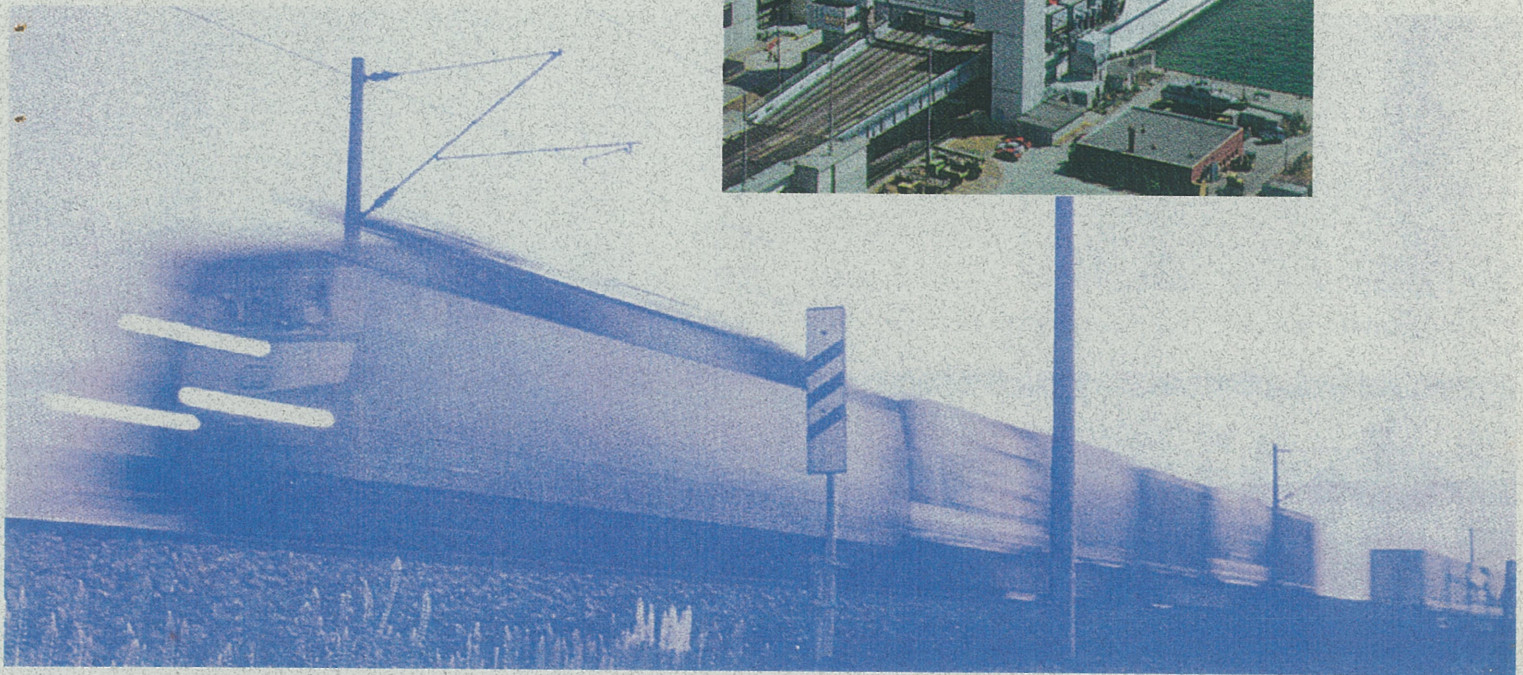




KINGDOM OF THAILAND
MINISTRY OF
TRANSPORT AND COMMUNICATIONS
STATE RAILWAY OF THAILAND

Feasibility Study of Si Racha to Rayong Loop Railway

Volume 3 Financial Proposal



August 1999



DE-Consult





บริษัท เนชั่นแนล เอ็นจิเนียริ่ง คอนซัลแตนท์ จำกัด
National Engineering Consultants Co.,Ltd.

55/160-161 ถนนสุทธิสาร ห้วยขวาง กรุงเทพฯ 10310

โทร. 275-1795 6, 275-5798, 277-6624; แฟกซ์ 276-2654

55/160-161 Sutthisan Rd., Huai khwang, Bangkok 10310, Thailand

Tel. 275-1795-6, 275-5798, 277-6624; Fax no. 276-2654

Your ref:

Our ref: P00/1040842

August 11, 1999

Chief Construction Engineer
Construction Department
3rd Floor, Store Department Building
State Railway of Thailand
Rong Muang Road, Bangkok 10330
THAILAND

Dear Sir,

Re: Feasibility Study of Si Racha to Rayong Loop Railway

National Engineering Consultants Co., Ltd. (NECCO) is pleased to present 15 copies of Qualification Documents, Technical Proposals and Financial Proposals in separate seal packages for the above mentioned project.

For preparation of this proposal and the execution of the project if chosen, NECCO has formed an association with the following consulting firms:

- 1) DE-Consult Deutsche Eisenbahn-Consulting GmbH of Germany who specialize in area of railway engineering.
- 2) Consultants of Technology Co., Ltd. (COT) of Bangkok, Thailand, a registered consultants for environmental study.

The team chosen for this assignment provides a combination of international and Thai specialists from these 3 firms. Special attention will be given in selection of project team members in order to cover all kind of disciplines assigned to carry out tasks for successful completion of the project.

We look forward to this interesting and challenging assignment and to providing services to the SRT.

Yours sincerely,

Panom Suksingha
Managing Director





บริษัท เนชั่นแนล เอ็นจิเนียริ่ง คอนซัลแตนท์ จำกัด National Engineering Consultants Co.,Ltd.

55/160-161 ถนนสุทธิสาร ห้วยขวาง กรุงเทพฯ 10310

โทร. 275-1795 6, 275-5798, 277-6624; แฟกซ์ 276-2654

55/160-161 Sutthisan Rd., Huai khwang, Bangkok 10310, Thailand

Tel. 275-1795-6, 275-5798, 277-6624; Fax no. 276-2654

Your ref:

Our ref: P00/1030842

August 11, 1999

STATEMENT OF ASSOCIATION

National Engineering Consultants Co., Ltd. (NECCO), DE-Consult Deutsche Eisenbahn-Consulting GmbH (DE-Consult) and Consultants of Technology Co., Ltd. (COT) have agreed to associate in full for the purpose of providing services for SRT's Feasibility Study of Si Racha to Rayong Loop Railway Project.

We wish also to confirm that NECCO, DE-Consult and COT will jointly and severally be responsible for their performance under the Consulting Services Contract and that NECCO will be the lead firm with the full support of DE-Consult and COT during the execution of the project.

Yours faithfully,

National Engineering Consultants Co., Ltd.

Panom Suksingha
Managing Director

DE-Consult Deutsche Eisenbahn-
Consulting GmbH

Consultants of Technology Co.,
Ltd.

Bernhard KRAFT
Vice President / Regional Director

Pisit Puthipiroj
Managing Director

Table of Contents

	Page
• Terms	1
• Summary of Costs	2
1. Remuneration	
1.1 Remuneration of Expatriate Staff	3
1.2 Remuneration of Local Key Staff	
1.2.1 National Engineering Consultants Co., Ltd.	4
1.2.2 Consultants of Technology Co., Ltd.	4
1.3 Remuneration of Supporting Staff	
1.3.1 National Engineering Consultants Co., Ltd.	5
1.3.2 Consultants of Technology Co., Ltd.	5
2. Direct Expenses	6
3. Breakdown of Remuneration Rate	
3.1 National Engineering Consultants Co., Ltd.	8
3.2 De-Consult Deutsche Eisenbahn-Consulting GmbH	9
3.3 Consultants of Technology Co., Ltd.	10

FINANCIAL PROPOSAL

1. TERMS:

1.1 Introduction

This Financial Proposal is prepared in accordance with the Terms of Reference, Instructions for Submission of Proposals and the Consultant's Technical Proposal submitted under separate cover.

1.2 Duration of Services

The fees and costs shown in this document cover Phase I : Freight Overview Study and Phase II : Project Development Study which will be carried out within the overall project period of 8.0 months.

1.3 Exchange Rates

Fees and Costs are expressed in Baht (B) for both local currency and expatriate portions.

1.4 Man-Month Charge Rates (Billing Rates)

The charge rates are all time-based rates which consist of basic salary, fringe benefits, firms's overheads and fees. A breakdown of each individual staff charge rates is provided herein.

1.5 Taxation

The proposed overall lump sum cost of both Freight Overview Study and Project Development Study include the current Thai tax., VAT of 7% and stamp duty of 0.1%.

1.6 Payment Schedule

No payment schedule is proposed in this financial proposal assuming that it will be discussed and agreed during negotiations.

1.7 Validity of Proposal

This proposal is valid for the period of six (6) calander months from the date of submission. The consultant reserves the right to propose revisions of the service fees if negotiation and agreement is not be concluded within this period.

Feasibility Study of Si Racha to Rayong Loop Railway

SUMMARY OF COSTS

	Baht
Remuneration of Expatriate Key Staff	11,085,000
Remuneration of Local Staff	6,170,480
Remuneration of Supporting Staff	2,847,680
Direct Cost : Expatriate Staff	2,277,500
Direct Cost : Local Staff	4,316,000
Sub-Total	26,696,660
Tax : Vat 7%	1,868,766
Total	28,565,426

Feasibility Study of Si Racha to Rayong Loop Railway

1. REMUNERATION

1.1 Remuneration of Expatriate Staff

No.	Position	Name	Man-Month	Monthly Billing Rate	Amount (Baht)
1	Project Manager	Sieg	6	830,000	4,980,000
2	Railway Operation Specialist	Seifert	1.5	830,000	1,245,000
3	Logistics & Mat. Handling Expert	Liesenfeld	1.5	830,000	1,245,000
4	Transport Planner	Krewer	3	830,000	2,490,000
5	Signalling & Telecom. Expert	Witt	1.5	750,000	1,125,000
Sub-Total 1.1					11,085,000

Feasibility Study of Si Racha to Rayong Loop Railway

1.2 Remuneration of Local Key Staff

1.2.1 National Engineering Consultants Co., Ltd.

No.	Position	Name	Man-Month	Monthly Billing Rate	Amount Baht
1	Project Director	Panom S.	1	150,150	150,150
2	Railway Civil Engineer	Samug K.	8	150,150	1,201,200
3	Trackwork Engineer	Pratana K.	3	150,150	450,450
4	Survey Engineer	Narong C.	2	150,150	300,300
5	Geotechnical Engineer	Korchoke C.	2	150,150	300,300
6	Drainage Engineer	Pipat P.	2	150,150	300,300
7	Bridge & Structure Engineer	Chanchai S.	2	150,150	300,300
8	Cost Engineer	Suwan S.	2	150,150	300,300
Sub-Total 1.2.1					3,303,300

1.2.2 Consultants of Technology Co., Ltd.

No.	Position	Name	Man-Month	Monthly Billing Rate	Amount Baht
1	Environmental Expert/ Team Leader	Meena P.	5.0	129,168	645,840
2	Regional Development Planner	Kiat C.	2.5	132,756	331,890
3	Air/Noise Expert	Warawut S.	1.5	118,404	177,606
4	Socio-Economic Expert	Surapun P.	2.0	126,776	253,552
5	Hydrology/Water Quality Expert	Paisarn V.	1.5	126,776	190,164
6	Ecology Expert	Dr. Pricha D.	1.5	129,168	193,752
7	Economist & Financial Analyst	Dr. Prasit T.	4.0	207,000	828,000
8	Architect	Dr. Pantuda P.	2.0	123,188	246,376
Sub-Total 1.2.2					2,867,180

Feasibility Study of Si Racha to Rayong Loop Railway

1.3 Remuneration of Supporting Staff

1.3.1 National Engineering Consultants Co., Ltd.

No.	Position	Man-Month	Monthly Billing Rate	Amount Baht
1	Assistant Engineer	16	64,350	1,029,600
2	Computer Operator	8	64,350	514,800
3	Executive Secretary	8	37,125	297,000
4	Office Clerk	8	8,910	71,280
Sub-Total 1.3.1				1,912,680

1.3.2 Consultants of Technology Co., Ltd.

No.	Position	Man-Month	Monthly Billing Rate	Amount Baht
1.	Environmental Engineer	6.0	40,000	240,000
2.	Environmental Scientist	12.0	35,000	420,000
3.	Technicians	4.0	20,000	80,000
4.	Computer Operator-Drafting	3.0	15,000	45,000
5.	Secretary	4.0	18,000	72,000
6.	Typist	6.0	13,000	78,000
Sub-Total 1.3.2				935,000

Feasibility Study of Si Racha to Rayong Loop Railway

2. DIRECT EXPENSES

2.1 Mobilization and Demobilization (Expatriate Staff only)

1) International Air Fare	Baht
Frankfurt-Bangkok-Frankfurt	
9 Trips @120,000 Baht/Trip	1,080,000
2) Processing	
(Physical Exam., Permit & Visa, Insurance etc.)	
9 Trips @40,000 Baht/Trip	360,000
3) Excess Baggage Allowance	
9 Trips @10,000 Baht/Trip	90,000
4) International Communications / Home Office Support	
7.0 Months @20,000 Baht/Month	140,000
Sub-Total	<u>1,670,000</u>

2.2 Accommodation / Perdiem Allowance

1) Expatriate Staff	
13.5 Months @45,000 Baht/Month	607,500
Sub-Total	<u>607,500</u>

2.3 Transportation Cost

Car Rental 8*2 Veh./Month @45,000 Baht/Month	720,000
Sub-Total	<u>720,000</u>

2.4 Traffic Modelling Cost

Lump Sum	100,000
Sub-Total	<u>100,000</u>

2.5 Cost of Seminar

Lump Sum	250,000
Sub-Total	<u>250,000</u>

2.6 Office Expenses

1) Office rental	
20 persons *8.0 sq. m./person @500 Baht/sq. m. *8.0 month	640,000
2) Office Equipment	
Copy Machine rental 8.0 month @20,000 Baht/month	160,000
3) Computer Charge (Lump Sum)	100,000
4) Local Communication Cost	
8.0 month @10,000 Baht/month	80,000
5) Office Consumable & Supplied	
8.0 month @20,000 Baht/month	160,000
Sub-Total	<u>1,140,000</u>

Feasibility Study of Si Racha to Rayong Loop Railway

2.7 Environmental Study Expenses

Field Surveys

1) Socio-Economic/Attitude Surveys	(Lump Sum)	800,000
2) Land use/Sensitive Area/Infrastructure Surveys	(Lump Sum)	300,000
3) Terrestrial Ecology Surveys	(Lump Sum)	200,000
Sub-Total		<u>1,300,000</u>

Other Expenses

1) Air/Noise Modelling	(Lump Sum)	300,000
Sub-Total		<u>300,000</u>

2.8 Reports and Document:

1) Inception Report 20 copies @800 Baht/copy	16,000
2) Phase I Report 20 copies @500 Baht/copy	10,000
3) Draft Final Report 30 copies @1,000 Baht/copy	30,000
- Executive Summary 30 copies @500 Baht/copy	15,000
4) Final Report 200 copies @1,500 Baht/copy	300,000
- Executive Summary 200 copies @500 Baht/copy	100,000
5) Monthly Report (7 months), 10 copies @500 Baht/copy	35,000
Sub-Total	<u>506,000</u>

Feasibility Study of Si Racha to Rayong Loop Railway
NATIONAL ENGINEERING CONSULTANTS CO., LTD. (NECCO)
BREAKDOWN OF REMUNERATION RATE

1. Key Staff

No.	Name	Position	Basic Salary/ Man-Month (1)	Social Charge (35% of 1) (2)	Overhead (60% of 1) (3)	Sub-Total (1+2+3) (4)	Fee (10% of 4) (5)	Billing Rate/ Man-Month (4+5) (6)
1	Project Director	Panom S.	70,000	24,500	42,000	136,500	13,650	150,150
2	Railway Civil Engineer	Samug K.	70,000	24,500	42,000	136,500	13,650	150,150
3	Trackwork Engineer	Pratana K.	70,000	24,500	42,000	136,500	13,650	150,150
4	Survey Engineer	Narong C.	70,000	24,500	42,000	136,500	13,650	150,150
5	Geotechnical Engineer	Korchoke C.	70,000	24,500	42,000	136,500	13,650	150,150
6	Drainage Engineer	Pipat P.	70,000	24,500	42,000	136,500	13,650	150,150
7	Bridge & Structure Engr.	Chanchai S.	70,000	24,500	42,000	136,500	13,650	150,150
8	Cost Engineer	Suwan S.	70,000	24,500	42,000	136,500	13,650	150,150

2. Supporting Staff

No.	Position	Basic Salary/ Man-Month (1)	Social Charge (35% of 1) (2)	Overhead (60% of 1) (3)	Sub-Total (1+2+3) (4)	Fee (10% of 4) (5)	Billing Rate/ Man-Month (4+5) (6)
1	Assistant Economist	30,000	10,500	18,000	58,500	5,850	64,350
2	Computer Operator	30,000	10,500	18,000	58,500	5,850	64,350
3	Executive Secretary	25,000	8,750	-	33,750	3,375	37,125
4	Office Clerk	6,000	2,100	-	8,100	810	8,910

Si Racha to Rayong Loop Railway

DE-Consult Deutsche Eisenbahn-Consulting GmbH (DE-Consult)

BREAKDOWN OF REMUNERATION RATE

No.	Name	Position	Basic Salary/ Man-Month (1)	Social Charge (35% of 1) (2)	Overhead (60% of 1) (3)	Sub-Total (1+2+3) (4)	Fee (10% of 4) (5)	Billing Rate Man-Month (4+5)=(6) D.M.	Amount (Baht)
1	Sieg	Project Manager	19,347	6,772	11,608	37,727	3,773	41,500	830,000
2	Seifert	Railway Operation Specialist	19,347	6,772	11,608	37,727	3,773	41,500	830,000
3	Liesenfeld	Logistics & Mat. Handling	19,347	6,772	11,608	37,727	3,773	41,500	830,000
4	Krewer	Transportation Planner	19,347	6,772	11,608	37,727	3,773	41,500	830,000
5	Witt	Signalling & Telecom. Expert	17,483	6,119	10,490	34,091	3,409	37,500	750,000

Note: Exchange Rate of 20 Baht per D.M. is applied.

FEASIBILITY STUDY OF SIRACHA TO RAYONG LOOP RAILWAY
CONSULTANTS OF TECHNOLOGY CO.,LTD. (COT)
BREAKDOWN OF REMUNERATION RATE

Key Staff

No.	Name	Position	Basic Salary/ Man-Month (1)	Social Charge (35% of 1) (2)	Overhead (60% of 1) (3)	Sub-Total (1+2+3) (4)	Fee (10% of 4) (5)	Billing Rate/ Man-Month (4+5) (6)
1	Meena Pittayasoponkij	Environmental Expert/Team Leader	60,218	21,076	36,131	117,425	11,743	129,168
2	Kiat Chivakul	Regional Development Planner	61,891	21,662	37,135	120,687	12,069	132,756
3	Warawut Suadee	Air/Noise Expert	55,200	19,320	33,120	107,640	10,764	118,404
4	Surapun Pecharapa	Socio-Economic Expert	59,103	20,686	35,462	115,251	11,525	126,776
5	Paisarn Veerakit	Hydrology/Water Quality Expert	59,103	20,686	35,462	115,251	11,525	126,776
6	Dr. Pricha Dhanmanonda	Ecology Expert	60,218	21,076	36,131	117,425	11,743	129,168
7	Dr. Prasit Tongyingsiri	Economist & Financial Analyst	96,504	33,776	57,902	188,183	18,818	207,000
8	Dr. Pantuda Puthipiroj	Architect	57,430	20,101	34,458	111,989	11,199	123,188

;

Supporting Staff

No.	Name	Basic Salary/ Man-Month (1)	Social Charge (35% of 1) (2)	Overhead (60% of 1) (3)	Sub-Total (1+2+3) (4)	Fee (10% of 4) (5)	Billing Rate/ Man-Month (4+5) (6)
1	Environmental Engineer	18,648	6,527	11,189	36,364	3,636	40,000
2	Environmental Scientist	16,317	5,711	9,790	31,818	3,182	35,000
3	Technicians	9,324	3,263	5,594	18,182	1,818	20,000
4	Computer Operator-Drafting	6,993	2,448	4,196	13,636	1,364	15,000
5	Secretary	12,121	4,242	-	16,363	1,636	18,000
6	Typist	8,754	3,064	-	11,818	1,182	13,000