consulting services;
2. VEC will assist the Consultant in obtaining work and resident permits, visa and any other permissions necessary for the expatriate staff and their families;
3. VEC will assist the Consultant in collecting data, information related to the consulting services;
4. VEC will assist the Consultant in getting approvals from other agencies or institutions for carrying out their services; and,

VEC will assign appropriate number of staff to support the consulting services.

Manning Schedule for the Consulting Services

Attachment 9

		Position	BillingRate		2010	2011	2012												2013												2014												2015												2016	2017												Total
			F/C Yen	LC/ VND			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12		1	2	3	4	5	6	7	8	9	10	11	12	
		Main Team A	0	0																																																															0
A	1	Team Leader	2630000	0				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1										1						46
A	2	Senior Highway Engineer	2630000	0				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																			42
A	3	Senior Structual Engineer	2630000	0				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																			42
A	4	Senior Geotecnical Engineer	2630000	0				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																																						24
A	5	Senior Material/Pavement Engineer	2630000	0				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																										36
A	6	Senior Quantity/ Contract Specialist	2630000	0				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																			42
A	7	Resettlement Specialist	2630000	0				1	1	1	1	1	1												1												1																																8
A	8	Environmental Specialist	2630000	0									1												1												1																																3
A	9	ITS Senior Expert	2630000	0				1									1	1														1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																			21
			0	0																																																															0
			0	0																																																															0
		Pkg1	0	0																																																															0
A	10	Resident Engineer/Highway Engineer	2630000	0					1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																								36
		Pkg2	0	0																																																															0
A	11	Resident Engineer/Highway Engineer	2630000	0						1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																						36
		Pkg3	0	0																																																															0
A	12	Resident Engineer/Structure Engineer	2630000	0							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																					36
A	14	Tunnell Engineer	2630000	0								1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																										30
		Pkg4	0	0																																																															0
A	14	Resident Engineer/Highway Engineer	2630000	0								1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																				36
		Pkg5	0	0																																																															0
A	15	Resident Engineer/Highway Engineer	2630000	0									1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																			36
		Pkg6	0	0																																																															0
A	16	Resident Engineer/Highway Engineer	2630000	0				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																										36
		Pkg7	0	0																																																															0
A	17	Resident Engineer/Highway Engineer	2630000	0										1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																			36
		Pkg8(ITS and O&M)	0	0																																																															0
A	18	Traffic Safety Facility Specialist	2630000	0																												1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																			18
A	19	Toll Collection System Specialist	2630000	0																												1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																			18
			0	0																																																														0
			0	0																																																														0
		Main Team B	0	0																																																															0
B	1	Co-Team Leader	0	40000000				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1										1						46
B	2	Highway Engineer	0	40000000				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																			42
B	3	Highway Engineer	0	40000000				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																			42
B	4	Highway Engineer	0	40000000				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																			42
B	5	Structual Engineer	0	40000000				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																			42
B	6	Structual Engineer	0	40000000				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																			42
B	7	Structual Engineer	0	40000000				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																			42
B	8	Geotechnical Engineer	0	40000000				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																			42
B	9	Cost Estimator/Quantity Surveyor	0	40000000				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																			42
B	10	Cost Estimator/Quantity Surveyor	0	40000000				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																			42
B	11	Cost Estimator/Quantity Surveyor	0	40000000				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																			42
B	12	Material/Pavement Engineer	0	40000000				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																			42
B	13	Resettlement Specialist	0	40000000				1	1	1	1	1	1																																																							6
B	14	Envilonmental Specialist	0	40000000				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																			42
B	15	ITS Specialist	0	40000000																												1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																			18
B	16	ITS Specialist	0	40000000																												1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																			18
			0	0																																																															0
		Pkg1:Km0-Km8	0	0																																																															0
B	17	Assist. Resident Engineer	0	40000000					1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																								36
B	18	Material/Pavement Engineer	0	40000000					1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																								36
B	19	Survey Engineer	0	40000000					1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																								36
			0	0																																																															0
		Pkg2:Km8-Km17	0	0																																																															0
B	20	Assist. Resident Engineer	0	40000000						1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																						36
B	21	Material/Pavement Engineer	0	40000000						1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																						36
B	22	Survey Engineer	0	40000000						1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																						36
			0	0																																																															0
		Pkg3:Km17-Km22	0	0																																																															0
B	23	Assist. Resident Engineer	0	40000000							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																					36
B	24	Material/Pavement Engineer	0	40000000							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																					36
B	25	Survey Engineer	0	40000000							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																					36
			0	0																																																															0
		Pkg4:Km22-Km32	0	0																																																															0

B	26	Assist. Resident Engineer	0	40000000								1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1										36
B	27	Material/Pavement Engineer	0	40000000								1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1										36
B	28	Survey Engineer	0	40000000								1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1										36
			0	0																																																		0
	Pkg5:Km32-Km42		0	0																																																	0
B	29	Assist. Resident Engineer	0	40000000									1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1									36
B	30	Material/Pavement Engineer	0	40000000									1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1									36
B	31	Survey Engineer	0	40000000									1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1									36
			0	0																																																	0
	Pkg6:Km42-Km52		0	0																																																	0
B	32	Assist. Resident Engineer	0	40000000				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1													36
B	33	Material/Pavement Engineer	0	40000000				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1													36
B	34	Survey Engineer	0	40000000				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1													36
			0	0																																																	0
	Pkg7:Km52-Km65		0	0																																																	0
B	35	Assist. Resident Engineer	0	40000000										1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								36
B	36	Material/Pavement Engineer	0	40000000										1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								36
B	37	Survey Engineer	0	40000000										1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								36
			0	0																																																	0
	Pkg8:ITS and O&M		0	0																																																	0
B	38	Inspector (Electrical Works)	0	40000000																												1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								18
B	39	Inspector (Building Works)	0	40000000																												1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								18
B	40	Inspector (ITS Facility Works)	0	40000000																												1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								18
B	41	Inspector (ITS Cable Works)	0	40000000																												1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								18
B	42	Toll collection system specialist	0	40000000																												1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								18
			0	0																																																	0
	Capacity Development		0	0																																																	0
B	43	Expressway Operation Specialist	0	40000000																												1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								18
B	44	Expressway Maintenance Specialist	0	40000000																												1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								18
			0	0																																																	0
		[Total of Pro-A]			**0**	**0**	**139**												**170**												**191**												**81**												**0**	**1**	**582**
		[Total of Pro-B]			**0**	**0**	**317**												**408**												**507**												**241**												**0**	**1**	**1,474**
		[Total of Pro-A+Pro-B]			0	0	456												578												698												322												0	2	2,056
		Total Cost of FC for Each Month(Pro-A)			0	0	365,570,000												447,100,000												502,330,000												213,030,000												0	2,630,000	1,530,660,000
		Total Cost of FC for Each Month(Pro-B)			0	0	0												0												0												0												0	0	0
		Total Cost of LC for Each Month(Pro-A)			0	0	0												0												0												0												0	0	0
		Total Cost of LC for Each Month(Pro-B)			0	0	12,680,000,000												16,320,000,000												20,280,000,000												9,640,000,000												0	40,000,000	58,960,000,000
Support Staff			0	0																																																		0
C	1	Office Manager	0	12500000				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								42
C	2	Bilingual Secretary	0	12500000				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								42
C	3	Secretary	0	12500000				6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6								252
C	4	Translator 1	0	12500000				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								42
C	5	Translator 2	0	12500000				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								42
C	6	Translator 3	0	12500000				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								42
C	7	Accountant	0	12500000				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1								42
C	8	Inspector	0	12500000				5	9	14	16	21	26	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	28	24	20	17	12	7								1,189
		[Total of Supporting Staff]			**0**	**0**	**388**												**540**												**540**												**225**												**0**	**0**	**1,693**
		Total Cost of LC for Each Month(SS)			0	0	4,850,000,000												6,750,000,000												6,750,000,000												2,812,500,000												0	0	21,162,500,000
		Grand Total			**0**	**0**	**844**												**1,118**												**1,238**												**547**												**0**	**2**	**3,749**

Note: The quoted rates above are for cost estimate purpose at the time of appraisal and do not bind the actual unit price in each consulting services contract.

Cost Breakdown for the Consulting Services

Attachment 10

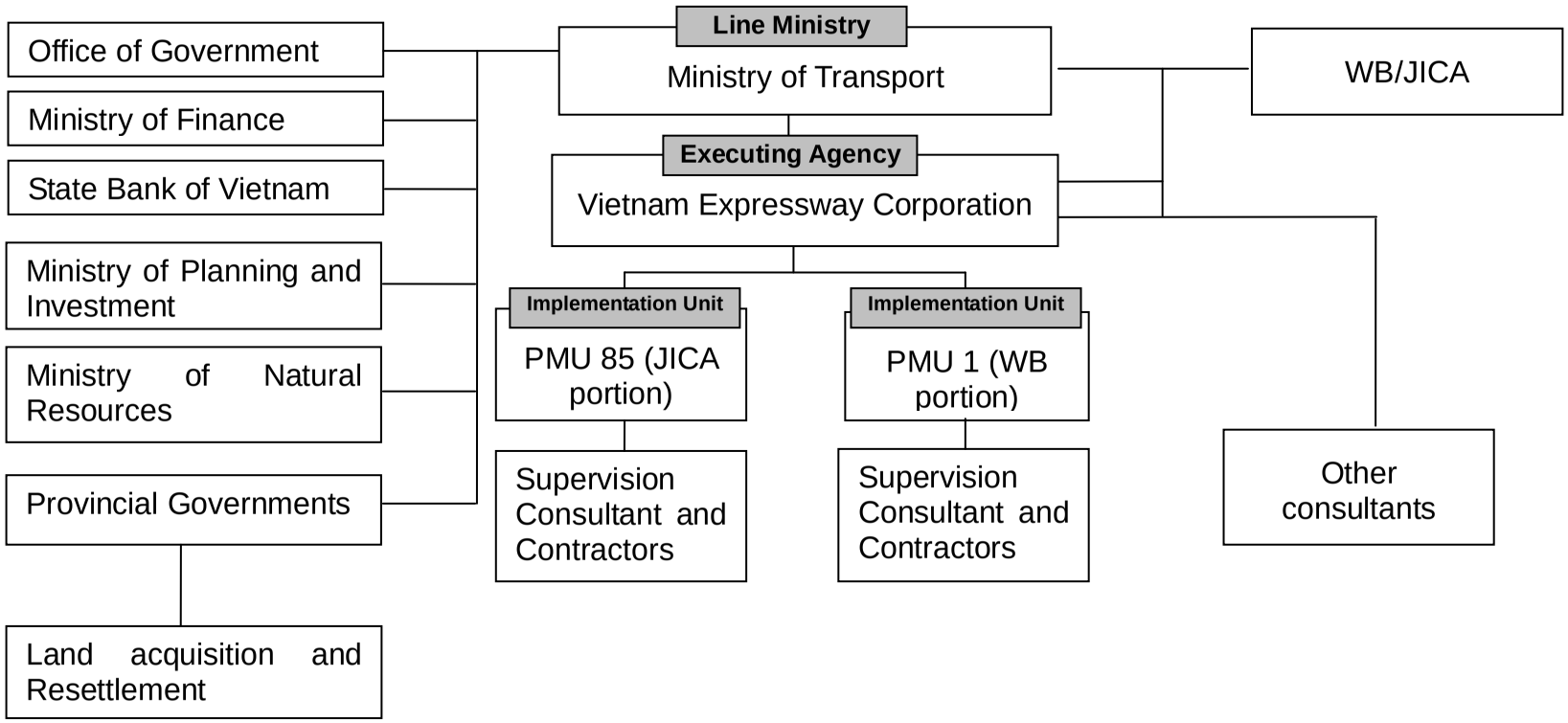
US $ = yen 85.5
VND = yen 0.004610

	Unit	Qty.	Foreign Portion (Yen) Rate	Foreign Portion (Yen) Amount ('000)	Local Portion VND Rate	Local Portion VND Amount ('000)	CombinedTotal ('000) Yen
A Remuneration							
1 Professional (A)	M/M	582	2,630	1,530,660	0	0	1,530,660
2 Professional (B)	M/M	1474	0	0	40,000	58,960,000	271,806
3 Supporting Staffs	M/M	1693	0	0	12,500	21,162,500	97,559
Subtotal of A				1,530,660		80,122,500	1,900,025
							0
B Direct Cost							0
1 International Airfare		49	300	14,550		0	14,550
3 Accommodation Allowance	Month	582	100	58,200		0	58,200
4 Vehicle Rental	Month	288		0	30,000	8,640,000	39,830
5 Office Rental	provisional sum	1		0	5,580,000	5,580,000	25,724
6 International Communications and reports	month	288	100	28,800		0	28,800
7 Domestic Communications and reports	month	288		0	10,000	2,880,000	13,277
8 Office Supply	month	288		0	5,000	1,440,000	6,638
9 Office Furniture and Equipment	provisional sum	1		0	100,000	100,000	461
							0
							0
							0
							0
							0
							0
							0
							0
							0
							0
							0
							0
							0
							0
Subtotal of B				101,550		18,640,000	187,480
Total				1,632,210		98,762,500	2,087,505

Note: The quoted rates above are for cost estimate purpose at the time of appraisal and do not bind the actual unit price in each consulting services contract.

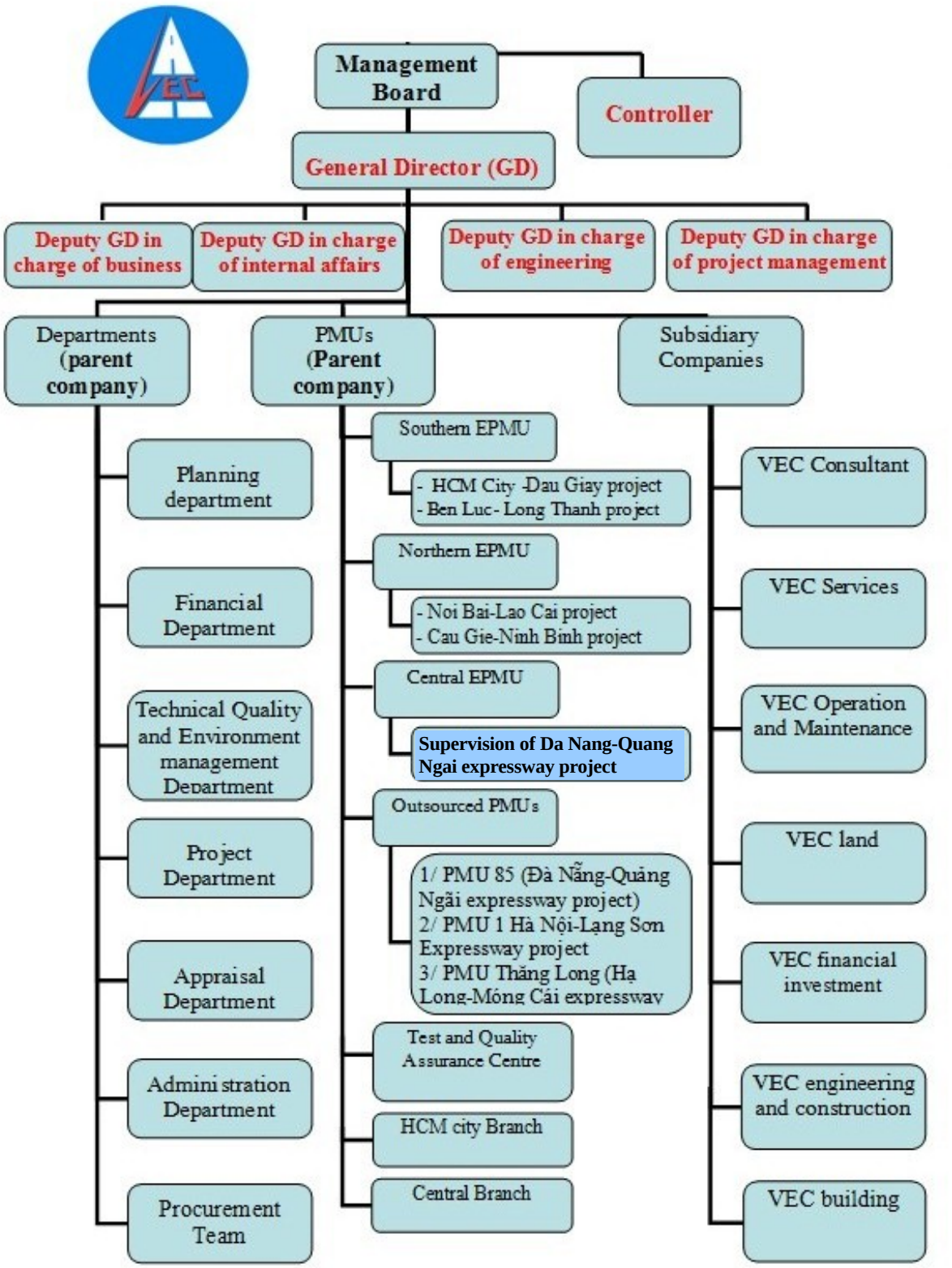
Organizational Chart of the Da Nang – Quang Ngai Expressway Construction Project

Attachment 11



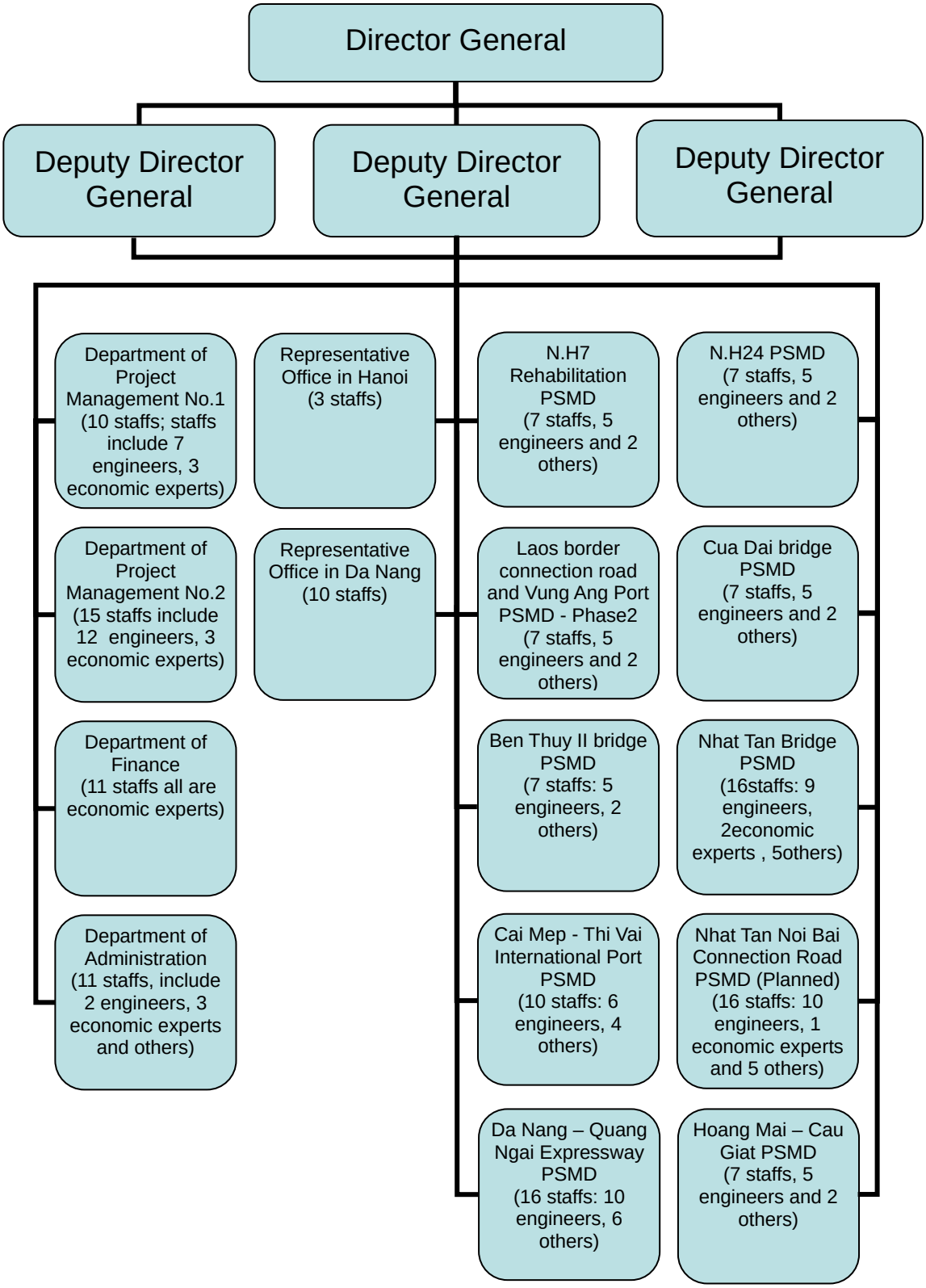
Attachment 12

Organization Chart of VEC



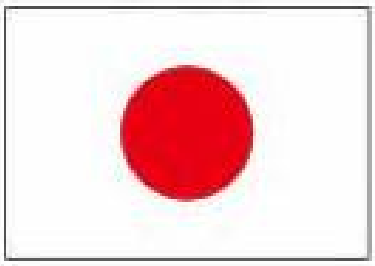
Attachment 13

Organization Chart of PMU 85



Attachment 14

＜Sample＞



the national flag of Vietnam

Project Name
FUNDED BY JAPANESE ODA LOAN
AS A TOKEN OF FRIENDSHIP AND COOPERATION
BETWEEN
JAPAN AND VIETNAM
【Year of Completion】

JICA

JAPAN
Official Development Assistance

the mark of Executing Agency

HIV/AIDS PREVENTIONALIEC CAMPAIGN

Attachment 15

Under the overall management and coordination of the Team Leader of IPRMS, a team of consultants specialized in HIV/AIDS and STD IEC campaign shall perform the tasks specified in this sub-ToR.

BACKGROUND

HIV/AIDS: The first case of HIV/AIDS infection in Vietnam was found in 1990, and there are now (2009) an estimated 242, 557 people living with HIV/AIDS. Ministry of Health (MOH) estimates that there will be 254,000 HIV/AIDS cases in 2010, increasing to 280,000 in 2012. With a national average of 28.6%, HIV/AIDS is most prevalent among injecting drug users (IDUs), in comparison with female sex workers (FSWs) – 4.4%; and men having sex with men (MSM) – 5% (HCMC) and 9% (Hanoi), and spread through blood. However, there are some indications that the rate of HIV/AIDS infection caused through sex has recently increased, with the overall rate for males 4 times higher then for female cases. Overall Vietnam's HIV/AIDS epidemic is concentrated, both in specific sub-populations and regions.

There is considerable variability of the spread of HIV/AIDS across provinces. HIV/AIDS prevalence is highest in Vietnam's two economic magnets, specifically the Haiphong-Hanoi corridor of the Red River Delta and the Mekong Delta, particularly HCMC, which alone has approximately a quarter of Vietnam's HIV/AIDS infections.

Vietnam's response has been broad based, including: a National Strategy on HIV/AIDS Prevention and Control in Vietnam until 2010, and vision to 2010; a law on HIV/AIDS Prevention and Control passed in 2006; 9 National Programmes of Action under the National Strategy; an Action Plan on Managing and Coordinating Donations; and considerable international support, including from the World Bank, ADB, DFID/NORAD, UNAIDS, Global Fund, and the Government of Australia. At the practical implementation level responses have included: awareness/ communication campaigns; community outreach; condom promotion; free needle and syringe distribution; methadone maintenance programs; HIV testing services; counseling services; and monitoring, evaluation and surveillance activities.

In the infrastructure and transport sectors, MOH and Ministry of Transport (MOT) have noted that at present there is little comprehensive research on mobile populations in the sectors, with limited guidelines and mechanisms to connect the general healthcare and referral systems for HIV testing and/or treatment. MOH and MOT have begun an ADB funded baseline study to investigate these issues. In addition, MOT (HIV/AIDS Control Committee) is working in partnership with the MOH (Administration of HIV/AIDS Control).

At an implementation level, large numbers of infrastructure projects funded by the Government of Vietnam (GoV) and donors are currently underway. Specifically, during the construction phase of the DQE, it is anticipated there will be an influx of construction workers, who are expected to be unaccompanied men, and in the majority from outside of the project area. It is also expected that there will be an increase in demand for sex workers near the construction sites, and that the infrastructure improvements will facilitate increased mobility, especially for transport and construction workers. Unsafe sex can increase the risk of increased transmission of HIV/AIDS and sexually transmitted infections (STIs), particularly amongst and between migrant/ mobile populations, sex workers and host communities. Female sex workers and women - i.e. the wives/ partners of men practicing unsafe sex -may be particularly vulnerable to HIV/AIDS and STIs, and less able to change their own behaviour and insist on safe sex practices.

OBJECTIVES

The objectives of this 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.

SCOPE OF ACTIVITIES

Task 1: Rapid Assessment

- Undertake a rapid assessment of the level of knowledge, attitudes and practice (KAP) of the target audience across the specific construction sites along the project alignment.
- Undertake a situational analysis to assess the status of project construction activities and timeframes; any on-going HIV/AIDS awareness activities amongst the target audience; and liaise with key provincial authorities and local stakeholders, including HIV/AIDS Committees and health clinics.

Task 2: Develop Workplan

- Based on the findings of the rapid assessment and situational analysis, develop a Workplan for 3 year period. The work plan shall take full consideration and reference of the "Road to Good Health" Toolkit developed by the World Bank in 2008 (available at:http://www.roadtogoodhealth.org).
- Clarify rationale, and identify priority construction locations and provinces for implementation activities, and confirm the scope of the HAPP.
- Undertake a sex disaggregated baseline at prioritized locations, including indicators identified as part of the Monitoring and Evaluation (M&E) Framework. For example, the baseline survey on HIV/AIDS awareness could include: transmission/non-transmission knowledge; prevention knowledge, STIs awareness; discrimination and stigma (i.e. willingness to affiliate with HIV/AIDS positive people); drug use and sexual behaviors (e.g. sex with non-marital partner in last three months, use of condoms when having sex with non marital partner in the last three months). The baseline will include a survey of the preferences of the of group construction workers on the most effective communication approach; i.e. when, where, how and what should be said as an HIV/AIDS awareness and prevention messages.
- Develop the overall intervention strategy, implementation schedule, resources and budget allocation.

Task 3: Implementation and Communication Activities

- Based on the situational analysis and baseline findings develop a set of information, education and communication (IEC) activities which are gender sensitive, and appropriate to the local culture and target audience. HIV/AIDS treatment activities will not be possible as part of the assignment. Therefore, clients will need to be referred to local health authorities for testing and follow up.
- The proposed IEC activities could include, for example:
  - *Printed materials*: brochures, posters, wall calendars, playing cards, billboards, murals, advertisements (e.g. posted at the construction camps or on public transport vehicles).
  - *Mass media:* every construction camp should have a television and/or video recorder to show mini-dramas, docu-dramas.
  - *Giveaways:* strong visual HIV/AIDS messages on used items easily integrated into community life (e.g. condoms, pens, T-shirts, caps, key chains, playing cards).
  - *Community Awareness Events:* e.g. a community awareness day/ health day/ fun day: for employees and, if applicable, their families.
  - *Other innovative ideas:* for example SMS, emails to raise HIV/AIDS awareness.

Task 4: Monitoring and Evaluation (M&E) Framework

- Undertake regular monitoring and reporting on DQE implementation; including undertaking a baseline survey; monitoring of IEC activities; reporting through progress reports to Supervision Missions; and midterm and final evaluations.
- The M&E Framework would include sex disaggregated indicators, data collection, analysis, reporting on activities and outcomes, timeframe for mid-term and final evaluations, and coordination across the 13 provinces. The M&E Framework and indicators will be finalized on agreement of the Proposed Workplan.
- For example, the M&E Framework would include (but not be limited to) the following sex disaggregated indicators:
    - material dissemination: the number of HIV/AIDS materials disseminated: leaflets, brochures, posters, T-shirts etc
    - condom distribution: number distributed
    - knowledge of HIV/AIDS transmission and prevention mechanisms: construction workers, residents of villages near sites, PPMUs, etc
    - communication and awareness raising trainings/ workshops: number of construction sites, number of construction workers, number of residents participating, number of other workers (e.g. sex workers) participating, number of workers participating in workshops
    - attitudes to HIV/AIDS status: percentage of constriction workers/ residents with discriminatory attitudes to people living with HIV/AIDS

REQUIREMENT OF EXPERTISE

The Consultant will have:

- professional and experienced staff, in HIV/AIDS awareness and prevention, particularly in information, education and communication programs.
- experience in effectively managing similar campign for a large linear infrastructure project; including planning, budgeting, monitoring and reporting.
- experience with working in Vietnam, including a good understanding of local culture, social norms, gender relations, and ethnic minorities.
- a good working relationship with local government and health departments.
- positive experiences coordinating with other service providers and collaborating with international donors, possibly working on HIV/AIDS at the provincial project sites.

INDICATIVE BUDGET

The budget for the HIV/AIDS activity under IPRMS shall not exceed US $300,000.

Progress of the North-South Expressway Projects

Attachment 16

No	Section	km	Cost (million $)	Project owner	Status
1	Cau Gie-Ninh Binh	50	547	VEC	Under Construction, to be completed by 2011
2	Ninh Binh-Thanh Hoa	121	1,538	MOT	F/S on-going by TEDI. PMU1 in charge of project preparation. PPP scheme to be applied.
3	Thanh Hoa-Ha Tinh	98	1,487	MOT	F/S on-going by TEDI
4	Ha Tinh-Quang Tri	277	1,271		No information
5	Quang Tri–Da Nang	178	1,589	MOT (PMU HCM)	Cam Lo-Tuy Loan: F/S on-going
6	Da Nang-Quang Ngai	131.5	1,471	VEC	F/S (JETRO), F/S review (WB), F/S approved, D/D on-going.
7	Quang Ngai-Quy Nhon	150	1,394		PreF/S on-going (TEDI)
8	Quy Nhon-Nha Trang	240	1,468		No information
9	Nha Trang–Phan Thiet	235	2,000	MOT (PMU 6)	F/S on-going (local consultant)
10	Phan Thiet–Dau Giay	100	991	Bitexco, IFC	F/S on going. PPP scheme to be applied.
11	HCMC-Dau Giay	55	1,111	VEC	D/D completed (ADB), under construction
12	Ben Luc – Long Thanh	58	1,607	VEC	F/S (JETRO) and F/S review (TEDI-S) completed and approved, ADB PPTA on-going
13	HCMC-Trung Luong	40	520	PMU My Thuan	Construction completed
14	Trung Luong-My Thuan	43	974	BEDC	F/S completed, under Construction (BOT)
15	My Thuan-Can Tho	32.2	312	PMU My Thuan	F/S on going. PPP scheme to be applied.
16	Doan Hung–Hoa Lac–Pho Chau	457	4,813		No information
17	Ngoc Hoi–Chon Thanh–Rach Gia	864	7,974		No information

Attachment 17

Draft TOR of D/D consultant

3. Scope of Services

3.1 General

In executing the services, the Consultant shall follow the current relevant Guidelines and regulation/procedures of GOVN and the Bank based on the FIDIC Conditions of Contracts. The Consultant shall assist PMU85/MOT in all aspects of the work including the review of previous studies, detailed design and tender assistance required for implementation of the Project. The scope of the consulting services broadly consists of, but not limited to, the following works:

1. Review of previous studies.
2. Detailed engineering design including cost estimation and preparation of tender documents and other supporting documentation.
3. Assistance with calling and assessing tenders for works and for contract negotiations.

Special attention is drawn to the requirement that the Consultant conduct independent bid evaluations and give the Client advice on issues related to contract negotiations for the Client's reference.

The Consultant shall perform the tasks listed below:

3.2 Review of Previous Studies and Establishing the Detailed Design Framework

The Consultant shall:

(1) Review Previous Studies

The Consultant shall review the previous studies to acquaint themselves with the evolution of the Project and its current features, and to identify matters that may materially affect the work of the current contract. Key issues will be identified for discussion and agreement with PMU85/MOT. The review shall cover, among others, the following subjects:

a. Review of horizontal and vertical alignment and proposed structures.

b. Review site-specific social and environmental impacts identified in the Environmental Impact Assessment (EIA) prepared by PMU85 and the mitigation measures proposed in the associated Environmental Management Plan (EMP).

c. Review construction phasing and management of traffic during construction.

d. Review toll operation and control facilities, operation and maintenance facilities and services, service areas, parking areas, etc.

(2) Establish Detailed Engineering Design Framework

The Consultant shall:

a. Establish design criteria and design standards to be applied for the Project.

b. Recommend and agree with PMU85/MOT the format and content for the Bills of Quantities, cost estimates and prequalification and bidding documents.

c. Recommend and agree with PMU85/MOT the time schedule for preparation of the detailed design, the Bills of Quantities, cost estimates, prequalification documents and bidding documents to allow the tendering of works and construction for each contract package to commence immediately after the completion of necessary design and documentation work and the gaining of necessary approvals.

3.3 Detailed Engineering Design and Procurement Planning

Tasks to be undertaking by the Consultant to prepare the detailed engineering design and the planning of procurement will include:

1. Identify project packaging.
2. Conduct surveys and investigations.
3. Prepare detailed design for roads, bridges and other structures.
4. Design of intelligent transport systems and toll facilities.
5. Establish an operation and maintenance system for the project.
6. Prepare an Environmental Impact Assessment, Environmental Management Plan, Ethnic Minority Development Plan (if needed) and Resettlement Action Plan.
7. Recommend construction methods and prepare a construction schedule.

8. Prepare a cost estimate for the Project.
9. Prepare pre-qualification, tender and contract documents.
10. Prepare an implementation program.

In undertaking the detailed engineering design, the Consultant shall:

a. Use the reference documents of previous studies approved by GOVN and the World Bank as the basis for detailed design.

b. Use engineering standards approved by GOVN. Where current standards are not available or are unsuitable, the Consultants shall make recommendations for appropriate standards and gain approval from PMU85/MOT for their use.

c. Undertake the work in a phased manner so that pre-qualification of contractors can occur for packages for which detailed design and documentation is completed while detailed design and documentation continues for other packages.

3.3.1 Packaging

The Consultant shall identify a recommended packaging for the project and get agreement with the Client before commencing detailed design. Packaging shall satisfy the following conditions:

a. Individual packages should be confined to a single province;

b. Individual package shall be financed by only a single financier;

c. The value of a package should generally be from about 70 million to 100 million USD, i.e. neither too big nor too small.

d. During D.D preparation, the Consultant shall study, initiate the solutions and design a contract package with reasonable scopes of works beforehand so that its construction can be commenced in 2010.

3.3.2 Surveys and Investigations

(1) Data collection

- Investigate and collect the following data for cost estimate and general cost estimate: Production costs related to local transportation activities; depreciation regulations related to traffic vehicles; haulage tables for transportation services; charges for travel, bridges and roads, and insurance; costs for traffic accidents; inflation and exchange rate in the previous years; local unit price for calculation of general cost estimate; consult unit prices of projects under implementation in the region; investigate sources of materials and energies for construction; cooperate with local governments to identify disposal areas for soil and waste materials (including liquid waste)

- Survey for construction material transportation

- Investigate and collect planning data related to the project and work with relevant authorities: Collect planning maps of highways, railways, waterways and maritime; plan of industrial and urban zones along the route; plan of systems of hydraulic works , irrigation, canals, dykes, and pumping stations, etc; plan of underground works and system of underground and overhead lines; Plan of water supply and drainage system; plan of electricity supply and lighting; plan of communication system and other relevant plans along the route, etc (the plans must be granted with official approval of relevant authorities)

- Collect project documents and design document of the relevant projects

- Work and agree in writing with relevant authorities of Da nang city, Quang Nam and Quang Ngai provinces, 5^{th} military zone under Ministry of Defense, EVN, VNPT, PMU of industrial zones and other relevant managing agencies about the following contents: Alignments; alternative design of interchange; scale and location of toll plazas, control center, service stations; elevation of detailed plans of urban zones and industrial zones; location, span or width, and elevation of culvert and frontage road; navigational clearance, railway clearance; documents related to hydraulic works, irrigation, water sources and sewage system for urban zones, clearance of large canals and dykes; areas within military structures, military barracks; and the other relevant documents, etc.

(2) Surveys

Implement detailed surveys served for engineering designs of all work items under the project including: surveys of topography, hydrology, geology and testing, material sources, traffic issues, electricity, land acquisition and resettlement, surveys of relevant underground and overhead structures and staking land acquisition,etc ..,and

additional survey quantities (if any) during the design. The surveys must comply with current Vietnamese specifications and standards, and supply sufficient data for documentation of detail engineering designs. Before implementation of surveys, the Consultant must carry out thorough studies on existing documents and data in the previous stages (FS, JETRO). Based on the findings from the studies, the Consultant makes and submit detailed plans for VEC's approval to implement. Scope of the work are mainly, but not limited, as follows:

(i) Topographic survey

- Class IV primary control points (national coordinate system VN2000): Installed with GPS technology, mark specification is in accordance with standard 22 TCN 263-2000. Each mark's distance is about 3-4 km along the expressway route, and at least 4 marks/ point at points of intersection and large bridges such as Ky Lam, Tam Ky.... and at least 2 marks/ point for the other interchanges and bridges. The marks along the route and at the large bridges and interchanges should be arranged reasonably to avoid overlapping.

- Class IV leveling network: Installed with highly accurate geometric leveling equipment. Marks of IV class leveling network share same positions with those of IV class primary control points. Its errors are varied within standard 22 TCN 263-2000.

- Secondary control point (traverse net): measured with electronic tachometer which has accuracy and errors according to standard 22 TC 263-2000. Each mark's distance is about 150m-200 m/1 point along the expressway route, and at least 8 marks/ point for points of interchange and large bridges and at least 4 marks/ point for the other interchanges and bridges. The marks along the route and at the large bridges, interchanges should be arranged reasonably to avoid overlapping.

- Technical leveling network: Marks of technical leveling networks share same positions with those of secondary control point. It is measured with highly accurate geometric leveling equipment. Its accuracy and error is in line with standard 22 TCN 263-2000.

- Site planning: According to the alignment determined in FS, a site plan at scale of 1/1000 is made along the route, with measurement range in the expressway from center line to sides of 70 m and that in level crossing (traverse) from center line to sides of 50 m. The site plan is required to have full description of topography, ground objects, underground and surface structures, high voltage and low voltage lines, ground communication lines, railway signals, location of lakes and ponds, system of irrigation and canals, special ground objects, historical site, temples, pagodas, feretories, cemeteries, and administrative land boundary, etc as well as GPS marks, and secondary control points.

- Detailed stakeout works: According to the above site plan at scale of 1/1000, alignment design must comply with the specification and is agreed with relevant authorities (locality, military, etc). Based on system of secondary control points, official setting out in the field includes: top marking, marking in the curve, main stakeout in TS, TC, P, ST, CT; and detailed stake arrangement with max. distance of lower than 20m/ stake, and main stakes in the curve and in changed terrains and stakes of ground objects, culverts, control stakes, locations in planned industrial and urban zones (focusing on starting points and ending points) boundary of communes and districts, etc. Main stakes at top of curves, in TS, TC, P, ST, CT, Km, culverts, bridges, intersection, etc must be concreted according to standard 22 TCN 263-2000.

- Survey of longitudinal section at horizontal scale of 1/1000, and vertical scale of 1/100.

- Survey of cross-section at scale of 1/200. Surveying range is 70 m from center line to both sides of the expressway.

- Survey of culverts for drainage: Planimetric survey of the culverts with span (width) of more than 1.5m is at scale of 1/500 at the culverts, and axial measurement range of 100 m and horizontal one of 100 m for each side. The axial survey of dyke's center line, horizontal survey of dyke, and road crossing at all points of dyke's center line are at scale of 1/200. Surveying range includes range of planimetric survey of the culverts. Intersection angle is surveyed between road and culvert center lines. It is necessary to agree in writing with the relevant agencies on irrigation culverts.

- Survey of intersection points with the other works such as railways, high-voltage and low-voltage lines, communication lines including phone lines, electricity and lighting structures, post and communication cables and underground structures in the expressway routes consists of the following works: measurement of height of rail top at the intersection points with the existing routes; investigation of planned elevation of crossroad, if any; survey of elevation and locating alignment and electrical poles (by coordinate), survey of at least two adjacent poles, intersection angle between lines and perpendicular lines, distance from the center line to the poles, height of the poles, clearance between the lowest lines and natural surface; and survey of kinds of poles, electricity, cables, pipeline, electric transmission grid, managing agencies.

- Survey of interchanges: Identify crossroad intersecting with designed route (coordinate, station); identify the intersection angle, width of road base, kind of pavement, existing structure, kinds of vehicle, etc in the interchanges; stake out concrete/ iron piles at centerlines, starting points, ending points, top points, and basic points in the curve; make site plan with scale of 1/500 with measurement range within designed interchange range; survey longitudinal section of interchanges and its branches with length scale of 1/1000 and height scale of 1/100; survey cross-section of interchange at scale of 1/200 and distance from centerline to each side of 50m, and survey range is equal to site plan one.

- Survey of bridge: Make elevation plan at construction place of bridge at scale of 1/500; survey profile of bridge at scale of 1/500 at center line of the expressway; stake center line of the bridge with accuracy equivalent to that of secondary control points (it is noted to collect hydrographic and hydraulic data, and the documents agreed with local authorities on plan of rivers, dykes and hydraulic works. It is necessary to survey meteorological data such as: temperature, wind, rainfall, humidity, earthquake, and figures of flow rate, velocity and water level.

- Survey of residential underpass culverts: Make plan at scale of 1/500 with distance from center line to two sides of 200m and 100m respectively along the main route; survey longitudinal section at center line of residential underpass culverts at scale of 1/500, surveying distance from the centerline to each side of 100 m; survey cross section at distance from the centerline to each side of 30 m at scale of 1/200; survey the intersection angle between the interchange and the main route; survey kinds of intersection (district ones, commune ones, and ward ones), scale and plans (if any). Survey profile of intersection at scale of 1/500, at distance from the expressway's centerline to each side of 200m, and survey cross section of intersection at scale of 1/200 from the intersection's centerline to each side of 30m.

- Survey of canals and dykes: Identify location and boundary of canals and dykes; set plan at scale of 1/500 in boundary of canals and dykes; survey longitudinal section of canals and dykes at scale of 1/1000, and their height at scale of 1/100; survey their cross section at scale of 1/100, at distance from their centerline to each side of 20m.

- Survey of toll plazas, control centers, service station, expressway management offices, bus station, communication stations: Establish area control points equivalent to secondary control points; survey topographic plan at scale of 1/500.

- Survey and investigation of land acquisition and resettlement.

(ii) Survey of hydrographical data

- Collect meteorological and hydrographical data related to rainfall, wind, and temperature, humidity from meteorological stations, and flow rate and water level at hydrographical stations in rivers in the project area.
- Collect relevant documents and work with Ministry and provincial departments of agriculture and rural development to agree with bridge designs. In terms of the culverts over irrigation systems, it is necessary to work with relevant authorities and local governments to gain agreement on culvert location, width, and required elevation from its bottom.
- Survey water level along each 1 km distance of the expressway, forming 1 water level group (each water level includes: highest one, frequent one, average one, and lowest one in 3 consecutive years; survey causes and period of flood....For drainage culverts, survey water level groups (each water level includes: highest one, frequent one, average one, and lowest one in 3 consecutive years). Survey year and causes of flood. Illustrate surveyed water level groups in the site plan.
- Survey situation of existing drainage works, irrigational system along and through the route, identify existing cross-section of canals and dykes, their top width, bottom width, depth, bottom elevation, functions, flow direction and longitudinal slope, and mark at their side.
- Survey fully existing situation of drainage, utility purposes and managing agencies of irrigation systems along and through the route.
- Hydrologic survey of bridge: Measure cross-section of flow; survey the water level in form of 3 groups at each location of bridge including: highest one, frequent one, average one, and lowest one in 3 consecutive years, causes and duration of flood.
- Hydraulic and hydrologic calculation: Based on survey data, carry out hydrologic calculation for the engineering design such as designed water level along the route, and hydraulic and hydrologic calculation of bridges and culverts (flow rate, velocity, and water level, general and local scour).

(iii) Engineering geological survey:

The Consultant is required to study thoroughly geological data in FS stage to arrange the holes drilled at stage of the engineering designs, avoiding to quantity overlapping. Requirements of geological drill are as follows:

- Engineering geological survey of normal foundation: Drill both normal foundation and culverts with two holes at the depth of 7 m per 1 km.
- Survey at special sections such as the ones which need deep excavation, embankment or soft ground ones: Drill one hole at the expressway centerline per 75 m; drill geological cross-sections with two holes for two sides and one hole at the centerline per 150 m and these cross-sections should be combined the locations of drilled culverts. Depth of borings must be enough to meet the requirements of detailed design. Carry out Vane shear test (VST) at drilled holes of the centerline at cross-section location. Distance of vane shear is 2 m to bottom of the holes..
- Engineering geological survey of bridge: Each abutment and bridge pier have one the drilled hole (location of abutment and bridge pier is identified after completion of the plan and profile of bridge's center line); the hole is 3-5 m deeper than pile foundation with the completing conditions equivalent to standard of 22 TCN 263-2000; one sample/ 2m is taken. SPT piercing in the holes is carried out with distance of 2m/ point. Test physico-mechanical properties of ground, especially in case of soft ground, test the additional parameters such as Cv, K, organic content, and compress 3 axles in form of UU and CU to provide sufficient data for soft ground treatment.
- Engineering geological survey of tunnel: Drill one hole at the expressway centerline per 50 m. Depth of borings must be enough to meet the requirements of detailed design. Testing 17 undisturbed soil samples/ each boring and 8 disturbed samples/each boring. Seismic measurement at 4 points at the depth of 50m and 8 points at the depth of 100m is carried out to identify strata structure.
- Engineering geological survey of residential underpass culvert: Drill two staggered holes at each location of the residential underpass culvert, one hole at right lane of the expressway, and another at left one; Take one sample/ 2m; carry out SPT piercing in the holes with distance of 2m/ point.
- Engineering geological survey of toll plazas, control centers, service station, expressway management offices: each location has at least 4 holes with full depth to provide sufficient data for the design.
- Sampling and testing works is carried out in accordance with the standards of 22 TCN 259-2000, 22 TCN 263-2000, 22TCN262-2000 and enough data is required to collect to serve for detailed engineering design. For the embankments on the soft ground, it necessary to test the parameters such as Cv, K, organic content, and compress 3 axles in form of UU and CU to provide sufficient data for soft ground treatment. The Consultant shall collect and store samples, especially the ones at large bridges. These samples shall be handed over to the client upon the Project completion.

(iv) Material Source Survey

This task must be ensured to collect all data of locations of material sources which meet the requirements of the Project, are practical and feasible during construction.

- Back filling materials (borrow pits) and sand for soft ground treatment: identify exploitable soil and sand quarries; work with local governments to gain agreement in writing ad then, map out them on plan at scale of 1/50,000. Collect data related to capacity and quality of each quarry; take testing sample to identify necessary parameters of back filling materials and others for soft ground treatment.
- Survey and evaluation of general situation, capacity and transportation length of the routes for exploitation and transportation to the construction site.
- Borrow pits and quarry sites for construction of bridge and culverts, pavement: For borrow pits and quarry sites which are exploited or being exploited, collect data related to their capacity and quality, exploitability, and transporting conditions to the construction site. For new borrow pits and quarry sites, carry out procedures for survey and testing necessary characteristics of each material.

(v) Survey of other relevant structures

- Survey current situations of traffic works in the area to evaluate usage capacity and level that shall be upgraded to construct service roads for construction of the expressway.

- Survey old bridges and culverts on the cross lines: Identify location, survey profile, main cross-section, and elevation of components of existing works; review construction materials; evaluate loading capacity of the works; evaluate fault degrees, suitability and utilizing capacity.

- Survey current situations of irrigation works within study area.

- Survey underground structures, public works: optical cables, underground cables, pipeline, oil and petrol pipeline, etc.

- Survey existing power supply in the route, and request for supplying capacity and starting points. For transformer stations, request was made to identify their location, scale, capacity, specifications, and works which is supplied with power, etc. Survey additional locations of transformer stations; identify clearly locations of the station by coordinate and full description in maps including topographic, geologic and ground object data, and agreeing with the local governments in writing on these issues, etc.

- Survey cultural buildings, temples, pagodas, and relevant legal religious buildings.

(vi) Additional Traffic Surveys

- The Consultant shall review available traffic data on the existing road and conduct additional surveys as necessary to:

- Collect data needed for the detailed design of foundations, pavements, interchanges, and toll stations, etc; and

- Collect base line data that can be used for monitoring performance of the completed Project, where this data shall include the quantity and composition of traffic using the current national highway, total travel time and the variability of the travel time for, separately, cars and trucks, and the number and type of traffic accidents per annum along the current corridor. This data will be collected separately for at least the segments Danang to Tam Ky and Tam Ky to Quang Ngai.

(vii) Independent Land Valuation Survey

As part of the work on updating the Resettlement Action Plan (RAP) the consultant will engage as a sub-consultant a qualified Land Valuation Consultant (LVC). The LVC must be licensed by the Ministry of Finance to undertake land valuation in Viet Nam and be independent of all project stakeholders. As part of the updating work the LVC will undertake a survey to establish current market values for all types of land, by location and use, sufficient to confirm the budget under the updated RAP.

(viii) Environmental and Social Surveys

Undertake surveys as necessary to update the EIA and EMP.

3.3.3 Detailed Design of Road, Bridges and Other Structures

The Consultant shall:

(1) Prepare a comparative analysis to aid the selection of the most appropriate types of interchange bridge structures and other important structures taking into account the site conditions, construction method as well as economic conditions.

(2) Review the preliminary design in the previous studies taking account of the results of updated topographic survey, materials survey, geotechnical survey and soil investigation, hydrological survey and other available data.

(3) Take account of site-specific social and environmental impacts identified in the EIA prepared by PMU85 and the mitigation measures proposed in the associated EMP, and any other matters identified though work described in Section 3.3.6, in the detailed engineering design. Maintain records of changes in features of the Project to facilitate updating the EIA and EMP.

(4) Prepare detailed engineering designs for roads, interchanges, bridges and other structures, soft ground treatment and pavement structure, including structural analysis, design calculation, drawings, etc. taking into account the most appropriate construction method.

(5) Prepare engineering drawing that include site plans, interchange plans, general views and structural drawings. Unless agreed, scales for drawings shall be not less than:

a.	Plan	1:1000
b.	Elevation	1:100
c.	Cross sections	1:50
d.	Structures	1:200
e.	Other	as appropriate

(6) Calculate quantities for each item of work based on the detailed design and the agreed form and content of the bill of quantities.

(7) Undertake a road safety audit of the expressway design and revise the design, if appropriate, to address any safety issued identified in the design. A report will be prepared by an experienced Road Safety Audit Expert and submitted for review by the appropriate authority to confirm that appropriate measures have been taken to address road safety issues.

(8) The Consultant shall prepare detailed design of service areas in the alignment.

(9) The Consultant shall prepare D.D and undertake construction supervision of resettlement area with the provisional sum of 200.000 USD.

(10) The Consultant shall prepare the documents of land acquisition staking for the Project.

3.3.4 Study and Design of ITS and Toll Collection System

(1) The Consultant shall conduct an investigation into intelligent transport systems (ITS) and the toll collection system needed for the Project. The systems will include vehicle and incident detection, CCTV, information systems, data transmission, etc. The work shall draw on technical standards that it is expected will be established by the GOVN with support from JICA, and will cover:

a. Identification of potential data and information needs, traffic management issues and emergency support such as police, fire and ambulance services.

b. Conceptual design of ITS and toll collection systems.

c. Setting of design standards for each system component and configuration of each item of equipment.

d. Conceptual plan for institutional arrangements and staffing needed to manage the ITS and toll collection systems, including branch offices.

(2) Following this investigation and approval of proposals by PMU85/MOT, detailed design and cost estimates shall be prepared for the following facilities:

a. Central control and operation center and branch offices.

b. Agreed vehicle and incident detection, CCTV, information systems, data transmission and other systems.

c. Toll collection facilities including toll gate equipment and its operation system.

d. Communication and other facilities needed for emergency support such as police, fire and ambulance services.

3.3.5 Expressway Operations and Maintenance

The Consultant shall review the operation and maintenance systems for existing and proposed expressway in Vietnam and recommend the most appropriate system for the Project. In doing so, the Consultant will also take account of work described in Section 3.3.4, and also the work of a separate planned investigation of legal and regulatory frameworks, policies, and institutional and administrative arrangements for expressways in Vietnam to be undertaken by the GOVN with support from the World Bank. The work to be undertaken by the Consultant shall include the following:

a. Plan a Management Unit to undertake operations and maintenance of the expressway, including goals and objectives, organization structure, and staffing needs for the proposed Unit. This work should be undertaken to a sufficient level of detail to allow work described in the next item to be undertaken.

b. Determine the buildings, facilities and equipment needed by the Unit, including its central and branch offices, submit the plans to PMU85/MOT for review.

c. Following approval, prepared the detailed design and cost estimates for buildings and facilities for the Management Unit and prepared specifications and cost estimates for all equipment, vehicles, materials and supplies, including stock, that will need to be procured to allow the Unit to undertake operations and maintenance of the expressway.

3.3.6 Review and update, as necessary, an Environmental Impact Assessment (EIA), Environmental Management Plan (EMP), Ethnic Minority Development Plan (EMDP) and Resettlement Action Plan (RAP)

The Consultant shall review the EIA for the Project and submit an updated EIA and an associated EMP with recommendations for mitigation measures in response to the environmental impacts, if any. An EMDP will be prepared if needed. The Consultant shall review and update the Resettlement Action Plan (RAP) prepared by PMU85/MOT. The EIA, EMP, EMDP and RAP will be prepared in accordance with World Bank guidelines including the *Environmental Assessment Guidebook* and *Involuntary Resettlement in Development Projects: Policy Guidelines in World Bank-Financed Projects.*

A more detailed outline of activities to be undertaken with regard to the EIA and EMP is presented in Annex A. Information on the work to be undertaken in updating the RAP is given in Annex B. The work on the RAP will draw on the independent land valuation survey described in Section 3.3.2(6). The work of the Consultant on resettlement will support the relevant Resettlement Committees, which have the principal responsibility for planning and implementing resettlement activities.

Note: The EIA, EMP, EMDP (if needed) and RAP shall be translated into Vietnamese by the Consultant and submitted PMU85. In case, there is discrepancy between English version and Vietnamese one, the English version will prevail.

3.3.7 Construction Method and Schedule

The Consultant shall carry out the study of construction execution and propose the most suitable and practical construction method and schedule of the Project.

3.3.8 Cost Estimate

The Consultant shall prepare the detailed cost estimate for the construction of the Project, including:

a. Bills of Quantities for the construction works of every contract package and the whole project.

b. The cost estimate for every contract package based on a detailed unit price analysis.

c. Prepare the total cost estimate for every contract package and the whole project based on the Bills of Quantities and taking account of project management and other costs, and showing a breakdown of foreign and local currency portions.

d. Prepare annual financing schedules for every contract package and the whole project based on the construction schedule and showing total costs and a breakdown of foreign and local currently portions.

3.3.9 Pre-qualification, Bidding and Contract Documents

For sections of the Project to be funded with assistance from the World Bank, the Consultant shall prepare procurement documents in accordance with the World Bank's *Procurement Guidelines*, *Standard Pre-Qualification Documents* and *Standard Bidding Documents for Procurement of Works*. For sections to be funded with assistance from the Government of Japan, the documents will be prepared in accordance with the most recent version of the *Handbook for Procurement under ODA Loans.* These standard documents will be provided to the Consultant.

The procurement documents to be prepared by the Consultant will include those needed for pre-qualification, bidding and contracting each contract package. The documents shall be prepared and completed in a timely manner so that prequalification of packages for which design has been completed and approvals gained can be undertaken in parallel with detailed design for other packages and the bidding can be started immediately after completing the detailed design for the concerned contract package.

Pre-qualification, bidding and contract documents shall be in English. The documents shall be translated into Vietnamese by the Consultant and submitted to PMU85/MOT for approval. Where there is discrepancy between the English and Vietnamese versions, the English version will prevail.

3.3.10 Preparation of Implementation Program

The Consultant shall prepare the implementation program in accordance with the final scope of works.

3.4 Procurement Assistance

The Consultant shall provide necessary technical assistance to PMU85/MOT in all aspects of the procurement process in accordance with the procurement regulations of GOVN and World Bank guidelines.

The technical assistance shall include, but not limited to, the following:

(1) Preparation of the Procurement Plan covering all major work contracts.

(2) Preparation of pre-qualification and bidding documents for each contract package.

(3) Providing necessary assistance on invitation of pre-qualification, evaluation of pre-qualification applications and preparation of pre-qualification evaluation reports for submission for review by concerned agencies including PMU85, MOT and the World Bank.

(4) Providing necessary assistance on invitation for bids, bid opening, pre-bid conference, pre-bid site visits for the pre-qualified interested bidders, preparation of clarification answers and addendum to bidding documents, evaluation of bids, preparation of bid evaluation report in accordance with the World Bank's standard bid evaluation form and the MOT's form for submission for review by concerned agencies including PMU85, MOT and the World Bank.

(5) Assist PMU85/MOT in contract negotiation, preparation and finalization of contracts submission for review by concerned agencies including PMU85, MOT and the World Bank.

3.5. The Consultant shall stake land acquisition with the provisional sum of 200,000 USD to hand over to local authorities who undertake compensation for land acquisition and resettlement.

3.6. The Consultant shall undertake training and technology transfer for the Client and PMU85.

Attachment 18

BỘ GIAO THÔNG VẬN TẢI	CỘNG HÒA XÃ HỘI CHỦ NGHĨA VIỆT NAM Độc lập - Tự do - Hạnh phúc
Số: /QĐ-BGTVT	*Hà Nội, ngày tháng 01 năm 2010*

THÔNG TƯ

Quy định về tổ chức quản lý, khai thác đường cao tốc

Căn cứ Luật Giao thông đường bộ ngày 13 tháng 11 năm 2008;

Căn cứ Nghị định số 51/2008/NĐ-CP ngày 22 tháng 4 năm 2008 của Chính phủ quy định chức năng, nhiệm vụ, quyền hạn và cơ cấu tổ chức của Bộ Giao thông vận tải;

Bộ trưởng Bộ Giao thông vận tải Quy định về tổ chức quản lý, khai thác đường cao tốc như sau:

CHƯƠNG I

QUY ĐỊNH CHUNG

Điều 1. Phạm vi áp dụng và đối tượng điều chỉnh

Quy định này quy định về việc quản lý, khai thác đường cao tốc để hướng dẫn cho mọi đối tượng tham gia giao thông, các tổ chức và cá nhân liên quan nhằm quản lý và khai thác đường cao tốc có hiệu quả, đảm bảo an toàn giao thông, an toàn công trình.

Điều 2. Giải thích từ ngữ

Trong Quy định này, các từ ngữ dưới đây được hiểu như sau:

1. *Đường cao tốc* là đường dành cho xe cơ giới, có dải phân cách chia đường cho xe chạy hai chiều riêng biệt; không giao nhau cùng mức với các đường khác; được bố trí đầy đủ trang thiết bị phục vụ, bảo đảm giao thông liên tục, an toàn, rút ngắn thời gian hành trình và các xe ra vào đường cao tốc có kiểm tra, kiểm soát ở những điểm cố định

2. *Đất của đường cao tốc* là phần đất trên đó công trình đường cao tốc được xây dựng và phần đất dọc hai bên đường cao tốc để quản lý, bảo trì, bảo vệ công trình đường cao tốc.

3. *Hành lang an toàn đường cao tốc* là dải đất dọc hai bên đất của đường cao tốc, tính từ mép ngoài đất của đường cao tốc ra hai bên để bảo đảm an toàn giao thông đường cao tốc.

4. *Làn nhập, tách dòng* là làn xe dành cho phương tiện giao thông cơ giới chuyển tốc độ trước khi vào hoặc ra khỏi đường cao tốc.

5. *Cầu vượt* là cầu của đường ngang vượt qua đường cao tốc ở phía trên.

6. *Cống, cầu, hầm chui dân sinh* là cống hoặc cầu hoặc hầm của đường cao tốc dùng cho người, động vật hoặc các phương tiện xe đi qua đường cao tốc theo kiểu chui dưới đường cao tốc.

7. *Đường trên cao* là đường cao tốc được xây dựng bằng cầu cạn.

8. *Trung tâm quản lý đường cao tốc* là trung tâm quản lý, theo dõi và điều hành giao thông trên đường cao tốc, có quy mô quản lý về địa lý theo lãnh thổ vùng hay khu vực.

9. *Phòng quản lý giao thông đường cao tốc* là đơn vị của tổ chức quản lý, khai thác đường cao tốc, được giao nhiệm vụ theo dõi và phối hợp với các cơ quan chức năng để giải quyết các về giao thông trên một cung đoạn đường cao tốc.

Điều 3. Hành lang an toàn đường cao tốc

1. Phạm vi đất dành cho đường cao tốc gồm đất của đường cao tốc và đất hành lang an toàn đường cao tốc.

2. Đất của đường cao tốc là phần đất nằm giữa hai hàng cọc giải phóng mặt bằng đã được đền bù giải phóng mặt bằng khi thực hiện dự án đầu tư.

3. Phạm vi hành lang an toàn đường cao tốc là phần đất nằm giữa ranh giới giải phóng mặt bằng và mốc của đường cao tốc.

Đối với cầu cạn, theo chiều ngang được quy định như đối với đường.

Điều 4. **Các công trình thiết yếu trong hành lang an toàn đường cao tốc**

1. Tổ chức, cá nhân xây dựng công trình thiết yếu trong hành lang an toàn đường cao tốc phải thực hiện theo Nghị định của Chính phủ quy định về « Quản lý và bảo vệ kết cấu hạ tầng giao thông đường bộ » và các quy định sau đây:

a) Lập và duyệt dự án, thiết kế theo quy định của pháp luật về đầu tư và xây dựng;

b) Có văn bản chấp thuận ngay từ khi lập dự án đầu tư, hồ sơ thiết kế kỹ thuật hoặc báo cáo kinh tế - kỹ thuật của Bộ Giao thông vận tải hoặc tổ chức được Bộ Giao thông vận tải ủy quyền.

c) Có giấy phép thi công bảo đảm an toàn giao thông của cơ quan quản lý đường có thẩm quyền.

2. Tổ chức quản lý đường cao tốc có trách nhiệm kiểm tra, giám sát Tổ chức, cá nhân được phép xây dựng công trình thiết yếu trong hành lang an toàn đường cao tốc tuân thủ các yêu cầu sau:

a) Thực hiện các thủ tục về thoả thuận, chấp thuận thiết kế và cấp giấy phép thi công theo quy định của quy định này và quy định có liên quan khác của pháp luật;

b) Cam kết di chuyển hoặc xây dựng, cải tạo công trình đúng tiến độ theo yêu cầu của cơ quan quản lý đường bộ có thẩm quyền;

c) Không được yêu cầu bồi thường và phải chịu hoàn toàn trách nhiệm, kinh phí có liên quan đến việc giải tỏa công trình (nếu có).

Điều 5. Quản lý mốc lộ giới đường cao tốc và hành lang an toàn đường cao tốc

1. Uỷ ban nhân dân các cấp căn cứ mốc lộ giới, cọc giải phóng mặt bằng để hướng dẫn nhân dân sử dụng đất phù hợp với quy định của pháp luật.

2. Nghiêm cấm các hành vi sau đây:

- Xây dựng mới, cơi nới công trình trong phạm vi hành lang an toàn đường cao tốc.

- Tái lấn chiếm phần hành lang an toàn đã đền bù giải phóng mặt bằng.

3. Ngoài quy định tại khoản 2 Điều này, trong phạm vi hành lang an toàn đường cao tốc còn phải tuân theo các quy định dưới đây:

a) Không xây dựng chợ, cơ sở dịch vụ, trường học, nhà ở và các công trình khác.

b) Không xây dựng, lắp đặt biển quảng cáo (đặc biệt là các biển phát sáng). Các biển quảng cáo đặt ngoài hành lang an toàn đường cao tốc, nếu làm giảm sự chú ý của người tham gia giao thông thì không được lắp đặt.

c) Không được đào đất, đá, không được đổ đất đá phế thải, phế liệu làm ảnh hưởng đến thoát nước, đến vệ sinh môi trường và an toàn cầu, đường.

Điều 6. Bảo vệ công trình đường cao tốc

1. Nghiêm cấm bất kỳ hành vi nào làm mất mát, hư hỏng các hạng mục công trình và công trình đường cao tốc.

2. Nghiêm cấm việc tự ý đào, đắp mái ta luy mở lối lên, xuống cũng như tự ý phá dải phân cách, hàng rào bảo vệ, đắp đất đá hoặc hành vi tương tự để tạo lối đi qua dải phân cách giữa.

3. Các hành vi lấn chiếm, trộm cắp, tháo dỡ, di chuyển, làm hư hỏng các hạng mục công trình trên đường cao tốc làm mất an toàn giao thông, làm giảm tuổi thọ công trình, hạn chế hiệu quả khai thác thì tùy theo mức độ vi phạm sẽ bị xử lý hành chính hoặc truy cứu trách nhiệm hình sự theo quy định của pháp luật.

CHƯƠNG II

QUY ĐỊNH VỀ SỬ DỤNG ĐƯỜNG CAO TỐC

Điều 7. Giao thông trên đường cao tốc

1. Các đối tượng không được tham gia giao thông trên đường cao tốc:

a) Xe máy chuyên dùng có tốc độ thiết kế nhỏ hơn 70 km/h;

b) Máy kéo, xe mô tô hai bánh, xe mô tô ba bánh, xe gắn máy (kể cả xe máy điện) và các loại xe tương tự;

c) Xe máy thi công tự hành, xe bánh xích;

d) Xe bồn chở chất độc hại, dễ cháy, vật liệu nổ đi qua đường hầm dài trên 500 m;

e) Xe thô sơ, người đi bộ;

g) Súc vật;

2. Người, phương tiện, thiết bị phục vụ việc quản lý, bảo trì đường cao tốc có phù hiệu hoặc biểu tượng riêng thì được đi lại trên đường cao tốc (không quy định tốc độ) nhưng không gây ảnh hưởng và cản trở giao thông trên đường.

3. Giao thông trên đường cao tốc theo hai chiều riêng biệt; các xe chỉ được ra, vào đường cao tốc ở các nút giao.

4. Người lái xe trên đường cao tốc phải thực hiện các quy định sau đây:

a) Khi vào đường cao tốc phải có tín hiệu xin vào và phải nhường đường cho xe đang chạy trên đường cao tốc, khi thấy an toàn mới cho xe nhập vào dòng xe ở làn xe sát mép ngoài; nếu có làn xe tăng tốc thì phải cho xe chạy trên làn xe đó trước khi nhập vào làn xe của đường cao tốc;

b) Khi ra khỏi đường cao tốc phải thực hiện chuyển dần sang làn xe phía bên phải, nếu có làn xe giảm tốc thì phải cho xe chạy trên làn xe đó trước khi rời khỏi đường cao tốc;

c) Không được cho xe chạy ở làn dừng xe khẩn cấp và phần lề đường;

d) Không được cho xe chạy quá tốc độ tối đa và dưới tốc độ tối thiểu ghi trên biển báo hiệu, sơn kẻ trên mặt đường.

5. Người lái xe trên đường cao tốc khi chuyển làn xe phải có tín hiệu báo trước và phải đảm bảo an toàn. Việc chuyển làn xe trên đường cao tốc người lái xe phải chịu trách nhiệm về hành vi vượt xe của mình khi gây ra tai nạn giao thông.

6. Người lái xe phải cho xe chạy cách nhau một khoảng cách an toàn ghi trên biển báo hiệu.

7. Chỉ được dừng xe, đỗ xe ở nơi quy định; trường hợp buộc phải dừng xe, đỗ xe không đúng nơi quy định thì người lái xe phải đưa xe ra làn dừng xe khẩn cấp, nếu không thể được thì phải báo hiệu để người lái xe khác biết.

8. Người lái xe trên đường cao tốc ngoài việc tuân thủ Quy định này còn phải tuân thủ quy tắc giao thông khác quy định tại Luật Giao thông đường bộ.

9. Kiểm soát phương tiện ra, vào đường cao tốc

Tại các vị trí cửa ra vào đường cao tốc, lực lượng Cảnh sát giao thông và Thanh tra giao thông thực hiện việc kiểm soát phương tiện để đảm bảo khai thác tuyến cao tốc an toàn.

10. Giao thông trên đường nối từ quốc lộ, đường tỉnh, đường nối từ các khu vực quan trọng với đường cao tốc thực hiện như đối với giao thông trên quốc lộ.

Điều 8. Tốc độ lưu hành cho phép đối với phương tiện tham gia giao thông trên đường cao tốc

Tốc độ lưu hành tối đa, tối thiểu cho phép các phương tiện tham gia giao thông trên đường cao tốc như sau:

- Làn cạnh dải phân cách giữa: Tốc độ tối đa 100 km/h, tốc độ tối thiểu 60 km/h;

- Làn cạnh làn dừng khẩn cấp: Tốc độ tối đa 80 km/h, tốc độ tối thiểu 50 km/h;

- Nếu trời mưa, sương mù hay đường trơn, người lái xe phải giảm tốc độ tùy theo tình hình thời tiết.

Điều 9. Khoảng cách an toàn giữa hai xe khi tham gia giao thông trên đường cao tốc

1. Khi mặt đường khô ráo, khoảng cách an toàn ứng với mỗi tốc độ lưu hành được quy định như sau:

Tốc độ lưu hành (km/h)	Khoảng cách an toàn tối thiểu (m)
Đến 80	80
Trên 80 đến 100	100

2. Khi trời mưa, có sương mù, mặt đường trơn trượt, người lái xe phải điều chỉnh khoảng cách an toàn thích hợp lớn hơn khoảng cách an toàn ghi trên biển báo hiệu.

Điều 10. Chấp hành báo hiệu trên đường cao tốc

1. Người tham gia giao thông trên đường cao tốc phải chấp hành hiệu lệnh và chỉ dẫn của hệ thống báo hiệu đường bộ. Thứ tự ưu tiên như sau:

- Hiệu lệnh của Người điều khiển giao thông;

- Biển báo hiệu tạm thời;

- Biển báo hiệu cố định.

2. Ngoài hệ thống báo báo hiệu đường bộ, các xe lưu hành trên đường cao tốc còn được hỗ trợ bởi hệ thống phát thanh radio qua kênh VOV giao thông.

Điều 11. Các quy định khi gặp sự cố khẩn cấp về giao thông

1. Sự cố hỏng xe
- Bật đèn xi nhan hai bên báo hiệu nguy hiểm;
- Di chuyển xe vào làn dừng khẩn cấp, trường hợp bất khả kháng thì phải dừng xe sát mép đường bên phải;
- Gọi điện thoại báo cho phòng quản lý giao thông bằng số điện thoại SOS để được gọi đội cứu hộ xe (hoặc gọi qua số điện thoại khẩn cấp).

2. Sự cố tai nạn
- Bật đèn xi nhan hai bên báo hiệu nguy hiểm;
- Tắt máy;
- Rời khỏi xe, không khoá cửa, để chìa khoá trong ổ khoá xe;
- Gọi điện thoại báo cho phòng quản lý giao thông bằng số điện thoại SOS để được gọi xe cứu hộ, xe cấp cứu (hoặc gọi qua số điện thoại khẩn cấp).

3. Sự cố cháy xe
- Cho xe đỗ sát lề đường, để lại chìa khoá trong ổ khoá xe;
- Rời khỏi xe ngay lập tức, không khoá cửa;
- Tổ chức thoát hiểm cho người ngồi trên xe nếu là xe khách;
- Dập tắt lửa bằng bình chữa cháy trong xe hoặc các thiết bị chữa cháy có;
- Nếu không thể dập tắt được lửa phải lập tức thoát hiểm và gọi điện thoại báo cho phòng quản lý giao thông bằng số điện thoại SOS hoặc cho lực lượng Cảnh sát phòng cháy chữa cháy qua số điện thoại 114.

4. Sự cố do xe khác cháy dẫn đến tắc đường
- Cho xe đỗ sát lề đường, để lại chìa khoá trong ổ khoá xe;
- Bật đèn xi nhan hai bên cảnh báo nguy hiểm;
- Lập tức rời khỏi xe, không được khoá cửa xe;
- Tham gia dập tắt lửa bằng bình chữa cháy trong xe hoặc các thiết bị chữa cháy có sẵn;
- Gọi điện thoại báo cho phòng quản lý giao thông bằng số điện thoại SOS hoặc cho lực lượng Cảnh sát phòng cháy chữa cháy qua số điện thoại 114.

5. Tắc nghẽn xe
- Cho xe đỗ sát vào mép đường bên phải;
- Bật đèn xi nhan hai bên báo hiệu nguy hiểm;
- Gọi điện thoại báo cho phòng quản lý giao thông bằng số điện thoại SOS;
- Tuân theo hướng dẫn của Cảnh sát giao thông hoặc Thanh tra giao thông.

Điều 12. Tải trọng và khổ giới hạn của đường cao tốc

1. Người lái xe tham gia giao thông trên đường cao tốc phải tuân thủ các quy định về tải trọng, khổ giới hạn của đường bộ.

2. Các loại xe quá khổ giới hạn, quá tải trọng có giấy phép lưu hành trên quốc lộ được lưu hành trên đường cao tốc.

CHƯƠNG III
TỔ CHỨC QUẢN LÝ KHAI THÁC ĐƯỜNG CAO TỐC

Điều 13. Tổ chức theo dõi và điều hành giao thông trên đường cao tốc

1. Trung tâm quản lý giao thông đường cao tốc được cơ quan nhà nước có thẩm quyền thành lập để quản lý, theo dõi và điều hành giao thông trên mạng lưới đường cao tốc khu vực.

2. Phòng quản lý giao thông đường cao tốc được tổ chức quản lý đường cao tốc thành lập để theo dõi và phối hợp với các cơ quan chức năng để giải quyết các về giao thông trên một đoạn đường cao tốc.

3. Tổ chức quản lý đường cao tốc chịu trách nhiệm tổ chức các lực lượng cứu hộ, cứu thương, cứu hỏa, bảo trì công trình trên đường và các vấn đề có liên quan để phục vụ khai thác đường cao tốc

Điều 14. Nhiệm vụ của tổ chức quản lý, khai thác đường cao tốc

1. Tổ chức quản lý, khai thác đường cao tốc có nhiệm vụ triển khai thực hiện phương án tổ chức quản lý khai thác đường cao tốc được cơ quan Nhà nước có thẩm quyền phê duyệt.

2. Giải quyết sự vụ sảy ra trên đường và tai nạn giao thông.

3. Chủ trì giải quyết bảo dưỡng thường xuyên đường cao tốc.

4. Chủ trì hoặc phối hợp với các nhà thầu xây dựng để xử lý và khắc phục các hư hỏng trên đường.

5. Quản lý hệ thống thông tin trên đường cao tốc

- Đảm bảo thông tin thông suốt giữa các trạm, chốt điều tiết giao thông và đội tuần tra giao thông về phòng điều hành thuộc tổ chức quản lý đường cao tốc và ngược lại.

- Tiếp nhận thông tin khẩn cấp (SOS) để đưa ra phương án hỗ trợ kịp thời khi có sự cố xảy ra trên đường.

- Phục vụ công tác vận hành, bảo dưỡng và sửa chữa thiết bị.

6. Chủ trì đàm phán bồi thường thiệt hại về tài sản công trình đường bộ do xe cộ gây nên theo Luật Dân sự. Nếu không thực hiện được thỏa thuận bồi thường dân sự thì tổ chức quản lý, khai thác đường làm việc với các cơ quan nhà nước có thẩm quyền để buộc người làm hư hỏng công trình hoàn trả nguyên trạng trong thời gian ngắn nhất.

CHƯƠNG IV

XỬ LÝ TAI NẠN GIAO THÔNG TRÊN ĐƯỜNG CAO TỐC

Điều 15. Xử lý hiện trường tai nạn giao thông

Khi nhận được thông tin về tai nạn giao thông xảy ra, nhân viên hoặc các lực lượng của tổ chức quản lý đường cao tốc, lực lượng Cảnh sát giao thông có mặt tại hiện trường, chậm nhất là sau 20 phút kể từ khi nhận được thông tin để kịp thời tổ chức xử lý tai nạn và cứu hộ; Nếu xảy ra tắc nghẽn hoặc có từ 2 tai nạn xảy ra ở các địa điểm khác nhau thì chậm nhất là sau 30 phút.

Trình tự xử lý hiện trường như sau:

a) Đặt biển cảnh báo an toàn tại hiện trường, mở đèn tín hiệu cảnh báo;

b) Cứu người bị nạn;

c) Bố trí nhân viên và giải tán xe cộ, đề phòng vật nguy hiểm, dễ cháy dễ phát nổ;

d) Giải tỏa ngay hiện trường, đưa tài sản, phương tiện, hàng hóa gặp sự cố về tập trung tại những vị trí quy định để bảo quản và xử lý theo quy định của pháp luật ;

đ) Chỉ dẫn giao thông.

Điều 16. Phòng quản lý giao thông

Tổ chức quản lý đường cao tốc bố trí Phòng quản lý giao thông thiết lập tổng đài trực 24/24 giờ để phối hợp xử lý các tình huống về giao thông xảy ra trên tuyến.

Điều động và điều chỉnh nhân lực, vật lực của các tổ chức có liên quan để đảm bảo vận hành bình thường và thông suốt an toàn đường cao tốc.

Điều 17. Phong tỏa đường hoặc cấm đường

Do nguyên nhân thiên tai (mưa bão, động đất…) hoặc các nguyên nhân bất khả kháng khác dẫn đến, phải phong tỏa một phần hoặc toàn bộ đường cao tốc, việc phong tỏa đường được áp dụng theo trình tự sau:

1. Đội tuần tra đường căn cứ vào tình hình thực tế của mặt đường xác định phải phong tỏa một phần hoặc toàn bộ tuyến đường, trước hết phải thông báo cho Phòng điều tiết giao thông.

2. Phòng quản lý giao thông sau khi nhận được báo cáo về tình trạng cần phong tỏa đường hoặc cấm đường, hỏi rõ tình hình, ghi chép, thông báo cho nhân viên tuần đường đến hiện trường, đồng thời báo lên lãnh đạo Tổ chức quản lý đường cao tốc.

3. Sau khi nhận được thông tin, nếu Người đứng đầu Tổ chức quản lý đường cao tốc đồng ý phong tỏa hay cấm đường, thì Phòng quản lý điều tiết giao thông thực hiện:

- Liên hệ với Cảnh sát giao thông (CSGT) để thông báo về tình trạng khẩn cấp và thống nhất về phương án phong tỏa đường hay cấm đường trong trường hợp có liên quan đến việc phải điều tiết giao thông của các tuyến quốc lộ liên quan;

- Thông báo cho các đơn vị, bộ phận có liên quan và các phương tiện truyền thông truyền tin.

4. Khi phong tỏa đường hay cấm đường Tổ chức quản lý đường cao tốc phối hợp với CSGT đưa ra biện pháp cụ thể.

Điều 18. Khống chế, điều tiết giao thông

1. Khống chế, điều tiết giao thông để thực hiện các công việc xử lý các tai nạn trên đường hoặc khi xảy ra các trường hợp đặc biệt.

- Việc khống chế, điều tiết giao thông để xử lý sự cố thường được áp dụng đối với các tai nạn giao thông nghiêm trọng, đối với các sự cố cần phải giải toả các chướng ngại vật khối lượng lớn

- Việc khống chế, điều tiết giao thông chủ yếu là đặt các biển báo hiệu hạn chế tốc độ, biển hướng dẫn giao thông thay đổi làn xe chạy, sử dụng đường tránh bảo đảm giao thông an toàn, thông suốt.

- Đối với các sự cố nghiêm trọng, khống chế giao thông ở hiện trường nơi xảy ra sự cố thường diễn ra trên đoạn đường kéo dài, gồm 5 khu vực sau:

1 Khu vực cảnh báo, có chiều dài ít nhất là 1000m;

2 Khu vực thay đổi dòng giao thông phía trước nơi xảy ra sự cố đang phải xử lý, có chiều dài khoảng 150 m;

3 Khu vực đệm, có chiều dài khoảng 80m;

4 Khu vực thực hiện các công việc xử lý vụ sự cố; chiều dài khu vực này được xác định theo yêu cầu xử lý sự cố;

5 Khu vực thay đổi dòng giao thông sau khu vực 4, có chiều dài tối thiểu 50m.

2. Khống chế giao thông trong điều kiện thời tiết xấu nếu có sương mù.

Trong điều kiện có sương mù Tổ chức quản lý đường cao tốc phải kịp thời có các biện pháp khống chế giao thông tuỳ theo tầm nhìn của lái xe để đặt các biển báo hạn chế tốc độ xe chạy, quy định khoảng cách giữa các xe, quy định cho phép hoặc cấm vượt xe theo bảng sau.

Khống chế giao thông trong các tình huống có sương mù
ở mức độ hạn chế tầm nhìn khác nhau

Tầm nhìn thấy của lái xe (m)	Hạn chế tốc độ (km/h)	Khoảng cách giữa các xe (m)	Vượt xe
> 200 m (sương mù mỏng)	Không hạn chế	> 100	Cho phép
100 – 200 m (sương mù trung bình)	≤ 60	> 50	Cho phép
< 100 m (sương mù nhiều)	≤ 50	> 50	Cấm

3. Khống chế giao thông khi có mưa to, gió lớn

Khi có mưa to, gió lớn người lái xe phải tự điều chỉnh tốc độ xe chạy để đảm bảo an toàn hoặc tuân thủ theo chỉ dẫn báo hiệu bằng điện tử.

Điều 19. Tham gia của Cảnh sát giao thông

1. Tổ chức quản lý đường cao tốc phải chủ động phối hợp chặt chẽ với lực lượng CSGT trong công tác tổ chức giao thông và xử lý tai nạn.

2. Trong thời gian tổ chức khai thác tạm thời Cảnh sát giao thông thực hiện các công việc chính như sau:

a) Chốt chặn, điều tiết giao thông, tuần tra giao thông trên đường cao tốc;

b) Tổ chức giao thông:

- Trường hợp hiện trường vụ tai nạn giao thông ít ảnh hưởng đến việc lưu thông của các phương tiện giao thông thì tổ chức hướng dẫn giao thông để không xảy ra ùn tắc;

- Trường hợp hiện trường vụ tai nạn giao thông gây ùn tắc thì báo cáo lãnh đạo chỉ huy đơn vị Cảnh sát giao thông nơi xảy ra tai nạn có phương án tăng cường lực lượng, phương tiện, phân luồng giao thông để giải quyết ùn tắc.

Điều 20. Cứu thương và tham gia của y tế

Trên dọc tuyến cao tốc, Tổ chức quản lý đường cao tốc phải lập sơ đồ đường đi và cự ly đến các trạm y tế tuyến xã, huyện, tỉnh của địa phương để phổ biến (cấp sơ đồ) cho tất cả các nhân viên và lái xe của đơn vị khai thác đường.

Đơn vị quản lý đường phải phân công xe và người tham gia cứu thương khi có tai nạn sảy ra cho từng ca công tác.

Khi xảy ra tai nạn đơn vị quản lý đường phải cử nhân viên cứu hộ đến và có mặt tại hiện trường chậm nhất theo Điều 15 của quy định này kể từ thời điểm nhận được tin báo xảy ra tai nạn. Các nhân viên cứu hộ phải được đào tạo chuyên nghiệp để phục vụ công tác cứu hộ.

Khi nhận được thông tin về tai nạn giao thông gây thương tích thì tổ chức y tế nhận tin cử ngay xe cứu thương đến hiện trường để cùng cấp cứu với các tổ chức cá nhân có mặt tại hiện trường.

Điều 21. Phối hợp với chính quyền địa phương

Khi xảy ra các vụ tai nạn nghiêm trọng trên đường cao tốc, chính quyền địa phương hỗ trợ xử lý các vấn đề có liên quan theo trình tự và quy định của pháp luật.

Điều 22. Tham gia của Thanh tra giao thông đường bộ

Tổ chức quản lý đường cao tốc phải phối hợp chặt chẽ với Thanh tra giao thông đường bộ để phối hợp xử lý các vấn đề có liên quan cần đến sự hỗ trợ và giải quyết của Thanh tra.

Thanh tra đường bộ tham gia các việc chủ yếu sau đây:

a) Phát hiện, ngăn chặn và xử phạt vi phạm hành chính trong việc chấp hành các quy định của pháp luật về bảo vệ kết cấu hạ tầng giao thông đường bộ, bảo đảm tiêu chuẩn kỹ thuật của công trình đường bộ; trường hợp cấp thiết, để kịp thời ngăn chặn hậu quả có thể xảy ra đối với công trình đường bộ (hạn chế đến mức tối thiểu việc dừng hoặc gây cản trở đối với các xe ô tô hoạt động trên đường cao tốc, chỉ thực hiện dừng chặn xe khi có yêu cầu hỗ trợ tờ Cơ quan quản lý đường cao tốc);

b) Phát hiện, ngăn chặn và xử phạt vi phạm hành chính trong việc chấp hành các quy định về hoạt động vận tải và dịch vụ hỗ trợ vận tải tại các trạm dừng nghỉ, trạm kiểm tra tải trọng xe, trạm thu phí.

Điều 23. Thu dọn hiện trường tai nạn trên đường

1. **Tổ chức** quản lý đường cao tốc phải bố trí các xe chuyên dụng túc trực ở các vị trí thích hợp trên tuyến cao tốc để từ đó đến vị trí xảy ra tai nạn, sự cố là gần nhất làm nhiệm vụ trục kéo các xe bị sự cố trên đường.

2. Thu dọn chướng ngại vật, trục, kéo các xe bị tai nạn trên đường:

- Đối với các trường hợp không phức tạp thì trước khi thực hiện trục kéo xe, nhân viên quản lý đường phải bố trí người đặt các biển báo cần thiết, bố trí người hướng dẫn dòng xe chạy tránh khu vực trục kéo xe bằng các tín hiệu đèn hoặc cờ.

- Đối với các trường hợp phức tạp phải chiếm dụng làn xe chạy nhiều thời gian thì phải thực hiện khống chế giao thông như hướng dẫn của phòng giám sát, điều tiết giao thông.

3. Chủ phương tiện phải chịu trách nhiệm thanh toán chi phí trục, kéo xe.

Điều 24. Khắc phục các hư hỏng trên đường cao tốc do tai nạn gây nên

Khi có những sự cố tai nạn gây hư hỏng công trình đường cao tốc thì Tổ chức quản lý đường cao tốc phải tập trung lực lượng sửa chữa kịp thông xe trong thời gian sớm nhất.

Trường hợp có hư hỏng mà không gây mất an toàn giao thông thì cho phép khai thác tạm thời và có kế hoạch sửa chữa kịp thời.

Các hư hỏng mà Tổ chức quản lý đường cao tốc không đủ năng lực khắc phục, sửa chữa thì thông qua hợp đồng kinh tế để thực hiện và phải sửa chữa trong thời gian sớm nhất.

CHƯƠNG V

BẢO TRÌ ĐƯỜNG CAO TỐC

Điều 25. Tuần đường

Đội ngũ tuần đường, tuần tra, có phù hiệu, bảng hiệu có xe ô tô (thực hiện theo chức năng qui định).

Khi tuần đường nếu phát hiện sự cố hư hỏng của công trình đường cao tốc mà có thể gây mất an toàn giao thông hoặc ách tắc giao thông; các vụ việc lấn chiếm, vi phạm hành lang an toàn đường cao tốc thì phải báo cáo về phòng giám sát, điều tiết giao thông để xử lý và giải quyết.

Điều 26. Sửa chữa các hư hỏng nhỏ

Các hư hỏng nhỏ là hư hỏng có khối lượng công trình nhỏ, số lượng ít, có thể khắc phục trong thời gian ngắn. Tổ chức quản lý đường cao tốc chịu trách tổ chức việc sủa chữa trong thời gian sớm nhất có thể.

CHƯƠNG VI

TRÁCH NHIỆM CỦA CÁC CƠ QUAN, TỔ CHỨC

Điều 27. Trách nhiệm của Bộ Giao thông vận tải

Bộ Giao thông vận tải định kỳ tổ chức kiểm tra (hoặc kiểm tra đột xuất nếu cần thiết) công tác thực hiện việc quản lý, khai thác, các vấn đề có liên quan trên hệ thống đường cao tốc.

Điều 28. Trách nhiệm của Uỷ ban nhân dân cấp tỉnh.

Chỉ đạo Ủy ban nhân dân cấp huyện, Sở Giao thông vận tải thực hiện các quy định về quản lý, khai thác đường cao tốc đã được thống nhất với các địa phương có đường cao tốc đi qua.

Tổ chức chỉ đạo việc tuyên truyền, phổ biến, giáo dục cho moi công dân biết và thực hiện các quy định về đường cao tốc

Chỉ đạo các cơ quan chức năng của tỉnh phối hợp với Tổ chức quản lý khai thác đường cao tốc giải quyết các vấn đề phát sinh trong quá trình khai thác đường

Điều 29. Trách nhiệm của tổ chức quản lý đường cao tốc

1. Tổ chức quản lý đường cao tốc có nhiệm vụ phối hợp với Cảnh sát giao thông đường bộ, Ban An toàn giao thông, Sở Giao thông vận tải và chính quyền địa phương để thực hiện tốt Luật Giao thông đường bộ, các quy định của pháp luật liên quan đến an toàn giao thông đường bộ và nội dung Quy định này. Quản lý tốt hệ thống cầu, đường, các thiết bị an toàn giao thông trên đường cao tốc.

2. Thường xuyên kiểm tra, phát hiện các hư hỏng, mất mát và các hành vi xâm hại khác để xử lý kịp thời, đảm bảo theo quy định

3. Đình chỉ ngay các hoạt động gây tổn hại đến an toàn công trình và an toàn giao thông và báo cáo cho Bộ Giao thông vận tải và Uỷ ban nhân dân các cấp có liên quan.

4. Phối hợp với các cơ quan chức năng của địa phương trong việc tuyên truyền, phổ biến, giáo dục các quy định của pháp luật về an toàn giao thông trên đường cao tốc.

5. Hàng tháng có báo cáo về tình hình an toàn giao thông về Bộ Giao thông vận tải, Ủy ban an toàn giao thông quốc gia và Cục cảnh sát giao thông đường bộ - đường sắt.

6. Định kỳ hàng quý báo cáo Bộ Giao thông vận tải công tác quản lý, khai thác và các vấn đề có liên quan đến đường cao tốc./.

CHƯƠNG VII

ĐIỀU KHOẢN THI HÀNH

Điều 30 *lây thông tư 10 vao đây*

ATTACHMENT 19

VIETNAM
FINANCIAL REVIEW OF VIETNAM EXPRESSWAY CORPORATION

June 2010

A. Introduction

1. This note summarizes the key findings of the Bank's initial financial review of the Vietnam Expressway Corporation (VEC). This review provides an assessment of EVN's financial results for the 2005 - 2009 period based on its audited financial statements as well as other financial and operating data provided by VEC.

B. VEC Legal and Financial Structures

2. **Legal Structure.** VEC is a wholly state owned enterprise that was established in October 2004 by the Minister of Transport under Decision No. 3033/QD-BGTVT. Under this Decision, VEC has been charged with the following functions:

a) Investment, operation, maintenance and the management of toll collection on national expressway routes.
b) Construction of other transport facilities in all modes.
c) Management and operation of services adjacent to the expressway, such as motels, restaurants, advertisements, and construction materials.
d) Transport and technical consultation, including research and development with respect to the national highway system, the preparation of prefeasibility studies, feasibility studies, and designs, and the supervision of transport facilities and works.
e) Research and development regarding services in adjacent areas along expressway routes.

3. The company operates under a business license issued in November 2004 and amended in December 2007.

4. VEC is presently responsible for the development of six expressway projects (Table 1), of which three are now under construction. VEC states that the first of these projects, the Cau Gie – Ninh Binh Expressway, is scheduled to begin initial operations in mid-2011. In addition, VEC was also previously responsible for the development of the Trung Luong – Can Tho Expressway Project. However, this project has since been transferred to a expressway development company owned by the Bank for Investment and Development of Vietnam

5. **Organizational Structure.** The company is headed by the General Director under the supervision of the Management Board. Reporting to the General Director are four deputy directors, each of whom oversees one or more specific functions. VEC consists of six departments: (i) administration; (ii) planning; (iii) accounting and finance; (iv) appraisal; (v) projects; and, (vi) technical, quality and environmental management. Project implementation is undertaken by three project management units within VEC: (i) Cau Gie – Ninh Binh; (ii) Noi Bai – Lao Cai; and, (iii) southern expressway projects. As of May 2010, VEC employed 205 staff, all on a full-time basis.

Table 1: VEC Expressway Projects under Active Development

	Expressway	Status
1.	Cau Gie – Ninh Binh	Under Construction
2.	Noi Bai – Lao Cai	Under Construction
3.	Ho Chi Minh City - Long Thanh – Dau Giay	Under Construction
4.	Noi Bai – Mai Dich	Under Preparation
5.	Ben Luc – Long Thanh	Under Preparation
6.	Da Nang - Quang Ngai	Under Preparation

6. VEC also has one subsidiary[1] company and one associate[2] company. As of the end of 2009, VEC owned 55% of its subsidiary, the Vietnam Expressway Consultant Joint Stock Company, and 20% of its associate, the

[1] Subsidiary is a company in which VEC holds controlling interest, meaning that ownership exceeds 50%.

Vietnam Expressway Service Joint Stock Company. The total employment of these two companies is approximately 100 persons.

7. **Financial Structure.** As a separate legal entity, VEC is financially independent from Government in that its revenues, expenditures, assets and liabilities are recorded and accounted for on a separate basis. However, as its sole shareholder, and give the key role played by VEC in the development of Vietnam's road infrastructure, the Government exercises considerable control over VEC's financial affairs. For example, the Government determines which projects are to be assigned to VEC and plays a major role in the financing of these projects.

8. **Funding of VEC.** VEC has funded its capital investments primarily through debt and, to much lesser extent, with equity, all of which has been provided by Government. VEC intends that it will repay its debt and fund the operation of the maintenance of the completed expressways entirely through the collection of toll revenues and related income.

C. Accounting Standards

9. **Statutory Requirements.** In accordance with the requirements of the Ministry of Finance (MOF), VEC's accounting and financial management systems are based on Vietnamese Accounting Standards (VAS). Therefore, VEC's annual financial statements are prepared in accordance with VAS, which include a balance sheet, profit and loss account (income statement), and statement of cash flows. As is standard in Vietnam, VEC's financial year is the 12 month period ending December 31.

10. **External Audit.** VEC's annual financial statements are audited on an annual basis by a firm of independent auditors in accordance with Vietnamese Standards on Auditing. VEC has retained the same firm to undertake the annual audit since its establishment in 2004. With the exception of 2005, the audited statements, together with the report of the VEC General Director, the auditor's opinion, and accompanying notes have been issued within 3 – 4 months after the close of the financial year, which is typical for Vietnamese state enterprises. The 2005 report was not issued until August, 2006. Since 2007, the audit reports have been presented in both the Vietnamese and English languages.

11. The auditor's note, which is attached to the financial statements, provides the auditor's opinion as to whether the financial statements have been properly prepared in accordance with VAS and other relevant statutory regulations. In each year, the auditor has issued a qualified opinion, meaning that the financial statements were found to be in accordance with VAS and other statutory requirements with the possible exception of specific items. In 2008 and 2009, a qualification was issued because of VEC's methodology for the recognition and allocation of administration costs. In 2008, the auditor also stated that it was not able to verify the value of VEC's construction in progress. VEC states that the count of the 2008 construction in progress was undertaken by VEC after the close of the financial year and that the auditor was unable to attend the count during this period.

12. **Internal Audit.** In accordance with statutory requirements, VEC has an internal audit group, referred to as the "Control Board". The Control Board reports directly to VEC's Management Board and is also subject to Government oversight.

13. **Compliance with IFRS.** As noted above, VEC's accounting system and financial statements are based on VAS and, therefore, do not comply with International Financial Reporting Standards (IFRS). Although, a number of revisions to VAS have been implemented by MOF over the past decade that have brought it into greater consistency with IFRS, a number of differences remain. One important difference that is likely to be relevant to VEC in its future reporting is in the treatment of foreign exchange losses. Since 2009, unrealized foreign exchange losses can be deferred by most Vietnamese companies if such deferment is required to avoid a net loss. Under IFRS, such losses must be fully recognized in the year in which they occur. Therefore, where an enterprise has incurred foreign exchange losses, significant differences in reported profitability between VAS and IFRS can exist.

14. Some Vietnamese state enterprises, particularly those borrowing from international sources, have their financial statements audited in accordance with IFRS in addition to VAS. Since international creditors are much more familiar with IFRS, presenting financial information on this basis can better facilitate access to financing from these sources. In some cases, the requirement for IFRS reporting is specified in the legal agreements for such loans. For example, both the World Bank and Asian Development Bank (ADB) require that Vietnam Electricity (EVN) and its member companies borrowing from loans granted by the World Bank and ADB have

[2] Associate is a company in which VEC holds a significant interest, meaning that ownership is between 20% and 50%.

their annual financial statements audited in accordance with IFRS. However, ADB has not applied a similar requirement to VEC for its two existing loans.

15. Given the size of VEC's planned capital investment program, it needs to more fully develop its access to both domestic and international sources of financing. Preparing its audited financial statements in accordance with IFRS, in addition to VAS, would support better access to financing from international lenders and investors. Therefore, it is recommended that VEC consider preparation of its audited financial statements in accordance with both VAS and IFRS.

D. Financial Performance

16. **Operating Revenue & Expenses.** Since its establishment in 2004, VEC's focus has been on the planning and construction of its initial expressway projects, the first of which will not enter operation until at least 2011. As a result, VEC has not yet begun to generate operating revenues, which are to be derived from the application of tolls. This is shown in VEC's income statements over the 2005 – 2009 period (Table 2), which with the exception of 2007 do not show any operating revenue. Even the minor revenue reported in 2007 was not in fact due to actual operations but rather to the purchase and reimbursement of four vehicles for the construction supervision consultant on the Cau Gie – Ninh Binh Expressway Project.

17. VEC does earn interest income on its cash holdings, which is recorded as financial income on the income statement. Interest income has varied between a low of VND 1.8 billion ($0.1 million)[3] in 2009 and a high of VND 9.6 billion ($0.6 million) in 2006 (Table 2). VEC uses this income to cover its administration expenses. By allocating administration costs so that they exactly offset interest income, VEC earns no profit and, therefore, pays no income tax.

Table 2: VEC - Income Statements[1/]
(VND billion - nominal prices)

	2005	2006	2007	2008	2009
Revenue	0	5	0	0	0
Cost of Goods Sold	0	5	0	0	0
Financial Income	4	10	3	6	2
Financial Expenses	0	0	0	0	0
Administration Expenses	3	3	3	6	2
Net Income from Other Activities	0	0	0	0	(0)
Profit Before Tax	0	6	0	0	0
Income Tax	0	0	0	0	0
Profit After Tax	0	6	0	0	0

[1/] Derived from VEC audited VAS financial statements.

18. **Capital Investments.** VEC's construction activities are reflected in its balance sheets and cash flow statements, which are given in Tables 3 and 4 respectively. The balance sheets show VEC's financial position at the end of each year in terms of assets, liabilities and equity. The cash flow statements present all cash inflows and outflows during each year. VEC presently has three expressway projects under construction; Cau Gie – Ninh Binh, Noi Bai – Lao Cai, and Ho Chi Minh City - Long Thanh – Dau Giay. The accumulated cost expended on these projects as of the end of 2009 is VND 2,546 billion ($142 million), which is shown as construction in progress in the VEC balance sheet. This is more than double the VND 1,142 billion ($67 million) construction in progress as of the end of 2008. As these projects are completed, their cost will be transferred from construction in progress to tangible fixed assets.

19. VEC's annual capital investments have increased significantly over the past three years, from VND 516 billion ($32 million) in 2007, to VND 1,147 billion ($68 million) in 2008, and to VND 1,405 billion ($78 million) in 2009 (Table 5). These figures are derived from the increase in construction in progress and may underestimate actual construction activity. Advances to suppliers, which account for almost all receivables shown in VEC's

[3] Conversion from Vietnam dong (VND) to US dollar ($) based on year-end exchange rate published by State Bank of Vietnam. On this basis, VND/$ rates are 15,875 (2005), 16,101 (2006), 16,114 (2007), 16,977 (2008), and 17,941 (2009). Exchange rate applied for 2010 is 18,544, which is that effective as of May 28, 2010.

balance sheet (Table 3) are very large; VND 3,415 billion ($190 million). Advances outstanding at the end of 2008 were significantly less, but still large in comparison to the value of construction in progress as of this same date. A portion of these large advance amounts might indicate that additional construction has been undertaken that has not yet been formally recorded as being construction in progress.

Table 3: VEC – Balance Sheets[1/]
(VND billion - nominal prices)

	2005	2006	2007	2008	2009
Current Assets					
Cash	157	11	9	25	526
Short-Term Investments	89	10	254	431	0
Receivables	28	238	400	1,135	3,415
Other Current Assets	1	3	12	21	36
Total Current Assets	275	263	675	1,613	3,977
Non-Current Assets					
Net Tangible Fixed Assets	2	4	3	6	6
Net Intangible Fixed Assets	0	0	0	0	0
Construction in Progress	5	119	516	1,142	2,546
Other Non-Current Assets	0	0	0	23	23
Total Non-Current Assets	7	122	519	1,172	2,575
Total Assets	282	385	1,194	2,784	6,551
Current Liabilities					
Short-Term Debt	0	0	0	93	0
Current Portion of Long-Term Debt	0	0	0	0	0
Payable to Suppliers	0	1	31	13	13
Accrued Expenses	0	0	4	0	61
Other Payables	0	2	5	36	809
Total Current Liabilities	0	2	39	143	883
Non-Current Liabilities					
Long-Term Debt	0	0	400	1,634	4,596
Other Non-Current Liabilities	0	0	0	0	0
Total Non-Current Liabilities	0	0	400	1,634	4,596
Equity					
Contributed Capital	279	371	686	880	921
Funds & Reserves	2	12	68	128	152
Total Equity	281	382	754	1,008	1,072
Total Liabilities & Equity	282	385	1,194	2,784	6,551

[1/] Derived from VEC audited VAS financial statements.

20. **Financing of Capital Investments.** With no operating revenue yet, VEC has relied on debt, and to a much lesser extent on equity injections from Government, to fund its capital investment program. At the end of 2009, VEC's total debt was VND 4,596 billion ($256 million), almost three times more than that at the end of 2008 (Table 5). This debt has been derived from three main sources, as is shown in Table 6. The largest source has been domestic bond issues, which accounted for 44% of total debt at year end 2009. These bonds carry a Government guarantee and are sold by auction through the Hanoi Stock Exchange. Principal repayment on these bonds is due entirely upon the maturity date.

Table 4: VEC – Cash Flow Statements[1] /(VND billion - nominal prices)

	2005	2006	2007	2008	2009
Cash Flows from Operating Activities					
Income from Sale of Goods & Services	3	11	2	21	9
Payments to Suppliers	(29)	(323)	(486)	(1,267)	(1,488)
Payments to Employees	(2)	(3)	(5)	(7)	(24)
Interest Paid	0	0	0	(37)	(247)
Other Cash Inflows	2	149	604	43	888
Other Cash Outflows	(48)	(67)	(428)	(21)	(17)
Net Cash Flow	(75)	(235)	(313)	(1,267)	(879)
Cash Flows from Investing Activities					
Purchase & Construction of Fixed Assets	(0)	(2)	0	(4)	(1,963)
Payments for Short-Term Investments	0	0	0	(1,315)	(326)
Proceeds from Short-Term Investments	0	0	0	1,138	757
Other Cash Inflows	0	0	0	0	2
Other Cash Outflows	0	0	0	(23)	0
Net Cash Flow	(0)	(2)	0	(204)	(1,530)
Cash Flows from Financing Activities					
Contribution of Owners	229	91	311	193	41
Receipts from Loans	0	0	0	1,373	3,163
Repayments for Long-Term Principal	0	0	0	(80)	(332)
Other Cash Outflows	0	0	(0)	0	0
Net Cash Flow	229	91	311	1,486	2,872
Net Cash Flow in Period	154	(146)	(2)	15	463
Cash at Beginning of Period	4	157	11	9	25
Inpact of Exchange Rate Fluctuation	0	0	0	0	38
Cash at End of Period	157	11	9	25	526

1/ Derived from VEC audited VAS financial statements.

21. After domestic bonds, the next largest source of debt is from Official Development Assistance (ODA), which represents 36% of VEC's debt. The largest share of ODA debt has been provided by ADB, which by the end of 2009 had disbursed the equivalent of VND 1,487 billion ($83 million) toward the cost of the Noi Bai – Loa Cai Expressway and the Ho Chi Minh City – Long Thanh – Dau Giay Expressway. The other source of ODA is the Japan International Cooperation Agency (JICA), which is also funding a portion of the Ho Chi Minh City – Long Thanh – Dau Giay Expressway. The remaining share of VEC's debt is from domestic commercial bank loans, all of which were denominated in dong and provided by domestic commercial banks.

Table 5: VEC – Key Performance Indicators[1/] (VND billion - nominal prices)

	2005	2006	2007	2008	2009
Capital Structure & Liquidity					
Debt : Equity Ratio (DER)	0:100	0:100	35:65	62:38	81:19
Current Ratio	772.6	112.2	17.1	11.3	4.5
Cash & Short Term Investments	246	21	263	456	526
Capital Investments					
Capital Investments	6	121	516	1,147	1,405
Borrowing					
New Borrowing	0	0	400	1,373	3,163
Loan Repayments - Principal & Interest	0	0	0	117	578
Total Debt at Year End	0	0	400	1,727	4,596

1/ Derived from VEC audited VAS financial statements.

Table 6: VEC – Debt by Source & Currency as of December 31, 2009[1/] (VND billion - nominal prices)

Source of Debt	Foreign Currency Debt[2/]			VND	Total	Percent
	USD	JPY	Total	Debt	Debt	
1. ODA Loans	1,487	168	1,654	0	1,654	36%
2. Commercial Bank Loans	0	0	0	968	968	21%
3. Bonds	0	0	0	2,024	2,024	44%
Total	1,487	168	1,654	2,992	4,646	100%
Percent of Total Debt	32%	4%	36%	64%	100%	

1/ Derived from audited financial statements for 2009. 2/ USD - US Dollar; JPY - Japanese Yen.

22. **Foreign Exchange Exposure.** VEC is exposed to changes in exchange rates through its foreign currency debt, which accounted for 36% of total debt at year end 2009 (Table 6). All of this foreign currency debt is unhedged. As a result, any depreciation of the dong against the dollar or Yen will increase the cost of VEC's debt. Since VEC's toll revenues are in local currency, a depreciation of the dong could lead to a funding shortfall, which VEC might not be able to cover. However, the ability to hedge foreign currency exposure against the dong is still limited. One positive aspect of VEC's foreign currency loan portfolio is that almost 90% of these foreign currency loans are denominated in US dollars. Since the dong is managed primarily in relation to the dollar, there should be less exposure on dollar debt than on other foreign currencies.

23. **Maturity of Debt.** While all of VEC's debt is long-term, meaning that it has an original maturity of more than one year, much of this debt has a maturity significantly less than the life of the expressway assets being financed with this debt. For example, as of the end of 2009, its domestic bond issues, 56% of its borrowings through the domestic bond market had an original maturity of five years or less. By mid-2010, this had increased sharply to 74% with a maturity of less than five years. Additionally, all of VEC's commercial bank loans have an original maturity of less than five years. This means that in some cases, loans are coming due before the expressways have even begun to operate. For example, in 2009 VEC had to make loan repayments of VND 332 billion ($19 million). With no operating revenue, VEC repaid this from the proceeds of new debt taken out during 2009.

24. **Access to Debt.** VEC has struggled to secure the debt needed to fund its capital investment program. Despite a Government guarantee, a number of VEC's domestic bond offerings made in 2009 failed to sell any bonds. The company had five failed auctions over the period from June to August 2009. At another auction, in July 2009, VEC raised only VND 3.7 billion ($0.2 million) of the VND 500 billion ($28 million) it sought to sell. These auctions were intended to raise counterpart funding for the ADB funded Noi Bai – Lao Giay Expressway Project.

25. The main reason for these failed auctions is the interest rate, which is subject to an MOF set ceiling deemed to be too low by many prospective purchasers. This is at least in part related to unfavorable market conditions, which has significantly limited the overall supply of debt.

26. VEC was able to re-enter the bond market during the first quarter of 2010 with borrowings of VND 1,376 billion ($74 million) over a five week period from late January to early March 2010. However, the average interest rate on these issues was 13.05%, significantly higher than the average rate of 8.96% on VEC's 2009 bond issues (Table 7). MOF has given VEC approval to issue an additional amount of up to VND 4,000 billion ($216 million) in 2010. However, as of mid-2010, MOF has instructed VEC to temporarily withhold further bond issues until market conditions are considered more satisfactory. During this period, VEC is to instead raise funds through short-term commercial bank loans with maturities of up to six months. It states that it has agreements with two domestic banks to provide such short-term loans.

27. Up to mid-June 2010, VEC has issued bonds worth of total of VND 3,400 billion ($183 million). Table 7 provides a breakdown of this borrowing by year. As shown in the table, VEC was initially able to issue relatively long maturity bonds. The weighted average maturities of bonds issued in 2007 and 2008 were 15.0 years and 9.2 years respectively. However, the average maturity of bonds issued by VEC in 2009 and 2010 was much shorter; only 4.5 years. This reliance on shorter term debt was not by choice, but rather due to constraints imposed upon VEC in terms of the MOF ceiling interest rate and the resulting impact on VEC's ability to access debt. This brought the overall weighted average maturity for all VEC bonds down to 7.4 years, which is short given that the typical construction period for VEC's expressway projects is 5 – 7 years, followed by a 25 – 35 year operating life.

Table 7: VEC – Bond Issues by Year
(VND billion - nominal prices)

Year of Issuance	Total Issued	Average Interest Rate	Average Maturity (years)[1/]
2007	400	9.00%	15.0
2008	1,200	11.92%	9.2
2009	424	8.96%	4.5
2010[1/]	1,376	13.05%	4.5
Total/Average	3,400	11.66%	7.4

[1/] Original maturity upon date of issue.
[2/]2010 data up to June 16, 2010.

28. Principal repayment of the amounts borrowed through VEC's bond issues is made entirely upon maturity. The first of these bonds matures in 2012, which will require a principal repayment of VND 100 billion ($5.4 million). In 2013, the principal repayment due will be much more significant; VND 1,069 billion ($58 million). By 2013, the first of VEC's will be in their initial phase of operations, but may not be able to yet generate revenues sufficient to fully cover this principal repayment while also meeting its other financial obligations. Therefore, VEC may have to refinance at least part of this maturing debt with new borrowing.

29. In addition to the difficulties VEC has had in raising funds in the bond market, it has also experienced difficulty in obtaining longer-term commercial bank loans, both from domestic and foreign sources. Unlike VEC's bonds, its commercial bank loans are not Government guaranteed. Given that VEC is relatively new and has not yet had an opportunity to demonstrate that toll revenues can service its debt, commercial banks have been cautious in extending financing to it. As noted above, the loans that are extended have all had maturities of less than five years. In contrast other Vietnamese state enterprises with a more established operating track record have typically been able to access commercial bank loans with maturities of up to 10 years.

30. **Advance by MOF.** Due to VEC's difficulties in securing sufficient debt in 2009, MOF advanced VND 800 billion ($46 million) to cover at least part of its funding shortfall. This advance is shown in the VEC balance sheet (Table 3) under other payables. The advance is to be repaid to MOF when VEC is able to secure the required funding through its bond issues. The provision of this advance indicates a significant commitment by Government to facilitate the implementation of VEC's ongoing projects.

31. **Capital Structure.** Since VEC has relied much more heavily on debt than on equity to fund its capital investments, its capital structure has rapidly become highly leveraged. This is measured by the debt to equity ratio (DER), which has increased from 35:65 at the end of 2007 to 81:19 by the end of 2009 (Table 5). This means that 81% of VEC's total capital is comprised of debt and only 19% by equity. Commercial lenders typically regard 70:30 or 80:20 as being the maximum acceptable leverage. As a result, companies that are leveraged more highly can face difficulty in accessing new debt. As debt comprises an increasing share of the company's capital structure, lenders become concerned about the borrower's capacity to repay this debt. This concern is likely to be particularly significant for borrowers such as VEC that do not yet have the operating revenue needed to service this debt. VEC has sought to mitigate this concern by borrowing with a Government guarantee. However, as was noted above, even with the guarantee, VEC has not so far been able to secure the required amount of debt.

32. Equity is provided from two main sources; shareholder capital contributions, and retained earnings. However, until VEC begins collecting toll revenues from its completed projects, it has no way of generating retained earnings. Even when the first projects are completed, the revenues from these projects may initially be modest and take time to build to more significant levels. Therefore, over the shorter term, most of the required equity will have to come from Government capital contributions in order to support the additional borrowing that VEC needs to undertake.

33. **Debt Capacity.** VEC's capacity to take on new loans depends in large part on the injection of additional capital by Government. VEC expects to receive capital of about VND 222 billion ($12 million) in 2010, which is the remaining amount due on the sale of the toll collection station in 2009. If the DER is kept at the year-end 2009 level of 81:19, this capital injection would support additional debt of only about VND 920 billion ($50 million) in new debt. This would be only about one-third the actual net amount borrowed in 2009. Given that actual borrowing requirements will be significant in 2010, it appears likely that the DER will increase during the year. For example, if the amount borrowed in 2010 is the same as that in 2009, the DER would increase to 85:15. As the DER increases, VEC's ability to take on more debt will become increasingly limited.

34. **Debt Management.** VEC will need to secure significant additional debt in order to fund even the relatively limited number of projects presently under construction or under design. This will require a strengthened capacity for debt planning and management to meet VEC's needs over both the shorter and longer terms.

Safety and Quality Control System Checklist

Attachment 20

Country:
Project Name:

Items to Confirm	Items to be Confirmed	Confirmation Result
(1) Laws and various standards related to safety and quality control	The existence or nonexistence of laws and various standards related to safety and quality control, as well as the names of those laws and contents of related provisions (1) Names of laws (2) Contents of related provisions	(In the case such laws exist, describe the names of those laws and contents of related provisions) (1) – Construction Law no.16/2003/QH11 dated 26/11/2003 by National Assembly. (2) – Labour law (3) – Decree no.06/CP dated 20/01/1995 by the Government on detail guidance of several articles under Labour law on labor safety (4) – Decree no.110/2002/NĐ-CP dated 27/12/2002 by the Government on amendment and supplementation of several articles under Decree 06/CP dated 20/01/1995 by the Government (5) Circular no. 37/2005/TT-BLĐTBXH dated 29/12/2005 on Labour user. (6) – Decree no. 209/2004/NĐ-CP dated 16/12/2004 by the Government on Infrastructure quality management; Decree no. 49/2008/NĐ-CP dated 18/4/2008 by th Government on amendment and supplementation of several article under the Decree no.209/204/ND/CP; (7) – Circular no. 27/2009/TT-BXD dated 31/7/2009 by Construction Ministry on guidance of infrastructure quality management.
	The existence or nonexistence of safety and quality control manuals at the executing agency (1) Names (2) Contents (examples of items to be described) ● Is the method of patrolling the sites (frequency of such patrols, etc.) indicated as reference? ● Is the frequency with which consultants and contractors are consulted indicated as reference?	- Administration Office under VEC is responsible for checking and supervising labour safety in VEC and make recommendations to the VEC management on the labour safety in the construction site. - Technical Technological Environmental Department under VEC take responsibility for checking construction quality of the projects

Items to Confirm	Items to be Confirmed	Confirmation Result
	● Are the rules and regulations (or manuals) governing safety and quality control included?	- PMU will work with the Supervision consultants to check and supervise labor safety activities and quality in the construction site. - The check is regular or unexpected - VEC adopted the standard ISO 9001-2000 in labour safety management
(2) Mandates of departments in the executing agency in charge of safety and quality control and the services the staff	Identification of the safety and quality control department and number of staff members	- No. of total staff members at the executing agency: 21 persons - Name of the safety and quality control department: Technical Technological Environmental Department and Administration Office - No. of staff members in the department above: 18 persons
		(Briefly describe the mandates of the department) Technical Technological Environmental Department are in charge of safety and quality control
	State of implementation of training for staff in charge of safety and quality control (Reference) ● Training in the safety and quality management system ● Training in matters related to laws ● Training in developing awareness of the dangers of accidents ● Training in the role of safety and quality control in the executing agency ● Training in construction method and method of safety and quality control ● Training in method of collecting accident statistics and their effective utilization ● Training in accident prevention techniques	yet to be decided

Items to Confirm	Items to be Confirmed	Confirmation Result
	● Others	
	Information concerning past accidents in construction, etc. (1) Has the information concerning past accidents been accumulated? In addition, ascertain what the policy is for accumulating accident information (e.g., recording information on only accidents resulting in death in accordance with the organizational rules). (2) Components and contents of accident information (Reference) ● No. of accidents ● Situation in which accidents occur ● Scale of accident (amount, number of casualties, existence or nonexistence of third-party injuries) ● Emergency response ● Cause of accident ● Future prevention method ● Others (Describe specifically)	On the construction site of VEC owned projects, there have not been any accidents yet.
(3) Assignment plan for staff in charge of safety control related to the Japanese ODA loan project	Assignment plan for staff in charge of safety control related to the Japanese ODA loan project (1) No. of staff members in charge of safety control (2) Is there any specific assignment plan, with a specific job description for each person?	● No. of the total staff members in the executing agency: _____4_persons ● No. of construction management staff: __3__ persons ● No. of staff members in charge of contractors: ___3____ persons
(4) Competence and experience of staff in charge of safety and quality control	Projects in which the staff handled safety and quality control (1) Projects handled (2) Names of positions the staff held or their status therein (3) Details of the service performed	yet to be decided

Items to Confirm	Items to be Confirmed	Confirmation Result
(5) System of confirming safety and quality control in the executing agency	Method of confirming safety and quality control in the executing agency (1) Regular consultative meetings with construction managers and contractors (2) Site patrol (3) Others (Describe specifically)	PMU will take regular check and meetings with contractors and engineers safety and quality control. - The Employer and the relevant authorities will take the unexpected check for the site.
(6) Confirmation related to the framework for responding to accidents	Specific method of sharing information within the executing agency when an accidents occurs * Briefly describe the framework for sharing information when an accident occurs. Attach a phone calling tree, relevant regulations, etc. as needed. (1) The manual for responding to an accident (2) Is the department to contact in the case of an accident described in the manual?	yet to be decided
	Method of keeping staff members in the executing agency informed about the framework for responding to an accident ● Implementation status of holding a briefing session to inform all staff members about the manual and its contents. ● Submission of an accident report and holding of investigative commissions	The workers in the construction site will be guided by the safety staff the general guidance on labour safety
(7) Method adopted by the executing agency to confirm training programs in safety and quality control provided by contractors for workers	Method of confirmation adopted by the executing agency ● Method of confirmation of preliminary training (in-house education, qualification process) ● Method of confirmation of the training schedule during construction (safety conventions, consultative meetings to discuss safety, post accident response conference, etc.)	DOLISA will issue the certificate on labour safety training to the workers in the construction site. Circular no.37/2005/TT-BLDTBXH dated December 29th 2005 on guiding labor safety training.

Items to Confirm	Items to be Confirmed	Confirmation Result
(8) Others	Public agencies with jurisdiction over safety issues (in Japan, the Ministry of Health, Labor and Welfare) ● Names of the public agencies ● Demarcation between those public agencies and the executing agency regarding safety ● Existence or non-existence of an official certification system governing specialist labor (heavy-construction-equipment operator, etc.) ● On-site inspections of construction sites, guidance, etc.	MOLISA, Ministry of Health, Ministry of Public security, Ministry of Transport and Ministry of Construction

Note: In the event the executing agency of a project is yet to be decided, enter this fact in the Confirmation Result column.

TRAFFIC SAFETY AUDIT

Attachment 21

Under the overall management and coordination of the Team Leader of IPRMS, a team of consultants specialized in traffic safety audit shall perform the tasks specified in this sub-ToR.

Background

Road Safety Audit (RSA) is a good insurance to ensure that the new road project delivers a low risk road. It is much more than a compliance check against design standards, but putting the highly experienced audit team in the position of road users to detect potential risk factors of the road infrastructure, which entails much opinion, conjecture and empathy with all sort of road users.

The National Assembly of Vietnam promulgated the ***Law on Road Traffic*** in 2009, which depicts that "Road works must be appraised in terms of traffic safety from the time of project elaboration, designing and construction and throughout the use process. Investment deciders and investors shall take into account traffic safety appraisal results for additional approval of projects".

The objective of this assignment is 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.

Scope of Services

The consulting services will be provided by a road safety specialist with particular experience or knowledge of road safety engineering and the scope of services include, but are not necessarily limited to, the following tasks.

(i) Review plans, documents, and reports provided by the design consultants before, during and after the completion of the detailed design.
(ii) Discuss with design consultants to clarify ambiguities and to gain a full understanding of the proposed scheme.
(iii) Visit the site of the proposed project and review proposed project from a road safety perspective. The road safety auditor will use appropriate checklists provided by the project implementing agency (PIA) or other similar checklists satisfactory to the PIA.
(iv) Produce concise RSA reports identifying potential safety concerns on the proposed scheme and recommending design changes to eliminate or minimize potential problems. The reports should address the safety needs of road users, with particular emphasis on the needs of those vulnerable groups along the proposed project corridor.

Required Inputs

The assignment is expected to take a total of approximately 8 person months, including travel time, and will consist of documents review, discussion meetings, site visits along the project corridor, producing the RSA report, and feedback meetings with the PIA.

Duration

The consultancy service will be of 5 year' duration.

Phasing

I. Phase I – pre-detailed design audit (1 person months)

The safety audit team shall be mobilized prior to commissioning the detailed design (the detailed design of the DQE is expected to start early 2011) for 1) reviewing the feasibility study and preliminary design and identifying possible road safety issues; 2) reviewing the ToR of the detailed design, ensuring road safety aspects are taken into account by designers, ensuring application of road safety standards, identifying possible road safety related issues to be particularly studied.

An audit report shall be produced at the end of Phase I, including proposed amendments in ToR of the detailed design.

II. Phase II - detailed design audit (3 person months)

As soon as the detailed design team is mobilized, the Road Safety Audit team is expected to meet with the detailed designers for safety principles, and recommendations from Phase I - the review of feasibility study and preliminary design. These would set the stage for the detailed designers for commencing the work with the best understanding of road safety requirements. Once the detailed design begins, the Road Safety Audit team will work closely with the detailed designers on a regularly basis to ensure good controls of the progress on road safety aspects (alignment, interchanges, service areas, tunnels, etc.) and a particular review of traffic facilities and E&M works. Finally the Road Safety Audit team shall conduct a full review of the completed detailed design with possible recommendations to benefit the construction implementation. The input of the Safety Audit team shall be fully collaborated with the inputs from the detailed design appraisal consultants.

Semi-annual audit reports shall be expected to best meet the schedule of the design progress.

III. Phase III – Construction Implementation audit (once a year – 4 person months)

During this phase, the Road Safety Audit team will visit the construction site at least once a year, checking the coherence of the works with the drawings, road safety conditions of accesses to worksites, of diverted existing roads or accesses to houses, and public buildings like hospitals and schools.

An audit report shall be produced on an annual basis within 1 month of each construction phase safety audit.

IV. Phase IV – Pre-opening audit (1 person month)

Before the DQE opens to traffic, the Safety Audit team will conduct a field visit identifying issues which could hardly be seen in the drawings such as: identification and protection of each individual obstacle, appropriate sight distances at exit points, correctness of guardrails types, connections and transitions, appropriateness and coherence of marking and signing, tunnel safety conditions, etc.

An audit report shall be produced at the end of Phase IV.

Staffing and Budget

The staffing devoted to the traffic safety audit (Activity 2) shall not be less than 9 person-months, while the budget for this activity shall not exceed US $300,000. This amount includes all related expenses like transport, logistics, accommodation and translation support.

List of Pro-poor Activities

Attachment 22

	Key information and possibility of activities/programs
1. Hoa Vang district	- Farmer Association is implementing the programs on poverty reduction, loan assistance to the students from the poor families, loans for farming and husbandry etc. - Women Union is implementing the programs such as loans for the poor female headed HH, microfinance for gender programs etc. - Social and policy Bank Branch is implementing 07 programs with loans for economic development, for poor HH, for students in poor families, for improving sanitation facilities etc. The poor families could borrow not more than VND 30,000,000 and with an interest of 0.65% per month.
2. Dien Ban district	- Farmer Association is implementing the programs for 1,905 HHs on poverty reduction, loan assistance to the students from the poor families, loans for farming and husbandry etc. - Women Union is implementing the programs such as loans for the poor female headed HH, microfinance for gender programs etc. - Social and policy Bank Branch is implementing the programs with loans for economic development, each poor HH could borrow not more than VND 30,000,000 and with an interest of 0.65% per month. One family could borrow not more than VND 20,000,000 for self-employment and with an interest of 0.65% per month. This Bank also supports loans for students from poor families, and for improving sanitation facilities of families as well as for labor export and buying houses.
2. Duy Xuyen district	- Farmer Association is implementing the programs for on poverty reduction, loan assistance to husbandry and agricultural activities. - Women Union is implementing the programs such as loans for the poor female headed HH from the social and policy Bank, microfinance, employment for women etc. - Social and policy Bank Branch is implementing 07 programs with loans for economic development, for poor HH, for students in poor families, for improving sanitation facilities etc. The poor families could borrow not more than VND 30,000,000 and with an interest of 0.65% per month.
3. Thang Binh district	- Agricultural Extension Center is implementing some programs for poverty reduction, new rice seedlings etc., - Farmer Association is implementing for the loan to farmers (with low interest) for employments and assist for selling products. Borrowing conditions are: Households have farm, fish ponds and each household can borrow up to VND 5 million. - Women Union is running for programs on loans to the farmers, loans from the Social and Policy Bank etc. - Loan from the Social and policy Banks: Targets to help the poor families. Long-term repayment with low interest (0.17% per month in three years). Maximum amount household can borrow is VND 30,000,000. The loan from the Social and policy Bank supports for the poor families, students, improving for family sanitation facilities.
4. Que Son district	- Farmer Association is implementing the agricultural programs and assistance families to access loans for husbandry and agricultural activities. - Women Union is implementing the programs such as loans for the poor female headed HH from the social and policy Bank, microfinance, employment for women etc. - Social and policy Bank Branch is implementing several programs with loans for economic development, for poor HH, for pupils from the poor families, for improving sanitation facilities etc. The poor families could borrow not more than VND 30,000,000 and with an interest of 0.65% per month.
5. Phu Ninh district	- Farmer Association is implementing the agricultural programs and assist families to access loan for husbandry and agricultural activities. The Farmer Association is in a cooperation with the vocational training and carry out the training programs on garment industry, IT, electrical technique etc. - Women Union is implementing the programs such as loans for the poor female headed HH from the social and policy Bank, microfinance, employment for women, applying new technology on farming and fish farming. - Social and policy Bank Branch of Phu Ninh district is implementing several programs with loans for economic development, for students, for poor HH, for labor export and for improving sanitation facilities etc.
6.Nui Thanh district	- Women Union has is cooperating with the district Social and Policy Bank to run some programs for the poor families. The poor family could borrow from VND 5 to 15 million. - Social and policy Bank has 05 loan programs for the poor families, for students from the poor families, for sanitation improvement, for labour export, employment.
7.Tam Ky City	- Women Union has is cooperating with the district Social and Policy Bank to run some programs for the poor families. - Social and policy Bank has programs for the poor families, for students from the poor families, for sanitation improvement, for labour export, employment.

Common Issues on Projects for the second batch of JICA's assistance package of FY2010

The JICA mission and the GOVN officials have discussed the common issues on all projects for the second batch of JICA's assistance package in FY2010 as mentioned below.

1. JICA mission stated that the results of the field surveys and discussions will be reported to GOJ for decision regarding the possible Japanese ODA Loan for the Projects. The GOVN officials stated that they had no objection to this and that GOVN will take all the necessary steps to expedite matters relating to the Loan.

2. The JICA mission and the officials of MPI confirmed that MPI should cause the relevant ministries and agencies to adequately take actions concerning what was agreed upon in the individual M/D, for smooth implementation of the Projects and for quick disbursement thereafter. In particular, all parties agreed upon the necessity of early initiation of land acquisition and selection of consultant.

3. The JICA mission and the officials of MPI confirmed that MPI cause the relevant ministries and agencies to select consultants and carry out procurement in accordance with Guidelines for Employment of Consultants under Japanese ODA Loans dated March 2009 (hereinafter referred to as "the Consultant Guidelines") and Guidelines for Procurement under Japanese ODA Loans dated March 2009, respectively. Both sides also confirmed that MPI should cause the relevant ministries and agencies to maintain sufficient communication with their consultants in accordance with the Consultant Guidelines for smooth implementation of the Projects.

4. The JICA mission and the officials of MPI confirmed that cost estimation was made taking into account the General Guidelines for the second Batch of FY 2010 Japanese ODA Loan Projects attached hereto as Attachment 23.

5. The JICA mission informed the officials of MPI that, along with the World Bank's announcement of its updated per capita Gross National Income (GNI) guidelines to be applied during FY 2011, changing classification of Vietnam from "(i) Civil Works Preference" to "(ii) Effective IDA Eligibility," Terms and Conditions of Japanese ODA Loan will be also changed, categorizing Vietnam as "Lower-Middle-Income Countries". The JICA mission also stated that new Terms and Conditions of Japanese ODA Loan will be applied to projects pledged after April 1, 2011, and details would be explained by the Government of Japan.

6. The Vietnamese side proposed JICA to consider a slight modification in the method for calculation of the price escalation rate. The extraordinary / unusual data should be excluded from the data used for calculation of the price escalation rate to ensure the reasonable output rate. Further, the Vietnamese side stated that the use of data of only five-year period seems too short and proposed JICA to consider using the statistics of longer time period. JICA agreed to discuss that issue internally with other related departments and will inform the result at the Fact Finding Mission for the first batch of FY 2011.

7. The Vietnamese side stated that the billing rate for consultant is very high in comparison with the billing rate of consultant under similar projects financed by the World Bank and ADB (about USD 25,000 / MM). This could be caused by the appreciation of the Japanese Yen recently. The Vietnamese side proposed JICA to consider a more reasonable billing rate for consultant in the future. JICA agreed to discuss that issue internally with other related departments and will inform the result at the Fact Finding Mission for the first batch of FY 2011.

Attachment 23

General Guidelines for the FY 2010 Second Japanese ODA Loan Candidate Projects

1. Exchange Rate

(1) US$ 1 = ¥ 85.5
(2) US$ 1 = VND 18,544
(3) VND 1 = ¥ 0.00461

2. Price Escalation Rate（including Consultant）

(1) Foreign Currency Portion 1.8% p.a.
(2) Local Currency Portion 10.5% p.a.

3. Physical Contingency Rate：

In principle, 5 % (to be determined based on the accuracy of project planning, design and cost estimate). Additional consideration could be made only for those projects with clear and reasonable justification.

4. Spare Parts

Spare parts cost necessary for at least 2 years after project completion should be included in "equipment cost" when appropriate.

5. Billing Rate for Consultant Rate

(1) Professional (A): 2,630,000YEN ／M/M ±10%
(2) Professional (B): 40,000,000VND ／M/M ±10%
(3) Professional (C): 12,500,000VND ／M/M ±10%

<NOTE>

- Professional (A) is applied for International Consultant,
- Professional (B) is applied for Local Consultant with over 5 years of experience in consulting service and qualified either equaling or surpassing the Professional (A).
- The quoted rates above are for cost estimate purpose at the time of appraisal and do not bind the actual unit price in each consulting services contract.

6. Tax and VAT

(1) Import Tax 3% and VAT 10% of the expenditure in foreign currency of procurement /construction
(2) VAT 10% of the expenditure in local currency of procurement/construction
(3) Tax on Consulting Services 15% of the expenditure of C/S

7. Base Year for Cost Estimation: October 2010

8. Procedure of Project Cost Estimation

(1) Estimate of Base Cost
(2) Estimated Base Cost x Price Escalation Rate
(3) ((1)+(2)) x Physical Contingency Rate
(4) Total Cost = (1) + (2) + (3)

Note: Price escalation and physical contingency of consulting services shall be included in the cost of consulting service, and shall NOT be counted in the contingencies of the total cost.

9. Annual Fund Requirements

Gregorian Calendar Year (January - December) is applied in principle

10. Standard Procedural Time for Procurement under JICA Loan

Project implementation schedule should be prepared using the following procedural period. However, the following procedural period is the minimum one, and it is recommended to use more realistic (usually longer) period when preparing Minutes of Discussion.

(1) Selection of Consulting Firm : 10 Months
（in case of Direct Negotiation : 3 Months）
(2) Construction, Procurement of Equipment
(a) Preparation of Tender Documents and JICA Approval : 3 Months
(b) Tender Period : 2 Months
(c) Evaluation of Bids : 2 Months
(d) JICA Approval of Bid Evaluation : 1 Month
(e) Contract Negotiation : 2 Months
(f) JICA Approval of Contract : 1 Month
(g) Opening of Letter of Credit and
Issuance of Letter of Commitment : 1 Month

Total ((a)-(g)) : 12 Months

Note: In case of ICB with Pre-qualification : 15 months
In case of Direct Negotiation : 8 Months

11. Others

(1) Those costs of goods and services envisaged to be imported (including the depreciation cost of imported construction equipment in the case of civil works) would be counted as foreign costs.
(2) The following items shall be included in the total project cost but are not eligible for JICA financing.
- Land Acquisition
- Compensation
- Taxes and Duties
- Administration cost

(3) The loan limit is 100 % of total project cost (except non-eligible portion).
(4) Interest during construction and commitment charge shall be included in the total project cost and shall be financed by JICA.
(5) The annual budget for commitment charge, shown in “Annual Fund Requirement”, shall be calculated such a manner that total amount of commitment charge divided by expected disbursement period (years).