# APEC Database of Transportation Technology Research 1999



ASIA-PACIFIC ECONOMIC COOPERATION

APEC Transportation Working Group December 1999



#### ASIA-PACIFIC ECONOMIC COOPERATION SECRETARIAT

O 1999 APEC Secretariat

438 Alexandra Road #14-00 Alexandra Point Singapore 119958
Tel: (65) 276 1880 / Fax: (65) 276 1775
Email: info@mail.apecsec.org.sg
Website: http://www.apecsec.org.sg

APEC #99-TR-02.1 ISBN 981-04-2193-1

#### **Preface**

Diverse research efforts are being undertaken in the Asia-Pacific region aiming to establish transportation systems which are efficient, safe and environmentally friendly. It would certainly be possible to move ahead with more efficient research and to improve the current transportation systems if APEC member economies share information regarding their research, and try to avoid, as much as possible, the duplication of efforts. In order to achieve that goal, there was a need to create a database on information concerning research projects undertaken by the transportation-related research institutes of each member economy.

At the 5th meeting of the Transportation Working Group held in Auckland in 1994, Japan proposed the APEC Transport-Technology Research Database Project as the first attempt within APEC to create a database on technology. This database is composed of public research institutes in the transportation sector within this region, their contact information, information and out lines of the various projects which those institutes are implementing.

This database was compiled thanks to the generous offer of much valuable advice and a great deal of information regarding the research projects being implemented in 13 APEC member economies (Canada; Peoples Republic of China; Hong Kong, China; Indonesia; Japan; Republic of Korea; Mexico; New Zealand; Republic of the Philippines; Singapore; Chinese Taipei; Thailand; and the United States Of America).

Please refer to the following pages for information on how this database can be appropriately used. It is hoped that this database will help to promote further advancement and sharing of transportation technology in the Asia-Pacific region, and will also contribute to the creation of efficient regional transportation systems.

## **Table of Contents**

1.	Preface		
2.	How to	Use This Database	
3.	Institute	List	1
4.	Project I	un of efforts. In order to achieve that goal, there was a need to c List information i concerning research projects undertaken s	
	(A) List I	by Economies	
	(B) List I	by Fields	
	1)	Land Transportation	29
	2)	Water Transportation	41
	3)	Air Transportation	45
	4)	Shipbuilding	
	5)	Port Construction	49
	6)	Disaster Reduction Technology	
	7)	Nuclear Energy	53
	8)	Environmental Protection	55
	9)	Marine Science	57
5.	Institute	es and Key Projects	
	1)	Canada	CA-1
	2)	Peoples Republic of China	CH-1
	3)	Hong Kong, China	HK-1
	4)	Indonesia	IN-1
	5)	Japan	JP-1
	6)	Republic of Korea	KO-1
	7)	Mexico	MX-1
	8)	New Zealand	NZ-1
	9)	Republic of the Philippines	PH-1
	10)	Singapore	SI-1
		Chinese Taipei	
		) Thailand	
	13)	United States of America	US-1

#### How to Use This Database

- If you are searching for research institutions in a certain economy, Please look on the Institute List.
- 2. If you are searching for projects of a certain economy in general, please look on the Project Lists.
- 3. If you need a detailed information on a certain project, please find the page number by using Project Lists, and look on the corresponding pages.
- 4. To find a field number, Please look at Table 1: 50000 moles in the second stable 1: 50000 moles in

#### Table 1: Field Number

- 1) Land Transportation one problem rollshogarest entry problem rice entry
- 2) Water Transportation
- 3) Air Transportation
- 4) Shipbuilding the horses of the common state of the same state of the common state o
  - 5) Port Construction and the manufacture of the property of th
  - 6) Disaster Reduction Technology
  - 7) Nuclear Energy
- 8) Environmental Protection
- bs 9) Marine Science and disease and pullbage note mobile to test test a bus

# **Institute List**

ECONOMIES	e et me manufacture au communication de la	FED	PAGE	
		er antingar bener samet en trouter en er en er en	NUMBER(S)	
Canada	Alberta Transportation &	Research and Development	1.	CA-1
	Utilities	Branch		
	Centre for Surface	National Research Council of	1	CA-1
	Transportation Technology	Canada		
	Institute for Aerospace	National Research Council of	3	CA-1
	Research	Canada		
	Institute for Marine	National Research Council of	2,4,5	CA-2
	Dynamics	Canada		
	Ministere des transports,	Laboratoire des chausses	1	CA-2
	Quebec	a,a		
	Ministry of Transportation of	Research and Development	1	CA-2
	Ontario ·	Branch		
	Ministry of Transportation of	Transportation Technology &	1	CA-3
	Ontario	Energy Branch		
	Saskatchewan Highways &	Planning and Coordination	1	CA-3
	Transportation	Branch		
	Centre d'essais et de		1.	CA-3
	recherches (PMG			
	Technologies Inc.)		*	
	Transportation Association of Canada		1	CA-4
	Transport Canada	Transportation Development	1,2,3,8	CA-4
		Centre		
	Transport Canada Aviation	Technical Services Branch	3	CA-14
		Air Traffic	3	CA-15
	. A	Services Research and		:
		Experimentation Centre		
P.R.China	China Academy of Railway		1	CH-1
	Sciences			
•	Civil Aviation College of China		3	CH-2
	Civil Aviation Flight College of China		3	CH-2
	No.1 Research institute of		3	CH-3
	CAAC No.2 Research institute of		3	CH-3
•	CAAC			

ECONOMIES INSTIT		TUTE	FIELD NUMBER(S)	PAGE
Hong Kong, China	Transport = - Francisco	Electronic Road Pricing Division	1	HK-1
		Vehicle Examination Division	1	HK-2
Indonesia	Doparamont of	Center of Data and Information	1,2,3	IN-1
		Land Communications Research and Development Centre	1,2,8	IN-1
		Sea Communications Research and Development Centre	2,4,5	IN-3
		Air Communications Research and Development Centre	3,8	IN-4
		Office of Safety Vehicle	6	IN-5
		Office of Maritime Safety Technology	6	IN-6
		Office of Aviation Facilities Technology	6,7*	IN-6
	Department of Public Works		1,,	IN-6
	Academic Institute	Technology and Science Centre	7,8,9	IN-7
		National Air Transportation and Aerospace Institute	3	IN-7
,	Bandurg Institute of Technology	Aircraft Construction Laboratory	3	IN-7
	Agency for the Assessment and Application Technology	Coastal Engineering Laboratory	2,5,9	IN-8
	, the state of the	Construction Engineering Laboratory	5	IN-8
	Bandurg Institute of Technology	Environment Technology Laboratory	8	IN-8

GE

(-1

<-2 |-1

I-1

I-3

I-4

I-5 I-6

I-6

I-6 I-7

**I-7** 

**I-7** 

1-8

1-8

1-8

ECONOMIES	INST	FIELD	PAGE	
Guardia de la composition della composition dell			NUMBER(S)	
Japan	Ministry of Transport	Electronic Navigation	2,3	JP-1
		Research Institute		
		Port & Harbour	6,8,9	JP-3
		ResearchInstisute		
-		Ship Research Institute	2,4,6,7,8,9	JP-4
		Traffic Safety and Nuisance	1,8	JP-14
		Research Institute		
Rep. Of	Korea Maritime Institute		1	KO-1
Korea	,	els.		
	The Korea Transport			KO-3
- - -	Institute			
Mexico	National University of	Engineering Institute	1,2,3,6,8	MX-1
<i>;</i>	Mexico			
:	Mexican Transport Institute		1,2,3,8	MX-19
New Zealand	The NZ Institute for		1	NZ-1
	Industrial Research and			
	Development			
	Transit New Zealand		1 *	NZ-2
Philippines	National Center for		1	PH-1
	Transport Studies		÷ `~•	
Singapore	Nanyang Technology	Centre for Transportation	1,2,3	SI-1
٠.	University	Studies		
	Centre for Transportation	National University of	1,2,3	SI-8
	Research	Singapore		
Chinese	мотс	Office of Science &	1,2,5,9	CT-1
Taipei		Technology Advisors		
	Institute of Harbor & Marine		9	CT-19
	Technology			
	Institute of Transport		1,2,3	CT-20

ECONOMIES	INS	FIELD NUMBER(S)	PAGE	
 Thailand	Department of Highways	Road Research and		TH-2
1110111011		Development Center		
	Port Authority of Thailand		5	TH-3
	Office of Maritime Promotion Commission	Research and Planning Division	2	TH-5
U.S.A.	Department of Transport	Assistant Secretary for Policy and International Affairs, Office of Economics		US-1
	Federal Highway	Associate Administrator for		US-1
	Administration	Research, Development, and		
		Technology		
		Associate Administrator for		US-2
		Safety and System		
		Applications		
		Office of Engineering and		US-2
		Highway Operations	*	
	•	Research and Development	-	
		Office of Highway Information	i iyo	US-3
		Management		
		Office of Policy Development		US-4
		Office of Technology		US-4
	1 A	Applications		
		Turner-Fairbank Highway		US-5
		Research Center		
		Vanderbilt Engineering Center	•	US-6
		for Transportation Operations		
		and Research		<u></u>
	Federal Railroad	Association of American	· · ·	US-6
	Administration	Railroads		
		Office of Research and		US-6
		Development		

(GE

H-2

H-3

H-5

S-1

S-1

S-2

S-2

S-3

3-5

3-6

3-6

3-6

ECONOMIES	INS	FIELD NUMBER(S)	PAGE	
U.S.A	Federal Transit Administration	Research, Training, and Rural Transportation		US-7
		Transit Research Information Center		US-7
	National Highway Traffic Safety Administration	Office of Crash Avoidance Research		US-7
	National Highway Traffic Safety Administration	Office of Ragulatory Analysis		US-8
		Vehicle Research and Test Center		US-8
	Research and Special Programs Administration	Volpe National Transportation Systems Center		US-9
	Research and Special Programs Administration	Volpe National Transportation Systems Center, Office of Research and Analysis		US-9

<b>ECONOMIES</b>	INST	ITUTE	KEY PROJECT	<b>PAGE</b>
Canada	Transport	Transportation	Dryden Commission Implementation	CA-4
	Canada	Development	Project, Aircraft Ground Deicing	
		Centre		
			APEC Satellite Navigation /	CA-4
			Communications Project	
			Air Security	CA-5
			Air Traffic Services	CA-5
			Aviation Search and Rescue	CA-5
			Aviation Weather	CA-6
			Aviation System Safety	CA-6
			Aircraft Evacuation Model	CA-6
			Child Safety Seat	CA-7
			Human Factors	CA-7
			Transportation Accessibility for	CA-11
			Elderly and Disabled Persons	
			Transportation Ergonomics	CA-11
	Transport		Air Traffic Management and	CA-13
	Canada		Surveillance Systems Development	
	Aviation			
			Communication, Navigation, and	CA-13
			Network Systems Development	_
		Air Traffic	ATC Human Factors	CA-14
		Services		
		Research and		
		Experimentation		
		Centre	Air Troffic Control Foot time and real	CA 11
			Air Traffic Control, Fast-time and real- time simulation	CA-14
			Flow Management	CA-15
Indonesia	Department of	Center of Data	Common Data Base	IN-1
indonesia		and Information	Common Data Base	IIN-I
	Communications	Air	Policy of limited open sky in Rep.	IN-4
		Communications	Policy of liftiled open sky in Nep.	1111-4
		Research and		
		Development		
		Centre		
			Perfect the air transport regulation	IN-4
			Standart of airport service in Pelita	IN-4
Japan	Ministry of	Electronic	Development on GPS Overlay	JP-1
	Transport	Navigation	System	
		Research		
		Institute		
			Improvement of the Airborne Collision	JP-1
			Avoidance System (ACAS-III)	
			Study on Aircraft Height Monitoring	JP-1
			Methodology for Reducing Vertical	
			Separation Minima	

#### PROJECT LIST - Field : Air Transportation -

Rep. of Korea	The Korea Transport Institute	Improving Airside Operations as Kimpo International Airport	KO- 12
		The Proposals for the Operational Plans of the Inchon International Airport	KO- 13
		Forecasting the Air Transportation Demands for the Year 2010	KO- 13
		Strategies Towards the Liberalization of the East Asian Aviation Market	KO- 13

<b>ECONOMIES</b>	INSTI	TUTE	KEY PROJECT	<b>PAGE</b>
Mexico	Engineering Institute	National University of	Regional effects of the economic opening and transport demand	MX-2
		Mexico	Regional impacts of the economic opening and development of the Mexican transport system	MX-2
			Experimental study of diverse type of pavement	MX-5
			Pavement of simple comcrete	MX-5
			Road and airports drainage	MX- 11
	Mexican Transport Institute		General transport study of the southeast region of Mexico	MX- 21
			Methodology for freght transport corridors analysis	MX- 23
			Transport situation of some products of Mexican foreign trade	MX- 25
			Competitive increase in freight transportation	MX- 26
			Transport and trade flows	Mx-27
			A methodology to study logistic services offer and transport costs	MX- 27
				MX- 28
			Research methodology for road engineers	MX- 32
Thailand			Project Evaluation	TH-1
			Study on Transport Master Plan	TH-1

## PROJECT LIST - Field : Disaster Reduction Technology -

<b>ECONOMIES</b>	INST	TUTE	KEY PROJECT	<b>PAGE</b>
Japan	Ministry of Transport	Port & Harbour Research Institute	Research on Impact Assessment of Sea Level Rise due to Global Warming	JP-2
		Ship Research Institute	A Study Buffer Equipments for use as Protection against Ship Collision	JP-3
			Physical and Chemical Characteristics of wave Breaking in Air-Sea Interface	JP-11
			Research on Failure Prediction of Diesel Engine with Artificial Intelligence	JP-13
			Study on Performance of Ice- breaking Patrol Ship	JP-18
			Study on safety evaluation ship hull	JP-19
Chinese Taipei	Institute of Transportation	Transportation Safety Division	The Study of Intelligent Vehicle for Highway Safety Improvement (I) - Understanding the Current Development of this Technology and its Applicability	CT-5

<b>ECONOMIES</b>	INST	TUTE	KEY PROJECT	PAGE
Indonesia	Department of	Land	Study of land transport	IN-1
	Communications	Communications	standardization	IN-2
		Research and	Guideline arrangement of urban	
		Development	transport planning	
		Centre	Criteria of service determination of	
			ferry and sea line	
		Air	National Aerospace	IN-3
		Communications		
		Research and		
		Development		
		Centre	Cargo Air Transport	IN-3
			Security System of Air Transport	IN-3
			Borow Cross Pioneer Transport	IN-4
			System	1111-4
Japan	Ministry of	Port & Harbour	Research on Impact Assessment of	JP-2
l '	Transport	Research	Sea Level Rise due to Global	
1	-	Institute	Warming	
		Ship Research	Development of a Movable Disposal	JP-7
		Institute	System for Waste FRP Boats	
			Experimental Study on Sloshing	JP-8
			Loads of Middle-Sized Tankers with	
			Double Hulls	
			Maintenance System of Offshore	JP-11
			Structure	15.44
			Physical and Chemical	JP-11
			Characteristics of wave Breaking in Air-Sea Interface	
			Reduction of Oil Spill from Oil Tanker	JP-12
			Research for Reduction of CO2	JP-12
			Emission out of Power Plants	JF - 12
			Research on Exhaust Emissions from	JP-12
			Marine Diesel Engines	01 12
			Research on Hydrogen Gas Turbine	JP-14
			Research on Multi-Dimensional	JP-14
			Measurement using Laser	
			Interferometry for Combustion	
			Diagnostics	
			Research on Performance of a Stack	JP-14
			of Solid Oxide Fuel Cells	
			Research on Quantification of	JP-15
			Combustion and Exhaust Emissions	
Į.			from Marine Diesel Engines	
			Study on Reduction of Exhaust Gas	JP-18
			Emissions from Marine Diesel Engine	
			Study on a Research Vessel in Ice	JP-19
			Covered Sea	<u> </u>
ĺ			Study on safety evaluation ship hull	JP-19

#### PROJECT LIST - Field : Environmental Protection -

	Traffic Safety	New Technologies control NOx	JP-22
	and Nuisance	Emission from Diesel Engines and	
	Research	their Applicability under Driving	
	Institute	Conditions	

#### PROJECT LIST - Field : Environmental Protection -

<b>ECONOMIES</b>	INST	TUTE	KEY PROJECT	PAGE
Mexico	Engineering	National	Environmental and energy diagnosis	MX-1
	Institute	University of	in the institute of engineering	
		Mexico		
	Mexican		Studies related with the saving of	MX-
	Transport		energy in the transport sector	32
	Institute			
Chinese	Institute of		A Study on Corrosion Mechanism	CT-2
Taipei	Harbor & Marine		and Prevention of Harbor Structure	
	Technology	Material Division		

<b>ECONOMIES</b>	INSTI	TUTE	KEY PROJECT	PAGE
Canada	Transport Canada	Transportation Development Centre	Dangerous Goods R&D Program	CA-7
			Railway Research Program	CA-8
İ			Railway Safety	CA-9
			Research and development program	CA-9
			to improve the accessibility, energy	
			efficiency and environmental	
1			friendliness of urban transit buses	
			Electric Vehicle Research Program	CA-10
			Research program on the application	CA-10
			of electronics, communications and	
			computer technologies to road	
			transportation (IVHS)	
			Research program on the safety of	CA-10
			heavy road freight vehicles	
			Road transportation research and	CA-11
			development program	
			Transportation Accessibility for	CA-11
			Elderly and Disabled Persons	
			Transportation Ergonomics	CA-11
P.R.China	China Academy		Research on technical approaches	CH-1
	of Railway		for Beijing-Shanghai high speed	
Į.	Sciences		(250km/h) railway line	
			Research on technical approaches	CH-1
			for application of 25t axleload for	
			fraight train operation in China	
			comprehensive testing on	CH-1
			Guangzhou-Shenzhen 160km/h	
ll	D	0 t f D - t -	passenger trains	18.1.4
Indonesia	Department of	Center of Data	Common Data Base	IN-1
	Communications	and Information	Otrodo of lond to one of	181.4
		Land Communications	Study of land transport	IN-1
		Research and	Guideline arrangement of urban	
		Development	transport planning	
		Center	Criteria of Service Determination of	
		Ochici	ferry and sea line	
Japan	Ministry of	Traffic Safety	New Technologies control NOx	JP-22
Саран	Transport	and Nuisance	Emission from Diesel Engines and	3. 22
	Transport	Research	their Applicability under Driving	
		Institute	Congitions	
Rep. of Korea	Korea Maritime		Establishment of Railroad Logistics	KO-1
	Institute		Services System	
	The Korea		A feasibility study of the air cargo city	KO-3
	Transport		terminal in Seoul Metropolitan Area	
	Institute		, '	
	•		<del>.</del>	

Developing the GIS-T and its	KO-3
Applications for Urban Transport	
Estimation of the Special Travel	KO-4
Demand on National Holidays	
A Study on Pusan's Transit Fare	KO-4
Structure	
A Study on How to Utilize Electronic	KO-4
Technology for the Enhancement of	
the Transportation System	

ECONOMICS INCTI	THE KEY DOO LEGT	DAGE
ECONOMIES INSTI		PAGE
Rep. of Korea The Korea Transport Institute	A Study on the Construction and Operation of the Information Center	KO-5
	A Study on the Feeder Network for the Seoul-Pusan High Speed Rail Line	KO-5
	A Study on the Interchange Spacing and Management for Improving the Functional Efficiency of Highway	KO-5
	A Feasibility Study and Basic Plan for the Construction and Operation of the Light-rail Transit in the Pusan Metropolitan Area	KO-6
	A Feasibility Study and Basic Plan for the Extension of Subway lines No.1,2 in the Daegu Metropolitan Area	
	A Feasibility Study and Basic Plan on the Construction and Operation of Light Rail Transit between Kimhae and Jangyoo	KO-6
	A Basic Plan to Construct and Operate the Bicycle Road System in Kimhae City	KO-7
	A Feasibility Study and Basic Plan for the Construction and Operation of Light Rail Transit in Youngin City	KO-7
	A Study of the Transport Investment Appraisal Methods	KO-7
	An Analysis of the Traffic Impact Assessment Report for 1995	KO-8
	A Study for the Establishment of Coordinated Road Freight Transport System	KO-8
	Strategic Issues of the Urban Freight Movement for Seoul Metropolitan Area	KO-8
	A Study on How to Improve the Passenger and Freight Fare System	KO-9

A Study on How to Improve the Interchange Facilities and Toll Collection System of the Seoul Beltway	KO-9
A Strategy Planning Study of the Ho- Nam High Speed Rail Construction	KO-9
A Survey of the Urban Traveler	KO-
Patterns in the Seoul Metropolitan	10
Area	
A Study for the Establishment of	KO-
Coordinated Road Freight Transport	10
System	
The First Nationwide Logistics Survey	KO-
in Korea	10

<b>ECONOMIES</b>		TUTE	KEY PROJECT	<b>PAGE</b>
Rep. of Korea	The Korea Transport Institute		A Study on the Transport Service and Market Mechanism	KO-11
			Establishment of the Comprehensive Transportation DB (1)	KO-11
			Infrastructure Development and Private Investment Conditions in Korea	KO-11
			Standard Guidelines on the Economic Feasibility Study for Urban Railway Projects	KO- 12
			Strategies to Promote Inchon International Airport as a Regional Hub in Northeast Asia	KO- 12
Mexico	Engineering Institute	National University of Mexico	Highway projects appraisal	MX-1
			Logistics and accessibility to shopping centers in the metropolitan area of Mexico City	MX-2
			Regional effects of the economic opening and transport demand	MX-2
			Regional impacts of the economic opening and development of the Mexican transport system	MX-2
			Scenarios for logistic platforms supports in metropolitan areas	MX-2
			Strategic planning of distribution and collection routes with capacity restrictions	MX-3
			Structural design of asphalt pavements	MX-3

Transport systems and metropolitan	MX-3
territorial structures: distribution	
centers and cooperative logistics of	
enterprises in the central region	
Properties deterioration of the	MX-4
concrete subject to cycles of	
compression loa	
Behavior of cohesive compacted soils	MX-4
Probabilistic analysis of the seismic	MX-5
answer of structures on several	
supports in soft soils	
Pavement of simple concrete	MX-5
Efforts analysis of the Tlautla bridge	MX-6
under the action of gravitational loads	
Redistribution of flexionant moments	MX-6
and reaction in hyperstatic structures	
of reinforced concrete	
Effect of the wind inflexible bridge	MX-6
Rigid-plastic plate subjected to a	MX-7
moving load	N 4 3 / 7
Filtration forces and hydraulic	MX-7
breaking  Effect of the flow of water in tunnnels	MX-7
	IVIX-7
contour	NAV O
Displacement and efforts in a	MX-8
elastoplastic semi-infinit mean upon	
digging a circular tunnel	141/ 0
Rock pressures in tunnels and	MX-8
interaction rock-coating	10/10
The concept of preconsolidation of	MX-8
soils	1477.5
Optimum design in treatment of soft	MX-9
soils with vertical drainage of sand	
Compactation of clayish soils	MX-9
Dynamic behavior of not cohesive embankment models	MX-9
Compact conditions, states variables	MX-
and engineering properties of	10
compacted clay	10
Soil-suructure interaction for footing	MX-
fundations	10
Roads and airports drainage	MX-
rtodus and amports drainage	11
Hydraulic model study of the crossing	MX-
of Mexico-Qeretaro highway with	11
Tepeji river	

1	1		
		Erosion inconcrete caused by high speed flow	MX- 12
			MX-
		A contribution to the study of the local	12
		undermining in bridge piles	
		Valuation of maximum entropy in	MX-
		urban transport models	13
		Use of models in planning transport infrastructure	MX- 13
		Infrastructure works like factor for the	MX-
1		rural development	13
		Social indirect cost of road	MX-
		investment	14
		Optimum of the social direct cost in	MX-
		work concepts for rural road	14
i		Atmospheric contamination and their	MX-
		relationship with the vehicles flow in	14
		Mexico city	-
Ĭ		System for drop emission in	MX-
		automobiles by means a continuous	15
		converter of pair of mechanical type	. 5
i		Instructive for structural design of	MX-
		flexible pavements for highways	15
		Operation of vehicles in slopes	MX-
		Operation of vehicles in slopes	16
		Vehicles sampling with dynamic	MX-
		weighers	16
		Highway structural design with	MX-
		flexible pavement	16
1		-	MX-
		Project of geometric specification for low cost roads	17
1			
		Full scale testing applied to pavement	MX-
		design	17
		Recomendations for the structural	MX-
		design of flexible pavement	18
	Mayigas	Analysis of the Leads sinculation in the	N // \/
	Mexican	Analysis of the loads circulating in the	MX-
	Transport	road and rail networks in order to	19
	Institute	select the optimal mode for each type of load.	
			NAV
		Connectivity analysis of the main	MX-
		maritime and border ports in order to	19
		improve their integration to the road and rail networks	
			N // \
		Development of a computer software	MX-
		to calculate maintenance actions of	20
1		different intensity and time horizon	1417
		Dynamic analysis of bridges	MX-
			20

## PROJECT LIST - Field : Land Transportation -

Effect of the slope and curvature in the operational costs and velocity of the main truck types, circulating in the Mexican road network	MX- 20
Field Studies to determine weight, dimensions and average value of the load of the vehicles circulating in the Mexican road network	MX- 21

Road-vehicle interaction	
Troub Tollion Interdetion	MX-
	21
National strategy for high	
maintenance	22
Pavement management s	
	22
Vehicle cycle analysis	MX-
	23
Analysis of three groups of	
for the study of intra and i	J
flowsbalance from the fre	
passengers circulation pe	
Methodology for freight tra	
corridors analysis	vehicle MX-
Road design factors and operating costs	venicie IVIX-
Freight transport integration	
element of the industry ar	
competitivity	id fiations 24
Surface conditions and ve	ehicle mx-24
operating costs inroad	)
Transport situation of som	ne products MX-
of Mexican foreign trade	24
Competitivity of the Mexic	
interstate common motor	carriers 24
from the NAFTA perspect	ive
Recent evolutionand trend	
interstate common carrier	
Economical evaluation of	
gradient in roads	26
Economic module of Mex	
Pavement Management S	
Competitive increases in	U
transportation	26
Freight transportation fro	
competition	27
Transport and trade flows	MX- 27
A methodology to study lo	
services offer and transpo	
Trade exchange between	
Canada and their transpo	
Structural effects of econo	
opening in freight	28
motorcarrierindustry	

ì	ı i	A	1.43.4
		Analyses of the unit damages	MX-
		coefficients corresponding to the	28
		Mexican highway network	
		Methodology for the analysis of	MX-
ļ		freight transport corridors	29
		Estimation of the traffic demand in	MX-
		roads combining origin-destiny	29
		studies with traffic counting actions	
		GIS and transport	MX-
			29
		Strategies to conduct origin-destiny	MX-
		studies	30
		Four contributions forthe quantitative	MX-
		appraisal of transport activities	30
		The integration of the optimal design	MX-
		and manufacture on cam	30
		mechanisms	
ĺ		Energy diagnostics in the transport	MX-
		sector	31
		Comparative measurement of	MX-
		emission and fuel consumption for	31
		change of type of gasoline on	
		vehicles without catalytic converters	
		Antipolluting devices for internal	MX-
		combustion engine	31
		Research methodology for road	MX-
		engineers	32
		Mathematical Models for trip	MX-
		distribution	32
		Development of design guidelines for	MX-
		climbing lanes on two-lane roads	33
		Quarter car dynamic response and	MX-
		international road roughness index	33
		SIMAQ	MX-
		Olivir (Q	33
		Diesel engine based vehicles	MX-
		Disser engine based veriloies	34
		Four studies in materials with	MX-
		applications in the transport industry	34
		Identification and behavior of residual	MX-
		solids for use in highway engineering	35
		Bridges management system	MX-
		Diages management system	35
			55
New Zealand	The New	Development of cost effective method	NZ-1
Liter Zealand	Zealand Institute	of assessing vehicle suspensions for	142 1
	for Industrial	"road friendliness", or road wear	
	Research and	road mondificot , or road woul	
	Development		
ı	Dovolopinont		

			Interaction between road geometry, heavy vehicle performance (stability, manoeuvrability, tractive effort etc.) and driver behaviour	NZ-1
			Relationship between dynamic wheel forces and pavement life	NZ-2
Philippines	National Center for Transport Studies		Analysis of Goods Movement in Metro Manila	PH-1
			Analysis of Road Traffic Accidents in the City of Manila	PH-1
			Analyzing Transfer Disutilities in Disaggregate Mode Choice Models for Work Trips Using Revealed and Stated Preference Data	PH-1
			Cost Characteristics of Jeepney and Bus Modes in Metro Manila	PH-2
			Development of a Planning and Design Criteria for Jeepney Stop Facilities: Concepts and Single LaneSimulation	PH-2
			Discrete Choice Models on Locational Choices of Firms in Industrial Estates: The Case of CALABARZON in the Philippines	PH-2
			Effects of Fly-Over Construction on Traffic Flow: The Case of Metropolitan Manila	PH-3
			Effects of Opening Exclusive Residential Subdivision	PH-3
			Expressway Capacity Analysis	PH-3
			Re-Evaluation of Signal Parameters in Metro Manila	PH-3
Singapore	Nanyang Technology University	Centre for Transportation Studies	Driver Behaviour in the Central Expressway Tunnels	SI-1
			Slag Utilization for Road Premix	SI-1
			Car Ownership, Traffic Congestion and Road Pricing	SI-2
			Analysis of Travel Behaviour in Singapore	SI-2

<b>ECONOMIES</b>	INSTI	TUTE	KEY PROJECT	<b>PAGE</b>
Singapore	Nanyang Technology University	Centre for Transportation Studies	Study of Transport Services in Jurong Industrial Estate	SI-2
			An Experimental Study to Improve the Skid Resistance at Road Markings	SI-3
			Deviation Bollards and Yellow Band at Bus Stops	SI-3
			Effectiveness of Speed-Radar Camera in Reducing High-Speed Travel	SI-3
			The Effects of Traffic, Geometrics and Operational Characteristics of Signalised Junctions on Red-Light Violation Rates	SI-4
			Trip and Parking Rates for Major Land Uses in Singapore	SI-4
			Home Interview Survey (1996) on Travel Behaviour	SI-4
	National University of Singapore	Centre for Transportation Research	Nondestructive Evaluation of Pavements	SI-5
			Pavement Management Systems for Roads	SI-5
			Analysis of Traffic Speed	SI-6
			Asphalt Road Drainage	SI-6
			Incident Detection Technologies	SI-6
			IT Applications in Highway Management	SI-7
Chinese Taipei	Institute of Transportation	Division of Interdisciplinary Research	Research and Development of Intelligent Vehicle and Transportation Technologies in Taiwan	CT-4
	Office of Science & Technology Advisors		Evaluation and Planning for Development of Advanced Technology on Transportation Engineering	CT-6
			GPS/VNS/GIS Integrated System with the Application to Intelligent Vehicle Highway System	CT-7
			Incorporating Telecommunication Technologies to Improve Transportation System Performance - A Feasibility Study of Telecommunicating	CT-8
			Influence of Geological Barriers on Tunneling	CT-8
			Intelligent Vehicle Highway System	CT-9

## PROJECT LIST - Field : Land Transportation -

Study on an Optoelectronic Sensing Instrument of Freeway Vehicle Flow	CT-9
· · · · · · · · · · · · · · · · · · ·	CT-10
Communications Technology and	
Transportation Development	

<b>ECONOMIES</b>	INSTI	TUTE	KEY PROJECT	PAGE
Chinese	Office of Science		The Integrated Technologies of GIS	CT-10
Taipei	& Technology		for Transportation Applications	
	Advisors			
			Use of Telecommunication	CT-11
			Technology for Highway Transport	
Thailand			Project Evaluation	TH-1
			Study on Transport Master Plan	TH-1
	Department of	Road Research	Techniques to improve soft clay	TH-2
	Highways	and	foundation	
		Development		
		Center		
			Road design and construction	TH-2
			techniques on soft foundation	
			Pilot project on evaluation of road	TH-3
			conditions by using FWD	
			Pilot Study to develop performance-	TH-3
			based specifications for paving	
			materials	

<b>ECONOMIES</b>	INST	TUTE	KEY PROJECT	<b>PAGE</b>
Japan	Ministry of Transport	Port & Harbour Research Institute	Research on Impact Assessment of Sea Level Rise due to Global Warming	JP-2
		Ship Research Institute	At-sea Experiment of Floating Offshore Structure - POSEIDON Project	JP-4
			Development of Huge Floating Offshore Structure	JP-6
			Development on Active Controlled Floating Structure	JP-7
			Fundamental Technology Concerning with construction of Huge-scale Floating Structure	JP-9
			Maintenance System of Offshore Structure	JP-11
			Physical and Chemical Characteristics of wave Breaking in Air-Sea Interface	JP-11
			Study on Ice Forces on a Structure in Ice Covered Sea	JP-17
			Study on a Research Vessel in Ice Covered Sea	JP-19
Mexico	Engineering Institute	National University of Mexico	Introduction to marine hydrodynamics	MX- 12
Chinese Taipei	Institute of Harbor & Marine Technology	Coastal Engineering Division	A Study of the Long Wave off Hwalien and Su-Ao	CT-1
			Study of Characteristics for the Sea and Air around Taiwan	CT-1
		Harbor Engineering Division	A Study on Corrosion Mechanism and Prevention of Harbor Structure	CT-2
		Mathematical Modelling Division	Computations and Visualizations of Wave and Nearshore Current in the Coast Zone	CT-3
	Institute of Harbor & Maritime Technology, Soil Mechanics Laboratory	Geotechnical Division	Research on the Dynamic Properties of Soil and Ground Improvement Method for the Coastal Regions in Taiwan	CT-3

## PROJECT LIST - Field : Nuclear Energy -

<b>ECONOMIES</b>	INST	TUTE	KEY PROJECT	<b>PAGE</b>
Japan	Ministry of Transport	Ship Research Institute	Advanced Man-Machine Interface Techniques for Autonomous Power Plant	JP-3
			Advanced Nuclear Plant Operation Based on Perception and Senses as Human Group	JP-4
			Development and Application of a Reliability Analysis Methodology "GO-FLOW" for Nuclear Power Plant System	JP-5
			Optimization of Neutron Shielding Structures for Ceramics Shields	JP-11
			Radiation Safety with Transport of Low Level Radioactive Materials	JP-12

<b>ECONOMIES</b>	INSTI	TUTE	KEY PROJECT	<b>PAGE</b>
Indonesia	Department of Communications	Sea Communications Research and Development Centre	Patterns of container transport to make efficient container port develop.	IN-2
			Study of shipping deregulation impact forward national export,value,balance	IN-3
			Standardization of means/infrastructure of sea transport	IN-3
Japan	Ministry of Transport	Ship Research Institute	Development of Testing Technology of Ice Model Basin	JP-6
Rep. of Korea	Korea Maritime Institute		Construction and Operation Plan of Kyung In Canal	KO-1
			Establishment of Port Logistics Services System	KO-1
			Investment Priority for New Ports Development	KO-2
			A Proposal for Private Investments in Gadok Container Terminal	KO-2
Mexico	Engineering Institute	National University of Mexico	Bibliography about maves movement produced by seisms	MX- 15
	Mexican Tansport Institute		Design of a spreader for empty containers	MX- 34
			Guide for specification of technical characteristics of port gantry cranes	MX- 35
Chinese Taipei	Office of Science & Technology Advisors		Hydrauic Model Tests on Littoral Drift Management and Land Reclamation of Taichung Harbor	CT-7
Thailand			Project Evaluation	TH-1
			Study on Transport Master Plan	TH-1
			Study on the Policy for Port and ICD Roles and Location	TH-1
	Port Authority of Thailand		The Study on Modernization of Bangkok Port in the Kingdom of Thailand	TH-4
			The Development of Laem Chabang Port Phase I	TH-4
			The Development of Laem Chabang Port Phase II	TH-5

INSTI	TUTE	KEY PROJECT	<b>PAGE</b>
Department of	Sea	Pattern of container transport to	IN-2
Communications	Communications	make efficient container port develop.	
	Research and		
	•		
	Center		
			IN-3
			IN-3
<b>.</b>	01: 5		15.4
			JP-4
Transport	institute		
			ID 4
			JP-4
			JP-5
			JP-5 JP-5
			JP-5
			JP-6
			0. 0
			JP-6
		Development of a Movable Disposal	JP-7
		Development on Active Controlled	JP-7
		Floating Structure	
		Evaluation of structural safety of a	JP-8
		novel type high-speed vessel	
			JP-8
			JP-9
			15.0
			JP-9
			ID 0
			JP-9
			ID 10
			JP-10
			JP-10
			01:-10
			JP-10
			01 -10
			JP-11
		<u> </u>	01 - 11
		Air-Sea Interface	
	Department of	Communications Research and Development Center  Ministry of Ship Research	Department of Communications Research and Development Center  Study of shipping deregulation impact forward national export, value balance Standardizatin of means/infrastructure of sea transport Institute  Ship Research At-sea Experiment of Floating Offshore Structure - POSEIDON Project  Capsizing of a ship in quartering waves  Chaos and Fractals in Ship Capsizing Corrosion Fatigue and Stress  Corrosion Cracking of High Tensile Steel for Ship Hull in Seawater and Crude Oil  Development of Huge Floating Offshore Structure  Development of Testing Technology of Ice Model Basin  Development of a Movable Disposal System for Waste FRP Boats  Development on Active Controlled Floating Structure  Evaluation of structural safety of a novel type high-speed vessel  Experimental Study on Sloshing  Loads of Middle-Sized Tankers with Double Hulls  Fundamental Technology Concerning with construction of Huge-scale Floating Structure  Hydrodynamic Analysis of Marine Propellers for Ice breakers  Impact Fracture Properties of Ship Basic Element  Impact Strength of Ferro-Cement Boat  Impact Strength of Fiber Reinforced Plastic Laminates for Ship Hull  Investigation of a capsizing accident of a large stem trawler  Physical and Chemical  Characteristics of wave Breaking in

PROJECT LIST - Field : Shipbuilding -

Research on Strength of Heat  Affected Materials and Structures	JP-15
	JP-16
intelligent nondestructive evaluation	, 10
for materials and structures of high	
reliability	

<b>ECONOMIES</b>	INST	TUTE	KEY PROJECT	<b>PAGE</b>
Japan	Ministry of Transport	Ship Research Institute	Research on the flow field around a ship in maneuvering motion	JP-16
			Research on the manoeuvring motion of a ship in waves	JP-16
			Study on Electromagnetic	JP-17
			Study on Performance of Ice- breaking Patrol Ship	JP-18
			Study on Protection against Impact Force on Life-saving Appliances for ship	JP-18
			Study on Reduction of Exhaust Gas Emissions from Marine Diesel Engine	
			Study on Technology for Designs of Marine Articles by FEM Analysis	JP-19
			Study on a Research Vessel in Ice Covered Sea	JP-19
			Study on safety evaluation ship hull	JP-19
			Study on safety factor for design of FRP boat	JP-20
			Study on safety marine FRP in low temperature region	JP-20
			Surf-riding of a Ship	JP-20
			Tribology of oxide ceramics at elevated temperatures	JP-21
Mexico	Mexican Transport Institute		Compendium of standars for the equipment of merchant vessels	MX- 32
Thailand			Project Evaluation	TH-1
			Study on Transport Master Plan	TH-1

<b>ECONOMIES</b>	INST	TUTE	KEY PROJECT	<b>PAGE</b>
Canada	Transport	Transportation	APEC Satellite Navigation /	CA-4
	Canada	Development	Communications Project	
		Centre	-	
			Inshore Navigation	CA-8
			Marine Operations / Environmental	CA-8
			Protection	
			Regulatory Support for Open Waters	CA-9
			and Ice-Infested Waters	
			Transportation Accessibility for	CA-11
			Elderly and Disabled Persons	_
			Transportation Ergonomics	CA-11
			Search and Rescue	CA-12
			Vessel Traffic Services	CA-12
Indonesia	Department of	Center of Data	Common Data Base	IN-1
	Communications	and Information		
		Land	Study of land transport	IN-1
		Communications	standardization	
		Research and	Guideline arrangement of urban	
		Development	transport planning	
		Center	Criteria of Service Determination of	
			ferry and sea line	11.1.0
		Sea	Pattern of container transport to	IN-2
		Communications	make efficient container port develop.	
		Research and		
		Development Center		
		Center	Study of shipping deregulation impact	IN-2
			foward national export, value balance	111-2
			Standardization of	IN-2
			means/infrastructure of sea transport	111-2
Japan	Ministry of	Ship Research	A Study Buffer Equipments for use as	JP-3
Саран	Transport	Institute	Protection against Ship Collision	0. 0
		oututu	Capsizing of a ship in quartering	JP-4
			waves	0
			Chaos and Fractals in Ship Capsizing	JP-5
			Development of Onboard Collision	JP-6
			Avoidance System	
			Development of Testing Technology	JP-6
			of Ice Model Basin	
			Evaluation of Performance and	JP-7
			Safety of Wing-in-Surface Effect Ship	
			(WISES)	
			Foghorn-Signal Processing for	JP-8
			Distance Measurement	
			Hydrodynamic Analysis of Marine	JP-9
			Propellers for Ice breakers	
			Investigation of a capsizing accident	JP-10
			of a large stern trawler	

Research on Exchanger Technology for Marine Use	JP-13
Research on Failure Prediction of Diesel Engine with Artificial Intelligence	JP-13
Research on Hydrogen Gas Turbine	JP-14
Research on Performance of a Stack of Solid OxideFuel Cells	JP-14

<b>ECONOMIES</b>	INS	TITUTE	KEY PROJECT	<b>PAGE</b>
Japan	Ministry of	Ship Research	Research on Quantification of	JP-15
	Transport	Institute	Combustion and Exhaust Emissions	
			from Marine Diesel Engines	
			Research on Stirling Engine Systems	JP-15
			for Under-Water Vehicles	
			Safety Assessment of High Speed	JP-17
			Vessel Traffic Using Computer	
			Simulation	
			Study on Electromagnetic	JP-17
			Study on Ice Forces on a Structure in	JP-17
			Ice Covered Sea	
			Study on Performance of Ice-	JP-18
			breaking Patrol Ship	
			Study on Protection against Impact	JP-18
			Force on Life-saving Appliances for	
			ship	
			Study on safety evaluation ship hull	JP-19
			Study on safety factor for design of	JP-20
			FRP boat	
			Study on safety marine FRP in low	JP-20
			temperature region	
			Surf-riding of a Ship	JP-20
Mexico	Engineering	National	Confiability of the operation of the	MX-1
	Institute	University of	hydraulic system cutzamala	
		Mexico		
			Regional effects of the economic	MX-2
			opening and transport demand	
			Regional impacts of the economic	MX-2
			opening and development of the	
			mexican transport system	
			Submerged breakwater	Mx-10
			Hydrodynamic analysis of structures	MX-
			and maritime vehicles	11
	Mexican		Connectivity analysis of the main	MX-
	Transport		maritime and border ports in order to	19
	Institute		improve their integration to the road	
			and rail networks	

# PROJECT LIST - Field : Water Transportation -

1	1	1		
			General transport study of the	MX-
			southeast region of Mexico	21
			Methodology for freight transport	MX-
			corridors analysis	23
			Transport situation of some products	MX-
			of Mexican foreign trade	25
			Competitive increase in freight	MX-
			transportation	26
			Transport and trade flow	MX-
			·	27
			A methodology to study logistics	MX-
			services offer and transport costs	27
Chinese	Office of Science		Feasibility Study High Speed	CT-6
Taipei	& Technology		Wingship Transportation System	
'	Advisors		around Taiwan	
<b>ECONOMIES</b>	INSTITUTE	<b>KEY PROJECT</b>	PAGE	
Thailand	Office of	Research and	Project Evaluation	TH-1
	Maritime	Planning	-	
	Promotion	Division		
	Commission			
			Study on Transport Master Plan	TH-1
İ			Outbound Ocean Transportation of	TH-6
			Frozen Products in Thailand	
j				

Economies	Canada
Institute	Alberta Transportation & Utilities
	Research and Development Branch
Field Number(s)	1
Overall Contact Point	<ul> <li>(1) Name: T.Wills</li> <li>(2) Title: Section Head, Maintenance &amp; Materials Section</li> </ul>
	(3) Phone: 403-422-2087
	Fax: 403-422-2846
	E-mail:
Other Remarks	

Economies	Canada
Institute	Centre for Surface Transportation Technology National Research Council of Canada
Field Number(s)	1
Overall Contact Point	(1) Name: John Coleman (2) Title: Director General (3) Phone: 613-998-9638 Fax: 613-957-0831 E-mail: john.coleman@nrc.ca
Other Remarks	

Economies	Canada
Institute	Institute for Aerospace Research National Research Council of Canada
Field Number(s)	3
Overall Contact Point	(1) Name: Dr.Tom LeFeuvre (2) Title: Director General (3) Phone: 613-993-0141 Fax: 613-952-7214 E-mail: tom.lefeuvre@nrc.ca
Other Remarks	Aerospace Research and Development, and evaluation in fields of aerodynamics, flight mechanics, structures, materials, and propulsion. Annual expenditures approximately \$23M, with staff complement of 240. Over 50% of work cost shared with Canadian Industry and government.

Economies	Canada
Institute	Alberta Transportation & Utilities
	Research and Development Branch
Field Number(s)	1
	(1) Name: T.Wills
Overall Contact Point	(2) Title: Section Head,
	(3) Phone: Maintenance & Materials Section
	Fax: 403-422-2087
	E-mail: 403-422-2846
Other Remarks	

Economies	Canada
Institute	Centre for Surface Transportation Technology National Research Council of Canada
Field Number(s)	1
Overall Contact Point	(1) Name: John Coleman (2) Title: Director General (3) Phone: 613-998-9638 Fax: 613-957-0831 E-mail: john.coleman@nrc.ca
Other Remarks	

Economies	Canada
Institute	
Field Number(s)	1
Overall Contact Point	(1) Name: (2) Title: (3) Phone: Fax: E-mail:
Other Remarks	

Economies Canada

Institute
Institute for Aerospace Research
National Research Council of Canada

3

Dr.Tom LeFeuvre Director General 613-993-0141 613-952-7214 tom.lefeuvre@nrc.ca

#### Other Remarks

Aerospace Research and Development, and evaluation in fields of aerodynamics, flight mechanics, structures, materials, and propulsion. Annual expenditures approximately \$23M, with staff complement of 240. Over 50% of work cost shared with Canadian Industry and government.

Economies Canada

Institute
Institute for Marine Dynamics
National Research Council of Canada

Field Number(s) 2,4,5

(1) Name: N.E.Jeffery

Overall Contact Point
(2) Title:
Director General

(3) Phone: 709-772-2469

Fax: 709-772-3101

```
E-mail:
njeffery@minnie.imd.nrc.ca
Other Remarks
Economies
Canada
Institute
Ministere des transports, Quebec
Laboratoire des chausses
Field Number(s)
1
(1) Name:
Pierre Lafontaine
Overall Contact Point
(2) Title:
Directeur,
Direction de laboratoire des chausses
(3) Phone:
418-643-6618
 Fax:
416-646-6195
 E-mail:
Other Remarks
```

**Economies** 

#### Canada

(1) Name:

Institute Ministry of Transportation of Ontario Research and Development Branch Field Number(s) (1) Name: G.Geva **Overall Contact Point** (2) Title: Director (3) Phone: 416-235-4707 Fax: 416-235-4872 E-mail: Other Remarks **Economies** Canada Institute Ministry of Transportation of Ontario Transportation Technology & Energy Branch Field Number(s)

#### Sue Crawford

**Overall Contact Point** (2) Title: Director (3) Phone: 416-235-5070 Fax: 416-235-4936 E-mail: Other Remarks Economies Canada Institute Institute for Marine Dynamics National Research Council of Canada Field Number(s) 2,4,5 (1) Name: N.E.Jeffery Overall Contact Point (2) Title: Director General (3) Phone: 709-772-2469

Fax:

E-mail: njeffery@minnie.imd.nrc.ca Other Remarks Economies Canada Institute Ministere des transports, Quebec Laboratoire des chausses Field Number(s) (1) Name: Pierre Lafontaine **Overall Contact Point** (2) Title: Directeur, Direction de laboratoire des chausses (3) Phone: 418-643-6618 Fax: 416-646-6195

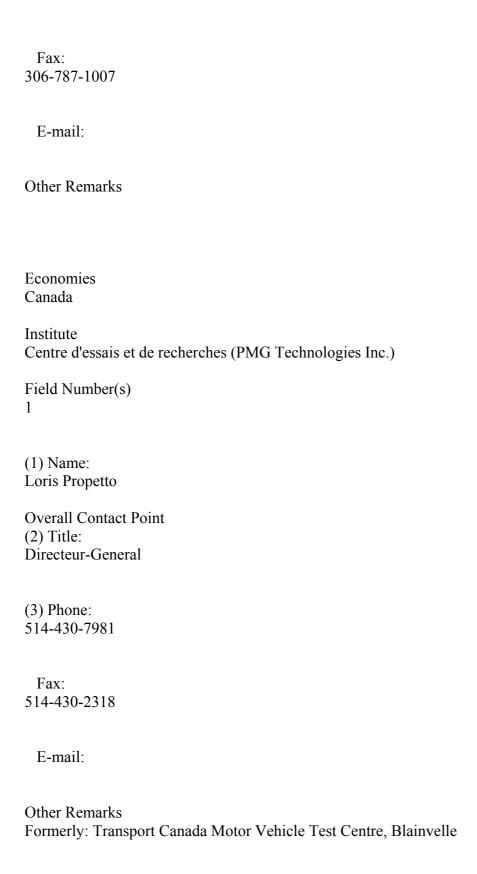
Other Remarks

E-mail:

```
Economies
Canada
Institute
Ministry of Transportation of Ontario
Research and Development Branch
Field Number(s)
1
(1) Name:
G.Geva
Overall Contact Point
(2) Title:
Director
(3) Phone:
416-235-4707
 Fax:
416-235-4872
 E-mail:
Other Remarks
Economies
Canada
Institute
Ministry of Transportation of Ontario
Transportation Technology & Energy Branch
Field Number(s)
```

(1) Name: Sue Crawford **Overall Contact Point** (2) Title: Director (3) Phone: 416-235-5070 Fax: 416-235-4936 E-mail: Other Remarks **Economies** Canada Institute Saskatchewan Highways & Transportation Planning and Coordination Branch Field Number(s) (1) Name: Abdul Qauyam **Overall Contact Point** (2) Title: Research Engineer, Municipal Planning and Research Section (3) Phone:

306-787-4808



**Economies** Canada Institute Transportation Association of Canada Field Number(s) (1) Name: Louise Pelletier **Overall Contact Point** (2) Title: **Executive Director** (3) Phone: 613-736-1350 Fax: 613-736-1395 E-mail: Other Remarks Although not a research or testing institution, the TAC R&D Council publishes annually an inventory of ongoing transportation research in Canada. Also, an inventory of laboratory facilities for Road Transportation was published in 1992. **Economies** Canada

Institute

Transport Canada

Field Number(s)

Transportation Development Centre

(1) Name: W.F.Johnson

Overall Contact Point
(2) Title:
Acting Exective Director

(3) Phone: 514-283-0001

Fax: 514-283-7158

E-mail:

Other Remarks

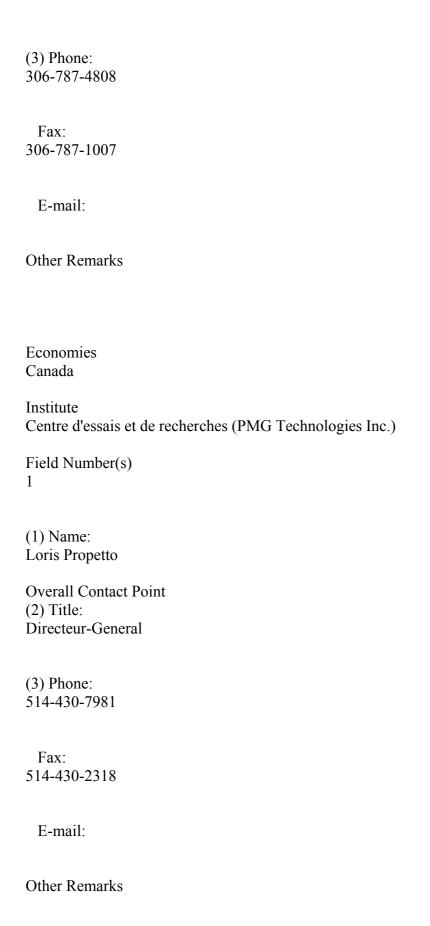
Economies Canada

Institute Saskatchewan Highways & Transportation Planning and Coordination Branch

Field Number(s)

(1) Name: Abdul Qauyam

Overall Contact Point
(2) Title:
Research Engineer,
Municipal Planning and Research Section



Formerly: Transport Canada Motor Vehicle Test Centre, Blainvelle

Economies Canada
Institute Transportation Association of Canada
Field Number(s) 1
(1) Name: Louise Pelletier
Overall Contact Point (2) Title: Executive Director
(3) Phone: 613-736-1350
Fax: 613-736-1395
E-mail:
Other Remarks Although not a research or testing institution, the TAC R&D Council publishes annually an inventory of ongoing transportation research in Canada. Also, an inventory of laboratory facilities for Road Transportation was published in 1992.
Economies

Institute Transportation Development Centre Transport Canada

Canada

Field Number(s) 1,2,3,8
(1) Name: W.F.Johnson
Overall Contact Point (2) Title: Acting Exective Director
(3) Phone: 514-283-0001
Fax: 514-283-7158
E-mail:
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project Dryden Commission Implementation Project, Aircraft Ground Deicing
Field Number(s) 3
(1) Name: Barry Myers
Contact Point (2) Title: R&D Task Group Manager
(3) Phone:

```
514-283-1186
 Fax:
514-283-1186
 E-mail:
myersbb@tc.gc.ca
Schedule
 from
1993
to
1997
year(s))
Record of Cooperation
US NASA/FAA, International Airlines
Other Remarks
- Meterology,
- Anti-icing fluids,
- Aircraft performance,
- Ice-detection,
- Effect of runaway contamination in A/C tire friction,
KEY PROJECTS UNDERWAY
Name of the Project
Aging Aircraft non-destructive inspection
Field Number(s)
```

(1) Name:

Jean-Louis Rene

Senior Development Officer

Contact Point (2) Title:

```
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
renej@tc.gc.ca
Schedule
 from
1993
to
1995
3
year(s))
Record of Cooperation
US FAA, USAF, NRCC, International Airlines
Other Remarks
Corrosion
KEY PROJECTS UNDERWAY
Name of the Project
APEC Satellite Navigation / Communications Project
Field Number(s)
2,3
(1) Name:
A.E. Pokotylo
Contact Point
(2) Title:
Director General
```

```
(3) Phone:
613-991-6045
 Fax:
613-991-6045
 E-mail:
Schedule from 1995 to 1997 (2year(s))
Record of Cooperation APEC Economies
Other Remarks
Canada is sponsoring the studies consisting of:
- inventory of existing SN&C systems,
- state-of-the-art technology assessment & safety implications, economic evaluation of
the implementation of SN&C systems,
- policyadvice, project coordination and final reporting.
KEY PROJECTS UNDERWAY
Name of the Project
Dryden Commission Implementation Project, Aircraft Ground Deicing
Field Number(s)
3
(1) Name:
Barry Myers
Contact Point
(2) Title:
R&D Task Group Manager
(3) Phone:
514-283-1186
 Fax:
```

514-283-7158

```
E-mail:
myersbb@tc.gc.ca
Schedule
 from
1993
to
1997
year(s))
Record of Cooperation
US NASA/FAA, International Airlines
Other Remarks
- Meterology,
- Anti-icing fluids,
- Aircraft performance,
- Ice-detection,
- Effect of runaway contamination in A/C tire friction,
KEY PROJECTS UNDERWAY
Name of the Project
Aging Aircraft non-destructive inspection
Field Number(s)
(1) Name:
Jean-Louis Rene
Contact Point
(2) Title:
Senior Development Officer
(3) Phone:
```

```
Fax:
514-283-7158
 E-mail:
renej@tc.gc.ca
Schedule
 from
1993
to
1995
year(s))
Record of Cooperation
US FAA, USAF, NRCC, International Airlines
Other Remarks
Corrosion
KEY PROJECTS UNDERWAY
Name of the Project
APEC Satellite Navigation / Communications Project
Field Number(s)
2,3
(1) Name:
A.E. Pokotylo
Contact Point
(2) Title:
Director General
(3) Phone:
613-991-6045
```

```
Fax:
613-991-6045

E-mail:

Schedule from
1995
to
1997
(
2
year(s))

Record of Cooperation
APEC Economies

Other Remarks
Canada is sponsoring the
```

Canada is sponsoring the studies consisting of:

- inventory of existing SN&C systems,
- state-of-the-art technology assessment & safety implications, economic evaluation of the implementation of SN&C systems,
- policyadvice, project coordination and final reporting.

#### KEY PROJECTS UNDERWAY

```
Name of the Project
Air Security
Field Number(s)
```

(1) Name:

**Howard Posluns** 

Contact Point
(2) Title:
Acting Chief,
Advanced Technology Division

```
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
h.posluns@resonet.com
Schedule
 from
1985
to
1997
12
year(s))
Record of Cooperation
US FAA
Other Remarks
- Explosive detection,
- X-Ray pattern recognition
KEY PROJECTS UNDERWAY
Name of the Project
Air Traffic Services
Field Number(s)
3
(1) Name:
Howard Posluns
Contact Point
(2) Title:
Acting Chief,
Advanced Technology Division
```

```
(3) Phone:
514-283-7158
 Fax:
514-283-7158
  E-mail:
h.posluns@resonet.com
Schedule
  from
1980
to
1996
14
year(s))
Record of Cooperation
US FAA/NASA
Other Remarks
- Air Traffic control sequencing,
- Wake vortex prediction and advisory system,
- GPS Navigation
KEY PROJECTS UNDERWAY
Name of the Project
Aviation Search and Rescue
Field Number(s)
(1) Name:
Howard Posluns
Contact Point
(2) Title:
Senior Development Officer
```

```
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
h.posluns@resonet.com
Schedule
 from
1989
to
1997
8
year(s))
Record of Cooperation
Other Remarks
- 406Mhz emergency locator transmitter,
- Combined GPS/ELT
KEY PROJECTS UNDERWAY
Name of the Project
Air Security
Field Number(s)
(1) Name:
Howard Posluns
Contact Point
(2) Title:
Acting Chief,
Advanced Technology Division
```

```
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
h.posluns@resonet.com
Schedule
 from
1985
to
1997
(
12
year(s))
Record of Cooperation
US FAA
Other Remarks
- Explosive detection,
- X-Ray pattern recognition
KEY PROJECTS UNDERWAY
Name of the Project
Air Traffic Services
Field Number(s)
(1) Name:
Howard Posluns
Contact Point
(2) Title:
Acting Chief,
```

### **Advanced Technology Division**

```
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
h.posluns@resonet.com
Schedule
 from
1980
to
1996
14
year(s))
Record of Cooperation
US FAA/NASA
Other Remarks
- Air Traffic control sequencing,
- Wake vortex prediction and advisory system,
- GPS Navigation
KEY PROJECTS UNDERWAY
Name of the Project
Aviation Search and Rescue
Field Number(s)
3
(1) Name:
Howard Posluns
Contact Point
```

```
(2) Title:
Senior Development Officer
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
h.posluns@resonet.com
Schedule
 from
1989
to
1997
year(s))
Record of Cooperation
Other Remarks
- 406Mhz emergency locator transmitter,
- Combined GPS/ELT
KEY PROJECTS UNDERWAY
Name of the Project
Aviation Weather
Field Number(s)
(1) Name:
Howard Posluns
Contact Point
(2) Title:
```

### Senior Development Officer

```
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
h.posluns@resonet.com
Schedule
 from
1989
to
1996
year(s))
Record of Cooperation
US FAA
Other Remarks
- Micro-burst/wind shear detection,
- Nowcasting
KEY PROJECTS UNDERWAY
Name of the Project
Aviation System Safety
Field Number(s)
3
(1) Name:
Howard Posluns
Contact Point
(2) Title:
```

```
Acting Chief,
Advanced Technology
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
h.posluns@resonet.com
Schedule
 from
1995
to
1998
year(s))
Record of Cooperation
US FAA/NASA
Other Remarks
- Flight data monitoring,
- Flight operational quality assurance,
- Optimum location of flight data recorders
KEY PROJECTS UNDERWAY
Name of the Project
Aircraft Evacuation Model
Field Number(s)
3
```

(1) Name: Roy Nishizaki

```
Contact Point
(2) Title:
Senior Development Officer
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
nishizr@tc.gc.ca
Schedule
 from
1995
to
1998
year(s))
Record of Cooperation
U.K. Cranfield University
Other Remarks
- Development of an aircraft evacuation model
KEY PROJECTS UNDERWAY
Name of the Project
Aviation Weather
Field Number(s)
3
(1) Name:
Howard Posluns
Contact Point
(2) Title:
```

### Senior Development Officer

```
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
h.posluns@resonet.com
Schedule
 from
1989
to
1996
year(s))
Record of Cooperation
US FAA
Other Remarks
- Micro-burst/wind shear detection,
- Nowcasting
KEY PROJECTS UNDERWAY
Name of the Project
Aviation System Safety
Field Number(s)
3
(1) Name:
Howard Posluns
Contact Point
(2) Title:
```

```
Acting Chief,
Advanced Technology
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
h.posluns@resonet.com
Schedule
 from
1995
to
1998
year(s))
Record of Cooperation
US FAA/NASA
Other Remarks
- Flight data monitoring,
- Flight operational quality assurance,
- Optimum location of flight data recorders
KEY PROJECTS UNDERWAY
Name of the Project
Aircraft Evacuation Model
Field Number(s)
3
```

(1) Name: Roy Nishizaki

```
Contact Point
(2) Title:
Senior Development Officer
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
nishizr@tc.gc.ca
Schedule
 from
1995
to
1998
year(s))
Record of Cooperation
U.K. Cranfield University
Other Remarks
- Development of an aircraft evacuation model
KEY PROJECTS UNDERWAY
Name of the Project
Child Safety Seat
Field Number(s)
(1) Name:
Roy Nishizaki
Contact Point
(2) Title:
```

## Senior Development Officer

```
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
nishizr@tc.gc.ca
Schedule
 from
1995
to
1998
year(s))
Record of Cooperation
Other Remarks
- Development of a child safety seat for use on aircraft meeting Transport Canada safety
standards
KEY PROJECTS UNDERWAY
Name of the Project
Dangerous Goods R&D Program
Field Number(s)
(1) Name:
W. McLaren
Contact Point
(2) Title:
```

```
Chief,
Current Technology
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
Schedule
 from
to
(
year(s))
Record of Cooperation
United States
Other Remarks
- BLEVE research,
- Pressure relief valve testing,
- Tank car safety
KEY PROJECTS UNDERWAY
Name of the Project
Human Factors
Field Number(s)
3
(1) Name:
```

**Howard Posluns** 

```
Contact Point
(2) Title:
Acting Chief,
Advanced Technology Division
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
h.posluns@resonet.com
Schedule
 from
1992
to
1997
year(s))
Record of Cooperation
Other Remarks
- Controller shiftwork,
- Pilot shiftwork/fatigue
KEY PROJECTS UNDERWAY
Name of the Project
Child Safety Seat
Field Number(s)
3
(1) Name:
```

Roy Nishizaki

```
Contact Point
(2) Title:
Senior Development Officer
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
nishizr@tc.gc.ca
Schedule
 from
1995
to
1998
year(s))
Record of Cooperation
Other Remarks
- Development of a child safety seat for use on aircraft meeting Transport Canada safety
standards
KEY PROJECTS UNDERWAY
Name of the Project
Dangerous Goods R&D Program
Field Number(s)
1
(1) Name:
W. McLaren
```

```
Contact Point
(2) Title:
Chief,
Current Technology
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
Schedule
 from
to
(
year(s))
Record of Cooperation
United States
Other Remarks
- BLEVE research,
- Pressure relief valve testing,
- Tank car safety
KEY PROJECTS UNDERWAY
Name of the Project
Human Factors
Field Number(s)
(1) Name:
```

# **Howard Posluns Contact Point** (2) Title: Acting Chief, Advanced Technology Division (3) Phone: 514-283-7158 Fax: 514-283-7158 E-mail: h.posluns@resonet.com Schedule from 1992 to 1997 year(s)) Record of Cooperation Other Remarks - Controller shiftwork, - Pilot shiftwork/fatigue KEY PROJECTS UNDERWAY Name of the Project Inshore Navigation Field Number(s)

(1) Name:

# James Reid **Contact Point** (2) Title: Chief, Transportation Systems Technology Division (3) Phone: 514-283-7158 Fax: 514-283-7158 E-mail: reidj@tc.gc.ca Schedule from to ( year(s)) Record of Cooperation Other Remarks - Advanced Electronics Chart Systems, - Manoeuvring Predictive System KEY PROJECTS UNDERWAY Name of the Project Marine Operations / Environmental Protection Field Number(s) 2

```
(1) Name:
James Reid
Contact Point
(2) Title:
Chief,
Transportation Systems Technology Division
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
reidj@tc.gc.ca
Schedule
 from
to
(
year(s))
Record of Cooperation
Other Remarks
- Predictive Maintenance
- Tanker Risk Analysis Oilspill
- Prevention Techniques
KEY PROJECTS UNDERWAY
Name of the Project
Railway Research Program
```

Field Number(s)

```
(1) Name:
W. McLaren
Contact Point
(2) Title:
Chief,
Current Technology
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
mclarew@tc.gc.ca
Schedule
 from
to
(
year(s))
Record of Cooperation
US FRA
Other Remarks
- Railway Research Advisory Board,
- Human Factors in Railways,
- Instrumented Wheelsets
```

Name of the Project Inshore Navigation

Field Number(s)

```
(1) Name:
James Reid
Contact Point
(2) Title:
Chief,
Transportation Systems Technology Division
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
reidj@tc.gc.ca
Schedule
 from
to
year(s))
Record of Cooperation
Other Remarks
- Advanced Electronics Chart Systems,
```

- Manoeuvring Predictive System

Name of the Project Marine Operations / Environmental Protection

```
Field Number(s)
(1) Name:
James Reid
Contact Point
(2) Title:
Chief,
Transportation Systems Technology Division
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
reidj@tc.gc.ca
Schedule
 from
to
year(s))
Record of Cooperation
Other Remarks
- Predictive Maintenance
```

- Tanker Risk Analysis Oilspill

- Prevention Techniques

Name of the Project

```
Field Number(s)
(1) Name:
W. McLaren
Contact Point
(2) Title:
Chief,
Current Technology
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
mclarew@tc.gc.ca
Schedule
 from
to
(
year(s))
Record of Cooperation
US FRA
Other Remarks
- Railway Research Advisory Board,
- Human Factors in Railways,
```

Railway Research Program

KEY PROJECTS UNDERWAY

- Instrumented Wheelsets

```
Name of the Project
Railway Safety
Field Number(s)
(1) Name:
W. McLaren
Contact Point
(2) Title:
Chief,
Current Technology
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
mclarew@tc.gc.ca
Schedule
 from
to
(
year(s))
Record of Cooperation
United States
Other Remarks
- Railway crossing R&D
```

```
Name of the Project
Regulatory Support for Open Waters and Ice-Infested Waters
Field Number(s)
(1) Name:
James Reid
Contact Point
(2) Title:
Chief,
Transportation Systems Technology Division
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
reidj@tc.gc.ca
Schedule
 from
to
year(s))
Record of Cooperation
United States Coast Guard
Other Remarks
```

Propulsion Loading, Passenger Vessel Safety,

- Structual Stability

Name of the Project

Research and development program to improve the accessibility, energy efficiency and environmental friendliness of urban transit buses

```
Field Number(s)
(1) Name:
Claude Guerette
Contact Point
(2) Title:
Senior Development Officer
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
gueretc@tc.gc.ca
Schedule
 from
to
(
year(s))
Record of Cooperation
```

# Other Remarks

Current projects include the development of an 18m low-floor articulated bus, investigations of lightweight materials and structural design for buses, and studies of high efficiency hybrid propulsion systems.

```
Name of the Project
Railway Safety
Field Number(s)
(1) Name:
W. McLaren
Contact Point
(2) Title:
Chief,
Current Technology
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
mclarew@tc.gc.ca
Schedule
 from
to
year(s))
Record of Cooperation
United States
Other Remarks
- Railway crossing R&D
```

- Structual Stability

```
Name of the Project
Regulatory Support for Open Waters and Ice-Infested Waters
Field Number(s)
(1) Name:
James Reid
Contact Point
(2) Title:
Chief,
Transportation Systems Technology Division
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
reidj@tc.gc.ca
Schedule
 from
to
year(s))
Record of Cooperation
United States Coast Guard
Other Remarks
- Propulsion Loading,
- Passenger Vessel Safety,
```

Name of the Project

Research and development program to improve the accessibility, energy efficiency and environmental friendliness of urban transit buses

```
Field Number(s)
(1) Name:
Claude Guerette
Contact Point
(2) Title:
Senior Development Officer
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
gueretc@tc.gc.ca
Schedule
 from
to
year(s))
Record of Cooperation
```

#### Other Remarks

Current projects include the development of an 18m low-floor articulated bus,

investigations of lightweight materials and structural design for buses, and studies of high efficiency hybrid propulsion systems.

#### KEY PROJECTS UNDERWAY

```
Name of the Project
Electric Vehicle Research Program
Field Number(s)
(1) Name:
Claude Guerette
Contact Point
(2) Title:
Senior Development Officer
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
gueretc@tc.gc.ca
Schedule
 from
to
(
year(s))
Record of Cooperation
```

#### Other Remarks

- operational evaluation of Ford and Chrysler battery-powered pre-production vehicles,

- research on hybrid-electric drive systems,
- studies of EV infrastructure requirements and impacts

Name of the Project

Research program on the application of electronics, communications and computer technologies to road transportation (IVHS)

```
Field Number(s)
(1) Name:
Lewis Sabounghi
Contact Point
(2) Title:
Senior Development Officer
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
sabounl@tc.gc.ca
Schedule
 from
to
(
year(s))
Record of Cooperation
```

Current program emphasisis on the used radio frequency vehicle-to-roadside communications for the monitoring and control of commercial vehicles.

# KEY PROJECTS UNDERWAY

```
Name of the Project
Research program on the safety of heavy road freight vehicles
Field Number(s)
(1) Name:
Sesto Vespa
Contact Point
(2) Title:
Senior Development Officer
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
vespas@tc.gc.ca
Schedule
 from
to
(
year(s))
```

Current projects include; testing antilock breaking systems on double-trailler tanker trucks, investigating the stability of different logging truck configulations, and a study of fatigue in commercial vehicle drivers.

# KEY PROJECTS UNDERWAY

```
Name of the Project
Electric Vehicle Research Program
Field Number(s)
1
```

Contact Point
(2) Title:
Senior Development Officer

(3) Phone: 514-283-7158

Claude Guerette

Fax: 514-283-7158

E-mail: gueretc@tc.gc.ca

Schedule from

to

(

year(s))

- operational evaluation of Ford and Chrysler battery-powered pre-production vehicles,
- research on hybrid-electric drive systems,
- studies of EV infrastructure requirements and impacts

# KEY PROJECTS UNDERWAY

Name of the Project

Research program on the application of electronics, communications and computer technologies to road transportation (IVHS)

```
Field Number(s)
(1) Name:
Lewis Sabounghi
Contact Point
(2) Title:
Senior Development Officer
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
sabounl@tc.gc.ca
Schedule
 from
to
year(s))
```

Current program emphasisis on the used radio frequency vehicle-to-roadside communications for the monitoring and control of commercial vehicles.

# KEY PROJECTS UNDERWAY

```
Name of the Project
Research program on the safety of heavy road freight vehicles
Field Number(s)
(1) Name:
Sesto Vespa
Contact Point
(2) Title:
Senior Development Officer
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
vespas@tc.gc.ca
Schedule
 from
to
year(s))
```

year(s))

Current projects include; testing antilock breaking systems on double-trailler tanker trucks, investigating the stability of different logging truck configulations, and a study of fatigue in commercial vehicle drivers.

# KEY PROJECTS UNDERWAY

```
Name of the Project
Road transportation research and development program
Field Number(s)
(1) Name:
Brian Marshall
Contact Point
(2) Title:
Chief,
Technology Application Division
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
marshab@tc.gc.ca
Schedule
 from
to
```

# Record of Cooperation

#### Other Remarks

year(s))

TDC's program of road transportation R&D focusses on Intelligent Vehicle-Highway Systems (IVHS) and heavy vehicle safety and productivity.

```
KEY PROJECTS UNDERWAY
Name of the Project
Transportation Accessibility for Elderly and Disabled Persons
Field Number(s)
1,2,3
(1) Name:
Ling Suen
Contact Point
(2) Title:
Chief,
Research Analysis & Special Programs Division
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
suenl@tc.gc.ca
Schedule
 from
to
```

Record of Cooperation US DOT; TRB

Other Remarks

Program in all modes; deals with technologies for mobility impaired, sensory and cognitively impaired travellers.

# KEY PROJECTS UNDERWAY

Name of the Project Transportation Ergonomics

Field Number(s) 1,2,3

(1) Name: Ling Suen

Contact Point
(2) Title:
Chief,
Research Analysis & Special Programs Division

(3) Phone: 514-283-7158

Fax: 514-283-7158

E-mail: suenl@tc.gc.ca

Schedule from

to

(

```
year(s))
```

# Record of Cooperation

# Other Remarks

Developing a transportation framework. Focus is on operator selection and performance and ergonomic design of systems and equipment to optimize the safety, productivity and capacity of the overall human machine system.

#### KEY PROJECTS UNDERWAY

```
Name of the Project
Road transportation research and development program
```

```
Field Number(s)
```

(1) Name: Brian Marshall

Contact Point
(2) Title:
Chief,
Technology Application Division

(3) Phone: 514-283-7158

Fax: 514-283-7158

E-mail: marshab@tc.gc.ca

Schedule from

to

(

year(s))

Record of Cooperation

Other Remarks

TDC's program of road transportation R&D focusses on Intelligent Vehicle-Highway Systems (IVHS) and heavy vehicle safety and productivity.

#### KEY PROJECTS UNDERWAY

Name of the Project Transportation Accessibility for Elderly and Disabled Persons

Field Number(s)

1,2,3

(1) Name: Ling Suen

Contact Point (2) Title:

Chief,

Research Analysis & Special Programs Division

(3) Phone: 514-283-7158

Fax:

514-283-7158

E-mail: suenl@tc.gc.ca

Schedule from

to

```
(
year(s))
Record of Cooperation
US DOT; TRB
Other Remarks
Program in all modes; deals with technologies for mobility impaired, sensory and
cognitively impaired travellers.
KEY PROJECTS UNDERWAY
Name of the Project
Transportation Ergonomics
Field Number(s)
1,2,3
(1) Name:
Ling Suen
Contact Point
(2) Title:
Chief,
Research Analysis & Special Programs Division
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
suenl@tc.gc.ca
```

to

Schedule from

```
(
year(s))
Record of Cooperation
```

Developing a transportation framework. Focus is on operator selection and performance and ergonomic design of systems and equipment to optimize the safety, productivity and capacity of the overall human machine system.

# KEY PROJECTS UNDERWAY

Name of the Project Search and Rescue

Field Number(s)

(1) Name: James Reid

Contact Point

(2) Title:

Chief, Transportation Systems Technology Division

(3) Phone: 514-283-7158

Fax: 514-283-7158

E-mail: reidj@tc.gc.ca

Schedule from

to

```
(
year(s))
Record of Cooperation
United States
Other Remarks
- Drift Modelling,
Detection Experiments,Human Performance Limits
KEY PROJECTS UNDERWAY
Name of the Project
Vessel Traffic Services
Field Number(s)
(1) Name:
James Reid
Contact Point
(2) Title:
Chief,
Transportation Systems Technology Division
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
reidj@tc.gc.ca
Schedule
```

from

```
to
year(s))
Record of Cooperation
Other Remarks
- Radar System Enhancement,
- Improved Buoyage System
KEY PROJECTS UNDERWAY
Name of the Project
Search and Rescue
Field Number(s)
(1) Name:
James Reid
Contact Point
(2) Title:
Chief, Transportation Systems Technology Division
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
reidj@tc.gc.ca
Schedule
 from
```

```
to
year(s))
Record of Cooperation
United States
Other Remarks
- Drift Modelling,
- Detection Experiments,
- Human Performance Limits
KEY PROJECTS UNDERWAY
Name of the Project
Vessel Traffic Services
Field Number(s)
(1) Name:
James Reid
Contact Point
(2) Title:
Chief,
Transportation Systems Technology Division
(3) Phone:
514-283-7158
 Fax:
514-283-7158
 E-mail:
reidj@tc.gc.ca
```

Schedule

```
from
to
(
year(s))
Record of Cooperation
Other Remarks
- Radar System Enhancement,
- Improved Buoyage System
Economies
Canada
Institute
Transport Canada Aviation
Technical Services Branch
Field Number(s)
(1) Name:
Ron North
Overall Contact Point
(2) Title:
Executive Director
(3) Phone:
613-991-6151
 Fax:
613-954-4677
 E-mail:
```

# Other Remarks Operational development

Other Remarks

# KEY PROJECTS UNDERWAY

```
Name of the Project
Air Traffic Management and Surveillance Systems Development
Field Number(s)
(1) Name:
Clint MacNeil
Contact Point
(2) Title:
Superintendent
(3) Phone:
613-954-4677
 Fax:
613-954-4677
 E-mail:
cmacneil@fox.nstn.ns.ca
Schedule
 from
1986
to
year(s))
Record of Cooperation
FAA
```

- Flow management,
- Height monitoring,
- Automatic dependent surveillance,
- Software testing,
- Airport surface monitoring,
- Operational development

Name of the Project Communication, Navigation, and Network Systems Development

```
Field Number(s)
(1) Name:
Rick Eppich
Contact Point
(2) Title:
Superintendent
(3) Phone:
613-954-4677
 Fax:
613-954-4677
```

E-mail:

Schedule from 1988 to year(s))

# Record of Cooperation FAA, UK CAA

# Other Remarks

- GPS/GNSS,
- Automatic dependent surveillance,
- Data link,
- Operational development

# Economies Canada

Institute

Transport Canada Aviation Technical Services Branch

Field Number(s)

(1) Name: Ron North

Overall Contact Point (2) Title: Executive Director

(3) Phone: 613-991-6151

Fax: 613-954-4677

E-mail:

Other Remarks Operational development

KEY PROJECTS UNDERWAY

```
Name of the Project
Air Traffic Management and Surveillance Systems Development
Field Number(s)
(1) Name:
Clint MacNeil
Contact Point
(2) Title:
Superintendent
(3) Phone:
613-954-4677
 Fax:
613-954-4677
 E-mail:
cmacneil@fox.nstn.ns.ca
Schedule
 from
1986
to
year(s))
Record of Cooperation
FAA
Other Remarks
- Flow management,
- Height monitoring,
- Automatic dependent surveillance,
```

- Software testing,

Airport surface monitoring,Operational development

#### KEY PROJECTS UNDERWAY

- GPS/GNSS,

- Automatic dependent surveillance,

```
Name of the Project
Communication, Navigation, and Network Systems Development
Field Number(s)
(1) Name:
Rick Eppich
Contact Point
(2) Title:
Superintendent
(3) Phone:
613-954-4677
 Fax:
613-954-4677
 E-mail:
Schedule
 from
1988
to
(
year(s))
Record of Cooperation
FAA, UK CAA
Other Remarks
```

- Data link,
- Operational development

Economies

Canada

Institute

Transport Canada Aviation

Air Traffic Services Research and Experimentation Centre

Field Number(s)

3

(1) Name:

Joel Morin

**Overall Contact Point** 

(2) Title:

Manager

(3) Phone:

613-991-4244

Fax:

613-991-0732

E-mail:

NSTN0197@F.NSTN.NS.CA

Other Remarks

Canadian Airspace Management Simulator

#### KEY PROJECTS UNDERWAY

Name of the Project

**ATC Human Factors** 

Field Number(s)

3

```
(1) Name:
Joel Morin
Contact Point
(2) Title:
Manager
(3) Phone:
613-991-0732
 Fax:
613-991-0732
 E-mail:
Schedule
 from
1990
to
(
year(s))
Record of Cooperation
European Civil Aviation
```

#### Other Remarks

- Control tower integration,
- Control tower virtual reality,
- ATC voice recognition,
- ADS/Mode S,
- Canadian Automated Air Traffic System

#### KEY PROJECTS UNDERWAY

Name of the Project Air Traffic Control, Fast-time and real-time simulation

```
Field Number(s)
(1) Name:
Joel Morin
Contact Point
(2) Title:
Manager
(3) Phone:
613-991-0732
 Fax:
613-991-0732
 E-mail:
Schedule
 from
1990
to
year(s))
Record of Cooperation
Environmental, FAA
Other Remarks
- Canadian Airspace Management Simulator (CAMS)
Economies
Canada
Institute
Transport Canada Aviation
Air Traffic Services Research and Experimentation Centre
```

### Field Number(s)

(1) Name: Joel Morin

Overall Contact Point

(2) Title: Manager

(3) Phone: 613-991-4244

Fax: 613-991-0732

E-mail: NSTN0197@F.NSTN.NS.CA

Other Remarks Canadian Airspace Management Simulator

#### KEY PROJECTS UNDERWAY

Name of the Project ATC Human Factors

Field Number(s) 3

(1) Name: Joel Morin

Contact Point (2) Title: Manager

```
(3) Phone:
613-991-0732
 Fax:
613-991-0732
 E-mail:
Schedule
 from
1990
to
year(s))
Record of Cooperation
European Civil Aviation
Other Remarks
- Control tower integration,
- Control tower virtual reality,
- ATC voice recognition,
- ADS/Mode S,
- Canadian Automated Air Traffic System
KEY PROJECTS UNDERWAY
Name of the Project
Air Traffic Control, Fast-time and real-time simulation
Field Number(s)
3
(1) Name:
Joel Morin
Contact Point
(2) Title:
```

```
Manager
(3) Phone:
613-991-0732
 Fax:
613-991-0732
 E-mail:
Schedule
 from
1990
to
(
year(s))
Record of Cooperation
Environmental, FAA
Other Remarks
- Canadian Airspace Management Simulator (CAMS)
KEY PROJECTS UNDERWAY
Name of the Project
Flow Management
Field Number(s)
(1) Name:
Joel Morin
Contact Point
(2) Title:
Manager
```

```
(3) Phone:
613-991-0732
 Fax:
613-991-0732
 E-mail:
Schedule
 from
1990
to
year(s))
Record of Cooperation
FAA/NASA/European Civil Aviation
Other Remarks
- Traffic routing decision support,
- Air traffic sequencing tool (CTAS),
- Canadian Airspace Management Simulator (CAMS)
KEY PROJECTS UNDERWAY
Name of the Project
Flow Management
Field Number(s)
(1) Name:
Joel Morin
Contact Point
(2) Title:
Manager
```

```
(3) Phone:
613-991-0732
 Fax:
613-991-0732
 E-mail:
Schedule
 from
1990
to
year(s))
Record of Cooperation
FAA/NASA/European Civil Aviation
```

#### Other Remarks

- Traffic routing decision support,Air traffic sequencing tool (CTAS),
- Canadian Airspace Management Simulator (CAMS)

Economies	P.R.China
Institute	China Academy of Railway Sciences
Field Number(s)	1
Overall Contact Point	<ul> <li>(1) Name: Zhu Qijie</li> <li>(2) Title: Director, Research Planning</li> <li>(3) Phone: 86-1-3249343</li> <li>Fax: 86-1-3249055</li> <li>E-mail:</li> </ul>
Other Remarks	

	KEY PROJECTS UNDERWAY	
Name of the Project	Research on technical approaches for Beijing-Shangh	ai high
-	speed (250km/h) railway line	
Field Number(s)	1	
	(1) Name: Zhu Qijie	
Contact Point	(2) Title: Director,	
	Research Planning	
	(3) Phone: 86-1-3249343	
	Fax: 86-1-3249055	
	E-mail:	
Schedule	from 1994 to 1995 ( 2 year(s))	
Record of Cooperation		
Other Remarks		

	KEY PROJECTS UNDERWAY
Name of the Project	Research on technical approaches for application of 25t axleload
-	for freight train operation in China
Field Number(s)	1
	(1) Name: Zhu Qijie
Contact Point	(2) Title: Director, Research Planning
	(3) Phone: 86-1-3249343
	Fax: 86-1-3249055
	E-mail:
Schedule	from 1993 to 1995 ( 3 year(s))
Record of Cooperation	
Other Remarks	

KEY PROJECTS UNDERWAY		
Name of the Project	comprehensive testing on Guangzhou-Shenzhen 160km/h	
_	passenger trains	
Field Number(s)	1	
	(1) Name: Zhu Qijie	
Contact Point	(2) Title: Director, Research Planning	
	(3) Phone: 86-1-3249343	
	Fax: 86-1-3249055	
	E-mail:	

Schedule	from	1992	to	1994	(	3	year(s))	
Record of Cooperation								
Other Remarks								

Economies	P.R.China
Institute	Civil Aviation College of China
Field Number(s)	3
Overall Contact Point	(1) Name: Li Chang (2) Title: Director, 3D Display Technology Research Institute (3) Phone: 8622-4393347 Fax: E-mail:
Other Remarks	research areas: 3D display technology

Economies	P.R.China	
Institute	Civil Aviation Flight College of China	
Field Number(s)	3	
Overall Contact Point	<ul><li>(1) Name:</li><li>(2) Title: Director, Foreign Affairs Office</li><li>(3) Phone: 868233223097</li><li>Fax:</li><li>E-mail:</li></ul>	
Other Remarks	research areas: research and production of DRS-93 radar simulator	

Economies	P.R.China
Institute	No.1 Research institute of CAAC
Field Number(s)	3
Overall Contact Point	<ul><li>(1) Name: Xu Shukang</li><li>(2) Title: Director of Science &amp; Technology Office</li><li>(3) Phone: 861-4222220</li><li>Fax: 861-4276962</li><li>E-mail:</li></ul>
Other Remarks	research areas: 1) CNS/ATM system 2) air transport operation 3) civil aviation information 4) flight safety 5) civil aviation development 6) aeronautical medicine

Economies	P.R.China
Institute	No.2 Research institute of CAAC
Field Number(s)	3
Overall Contact Point	(1) Name: Jin Erwen (2) Title: Director,
Other Remarks	research areas: 1) computer application in civil aviation 2) aerial operation technology for agriculture and forrest 3) research and production of aeronautical chemical products

Economies Indonesia

Institute
Department of Communications
Center of Data and Information

Field Number(s) 1,2,3

(1) Name:

Ir. Cahyono Partawijaya, MATr

Overall Contact Point
(2) Title:
Head, Center of Data and Information

(3) Phone: 384-7782

Fax: 386-2371

E-mail: Pusdatin

Other Remarks

#### KEY PROJECTS UNDERWAY

Name of the Project Common Data Base

Field Number(s) 1,2,3

(1) Name: Sunayono. SE.

```
Contact Point
(2) Title:
Project Officer
(3) Phone:
386-2371
 Fax:
386-2371
 E-mail:
Pusaan
Schedule
 from
1994
to
1997
(
year(s))
Record of Cooperation
Other Remarks
Economies
Indonesia
Institute
Department of Communications
Land Communications Research and Development Centre
Field Number(s)
1,2,8
(1) Name:
```

# Ir. Dts. A. Razak Manan MM. MSI Overall Contact Point (2) Title:

Head, Land Communications Research and Development

(3) Phone: 384-9795

Fax: 385-9795

E-mail:

Other Remarks

#### KEY PROJECTS UNDERWAY

Name of the Project Study of land transport standardization

Field Number(s) 1,2,8

(1) Name:

Tamau maar Drs.

Contact Point (2) Title: Project Officer

(3) Phone: 384-9795

Fax: 384-9795

```
E-mail:
Schedule
 from
1996
to
1997
year(s))
Record of Cooperation
Other Remarks
Economies
Indonesia
Institute
Department of Communications
Center of Data and Information
Field Number(s)
1,2,3
(1) Name:
Ir. Cahyono Partawijaya, MATr
Overall Contact Point
(2) Title:
Head, Center of Data and Information
(3) Phone:
384-7782
 Fax:
386-2371
```

```
E-mail:
Pusdatin
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Common Data Base
Field Number(s)
1,2,3
(1) Name:
Sunayono. SE.
Contact Point
(2) Title:
Project Officer
(3) Phone:
386-2371
 Fax:
386-2371
 E-mail:
Pusaan
Schedule
 from
1994
to
1997
```

year(s))

## Record of Cooperation Other Remarks **Economies** Indonesia Institute Department of Communications Land Communications Research and Development Centre Field Number(s) 1,2,8 (1) Name: Ir. Dts. A. Razak Manan MM. MSI **Overall Contact Point** (2) Title: Head, Land Communications Research and Development (3) Phone: 384-9795 Fax: 385-9795 E-mail: Other Remarks

KEY PROJECTS UNDERWAY

```
Name of the Project
Study of land transport standardization
Field Number(s)
1,2,8
(1) Name:
Tamau maar Drs.
Contact Point
(2) Title:
Project Officer
(3) Phone:
384-9795
 Fax:
384-9795
 E-mail:
Schedule
 from
1996
to
1997
year(s))
Record of Cooperation
```

#### KEY PROJECTS UNDERWAY

Other Remarks

Name of the Project Guideline arrangement of urban transport planning

```
Field Number(s)
1,2,8
(1) Name:
Tamau maar Drs.
Contact Point
(2) Title:
Project Officer
(3) Phone:
384-9795
 Fax:
384-9795
 E-mail:
Schedule
 from
1996
to
1997
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
```

Criteria of service determination of ferry and sea line

Name of the Project

```
Field Number(s)
1,2,8
(1) Name:
Tamau maar Drs.
Contact Point
(2) Title:
Project Officer
(3) Phone:
384-9795
 Fax:
384-9795
 E-mail:
Schedule
 from
1996
to
1997
year(s))
Record of Cooperation
Other Remarks
Economies
Indonesia
Institute
Department of Communications
Sea Communications Research and Development Centre
```

Field Number(s) 2,4,5
(1) Name: Ir. Denny L Sianaan
Overall Contact Point (2) Title: Head, Sea Communications Research and Development
(3) Phone: 385-7003
Fax: 385-7003
E-mail:
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project Pattern of container transport to make efficient container port dev.
Field Number(s) 2,4,5
(1) Name: Asma Sa. Drs.
Contact Point (2) Title: Project Officer

```
(3) Phone:
365-7003
 Fax:
365-7003
 E-mail:
Schedule
 from
1994
to
1997
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Study of shipping deregulation impact fowards natinal export value and balance
Field Number(s)
2,4,5
(1) Name:
Asma Sa. Drs.
Contact Point
(2) Title:
Project Officer
(3) Phone:
```

```
365-7003
 Fax:
365-7003
 E-mail:
Schedule
 from
1996
to
1997
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Standardization of means/infrastructure of ea transport
Field Number(s)
2,4,5
(1) Name:
Asma Sa. Drs.
Contact Point
(2) Title:
Project Officer
(3) Phone: 365-7003
```

```
Fax:
365-7003
 E-mail:
Schedule
 from
1996
to
1997
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Guideline arrangement of urban transport planning
Field Number(s)
1,2,8
(1) Name:
Tamau maar Drs.
Contact Point
(2) Title:
Project Officer
(3) Phone:
384-9795
```

```
Fax:
384-9795
 E-mail:
Schedule
 from
1996
to
1997
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Criteria of service determination of ferry and sea line
Field Number(s)
1,2,8
(1) Name:
Tamau maar Drs.
Contact Point
(2) Title:
Project Officer
(3) Phone:
384-9795
 Fax:
```

```
384-9795
 E-mail:
Schedule
 from
1996
to
1997
year(s))
Record of Cooperation
Other Remarks
Economies
Indonesia
Institute
Department of Communications
Sea Communications Research and Development Centre
Field Number(s)
2,4,5
(1) Name:
Ir. Denny L Sianaan
Overall Contact Point
(2) Title:
Head, Sea Communications Research and Development
(3) Phone:
385-7003
```

```
Fax:
385-7003
 E-mail:
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Pattern of container transport to make efficient container port dev.
Field Number(s)
2,4,5
(1) Name:
Asma Sa. Drs.
Contact Point
(2) Title:
Project Officer
(3) Phone:
365-7003
 Fax:
365-7003
 E-mail:
Schedule
 from
1994
to
1997
```

```
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Study of shipping deregulation impact fowards natinal export value and balance
Field Number(s)
2,4,5
(1) Name:
Asma Sa. Drs.
Contact Point
(2) Title:
Project Officer
(3) Phone:
365-7003
 Fax:
365-7003
 E-mail:
Schedule
 from
1996
to
1997
```

```
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Standardization of means/infrastructure of ea transport
Field Number(s)
2,4,5
(1) Name:
Asma Sa. Drs.
Contact Point
(2) Title:
Project Officer
(3) Phone:
365-7003
 Fax:
365-7003
 E-mail:
Schedule
 from
1996
to
1997
year(s))
```

## Record of Cooperation Other Remarks **Economies** Indonesia Institute Department of Communications Air Communications Research and Development Centre Field Number(s) 3,8 (1) Name: Anef Budiman **Overall Contact Point** (2) Title: Head, Air Communications Research and Development (3) Phone: 384-9796 Fax: 384-9796 E-mail: Other Remarks

KEY PROJECTS UNDERWAY

Name of the Project

```
Policy of limited open sky in Rep.Z
Field Number(s)
3,8
(1) Name:
Ismad Nazamucom Ir.
Contact Point
(2) Title:
Project Officer
(3) Phone:
384-9796
 Fax:
384-9796
 E-mail:
Schedule
 from
1996
to
1997
year(s))
Record of Cooperation
Other Remarks
```

#### KEY PROJECTS UNDERWAY

Name of the Project Perfect the air transport regulation

```
Field Number(s)
3,8
(1) Name:
Ismad Nazamucom Ir.
Contact Point
(2) Title:
Project Officer
(3) Phone:
384-9796
 Fax:
384-9796
 E-mail:
Schedule
 from
1997
to
1998
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Standarrt of airport service inPelitaZ
```

Field Number(s)

```
(1) Name:
Ismad Nazamucom Ir.
Contact Point
(2) Title:
Project Officer
(3) Phone:
384-9796
 Fax:
384-9796
 E-mail:
Schedule
  from
1995
to
1997
year(s))
Record of Cooperation
Other Remarks
Economies
Indonesia
Institute
Department of Communications
Air Communications Research and Development Centre
Field Number(s)
```

(1) Nama:
(1) Name: Anef Budiman
Overall Contact Point
(2) Title:
Head, Air Communications Research and Development
(3) Phone:
384-9796
Fax:
384-9796
E-mail:
Other Remarks
KEY PROJECTS UNDERWAY
KET FROJECTS UNDERWAT
Name of the Project
Policy of limited open sky in Rep.
Field Number(s)
3,8
(1) Name:
Ismad Nazamucom Ir.
Contact Point
(2) Title:
Project Officer
(2) N
(3) Phone: 384-9796
301 7770

```
Fax:
384-9796
 E-mail:
Schedule
 from
1996
to
1997
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Perfect the air transport regulation
Field Number(s)
3,8
(1) Name:
Ismad Nazamucom Ir.
Contact Point
(2) Title:
Project Officer
(3) Phone:
384-9796
```

```
Fax:
384-9796
 E-mail:
Schedule
 from
1997
to
1998
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Standarrt of airport service inPelita
Field Number(s)
3,8
(1) Name:
Ismad Nazamucom Ir.
Contact Point
(2) Title:
Project Officer
(3) Phone:
384-9796
```

```
Fax:
384-9796
 E-mail:
Schedule
 from
1995
to
1997
year(s))
Record of Cooperation
Other Remarks
Economies
Indonesia
Institute
Department of Communications
Office of Safety Vehicle
Field Number(s)
6
(1) Name:
Ir. Tjokorde Gede Agung
Overall Contact Point
(2) Title:
Head, Office of Vehicle Safety
(3) Phone:
526-5887
```

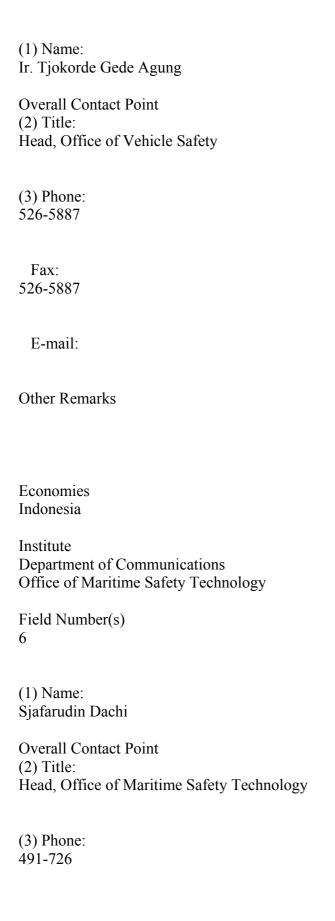
```
Fax:
526-5887
 E-mail:
Other Remarks
Economies
Indonesia
Institute
Department of Communications
Office of Maritime Safety Technology
Field Number(s)
(1) Name:
Sjafarudin Dachi
Overall Contact Point
(2) Title:
Head, Office of Maritime Safety Technology
(3) Phone:
491-726
 Fax:
491-434
 E-mail:
Other Remarks
```

Economies Indonesia Institute Department of Communications Office of Aviation Facilities Technology Field Number(s) 6,7 (1) Name: Capt. Endro Kastadi **Overall Contact Point** (2) Title: Head, Office of Aviation Facilities Technology (3) Phone: 424-5228 Fax: 424-5228 E-mail: Other Remarks **Economies** Indonesia Institute Department of Communications

Office of Safety Vehicle

Field Number(s)

6



```
Fax:
491-434
 E-mail:
Other Remarks
Economies
Indonesia
Institute
Department of Communications
Office of Aviation Facilities Technology
Field Number(s)
6,7
(1) Name:
Capt. Endro Kastadi
Overall Contact Point
(2) Title:
Head, Office of Aviation Facilities Technology
(3) Phone:
424-5228
 Fax:
424-5228
 E-mail:
```

Other Remarks

Economies Indonesia

Institute Department of Public Works Highway Research Center

Field Number(s)

(1) Name:

Dr. Ir. Patana Rantetoding

Overall Contact Point
(2) Title:
Head, Office of Highway Research Centre

(3) Phone: 022-780-2052

Fax: 022-780-2726

E-mail:

Other Remarks

Economies Indonesia

Institute Academic Institute Technology and Science Centre

Field Number(s) 7,8,9

(1) Name: Ir. Herudi Kartowisastro
Overall Contact Point (2) Title: Head, Office of Science and Technology of Indonesia
(3) Phone: 840-1488
Fax: 840-1487
E-mail:
Other Remarks
Economies Indonesia
Institute Academic Institute National Air Transportation and Aerospace Institute
Field Number(s) 10
(1) Name: Prof. Dr. Ir. H. Harsono Wiryosumarto, Ms. Met. E.
Overall Contact Point (2) Title: Head, National Air Transportation and Aerospace Institute
(3) Phone: 489-4989

```
Fax:
489-4815
  E-mail:
Other Remarks
Economies
Indonesia
Institute
Bandurg Institute of Technology
Aircraft Construction Laboratory
Field Number(s)
3
(1) Name:
Dr. Ir. Sulaiman Kamil
Overall Contact Point
(2) Title:
Head, Aircraft Technology Program
(3) Phone:
022-250-4529
  Fax:
022-250-4529
  E-mail:
Other Remarks
```

Economies Indonesia

Institute Department of Public Works Highway Research Center

Field Number(s)

(1) Name:

Dr. Ir. Patana Rantetoding

**Overall Contact Point** 

(2) Title:

Head, Office of Highway Research Centre

(3) Phone: 022-780-2052

Fax:

022-780-2726

E-mail:

Other Remarks

Economies Indonesia

Institute Academic Institute Technology and Science Centre

Field Number(s) 7,8,9

(1) Name: Ir. Herudi Kartowisastro
Overall Contact Point (2) Title: Head, Office of Science and Technology of Indonesia
(3) Phone: 840-1488
Fax: 840-1487
E-mail:
Other Remarks
Economies Indonesia
Institute Academic Institute National Air Transportation and Aerospace Institute
Field Number(s) 10
(1) Name: Prof. Dr. Ir. H. Harsono Wiryosumarto, Ms. Met. E.
Overall Contact Point (2) Title: Head, National Air Transportation and Aerospace Institute
(3) Phone:

```
489-4989
 Fax:
489-4815
 E-mail:
Other Remarks
Economies
Indonesia
Institute
Bandurg Institute of Technology
Aircraft Construction Laboratory
Field Number(s)
(1) Name:
Dr. Ir. Sulaiman Kamil
Overall Contact Point
(2) Title:
Head, Aircraft Technology Program
(3) Phone:
022-250-4529
 Fax:
022-250-4529
```

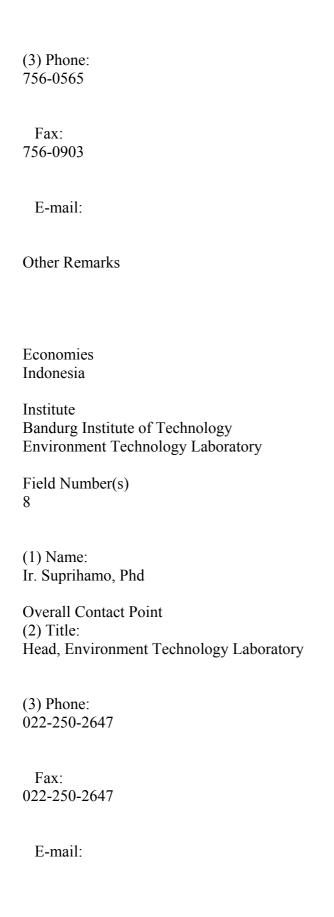
Other Remarks

E-mail:

**Economies** Indonesia Institute Bandurg Institute of Technology Environment Technology Laboratory Field Number(s) (1) Name: Ir. Suprihamo, Phd **Overall Contact Point** (2) Title: Head, Environment Technology Laboratory (3) Phone: 022-250-2647 Fax: 022-250-2647 E-mail: Other Remarks **Economies** Indonesia Institute Agency for the Assessment and Application Technology Coastal Engineering Laboratory

Field Number(s)

(1) Name: Ir. Landjono Yasowidardo, MSI. E.
Overall Contact Point (2) Title: Head, Coastal Engineering Laboratory
(3) Phone: 316-9850
Fax: 316-9873
E-mail:
Other Remarks
Economies Indonesia
Institute Agency for the Assessment and Application Technology Construction Engineering Laboratory
Field Number(s) 5
(1) Name: Ir. Gunawan Sakri
Overall Contact Point (2) Title: Head, Construction Engineering Laboratory



## Other Remarks

Economies Indonesia
Institute Agency for the Assessment and Application Technology Coastal Engineering Laboratory
Field Number(s) 2,5,9
(1) Name: Ir. Landjono Yasowidardo, MSI. E.
Overall Contact Point (2) Title: Head, Coastal Engineering Laboratory
(3) Phone: 316-9850
Fax: 316-9873
E-mail:
Other Remarks
Economies Indonesia
Institute Agency for the Assessment and Application Technology Construction Engineering Laboratory

```
Field Number(s)
(1) Name:
Ir. Gunawan Sakri
Overall Contact Point
(2) Title:
Head, Construction Engineering Laboratory
(3) Phone:
756-0565
Fax:
756-0903
E-mail:
Other Remarks
PAGE
PAGE
PAGE
PAGE
O Ô %&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLê
{ E9B:\\Z p'æ"nŒW\\&ESw\Z p\\—\I\APEC\Institute list (Form).doc
{ È.B:\\Z p'æ"ñŒW\\%\EŠw\Z p\|\_\I\APEC\Indonesia1.doc { ÈGB:\\Z p'æ"ñŒW\\\EŠw\Z p\|\_\I\APEC\Apec Transport Database
```

```
(Indonesia).doc
{ ÈGB:\\Z p'æ"ñŒW\\\EŠw\Z p\\—Í\APEC\Apec Transport Database
(Indonesia).doc
{ ÈGB:\\Z p'æ"ñŒW\\\EŠw\Z p\\—Í\APEC\Apec Transport Database
(Indonesia).doc
\{ \dot{E}=B: \forall Z \ p'a" \tilde{n} \in V \ \dot{U} \in P' \in APEC \setminus Database ^3 \ kfff' \in IN.DOC \}
\hat{E}=B:\langle Z p'a"\tilde{n}EW\rangle '\hat{U}\langle Z p\langle -\tilde{I}\rangle APEC\rangle Database\rangle kfff^APEC_IN.DOC
\{ \dot{E}=B: \langle Z p'a"\tilde{n}EW \rangle ' \dot{U}\langle Z p \langle -\tilde{I} \rangle APEC \rangle \
AutoMarginAdjustment2
AutoMarginAdjustment2 I
AutoMarginAdjustment3'
K
CharSpaceMode I
HeaderDateTimeMode
HeaderDateTimeMode B
HeaderDateTimeOpt
HeaderDateTimeOpt
HeaderDocInfoModel
HeaderDocInfoOptL
HeaderPageNumberMode"
HeaderPageNumberMode G
OverlayMode0
PageNUph
77.3 pt,6.4 pt
77.3 pt,6.4 pt
65.88 pt,-5 pt
65.88 pt,-5 pt
@NEC MultiWriter 2000E NPDL2
\\Svusx1\usx1p10
NPDL2MS
NEC MultiWriter 2000E NPDL2
NEC MultiWriter 2000E NPDL2
NEC MultiWriter 2000E NPDL2
NEC MultiWriter 2000E NPDL2
NEC MultiWriter 2000E NPDL2
Times New Roman
Symbol
Century
!%),.:;?]}¡F£
f(\)
Attachment A
Root Entry
WordDocument
CompObj
CompObj
```

SummaryInformation
SummaryInformation
Microsoft Word •¶ '
MSWordDoc
Word.Document.6
Attachment A
Microsoft Word for Windows 95
DocumentSummaryInformation
DocumentSummaryInformation
Attachment A
Attachment A

Economies	Japan
Institute	Ministry of Transport Electronic Navigation Research Institute
Field Number(s)	2,3
Overall Contact Point	<ul> <li>(1) Name: Yutaka Fukuda</li> <li>(2) Title: Special Assistant to the Deputy Director-General</li> <li>(3) Phone: 422-41-3162</li> <li>Fax: 422-41-3169</li> <li>E-mail:</li> </ul>
Other Remarks	

KEY PROJECTS UNDERWAY				
Name of the Project	Developme	Development on GPS Overlay System		
Field Number(s)	3			
	(1) Name:	Ken Ito		
Contact Point	(2) Title:	Onboard Apparatus Section,		
		Satellite Navigation Division		
	(3) Phone:	422-41-3196		
	Fax:	422-41-3199		
	E-mail:			
Schedule	from	1992 to 1995 ( 4 year(s))		
Record of Cooperation				
Other Remarks				

KEY PROJECTS UNDERWAY				
Name of the Project	Improvement of the Airborne Collision Avoidance System (ACAS-			
-	III)	·		
Field Number(s)	3			
	(1) Name:	Masayuki Shirakawa		
Contact Point	(2) Title:	Chief of the Electronic Equipment Section,		
		Development Division		
	(3) Phone:	422-41-3173		
	Fax:	422-41-3176		
	E-mail:			
Schedule	from	1994 to 1996 ( 3 year(s))		
Record of Cooperation				
Other Remarks				

KEY PROJECTS UNDERWAY				
Name of the Project	Study on Aircraft Height Monitoring Methodology for Reducing			
	Vertical Separation Minima			
Field Number(s)	3			
	(1) Name: Sakae Nagaoka			
Contact Point	(2) Title: Chief of the Navigation Systems Section,			
	Development Division			
	(3) Phone: 422-41-3171			
	Fax: 422-41-3176			
	E-mail:			

Schedule	from	1991	to	1994	( 3	year(s))	
Record of Cooperation							
Other Remarks							

Economies	Japan		
Institute	Ministry of Transport Port & Harbour Research Institute		
Field Number(s)	6,8,9		
Overall Contact Point	(1) Name: Masahiko Fukuichi (2) Title: Chief, Plannning Section (3) Phone: 468-44-5050 Fax: 468-42-9265 E-mail:		
Other Remarks			

KEY PROJECTS UNDERWAY				
Name of the Project	Research on Impact Assessment of Sea Level Rise due to Global			
	Warming			
Field Number(s)	6,8,9			
	(1) Name: Yasushi Hosokawa			
Contact Point	(2) Title: Chief,			
	Purification Hydraulics Laboratory			
	(3) Phone: 468-44-5019			
	Fax: 468-42-9265			
	E-mail:			
Schedule	from 1993 to 1995 ( 3 year(s))			
Record of Cooperation	Information and Researchers Exchange with: Univ. of Peking,			
	Beijing, China			
Other Remarks				

Economies	Japan	
Institute	Ministry of Transport Ship Research Institute	
Field Number(s)	2,4,6,7,8,9	
Overall Contact Point	<ul> <li>(1) Name: Akira Kono</li> <li>(2) Title: Director of the Research Planning Office</li> <li>(3) Phone: 422-41-3002</li> <li>Fax: 422-41-3247</li> <li>E-mail:</li> </ul>	
Other Remarks		

	KEY PROJECTS UNDERWAY
Name of the Project	A Study Buffer Equipments for use as Protection against Ship
	Collision
Field Number(s)	2,6
	(1) Name: Kikuo Arita
Contact Point	(2) Title: Chief of Advanced Structure Section,
	Structure Mechanics Division
	(3) Phone: +81-422-41-3075
	Fax: +81-422-41-3085
	E-mail:
Schedule	from 1993 to 1995 ( 3 year(s))
Record of Cooperation	
Other Remarks	A new buffer equipment was presented for mitigating damage in an
	unlikely accident of a ship collision with piers of a long-spanned bridge.

KEY PROJECTS UNDERWAY		
Name of the Project	Advanced Man-Machine Interface Techniques for Autonomous	
_	Power Plant	
Field Number(s)	7	
	(1) Name: Takeshi Matsuoka	
Contact Point	(2) Title: Chief of Systems Design Section,	
	Systems Engineering Division	
	(3) Phone: +81-422-41-3131	
	Fax: +81-422-41-3126	
	E-mail: PXP02525@niftyserve.or.jp	
Schedule	from 1989 to 1998 ( 10 year(s))	
Record of Cooperation		
Other Remarks		

KEY PROJECTS UNDERWAY		
Name of the Project	Advanced Nuclear Plant Operation Based on Perception and	
-	Senses as Human Group	
Field Number(s)	7	
	(1) Name: Masayoshi Numano	
Contact Point	(2) Title: Senior Technical Officer,	
	Systems Engineering Division	
	(3) Phone: +81-422-41-3095	
	Fax: +81-422-41-3126	
	E-mail:	
Schedule	from 1993 to 1998 ( 6 year(s))	
Record of Cooperation		
Other Remarks		

KEY PROJECTS UNDERWAY		
Name of the Project	At-sea Experiment of Floating Offshore Structure - POSEIDON	
-	Project	
Field Number(s)	4,9	
	(1) Name: Yutaka Ohkawa	
Contact Point	(2) Title: Chief of Safety and Stability Section,	
	Ocean Engineering Division	
	(3) Phone: 422-41-3147	
	Fax: 422-41-3143	
	E-mail:	
Schedule	from 1986 to 1990 ( 5 year(s))	
Record of Cooperation		
Other Remarks	Full-Scale Data on Environmental Condition, Mooring Force,	
	Motion of Structure, Strength of Structure and Corrosion at-sea	
	Experiment	

KEY PROJECTS UNDERWAY		
Name of the Project	Capsizing of a ship in quartering waves	
Field Number(s)	2,4	
Contact Point	<ul> <li>(1) Name: Makoto Kan</li> <li>(2) Title: Director of Ship Dynamics Division</li> <li>(3) Phone: 422-41-3054</li> <li>Fax: 422-41-3056</li> <li>E-mail:</li> </ul>	
Schedule	from 1988 to 1992 ( 5 year(s))	
Record of Cooperation	Federal Republic of Germany (1988-1990)	
Other Remarks	English publications available	

KEY PROJECTS UNDERWAY		
Name of the Project	Chaos and Fractals in Ship Capsizing	
Field Number(s)	2,4	
Contact Point	<ul> <li>(1) Name: Makoto Kan</li> <li>(2) Title: Director of Ship Dynamics Division</li> <li>(3) Phone: 422-41-3054</li> <li>Fax: 422-41-3056</li> <li>E-mail:</li> </ul>	
Schedule	from 1991 to 1995 ( 5 year(s))	
Record of Cooperation		
Other Remarks	English publications available	

KEY PROJECTS UNDERWAY		
Name of the Project	Corrosion Fatigue and Stress Corrosion Cracking of High Tensile	
_	Steel for Ship Hull in Seawater and Crude Oil	
Field Number(s)	4	
	(1) Name: Yuki Kobayashi	
Contact Point	(2) Title: Chief of Hybrid Structure Section,	
	Structure Mechanics Division	
	(3) Phone: +81-422-41-3079	
	Fax: +81-422-41-3085	
	E-mail:	
Schedule	from 1993 to 1996 ( 4 year(s))	
Record of Cooperation		
Other Remarks		

KEY PROJECTS UNDERWAY		
Name of the Project	Developme	nt and Application of a Reliability Analysis Methodology
-	"GO-FLOW	" for Nuclear Power Plant System
Field Number(s)	7	
	(1) Name:	Takeshi Matsuoka
Contact Point	(2) Title:	Chief of Systems Design Section,
		Systems Engineering Division
	(3) Phone:	+81-422-41-3131
	Fax:	+81-422-41-3126
	E-mail:	PXP02525@niftyserve.or.jp
Schedule	from	1989 to 1998 ( 10 year(s))
Record of Cooperation		
Other Remarks		

KEY PROJECTS UNDERWAY		
Name of the Project	Development of Huge Floating Offshore Structure	
Field Number(s)	4,9	
	(1) Name: Shigeo Ohmatsu	
Contact Point	(2) Title: Chief of Structure Dynamic Section,	
	Ocean Engineering Division	
	(3) Phone: +81-422-41-3144	
	Fax: +81-422-41-3143	
	E-mail:	
Schedule	from 1992 to 1996 ( 5 year(s))	
Record of Cooperation		
Other Remarks		

KEY PROJECTS UNDERWAY		
Name of the Project	Development of Onboard Collision Avoidance System	
Field Number(s)	2	
	(1) Name: Nobuo Arimura	
Contact Point	(2) Title: Senior Technical Officer,	
	Systems Engineering Division	
	(3) Phone: +81-422-41-3132	
	Fax: +81-422-41-3126	
	E-mail:	
Schedule	from 1993 to 1995 ( 3 year(s))	
Record of Cooperation		
Other Remarks		

	KEY PROJECTS UNDERWAY
Name of the Project	Development of Testing Technology of Ice Model Basin
Field Number(s)	2,4,5
	(1) Name: Koichi Koyama
Contact Point	(2) Title: Chief of Marine Dynamics Section,
	Arctic Vessel and Low Temperature Engineering
	Division
	(3) Phone: +81-422-41-3154
	Fax: +81-422-41-3152
	E-mail:
Schedule	from 1991 to 1995 ( 5 year(s))
Record of Cooperation	
Other Remarks	International Towing Tank Conference (Comparative Experiments, exchange of information)

KEY PROJECTS UNDERWAY		
Name of the Project	Developme	nt of a Movable Disposal System for Waste FRP Boats
Field Number(s)	4,8	
	(1) Name:	Shinya Hayashi
Contact Point	(2) Title:	Chief of Processing Section,
		Materials and Processing Division
	(3) Phone:	422-41-3107
	Fax:	422-41-3112
	E-mail:	
Schedule	from	1992 to 1994 ( 3 year(s))
Record of Cooperation		
Other Remarks		

KEY PROJECTS UNDERWAY		
Name of the Project	Development on Active Controlled Floating Structure	
Field Number(s)	4,9	
	(1) Name: Shunji Kato	
Contact Point	(2) Title: Senior Technical Officer,	
	Ocean Engineering Division	
	(3) Phone: +81-422-41-3149	
	Fax: +81-422-41-3143	
	E-mail:	
Schedule	from 1992 to 1996 ( 5 year(s))	
Record of Cooperation		
Other Remarks		

KEY PROJECTS UNDERWAY	
Name of the Project	Evaluation of Performance and Safety of Wing-in-Surface Effect
	Ship (WISES)
Field Number(s)	2
	(1) Name: Takeshi Fuwa
Contact Point	(2) Title: Chief of High-speed Vehicle Section,
	Ship Performance Division
	(3) Phone: 422-41-3049
	Fax: 422-41-3053
	E-mail:
Schedule	from 1990 to 1995 ( 5 year(s))
Record of Cooperation	Exchange of information(China, Germany, Russia), Accept
	Fellow(U.K.), Site visit(Russia)
Other Remarks	

KEY PROJECTS UNDERWAY	
Name of the Project	Evaluation of structural safety of a novel type high-speed vessel
Field Number(s)	4
Contact Point	(1) Name: Takeshi Miyamoto (2) Title: Chief of Dynamic Load and Response Section, Structure Mechanics Division (3) Phone: +81-422-41-3074 Fax: +81-422-41-3085 E-mail:
Schedule	from 1993 to 1996 ( 4 year(s))
Record of Cooperation	
Other Remarks	Data obtained from full-scale measurement of new type high-speed craft will be gathered.

	KEY PROJECTS UNDERWAY
Name of the Project	Experimental Study on Sloshing Loads of Middle-Sized Tankers
-	with Double Hulls
Field Number(s)	4,8
	(1) Name: Hiroyasu Takemoto
Contact Point	(2) Title: Director of Structure Mechanics Division
	(3) Phone: +81-422-41-3068
	Fax: +81-422-41-3085
	E-mail:
Schedule	from 1992 to 1995 ( 4 year(s))
Record of Cooperation	
Other Remarks	Sloshing experiments with 2-D and 3-D models were carried out on
	about 700 conditions for two years. Fundamental study was
	finished last year and a paper will be published related to results of
	the study in late 1994. Further Study have been undertaken on the
	subject.

KEY PROJECTS UNDERWAY		
Name of the Project	Foghorn-Signal Processing for Distance Measurement	
Field Number(s)	2	
	(1) Name: Kazuaki Yamada	
Contact Point	(2) Title: Chief of the Systems Analysis Section,	
	Systems Engineering Division	
	(3) Phone: +81-422-41-3132	
	Fax: +81-422-41-3126	
	E-mail:	
Schedule	from 1992 to 1994 ( 3 year(s))	
Record of Cooperation		
Other Remarks		

KEY PROJECTS UNDERWAY		
Name of the Project	Fundamental Technology Concerning with construction of Huge-	
_	scale Floating Structure	
Field Number(s)	4,9	
	(1) Name: Yutaka Ohkawa	
Contact Point	(2) Title: Chief of Safety and Stability Section,	
	Ocean Engineering Division	
	(3) Phone: +81-422-41-3147	
	Fax: +81-422-41-3143	
	E-mail:	
Schedule	from 1981 to 1986 ( 6 year(s))	
Record of Cooperation		
Other Remarks		

	KEY PROJECTS UNDERWAY
Name of the Project	Hydrodynamic Analysis of Marine Propellers for Ice breakers
Field Number(s)	2,4
	(1) Name: Koichi Koyama
Contact Point	(2) Title: Chief of Marine Dynamics Section,
	Arctic Vessel and Low Temperature Engineering
	Division
	(3) Phone: +81-422-41-3154
	Fax: +81-422-41-3152
	E-mail:
Schedule	from 1993 to 1995 ( 3 year(s))
Record of Cooperation	Japan-U.S. Science and Technology Agreement
Other Remarks	

KEY PROJECTS UNDERWAY	
Name of the Project	Impact Fracture Properties of Ship Basic Element
Field Number(s)	4
	(1) Name: Masaaki Sakuma
Contact Point	(2) Title: Senior Technical Officer,
	Structure Mechanics Division
	(3) Phone: +81-422-41-3078
	Fax: +81-422-41-3085
	E-mail:
Schedule	from 1992 to 1995 ( 3 year(s))
Record of Cooperation	
Other Remarks	The project will be finished 1995. Several paper were published on
	the subject.

KEY PROJECTS UNDERWAY	
Name of the Project	Impact Strength of Ferro-Cement Boat
Field Number(s)	4
Contact Point	(1) Name: Shigeru Kitamura (2) Title: Senior Technical Officer, Structure Mechanics Division (3) Phone: +81-422-41-3081 Fax: +81-422-41-3085 E-mail:
Schedule	from 1992 to 1995 ( 2 year(s))
Record of Cooperation	
Other Remarks	The project will be finished 1995. Several paper were published on the subject.

	KEY PROJECTS UNDERWAY
Name of the Project	Impact Strength of Fiber Reinforced Plastic Laminates for Ship Hull
Field Number(s)	4
	(1) Name: Yuki Kobayashi
Contact Point	(2) Title: Chief of Hybrid Structure Section, Structure Mechanics Division
	(3) Phone: +81-422-41-3079
	Fax: +81-422-41-3085
	E-mail:
Schedule	from 1994 to 1996 ( 3 year(s))
Record of Cooperation	
Other Remarks	Mechanical Properties of FRP Laminates under Impact Tension,
	Journal of the Society of Materials Science, JAPAN, Vol.43,
	No.486, pp.290-296, Mar. 1994

KEY PROJECTS UNDERWAY		
Name of the Project	Investigation of a capsizing accident of a large stern trawler	
Field Number(s)	2,4	
	(1) Name: Makoto Kan	
Contact Point	(2) Title: Director of Ship Dynamics Division	
	(3) Phone: 422-41-3054	
	Fax: 422-41-3056	
	E-mail:	
Schedule	from 1995 to 1995 ( 1 year(s))	
Record of Cooperation		
Other Remarks	English publications available	

KEY PROJECTS UNDERWAY		
Name of the Project	Maintenance System of Offshore Structure	
Field Number(s)	8,9	
Contact Point	(1) Name: Masayoshi Arita (2) Title: Chief of Ice-proof Structure Section,	
Schedule	from 1992 to 1995 ( 3 year(s))	
Record of Cooperation		
Other Remarks		

KEY PROJECTS UNDERWAY		
Name of the Project	Optimizatio	n of Neutron Shielding Structures for Ceramics Shields
Field Number(s)	7	
	(1) Name:	Kotaro Ueki
Contact Point	(2) Title:	Chief of Radioactive Materials Section,
		Nuclear Technology Division
	(3) Phone:	422-41-3137
	Fax:	422-41-3136
	E-mail:	
Schedule	from	1993 to 1997 ( 5 year(s))
Record of Cooperation		
Other Remarks		

KEY PROJECTS UNDERWAY		
Name of the Project	Physical and Chemical Characteristics of wave Breaking in Air-Sea	
-	Interface	
Field Number(s)	4,6,8,9	
	(1) Name: Hiroshi Tomita	
Contact Point	(2) Title: Chief of wave Force Section,	
	Ship Dynamics Division	
	(3) Phone: 422-41-3061	
	Fax: 422-41-3056	
	E-mail:	
Schedule	from 1993 to 1995 ( 3 year(s))	
Record of Cooperation	Canada, France and Norway	
Other Remarks		

KEY PROJECTS UNDERWAY		
Name of the Project	Radiation S	Safety with Transport of Low Level Radioactive Materials
Field Number(s)	7	
	(1) Name:	Kotaro Ueki
Contact Point	(2) Title:	Chief of Radioactive Materials Section,
		Nuclear Technology Division
	(3) Phone:	422-41-3137
	Fax:	422-41-3136
	E-mail:	
Schedule	from	1989 to 1994 ( 5 year(s))
Record of Cooperation		
Other Remarks		

KEY PROJECTS UNDERWAY		
Name of the Project	Reduction of (	Oil Spill from Oil Tanker
Field Number(s)	8	
	(1) Name: K	atsuji Yamaguchi
Contact Point	(2) Title: C	hief of Ship Equipment Section,
	S	hip Equipment and Marine Environment Division
	(3) Phone: 42	22-41-3119
	Fax: 42	22-41-3115
	E-mail:	
Schedule	from 19	994 to 1996 ( 3 year(s))
Record of Cooperation		
Other Remarks		

	KEY PROJECTS UNDERWAY
Name of the Project	Research for Reduction of CO2 Emission out of Power Plants
Field Number(s)	8
	(1) Name: Susumu Kan
Contact Point	(2) Title: Chief of Thermo Aerodynamics Section,
	Power and Energy Engineering Division
	(3) Phone: +81-422-41-3095
	Fax: +81-422-41-3101
	E-mail:
Schedule	from 1991 to 1996 ( 6 year(s))
Record of Cooperation	
Other Remarks	

KEY PROJECTS UNDERWAY		
Name of the Project	Research on Exchanger Technology for Marine Use	
Field Number(s)	2	
	(1) Name: Sadahiro Namie	
Contact Point	(2) Title: Chief of Steam Power Section,	
	Power and Energy Engineering Division	
	(3) Phone: +81-422-41-3089	
	Fax: +81-422-41-3101	
	E-mail:	
Schedule	from 1992 to 1996 ( 5 year(s))	
Record of Cooperation		
Other Remarks		

KEY PROJECTS UNDERWAY		
Name of the Project	Research on Exhaust Emissions from Marine Diesel Engines	
Field Number(s)	8	
	(1) Name: Masaaki Kikuchi	
Contact Point	(2) Title: Chief of Fuel and Lubricant Section,	
	Power and Energy Engineering Division	
	(3) Phone: +81-422-41-3096	
	Fax: +81-422-41-3101	
	E-mail:	
Schedule	from 1994 to 1996 ( 3 year(s))	
Record of Cooperation		
Other Remarks		

KEY PROJECTS UNDERWAY	
Name of the Project	Research on Failure Prediction of Diesel Engine with Artificial
	Intelligence
Field Number(s)	2,6
	(1) Name: Masayoshi Numano
Contact Point	(2) Title: Chief Research Officer,
	Power and Energy Engineering Division
	(3) Phone: +81-422-41-3095
	Fax: +81-422-41-3101
	E-mail:
Schedule	from 1990 to 1994 ( 5 year(s))
Record of Cooperation	Istitute Motori (Italia)
Other Remarks	Presentation at the meeting of 2nd International Workshop on Fluid
	Mechanics, Combustion and Reliability in Reciprocating Engines,
	Italy 1992.

KEY PROJECTS UNDERWAY		
Name of the Project	Research on Hydrogen Gas Turbine	
Field Number(s)	2,8	
Contact Point	(1) Name: Katsuhide Hiraoka (2) Title: Chief of Advanced Engine Section, Power and Energy Engineering Division (3) Phone: +81-422-41-3092 Fax: +81-422-41-3101 E-mail:	
Schedule	from 1990 to 1994 ( 5 year(s))	
Record of Cooperation		
Other Remarks	Presentation at the meeting of 10th World Hydrogen Energy Conference, Florida, USA. 1994	

	KEY PROJECTS UNDERWAY
Name of the Project	Research on Multi-Dimensional Measurement using Laser
-	Interferometry for Combustion Diagnostics
Field Number(s)	8
	(1) Name: Seishiro Sato
Contact Point	(2) Title: Chief of Combustion Diagnostics Section,
	Power and Energy Engineering Division
	(3) Phone: +81-422-41-3091
	Fax: +81-422-41-3101
	E-mail:
Schedule	from 1991 to 1996 ( 6 year(s))
Record of Cooperation	
Other Remarks	Presentation at the meeting of International Energy Agency (IEA)
	Exective Committee on Energy Conservation and Emission
	Reduction in Combustion, Baden, Switzerland 1993

	KEY PROJECTS UNDERWAY	
Name of the Project	Research on Performance of a Stack of Solid Oxide Fuel Cells	
Field Number(s)	2,8	
	(1) Name: Takanao Kumakura	
Contact Point	(2) Title: Chief of Combustion and Heat Transfer Section,	
	Power and Energy Engineering Division	
	(3) Phone: +81-422-41-3088	
	Fax: +81-422-41-3101	
	E-mail:	
Schedule	from 1994 to 1997 ( 4 year(s))	
Record of Cooperation		
Other Remarks		

KEY PROJECTS UNDERWAY		
Name of the Project	Research on Quantification of Combustion and Exhaust Emissions	
-	from Marine Diesel Engines	
Field Number(s)	2,8	
	(1) Name: Keijiro Shiode	
Contact Point	(2) Title: Chief of Internal Combustion Engine Section,	
	Power and Energy Engineering Division	
	(3) Phone: +81-422-41-3096	
	Fax: +81-422-41-3101	
	E-mail:	
Schedule	from 1991 to 1997 ( 7 year(s))	
Record of Cooperation		
Other Remarks	Presentation at the meeting of 21th International Congress on	
	Combustion Engine (CIMAC) London, UK 1993	

	KEY PROJECTS UNDERWAY
Name of the Project	Research on Stirling Engine Systems for Under-Water Vehicles
Field Number(s)	2
	(1) Name: Shigeji Tsukahara
Contact Point	(2) Title: Director of Power and Energy Engineering Division
	(3) Phone: +81-422-41-3086
	Fax: +81-422-41-3101
	E-mail:
Schedule	from 1991 to 1995 ( 5 year(s))
Record of Cooperation	
Other Remarks	Presentation at the meeting of 6th International Stirling Engine
	Conference, Eindhoven, The Netherlands 1993

KEY PROJECTS UNDERWAY		
Name of the Project	Research of	on Strength of Heat Affected Materials and Structures
Field Number(s)	4	
	(1) Name:	Kazuyoshi Matsuoka
Contact Point	(2) Title:	Chief of Application Section,
		Materials and Processing Division
	(3) Phone:	422-41-3105
	Fax:	422-41-3112
	E-mail:	
Schedule	from	1993 to 1996 ( 4 year(s))
Record of Cooperation		
Other Remarks		

	KEY F	PROJECTS UNDERWAY
Name of the Project	Research o	n quantitative and intelligent nondestructive evaluation
-	for materials	s and structures of high reliability
Field Number(s)	4	
	(1) Name:	Kenichi Katsuyama
Contact Point	(2) Title:	Senior Technical Officer,
		Materials and Processing Division
		422-41-3109
	Fax:	422-41-3112
	E-mail:	
Schedule	from	1994 to 1995 ( 2 year(s))
Record of Cooperation		
Other Remarks	_	

KEY PROJECTS UNDERWAY		
Name of the Project	Research o	n the flow field around a ship in maneuvering motion
Field Number(s)	4	
	(1) Name:	Koji Nonaka
Contact Point	(2) Title:	Chief of Maneuverability Section,
		Ship Dynamics Division
	(3) Phone:	422-41-3063
	Fax:	422-41-5056
	E-mail:	
Schedule	from	1993 to 1995 ( 3 year(s))
Record of Cooperation		
Other Remarks		

KEY PROJECTS UNDERWAY		
Name of the Project	Research o	n the manoeuvring motion of a ship in waves
Field Number(s)	4	
	(1) Name:	Koji Nonaka
Contact Point	(2) Title:	Chief of Maneuverability Section,
		Ship Dynamics Division
	(3) Phone:	422-41-3063
	Fax:	422-41-5056
	E-mail:	
Schedule	from	1991 to 1993 ( 3 year(s))
Record of Cooperation		
Other Remarks		

KEY PROJECTS UNDERWAY		
Name of the Project	Safety Assessment of High Speed Vessel Traffic Using Computer	
_	Simulation	
Field Number(s)	2	
	(1) Name: Yasuyoshi Itoh	
Contact Point	(2) Title: Chief of Information Processing Section,	
	Systems Engineering Division	
	(3) Phone: 422-41-3235	
	Fax: 422-41-3126	
	E-mail:	
Schedule	from 1991 to 1995 ( 5 year(s))	
Record of Cooperation		
Other Remarks		

KEY PROJECTS UNDERWAY	
Name of the Project	Study on Electromagnetic
Field Number(s)	2,4
	(1) Name: Kenji Yamane
Contact Point	(2) Title: Senior Technical Officer,
	Osaka Branch
	(3) Phone: 720-91-6272
	Fax: 720-91-6274
	E-mail:
Schedule	from 1993 to 1996 ( 3 year(s))
Record of Cooperation	
Other Remarks	Due to many semiconductor devices are installed to the ships, the
	problem of electromagnetic compatibility (EMC) has happened in
	the field of a digital control system. The concept of EMC which is
	defined as the ability of all electrical and electronic equipment to
	coexist without degradation of performance or environment, is very
	much applicable to all marine installation. Thus we investigate the
	actual condition on the electromagnetic environment in ships.

KEY PROJECTS UNDERWAY	
Name of the Project	Study on Ice Forces on a Structure in Ice Covered Sea
Field Number(s)	2,9
	(1) Name: Koh Izumiyama
Contact Point	(2) Title: Senior Technical Officer,
	Arctic Vessel and Low Temperature Engineering
	Division
	(3) Phone: +81-422-41-3154
	Fax: +81-422-41-3152
	E-mail:
Schedule	from 1992 to 1994 ( 3 year(s))
Record of Cooperation	Japan-Canada Science and Technology Agreement (exchange of
	experts)
Other Remarks	

KEY PROJECTS UNDERWAY		
Name of the Project	Study on Performance of Ice-breaking Patrol Ship	
Field Number(s)	2,4,6	
Contact Point	(1) Name: Koichi Koyama (2) Title: Chief of Marine Dynamics Section, Arctic Vessel and Low Temperature Engineering Division (3) Phone: +81-422-41-3154	
	Fax: +81-422-41-3152 E-mail:	
Schedule	from 1993 to 1995 ( 3 year(s))	
Record of Cooperation		
Other Remarks		

	KEY PROJECTS UNDERWAY
Name of the Project	Study on Protection against Impact Force on Life-saving
-	Appliances for ship
Field Number(s)	2,4
Contact Point	(1) Name: Kazuo Hitomi (2) Title: Chief of Ship Equipment Section,
	Osaka Branch
	(3) Phone: 720-91-6272
	Fax: 720-91-6274
	E-mail:
Schedule	from 1994 to 1997 ( 3 year(s))
Record of Cooperation	
Other Remarks	The purpose of this research is carried out a method of protection against impact force on the use of free fall lifeboat, estimation method of acceleration on the use of marine evacuation system and the relation between acceleration and height in order to improve the drop test of lifesaving equipment.

KEY PROJECTS UNDERWAY		
Name of the Project	Study on Reduction of Exhaust Gas Emissions from Marine Diesel	
-	Engine	
Field Number(s)	4,8	
	(1) Name: Yasuo Miyagi	
Contact Point	(2) Title: Director of Materials and Processing Division	
	(3) Phone: 422-41-3102	
	Fax: 422-41-3112	
	E-mail:	
Schedule	from 1991 to 1995 ( 4 year(s))	
Record of Cooperation		
Other Remarks		

	KEY PROJECTS UNDERWAY
Name of the Project	Study on Technology for Designs of Marine Articles by FEM
-	Analysis
Field Number(s)	4
	(1) Name: Michiaki Ikai
Contact Point	(2) Title: Senior Technical Officer,
	Osaka Branch
	(3) Phone: 720-91-6272
	Fax: 720-91-6274
	E-mail:
Schedule	from 1994 to 1997 ( 3 year(s))
Record of Cooperation	
Other Remarks	It needs many kind of marine vaives are redesign according to ISO regulation. We investigate the possibility to design marine valves by FEM analysis, and we design the ductile iron valves and the low temperature service valves.

	KEY PROJECTS UNDERWAY
Name of the Project	Study on a Research Vessel in Ice Covered Sea
Field Number(s)	4,8,9
	(1) Name: Koh Izumiyama
Contact Point	(2) Title: Senior Technical Officer,
	Arctic Vessel and Low Temperature Engineering
	Division
	(3) Phone: +81-422-41-3154
	Fax: +81-422-41-3152
	E-mail:
Schedule	from 1992 to 1994 ( 3 year(s))
Record of Cooperation	International Northern Sea Route Program (Joint project)
Other Remarks	

	KEY P	ROJECTS UNDERWAY
Name of the Project	Study on sa	fety evaluation ship hull
Field Number(s)	2,4,6,8	
	(1) Name:	Hiroshi Maenaka
Contact Point	(2) Title:	Chief of Strength Evaluation Section,
		Materials and Processing Division
	(3) Phone:	422-41-3104
	Fax:	422-41-3112
	E-mail:	
Schedule	from	1990 to 1993 ( 3 year(s))
Record of Cooperation		
Other Remarks		

	KEY PROJECTS UNDERWAY
Name of the Project	Study on safety factor for design of FRP boat
Field Number(s)	2,4
	(1) Name: Nagatoshi Hashimoto
Contact Point	(2) Title: Director of Osaka Branch
	(3) Phone: 720-91-6272
	Fax: 720-91-6274
	E-mail:
Schedule	from 1994 to 1997 ( 3 year(s))
Record of Cooperation	
Other Remarks	The following tests are carried out;
	(1) strength test (including fatigue test) of specimens, which are
	taken out of FRP boats long-term used, and
	(2) strength test of FRP plates consisting of the same laminated
	constitution as the above FRP boats.
	As the result of these experiments, decrease of strength due to
	fatigue is investigated.

	KEY PROJECTS UNDERWAY
Name of the Project	Study on safety marine FRP in low temperature region
Field Number(s)	2,4
Contact Point	<ul> <li>(1) Name: Akio Sakurai</li> <li>(2) Title: Senior Technical Officer,         Arctic Vessel and Low Temperature Engineering         Division</li> </ul>
	(3) Phone: +81-422-41-3159 Fax: +81-422-41-3152
	E-mail: NBG01147@niftyserve.or.jp
Schedule	from 1994 to 1997 ( 3 year(s))
Record of Cooperation	
Other Remarks	In order to estimate the safety of marine FRP in frozen area, we investigate the static and dynamic mechanical properties of specimens which are taken out of FRP ships long-term used. Virgin FRP plates consisting of same lamanated constitution as the above FRP ships and hybrid FRP which are reinforced by carbon or aramid fiber are also added to specimens.

	KEY PROJECTS UNDERWAY
Name of the Project	Surf-riding of a Ship
Field Number(s)	2,4
	(1) Name: Makoto Kan
Contact Point	(2) Title: Director of Ship Dynamics Division
	(3) Phone: 422-41-3054
	Fax: 422-41-3056
	E-mail:
Schedule	from 1986 to 1990 ( 5 year(s))
Record of Cooperation	

Other Remarks	English publications available

	KEY PROJECTS UNDERWAY
Name of the Project	Tribology of oxide ceramics at elevated temperatures
Field Number(s)	4
	(1) Name: Tetsuya Senda
Contact Point	(2) Title: Senior Technical Officer,
	Materials and Processing Division
	(3) Phone: 422-41-3106
	Fax: 422-41-3112
	E-mail:
Schedule	from 1993 to 1995 ( 3 year(s))
Record of Cooperation	The project is carried out in cooperation with CSIRO Australia
-	under the auspices of the Japan-Australia Science and Technology
	Agreement.
Other Remarks	

Economies	Japan
Institute	Ministry of Transport Traffic Safety and Nuisance Research Institute
Field Number(s)	1,8
Overall Contact Point	<ul><li>(1) Name: Shigeru Mori</li><li>(2) Title: Director</li><li>(3) Phone: 0422-41-3207</li><li>Fax: 0422-41-3233</li><li>E-mail:</li></ul>
Other Remarks	

	KEY PROJECTS UNDERWAY
Name of the Project	New Technologies control NOx Emission from Diesel Engines and
-	their Applicability under Driving Conditions
Field Number(s)	1,8
	(1) Name: Shigeru Mori
Contact Point	(2) Title: Director
	(3) Phone: 0422-41-3207
	Fax: 0422-41-3233
	E-mail:
Schedule	from 1990 to 1994 ( 5 year(s))
Record of Cooperation	
Other Remarks	

Economies Rep.of Korea
Institute Korea Maritime Institute
Field Number(s)
(1) Name: Lee, Hoe-Seung
Overall Contact Point (2) Title:
(3) Phone: 02-553-1533
Fax:
E-mail:
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project Establishment of Railroad Logistics Services System
Field Number(s) 1
(1) Name:
(1) Name: Chin Hyung-In.

```
Contact Point
(2) Title:
Senior Fellow, Director, Logistics Research Division
(3) Phone:
02-565-7095
 Fax:
02-565-7095
 E-mail:
Schedule
 from
1996.3
to
1996.12
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Construction and Operation Plan of Kyung In Canal
Field Number(s)
(1) Name:
Chin Hyung-In.
Contact Point
```

```
(2) Title:
Senior Fellow, Director, Logistics Research Division
(3) Phone:
02-565-7095
 Fax:
02-565-7095
 E-mail:
Schedule
 from
1995.4
to
1996.6
year(s))
Record of Cooperation
Other Remarks
Economies
Rep.of Korea
Institute
Korea Maritime Institute
Field Number(s)
(1) Name:
Lee, Hoe-Seung
Overall Contact Point
```

(2) Title:

(3) Phone: 02-553-1533
Fax:
E-mail:
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project Establishment of Railroad Logistics Services System
Field Number(s) 1
(1) Name: Chin Hyung-In.
Contact Point (2) Title: Senior Fellow, Director, Logistics Research Division
(3) Phone: 02-565-7095
Fax: 02-565-7095
E-mail:

```
Schedule
 from
1996.3
to
1996.12
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Construction and Operation Plan of Kyung In Canal
Field Number(s)
(1) Name:
Chin Hyung-In.
Contact Point
(2) Title:
Senior Fellow, Director, Logistics Research Division
(3) Phone:
02-565-7095
 Fax:
02-565-7095
 E-mail:
```

```
Schedule
 from
1995.4
to
1996.6
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Establishment of Port Logistics Services System
Field Number(s)
5
(1) Name:
Chin Hyung-In.
Contact Point
(2) Title:
Senior Fellow, Director, Logistics Research Division
(3) Phone:
02-565-7095
 Fax:
02-565-7095
 E-mail:
Schedule
 from
```

```
1996.6
to
1997.5
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Investment Priority for New Ports Development
Field Number(s)
5
(1) Name:
Lee, Jung - Ook
Contact Point
(2) Title:
Senior Fellow, Director, Logistics Research Division
(3) Phone:
02-565-7093
 Fax:
02-565-7093
 E-mail:
Schedule
 from
1995.4
```

```
to
1996.7
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
A Proposal for Private Investments in Gadok Container Terminal
Field Number(s)
5
(1) Name:
Lee, Jung - Ook
Contact Point
(2) Title:
Senior Fellow, Director, Logistics Research Division
(3) Phone:
02-565-7093
 Fax:
02-565-7093
 E-mail:
Schedule
 from
1995.12
to
```

```
1996.7
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Establishment of Port Logistics Services System
Field Number(s)
(1) Name:
Chin Hyung-In.
Contact Point
(2) Title:
Senior Fellow, Director, Logistics Research Division
(3) Phone:
02-565-7095
 Fax:
02-565-7095
 E-mail:
Schedule
 from
1996.6
to
1997.5
```

```
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Investment Priority for New Ports Development
Field Number(s)
5
(1) Name:
Lee, Jung - Ook
Contact Point
(2) Title:
Senior Fellow, Director, Logistics Research Division
(3) Phone:
02-565-7093
 Fax:
02-565-7093
 E-mail:
Schedule
 from
1995.4
to
1996.7
```

```
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
A Proposal for Private Investments in Gadok Container Terminal
Field Number(s)
(1) Name:
Lee, Jung - Ook
Contact Point
(2) Title:
Senior Fellow, Director, Logistics Research Division
(3) Phone:
02-565-7093
 Fax:
02-565-7093
 E-mail:
Schedule
 from
1995.12
to
1996.7
year(s))
```

Record of Cooperation
Other Remarks
Economies Rep.of Korea
Institute The Korea Transport Institute
Field Number(s)
(1) Name: Dr. Soogil Young
Overall Contact Point (2) Title:
(3) Phone: 2-538-1451
Fax:
E-mail:
Other Remarks

Name of the Project A Feasibility Study of the Air Cargo City Terminal in Seoul Metropolitan Area

KEY PROJECTS UNDERWAY

```
Field Number(s)
(1) Name:
Sungwook Hong
Contact Point
(2) Title:
Director of Department of Freight and Air Transport Studies
(3) Phone:
82-2-538-1459
 Fax:
82-2-538-1459
 E-mail:
Schedule
 from
95.5
to
96.5
year(s))
Record of Cooperation
Other Remarks
```

## KEY PROJECTS UNDERWAY

Name of the Project Developing the GIS-T and its Applications for Urban Transport

```
Field Number(s)
(1) Name:
Seungjae Lee
Contact Point
(2) Title:
Research Associate
(3) Phone:
82-2-538-1392
 Fax:
82-2-538-1392
 E-mail:
Schedule
 from
95.12
to
96.12
year(s))
Record of Cooperation
Other Remarks
Economies
Rep.of Korea
Institute
The Korea Transport Institute
Field Number(s)
```

(1) Name: Dr. Soogil Young
Overall Contact Point (2) Title:
(3) Phone: 2-538-1451
Fax:
E-mail:
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project A Feasibility Study of the Air Cargo City Terminal in Seoul Metropolitan Area
Field Number(s) 1
(1) Name: Sungwook Hong
Contact Point (2) Title: Director of Department of Freight and Air Transport Studies
(3) Phone: 82-2-538-1459

```
Fax:
82-2-538-1459
 E-mail:
Schedule
 from
95.5
to
96.5
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Developing the GIS-T and its Applications for Urban Transport
Field Number(s)
(1) Name:
Seungjae Lee
Contact Point
(2) Title:
Research Associate
(3) Phone:
82-2-538-1392
```

```
Fax:
82-2-538-1392
 E-mail:
Schedule
 from
95.12
to
96.12
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Estimation of the Special Travel Demand on National Holidays
Field Number(s)
(1) Name:
Seungjae Lee
Contact Point
(2) Title:
Research Associate
(3) Phone:
82-2-538-1392
 Fax:
```

```
82-2-538-1392
```

```
E-mail:
Schedule
 from
96.5
to
96.12
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
A Study on Pusan's Transit Fare Structure
Field Number(s)
(1) Name:
Jongseok Kim
Contact Point
(2) Title:
Associate Research Ferrow
(3) Phone:
82-2-538-1392
 Fax:
82-2-538-1392
```

```
E-mail:
Schedule
 from
96.1
to
96.11
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
A Study on How to Utilize Electronic Technology for the Enhancement of the
Transportation System
Field Number(s)
(1) Name:
Sanghyup Lee
Contact Point
(2) Title:
Research Associate
(3) Phone:
82-2-538-1391
 Fax:
82-2-538-1391
```

```
E-mail:
Schedule
 from
95.12
to
96.12
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Estimation of the Special Travel Demand on National Holidays
Field Number(s)
1
(1) Name:
Seungjae Lee
Contact Point
(2) Title:
Research Associate
(3) Phone:
82-2-538-1392
 Fax:
82-2-538-1392
```

```
E-mail:
Schedule
 from
96.5
to
96.12
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
A Study on Pusan's Transit Fare Structure
Field Number(s)
(1) Name:
Jongseok Kim
Contact Point
(2) Title:
Associate Research Ferrow
(3) Phone:
82-2-538-1392
 Fax:
82-2-538-1392
 E-mail:
```

```
Schedule
 from
96.1
to
96.11
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
A Study on How to Utilize Electronic Technology for the Enhancement of the
Transportation System
Field Number(s)
(1) Name:
Sanghyup Lee
Contact Point
(2) Title:
Research Associate
(3) Phone:
82-2-538-1391
 Fax:
82-2-538-1391
 E-mail:
```

```
Schedule
 from
95.12
to
96.12
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
A Study on the Construction and Operation of the Information Center
Field Number(s)
(1) Name:
Sanghyup Lee
Contact Point
(2) Title:
Research Associate
(3) Phone:
82-2-538-1391
 Fax:
82-2-538-1391
 E-mail:
```

```
Schedule
 from
96.1
to
96.12
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
A Study on the Feeder Network for the Seoul-Pusan High Speed Rail Line
Field Number(s)
(1) Name:
Kwangsuk Suh
Contact Point
(2) Title:
Associate Research Ferrow
(3) Phone:
82-2-538-1391
 Fax:
82-2-538-1391
 E-mail:
```

Schedule

```
from
95.12
to
96.3
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
A Study on the Interchange Spacing and Management for Improving the Functional
Efficiency of Highway
Field Number(s)
(1) Name:
Yeonkyu Kim
Contact Point
(2) Title:
Research Associate
(3) Phone:
82-2-538-1391
 Fax:
82-2-538-1391
 E-mail:
Schedule
```

```
from
96.5
to
96.12
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
A Study on the Construction and Operation of the Information Center
Field Number(s)
(1) Name:
Sanghyup Lee
Contact Point
(2) Title:
Research Associate
(3) Phone:
82-2-538-1391
 Fax:
82-2-538-1391
 E-mail:
Schedule
 from
96.1
```

```
to
96.12
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
A Study on the Feeder Network for the Seoul-Pusan High Speed Rail Line
Field Number(s)
(1) Name:
Kwangsuk Suh
Contact Point
(2) Title:
Associate Research Ferrow
(3) Phone:
82-2-538-1391
 Fax:
82-2-538-1391
 E-mail:
Schedule
 from
95.12
to
```

```
96.3
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
A Study on the Interchange Spacing and Management for Improving the Functional
Efficiency of Highway
Field Number(s)
(1) Name:
Yeonkyu Kim
Contact Point
(2) Title:
Research Associate
(3) Phone:
82-2-538-1391
 Fax:
82-2-538-1391
 E-mail:
Schedule
 from
96.5
to
```

```
96.12
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
A Feasibility Study and Basic Plan for the Construction and Operation of the Light-rail
Transit in the Pusan Metropolitan Area
Field Number(s)
(1) Name:
Hanjoon Lee
Contact Point
(2) Title:
Associate Research Ferrow
(3) Phone:
82-2-564-1820
 Fax:
82-2-564-1820
 E-mail:
Schedule
 from
95.12
to
96.12
```

```
(
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
A Feasibility Study and Basic Plan for the Extention of Subway lines No. 1,2 in the
Daegu Metropolitan Area
Field Number(s)
(1) Name:
Hwangbae Kim
Contact Point
(2) Title:
Research Associate
(3) Phone:
82-2-564-1820
 Fax:
82-2-564-1820
 E-mail:
Schedule
 from
96.2
to
96.11
```

```
(
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
A Feasibility Study and Basic Plan on the Construction and Operation of Light Rail
Transit between Kimhae and Jangyoo
Field Number(s)
(1) Name:
Changkyun Kim
Contact Point
(2) Title:
Research Associate
(3) Phone:
82-2-564-1820
 Fax:
82-2-564-1820
 E-mail:
Schedule
 from
95.12
to
96.11
```

```
(
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
A Feasibility Study and Basic Plan for the Construction and Operation of the Light-rail
Transit in the Pusan Metropolitan Area
Field Number(s)
(1) Name:
Hanjoon Lee
Contact Point
(2) Title:
Associate Research Ferrow
(3) Phone:
82-2-564-1820
 Fax:
82-2-564-1820
 E-mail:
Schedule
 from
95.12
to
96.12
```

```
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
A Feasibility Study and Basic Plan for the Extention of Subway lines No. 1,2 in the
Daegu Metropolitan Area
Field Number(s)
(1) Name:
Hwangbae Kim
Contact Point
(2) Title:
Research Associate
(3) Phone:
82-2-564-1820
 Fax:
82-2-564-1820
 E-mail:
Schedule
 from
96.2
to
96.11
```

```
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
A Feasibility Study and Basic Plan on the Construction and Operation of Light Rail
Transit between Kimhae and Jangyoo
Field Number(s)
(1) Name:
Changkyun Kim
Contact Point
(2) Title:
Research Associate
(3) Phone:
82-2-564-1820
 Fax:
82-2-564-1820
 E-mail:
Schedule
 from
95.12
to
96.11
```

```
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
A Basic Plan to Construct and Operate the Bicycle Road System in Kimhae City
Field Number(s)
(1) Name:
Kyunghwan Park
Contact Point
(2) Title:
Research Associate
(3) Phone:
82-2-564-1820
 Fax:
82-2-564-1820
 E-mail:
Schedule
 from
96.2
to
96.12
year(s))
```

# Record of Cooperation

Other Remarks

```
KEY PROJECTS UNDERWAY
Name of the Project
A Feasibility Study and Basic Plan for the Construction and Operation of Light Rail
Transit in Youngin City
Field Number(s)
(1) Name:
Jaehak Oh
Contact Point
(2) Title:
Director of Urban Transport Studies
(3) Phone:
82-2-564-1820
 Fax:
82-2-564-1820
 E-mail:
```

Schedule

from 96.3

to

96.12

# Record of Cooperation

Other Remarks

### KEY PROJECTS UNDERWAY

```
Name of the Project
A Study of the Transport Investment Appraisal Methods
```

```
Field Number(s)
```

(1) Name: Changkyun Kim

Contact Point (2) Title:

Research Associate

```
(3) Phone: 82-2-564-1820
```

Fax: 82-2-564-1820

E-mail:

Schedule from 96.2 to 96.7

## Record of Cooperation

Other Remarks

```
KEY PROJECTS UNDERWAY
Name of the Project
A Basic Plan to Construct and Operate the Bicycle Road System in Kimhae City
Field Number(s)
(1) Name:
Kyunghwan Park
Contact Point
(2) Title:
Research Associate
(3) Phone:
82-2-564-1820
 Fax:
82-2-564-1820
 E-mail:
Schedule
 from
```

year(s))

96.2 to 96.12

Record of Cooperation

#### Other Remarks

#### KEY PROJECTS UNDERWAY

```
Name of the Project
A Feasibility Study and Basic Plan for the Construction and Operation of Light Rail
Transit in Youngin City
Field Number(s)
(1) Name:
Jaehak Oh
Contact Point
(2) Title:
Director of Urban Transport Studies
(3) Phone:
82-2-564-1820
 Fax:
82-2-564-1820
 E-mail:
Schedule
 from
96.3
to
96.12
```

Record of Cooperation

#### Other Remarks

```
KEY PROJECTS UNDERWAY
Name of the Project
A Study of the Transport Investment Appraisal Methods
Field Number(s)
(1) Name:
Changkyun Kim
Contact Point
(2) Title:
Research Associate
(3) Phone:
82-2-564-1820
 Fax:
82-2-564-1820
 E-mail:
Schedule
 from
96.2
to
96.7
```

Record of Cooperation

#### Other Remarks

#### KEY PROJECTS UNDERWAY

```
Name of the Project
An Analysis of the Traffic Impact Assessment Report for 1995
Field Number(s)
(1) Name:
Dongsun Shin
Contact Point
(2) Title:
Research Associate
(3) Phone:
82-2-538-1820
 Fax:
82-2-538-1820
 E-mail:
Schedule
 from
95.11
to
96.11
year(s))
Record of Cooperation
```

Other Remarks

Other Remarks

```
Name of the Project
A Study for the Establishment of Coordinated Road Freight Transport System
Field Number(s)
(1) Name:
Hokyu Lim
Contact Point
(2) Title:
Senior Research Fellow
(3) Phone:
82-2-538-1459
 Fax:
82-2-538-1459
 E-mail:
Schedule
 from
96.1
to
96.12
year(s))
Record of Cooperation
```

Other Remarks

```
Name of the Project
Strategic Issues of the Urban Freight Movement for Seoul Metropolitan Area
Field Number(s)
(1) Name:
Sungwook Hong
Contact Point
(2) Title:
Director of Freight and Air Transport Studies
(3) Phone:
82-2-538-1459
 Fax:
82-2-538-1459
 E-mail:
Schedule
 from
96.2
to
96.12
year(s))
Record of Cooperation
```

```
Name of the Project
An Analysis of the Traffic Impact Assessment Report for 1995
Field Number(s)
(1) Name:
Dongsun Shin
Contact Point
(2) Title:
Research Associate
(3) Phone:
82-2-538-1820
 Fax:
82-2-538-1820
 E-mail:
Schedule
 from
95.11
to
96.11
year(s))
Record of Cooperation
Other Remarks
```

KEY PROJECTS UNDERWAY

```
A Study for the Establishment of Coordinated Road Freight Transport System
Field Number(s)
(1) Name:
Hokyu Lim
Contact Point
(2) Title:
Senior Research Fellow
(3) Phone:
82-2-538-1459
 Fax:
82-2-538-1459
 E-mail:
Schedule
 from
96.1
to
96.12
year(s))
Record of Cooperation
Other Remarks
```

Name of the Project

```
Name of the Project
Strategic Issues of the Urban Freight Movement for Seoul Metropolitan Area
Field Number(s)
(1) Name:
Sungwook Hong
Contact Point
(2) Title:
Director of Freight and Air Transport Studies
(3) Phone:
82-2-538-1459
 Fax:
82-2-538-1459
 E-mail:
Schedule
 from
96.2
to
96.12
year(s))
Record of Cooperation
Other Remarks
```

Name of the Project

A Study on How to Improve the Passenger and Freight Fare System

```
Field Number(s)
(1) Name:
Jaelim Lee
Contact Point
(2) Title:
Associate Research Fellow
(3) Phone:
82-2-538-1391
 Fax:
82-2-538-1391
 E-mail:
Schedule
 from
95.12
to
96.12
year(s))
Record of Cooperation
```

Name of the Project

Other Remarks

A Study on How to Improve the Interchange Facilities and Toll Collection System of the Seoul Beltway

```
Field Number(s)
(1) Name:
Sigon Kim
Contact Point
(2) Title:
Director of Road and Rail Transport Studies
(3) Phone:
82-2-538-1391
 Fax:
82-2-538-1391
 E-mail:
Schedule
 from
94.9
to
96.7
year(s))
Record of Cooperation
Other Remarks
```

Name of the Project A Stragegy Planning Study of the Ho-Nam High Speed Rail Construction

```
Field Number(s)
(1) Name:
Kwangsuk Suh
Contact Point
(2) Title:
Associate Research Fellow
(3) Phone:
82-2-538-1391
 Fax:
82-2-538-1391
 E-mail:
Schedule
 from
96.1
to
96.12
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
A Study on How to Improve the Passenger and Freight Fare System
Field Number(s)
```

```
(1) Name:
Jaelim Lee
Contact Point
(2) Title:
Associate Research Fellow
(3) Phone:
82-2-538-1391
 Fax:
82-2-538-1391
 E-mail:
Schedule
 from
95.12
to
96.12
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
A Study on How to Improve the Interchange Facilities and Toll Collection System of the
Seoul Beltway
```

Field Number(s)

```
(1) Name:
Sigon Kim
Contact Point
(2) Title:
Director of Road and Rail Transport Studies
(3) Phone:
82-2-538-1391
 Fax:
82-2-538-1391
 E-mail:
Schedule
 from
94.9
to
96.7
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
A Stragegy Planning Study of the Ho-Nam High Speed Rail Construction
Field Number(s)
```

```
(1) Name:
Kwangsuk Suh
Contact Point
(2) Title:
Associate Research Fellow
(3) Phone:
82-2-538-1391
 Fax:
82-2-538-1391
 E-mail:
Schedule
 from
96.1
to
96.12
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
A Survey of the Urban Traveler Patterns in the Seoul Metropolitan Area
Field Number(s)
(1) Name:
```

```
Contact Point
(2) Title:
Research Associate
(3) Phone:
82-2-564-1820
 Fax:
82-2-564-1820
 E-mail:
Schedule
 from
95.5
to
96.3
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
A Study for the Establishment of Coordinated Road Freight Transport System
Field Number(s)
1
(1) Name:
Hokyu Lim
```

Jaehak Oh

```
Contact Point
(2) Title:
Senior Research Ferrow
(3) Phone:
82-2-538-1459
 Fax:
82-2-538-1459
 E-mail:
Schedule
 from
96.1
to
96.12
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
The First Nationwide Logistics Survey in Korea
Field Number(s)
1
(1) Name:
Ohkyoung Kwon
```

```
Contact Point
(2) Title:
Research Associate
(3) Phone:
82-2-538-1459
 Fax:
82-2-538-1459
 E-mail:
Schedule
 from
96.4
to
96.12
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
A Survey of the Urban Traveler Patterns in the Seoul Metropolitan Area
Field Number(s)
(1) Name:
Jaehak Oh
Contact Point
(2) Title:
```

# Research Associate (3) Phone: 82-2-564-1820 Fax: 82-2-564-1820 E-mail: Schedule from 95.5 to 96.3 year(s)) Record of Cooperation Other Remarks KEY PROJECTS UNDERWAY Name of the Project A Study for the Establishment of Coordinated Road Freight Transport System Field Number(s) (1) Name: Hokyu Lim

Contact Point (2) Title:

Senior Research Ferrow

```
(3) Phone:
82-2-538-1459
 Fax:
82-2-538-1459
 E-mail:
Schedule
 from
96.1
to
96.12
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
The First Nationwide Logistics Survey in Korea
Field Number(s)
(1) Name:
Ohkyoung Kwon
Contact Point
(2) Title:
Research Associate
```

```
(3) Phone:
82-2-538-1459
 Fax:
82-2-538-1459
 E-mail:
Schedule
 from
96.4
to
96.12
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
A Study on the Transport Service and Market Mechanism
Field Number(s)
(1) Name:
Sungsoon Yun
Contact Point
(2) Title:
Associate Research Fellow
(3) Phone:
```

```
82-2-538-2351
 Fax:
82-2-538-2351
 E-mail:
Schedule
 from
96.5
to
97.2
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Establishment of the Comprehensive Transportation DB(1)
Field Number(s)
(1) Name:
Sangyong Lee
Contact Point
(2) Title:
Director of International Transport Studies
(3) Phone:
82-2-538-1392
```

```
Fax:
82-2-538-1392
 E-mail:
Schedule
  from
96.1
to
96.12
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Infrastructure Development and Private Investment Conditions in Korea
Field Number(s)
(1) Name:
Sangyong Lee
Contact Point
(2) Title:
Director of International Transport Studies
(3) Phone:
82-2-538-1392
```

```
Fax:
82-2-538-1392
 E-mail:
Schedule
 from
96.6
to
96.7
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
A Study on the Transport Service and Market Mechanism
Field Number(s)
(1) Name:
Sungsoon Yun
Contact Point
(2) Title:
Associate Research Fellow
(3) Phone:
82-2-538-2351
 Fax:
```

```
82-2-538-2351
 E-mail:
Schedule
 from
96.5
to
97.2
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Establishment of the Comprehensive Transportation DB(1)
Field Number(s)
(1) Name:
Sangyong Lee
Contact Point
(2) Title:
Director of International Transport Studies
(3) Phone:
82-2-538-1392
```

Fax:

82-2-538-1392

```
E-mail:
Schedule
 from
96.1
to
96.12
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Infrastructure Development and Private Investment Conditions in Korea
Field Number(s)
(1) Name:
Sangyong Lee
Contact Point
(2) Title:
Director of International Transport Studies
(3) Phone:
82-2-538-1392
 Fax:
82-2-538-1392
```

```
E-mail:
Schedule
 from
96.6
to
96.7
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Standard Guidelines on the Economic Feasibility Study for Urban Railway Projects
Field Number(s)
(1) Name:
Sangyong Lee
Contact Point
(2) Title:
Director of International Transport Studies
(3) Phone:
82-2-538-1392
 Fax:
82-2-538-1392
 E-mail:
```

```
Schedule
 from
96.4
to
96.12
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Strategies to Promote Inchon International Airport as a Regional Hub in Northeast Asia
Field Number(s)
(1) Name:
Jong Hur
Contact Point
(2) Title:
Associate Research Fellow
(3) Phone:
82-2-538-1459
 Fax:
82-2-538-1459
 E-mail:
```

```
Schedule
 from
96.1
to
96.12
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Improving Airside Operations at Kimpo International Airport
Field Number(s)
(1) Name:
Yonghwa Park
Contact Point
(2) Title:
Research Associate
(3) Phone:
82-2-538-1459
 Fax:
82-2-538-1459
 E-mail:
```

```
Schedule
 from
96.1
to
96.12
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Standard Guidelines on the Economic Feasibility Study for Urban Railway Projects
Field Number(s)
1
(1) Name:
Sangyong Lee
Contact Point
(2) Title:
Director of International Transport Studies
(3) Phone:
82-2-538-1392
 Fax:
82-2-538-1392
 E-mail:
Schedule
 from
```

```
96.4
to
96.12
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Strategies to Promote Inchon International Airport as a Regional Hub in Northeast Asia
Field Number(s)
(1) Name:
Jong Hur
Contact Point
(2) Title:
Associate Research Fellow
(3) Phone:
82-2-538-1459
 Fax:
82-2-538-1459
 E-mail:
Schedule
 from
96.1
```

```
to
96.12
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Improving Airside Operations at Kimpo International Airport
Field Number(s)
(1) Name:
Yonghwa Park
Contact Point
(2) Title:
Research Associate
(3) Phone:
82-2-538-1459
 Fax:
82-2-538-1459
 E-mail:
Schedule
 from
96.1
to
```

```
96.12
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
The Proposals for the Operational Plans of the Inchon International Airport
Field Number(s)
(1) Name:
Jong Hur
Contact Point
(2) Title:
Associate Research Ferrow
(3) Phone:
82-2-538-1459
 Fax:
82-2-538-1459
 E-mail:
Schedule
 from
96.4
to
96.7
```

```
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Forecasting the Air Transportation Demands for the Year 2010
Field Number(s)
3
(1) Name:
Jaekil Lee
Contact Point
(2) Title:
Research Associate
(3) Phone:
82-2-538-1392
 Fax:
82-2-538-1392
 E-mail:
Schedule
 from
96.4
to
96.12
```

```
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Strategies Towards the Liberalization of the East Asian Aviation Market
Field Number(s)
(1) Name:
Jong Hur
Contact Point
(2) Title:
Associate Research Fellow
(3) Phone:
82-2-538-1459
 Fax:
82-2-538-1459
 E-mail:
Schedule
 from
95.12
to
96.12
year(s))
```

# Record of Cooperation

Other Remarks

```
KEY PROJECTS UNDERWAY
Name of the Project
The Proposals for the Operational Plans of the Inchon International Airport
Field Number(s)
(1) Name:
Jong Hur
Contact Point
(2) Title:
Associate Research Ferrow
(3) Phone:
82-2-538-1459
 Fax:
82-2-538-1459
 E-mail:
Schedule
 from
96.4
to
96.7
```

Record of Cooperation

year(s))

## Other Remarks

## KEY PROJECTS UNDERWAY

Record of Cooperation

```
Name of the Project
Forecasting the Air Transportation Demands for the Year 2010
Field Number(s)
(1) Name:
Jaekil Lee
Contact Point
(2) Title:
Research Associate
(3) Phone:
82-2-538-1392
 Fax:
82-2-538-1392
 E-mail:
Schedule
 from
96.4
to
96.12
year(s))
```

## Other Remarks

## KEY PROJECTS UNDERWAY

Record of Cooperation

```
Name of the Project
Strategies Towards the Liberalization of the East Asian Aviation Market
Field Number(s)
(1) Name:
Jong Hur
Contact Point
(2) Title:
Associate Research Fellow
(3) Phone:
82-2-538-1459
 Fax:
82-2-538-1459
 E-mail:
Schedule
 from
95.12
to
96.12
year(s))
```

#### Other Remarks

```
PAGE
PAGE
PAGE
PAGE
ýýýýýýýýýý÷
ýýýýýýýýýý
          õ
9::<=>?
9::<=>?
R d ò @ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^ `abcdefghijklmnopqrstuvwxy
z{|}~
@ABCDEFGHIJKLMNOPQRSTUVWXYZ[\]^ `abcdefghijklmnopqrstuvwxyz{|}~
{ ÈCB:\\Z p'æ"ñŒW\\%`ÈŠw\Z p\\—Í\APEC\Apec Transport Database (Korea).doc
{ ÈCB:\\Z p'æ"nŒW\\&`EŠw\Z p\\—Í\APEC\Apec Transport Database (Korea).doc
{ ÈCB:\\Z p'æ"ñŒW\%\ÈŠw\Z p\\—Í\APEC\Apec Transport Database (Korea).doc
{ ÈCB:\\Z p'æ"ñŒW\%\ÈŠw\Z p\\—Í\APEC\Apec Transport Database (Korea).doc
{ ÈCB:\\Z p'æ"nŒW\\&`EŠw\Z p\\—Í\APEC\Apec Transport Database (Korea).doc
{ ÈCB:\\Z p'æ"ñŒW\%\ÈŠw\Z p\\—Í\APEC\Apec Transport Database (Korea).doc
{ ÈIB:\\Z p'æ"ñŒW\\%\EŠw\Z p\\—Í\APEC\temp2\Apec Transport Database
(Korea).doc
(Korea).doc
(Korea).doc
{ È4B:\\Z p'æ"ñŒW\%\ÈŠw\Z p\\\_Í\APEC\DB(Word)\Apec ko.docÿÿÆ
AutoMarginAdjustment2P
AutoMarginAdjustment2=I
AutoMarginAdjustment34
CharSpaceModeX
AutoMarginAdjustment3 J
CharSpaceMode J
```

DocLayt

DocLay I

HeaderDateTimeMode\$

HeaderDateTimeOpt4

HeaderDocInfoMode`

 $HeaderDocInfoMode \neq K$ 

HeaderDocInfoOptP

HeaderDocInfoOpt H

HeaderPageNumberMode

HeaderPageNumberMode G

OverlayMode

OverlayMode K

PageNUp H

ValidCPLLPP

ValidCPLLPP K

ViewGridÌ

69.3 pt,4.1 pt

69.3 pt,4.1 pt

64.5 pt,-0.7 pt

64.5 pt,-0.7 pt

@NEC MultiWriter 2000E NPDL2

 $\Svusx1\usx1p10$ 

NPDL2MS

NEC MultiWriter 2000E NPDL2

Times New Roman

Symbol

Century

!%),.:;?]}¡F£

\$([\{¢

Attachment A

**Root Entry** 

WordDocument

WordDocument

CompObj

CompObj

SummaryInformation

SummaryInformation

Microsoft Word •¶ '

MSWordDoc

Word.Document.6

Attachment A

Microsoft Word for Windows 95

DocumentSummaryInformation DocumentSummaryInformation Attachment A Attachment A

Economies	Mexico
Institute	Engineering Institute National University of Mexico
Field Number(s)	1,2,3,6,8
Overall Contact Point	<ul> <li>(1) Name: Dr.Jose Luis Fernandez</li> <li>(2) Title: Director of the Engineering Institute</li> <li>(3) Phone: 5-6-22-34-23</li> <li>Fax: 5-6-16-28-34</li> <li>E-mail: jlf@pumas.iingen.unam.mx</li> </ul>
Other Remarks	

KEY PROJECTS UNDERWAY	
Name of the Project	Confiability of the operation of the hydraulic system cutzamala
Field Number(s)	2
	(1) Name: Ovsel Gelman
Contact Point	(2) Title: Researcher
	(3) Phone: 5-6-22-35-00
	Fax: 5-6-17-07-84
	E-mail:
Schedule	from 1992 to 1995 ( 3 year(s))
Record of Cooperation	
Other Remarks	

KEY PROJECTS UNDERWAY		
Name of the Project	Environmental and energy diagnosis in the institute of engineering	
Field Number(s)	8	
	(1) Name: Luis Rodriguez Viqueira	
Contact Point	(2) Title: Engineer	
	(3) Phone: 5-6-22-35-00	
	Fax: 5-6-17-07-84	
	E-mail:	
Schedule	from 1992 to 1993 ( 1 year(s))	
Record of Cooperation		
Other Remarks		

KEY PROJECTS UNDERWAY		
Name of the Project	Highway projects appraisal	
Field Number(s)	1	
	(1) Name: Roberto Magallanes	
Contact Point	(2) Title: Researcher	
	(3) Phone: 5-6-22-35-00	
	Fax: 5-6-17-07-84	
	E-mail: rmn@pumas.iingen.unam.mx	
Schedule	from 1992 to 1994 ( 2 year(s	))
Record of Cooperation		
Other Remarks		

KEY PROJECTS UNDERWAY	
Name of the Project	Logistics and accessibility to shoping centers in the metropolitan
	area of Mexico City
Field Number(s)	1
	(1) Name: Dr. Juan Pablo Antun
Contact Point	(2) Title: Coordinator of systems engineering
	(3) Phone: 5-6-22-81-32/37
	Fax: 5-6-16-15-14
	E-mail:
Schedule	from 1993 to 1995 ( 3 year(s))
Record of Cooperation	
Other Remarks	Project number 4115

KEY PROJECTS UNDERWAY	
Name of the Project	Regional effects of the economic opening and transport demand
Field Number(s)	1,2,3
	(1) Name: Dr. Juan Pablo Antun
Contact Point	(2) Title: Coordinator of systems engineering
	(3) Phone: 5-6-22-81-32/37
	Fax: 5-6-16-15-14
	E-mail:
Schedule	from 1993 to 1995 ( 3 year(s))
Record of Cooperation	
Other Remarks	Project number 2125

KEY PROJECTS UNDERWAY	
Name of the Project	Regional impacts of the economic opening and development of the
-	Mexican transport system
Field Number(s)	1,2,3
	(1) Name: Dr. Juan Pablo Antun
Contact Point	(2) Title: Coordinator of systems engineering
	(3) Phone: 5-6-22-81-32/37
	Fax: 5-6-16-15-14
	E-mail:
Schedule	from 1993 to 1995 ( 3 year(s))
Record of Cooperation	
Other Remarks	Project number 4108

KEY PROJECTS UNDERWAY	
Name of the Project	Scenarios for logistic platforms supports in metropolitan areas
Field Number(s)	1
Contact Point	<ul> <li>(1) Name: Dr. Juan Pablo Antun</li> <li>(2) Title: Coordinator of systems engineering</li> <li>(3) Phone: 5-6-22-81-32/37</li> <li>Fax: 5-6-16-15-14</li> <li>E-mail:</li> </ul>
Schedule	from 1993 to 1995 ( 3 year(s))
Record of Cooperation	
Other Remarks	Project number 4119

KEY PROJECTS UNDERWAY	
Name of the Project	Strategic planning of distribution and collection routes with capacity restrictions
Field Number(s)	1
Contact Point	<ul> <li>(1) Name: Dr. Juan Pablo Antun</li> <li>(2) Title: Coordinator of systems engineering</li> <li>(3) Phone: 5-6-22-81-32/37</li> <li>Fax: 5-6-16-15-14</li> <li>E-mail:</li> </ul>
Schedule	from 1993 to 1995 ( 3 year(s))
Record of Cooperation	
Other Remarks	Project number 4116

KEY PROJECTS UNDERWAY	
Name of the Project	Structural design of asphalt pavements
Field Number(s)	1
	(1) Name: Santiago Corro
Contact Point	(2) Title: Researcher
	(3) Phone: 5-5-50-03-88
	Fax: 5-6-17-07-89
	E-mail:
Schedule	from 1992 to 1994 ( 2 year(s))
Record of Cooperation	
Other Remarks	

	KEY PROJECTS UNDERWAY
Name of the Project	Transport systems and metropolitan territorial structures: distribution centers and cooperative logistics of enterprises in the
	central region
Field Number(s)	1
	(1) Name: Dr. Juan Pablo Antun
Contact Point	(2) Title: Coordinator of systems engineering
	(3) Phone: 5-6-22-81-32/37
	Fax: 5-6-16-15-14
	E-mail:
Schedule	from 1993 to 1995 ( 3 year(s))
Record of Cooperation	
Other Remarks	Project number 3111

KEY PROJECTS UNDERWAY	
Name of the Project	Properties deterioration of the concrete subject to cycles of
	compression load.
Field Number(s)	1
	(1) Name: Carlos J. Mendoza
Contact Point	(2) Title: Researcher
	(3) Phone: 5-6-22-81-32/37
	Fax: 5-6-16-15-14
	E-mail:
Schedule	from to 1992 ( year(s))
Record of Cooperation	
Other Remarks	Project number 538

KEY PROJECTS UNDERWAY	
Name of the Project	Behavior of cohesive compacted soils
Field Number(s)	1,
	(1) Name: Jesus Alberro
Contact Point	(2) Title: Researcher
	(3) Phone: 5-5-50-03-88
	Fax: 5-6-17-07-89
	E-mail:
Schedule	from to 1985 ( year(s))
Record of Cooperation	
Other Remarks	Project number 493

	KEY PROJECTS UNDERWAY
Name of the Project	Probabilistic analysis of the seismic answer of structures on
	several supports in soft soils
Field Number(s)	1
	(1) Name: Luis Esteva
Contact Point	(2) Title:
	(3) Phone: 5-6-22-35-00
	Fax: 5-6-17-07-89
	E-mail:
Schedule	from to 1980 ( year(s))
Record of Cooperation	
Other Remarks	Project number 432

KEY PROJECTS UNDERWAY	
Name of the Project	Experimental study of diverse type of pavement. Mexicali airport
Field Number(s)	3
	(1) Name: Miguel Madinaveitia
Contact Point	(2) Title:
	(3) Phone: 5-6-22-35-00
	Fax: 5-6-17-07-89
	E-mail:
Schedule	from to 1978 ( year(s))
Record of Cooperation	
Other Remarks	Project number 411

	KEY PROJECTS UNDERWAY
Name of the Project	Pavements of simple concrete. Structural resistance
Field Number(s)	1, 3
Contact Point	(1) Name: Miguel Madinaveitia (2) Title:
	(3) Phone: 5-6-22-35-00
	Fax: 5-6-17-07-89
	E-mail:
Schedule	from to 1977 ( year(s))
Record of Cooperation	
Other Remarks	Project number 399

	KEY PROJECTS UNDERWAY
Name of the Project	Efforts analysis of the Tlautla bridge under the action of
	gravitational loads
Field Number(s)	1
	(1) Name: Luis A. Ferrer
Contact Point	(2) Title:
	(3) Phone: 5-6-22-35-00
	Fax: 5-6-17-07-89
	E-mail:
Schedule	from to 1974 ( year(s))
Record of Cooperation	
Other Remarks	Project number 341

KEY PROJECTS UNDERWAY	
Name of the Project	Redistribution of flexionant moments and reaction in hyperstatic
-	structures of reiforced concrete
Field Number(s)	1
	(1) Name: Neftalí Rodríguez Cuevas
Contact Point	(2) Title:
	(3) Phone: 5-6-22-35-00
	Fax: 5-6-17-07-89
	E-mail:
Schedule	from to 1973 ( year(s))
Record of Cooperation	
Other Remarks	Project number 311

KEY PROJECTS UNDERWAY	
Name of the Project	Effect of the wind in flexible bridges. Study on model of Metlac and
-	Fernando Espinosa Bridges
Field Number(s)	1
	(1) Name: Roberto Meli
Contact Point	(2) Title:
	(3) Phone: 5-6-22-35-00
	Fax: 5-6-17-07-89
	E-mail:
Schedule	from to 1969 ( year(s))
Record of Cooperation	
Other Remarks	Project number 206

KEY PROJECTS UNDERWAY	
Name of the Project	Rigid-plastic plate subjected to a moving load
Field Number(s)	1
	(1) Name: Joanna Sokol-Supel
Contact Point	(2) Title:
	(3) Phone: 5-6-22-35-00
	Fax: 5-6-17-07-89
	E-mail:
Schedule	from to 1980 ( year(s))
Record of Cooperation	
Other Remarks	Project number E-21

KEY PROJECTS UNDERWAY	
Name of the Project	Filtration forces and hydraulic breaking
Field Number(s)	1
Contact Point	(1) Name: Jesus Alberro (2) Title:
	(3) Phone: 5-6-22-35-00
	Fax: 5-6-17-07-89
	E-mail:
Schedule	from to 1990 ( year(s))
Record of Cooperation	
Other Remarks	Project number 528

KEY PROJECTS UNDERWAY	
Name of the Project	Effect of the flow of water in tunnels contour
Field Number(s)	1
Contact Point	(1) Name: Jesus Alberrro (2) Title:
	(3) Phone: 5-6-22-35-00
	Fax: 5-6-17-07-89
	E-mail:
Schedule	from to 1989 ( year(s))
Record of Cooperation	
Other Remarks	Project number 517

KEY PROJECTS UNDERWAY	
Name of the Project	Displacements and efforts in a elastoplastic semi-infinit mean upon
	digging a circular tunnel
Field Number(s)	1
	(1) Name: Jesus Alberro
Contact Point	(2) Title:
	(3) Phone: 5-6-22-35-00
	Fax: 5-6-17-07-89
	E-mail:
Schedule	from to 1988 ( year(s))
Record of Cooperation	
Other Remarks	Project number 516

	KEY PROJECTS UNDERWAY
Name of the Project	Rock pressures in tunnels and interaction rock-coating
Field Number(s)	1
	(1) Name: Jesus Alberro
Contact Point	(2) Title:
	(3) Phone: 5-6-22-35-00
	Fax: 5-6-17-07-89
	E-mail:
Schedule	from to 1983 ( year(s))
Record of Cooperation	
Other Remarks	Project number 468

	KEY PROJECTS UNDERWAY
Name of the Project	The concept of preconsolidation of soils
Field Number(s)	1
Contact Point	<ul><li>(1) Name: Ismael Herrera</li><li>(2) Title:</li></ul>
	(3) Phone: 5-6-22-35-00
	Fax: 5-6-17-07-89
	E-mail:
Schedule	from to 1976 ( year(s))
Record of Cooperation	
Other Remarks	Project number 363

KEY PROJECTS UNDERWAY	
Name of the Project	Optimum design in treatement of soft solis with vertical drainage of
	sand
Field Number(s)	1
	(1) Name: Sergio W. Covarrubias
Contact Point	(2) Title:
	(3) Phone: 5-6-22-35-00
	Fax: 5-6-17-07-89
	E-mail:
Schedule	from to 1972 ( year(s))
Record of Cooperation	
Other Remarks	Project number 302

KEY PROJECTS UNDERWAY	
Name of the Project	Compactation of clayish soils. Mechanical properties of compacted
-	clayish soils
Field Number(s)	
	(1) Name: Raul J Mersal
Contact Point	(2) Title:
	(3) Phone: 5-6-22-35-00
	Fax: 5-6-17-07-89
	E-mail:
Schedule	from to 1968 ( year(s))
Record of Cooperation	
Other Remarks	Project number 187

KEY PROJECTS UNDERWAY	
Name of the Project	Dynamic behavior of not cohesive embankment models
Field Number(s)	1
	(1) Name: Jorge I. Bustamante
Contact Point	(2) Title:
	(3) Phone: 5-6-22-35-00
	Fax: 5-6-17-07-89
	E-mail:
Schedule	from to 1965 ( year(s))
Record of Cooperation	
Other Remarks	Project number 114

KEY PROJECTS UNDERWAY	
Name of the Project	Compact conditions, states variables and engineering properties of
-	compacted clay.
Field Number(s)	1
	(1) Name: Daniel Resendiz
Contact Point	(2) Title:
	(3) Phone: 5-6-22-35-00
	Fax: 5-6-17-07-89
	E-mail:
Schedule	from to 1980 ( year(s))
Record of Cooperation	
Other Remarks	Project number E-44

KEY PROJECTS UNDERWAY	
Name of the Project	Soil-structure interaction for footing foundations
Field Number(s)	1
	(1) Name: Andrew W. Dawson
Contact Point	(2) Title:
	(3) Phone: 5-6-22-35-00
	Fax: 5-6-17-07-89
	E-mail:
Schedule	from to 1977 ( year(s))
Record of Cooperation	
Other Remarks	Project number E-28

	KEY PROJECTS UNDERWAY
Name of the Project	Submerged breakwater. Experimental study.
Field Number(s)	2
Contact Point	<ul><li>(1) Name: Manuel Garcia</li><li>(2) Title:</li></ul>
	(3) Phone: 5-6-22-35-00
	Fax: 5-6-17-07-89
	E-mail:
Schedule	from to 1988 ( year(s))
Record of Cooperation	
Other Remarks	Project number 523

KEY PROJECTS UNDERWAY	
Name of the Project	Hydrodynamic analysis of structures and maritime vehicles.
Field Number(s)	2
Contact Point	(1) Name: J. L. Sanchez Bribiesca (2) Title:
Contact Foint	(3) Phone: 5-6-22-35-00
	Fax: 5-6-17-07-89 E-mail:
Schedule	from to 1981 ( year(s))
Record of Cooperation	
Other Remarks	Project number 446

	KEY PROJECTS UNDERWAY
Name of the Project	Roads and airports drainage
Field Number(s)	1,3
Contact Point	(1) Name: Gilberto Sotelo (2) Title:
	(3) Phone: 5-6-22-35-00
	Fax: 5-6-17-07-89
	E-mail:
Schedule	from to 1973 ( year(s))
Record of Cooperation	
Other Remarks	Project number 315

KEY PROJECTS UNDERWAY	
Name of the Project	Hydraulic model study of the crossing of Mexico-Queretaro higway
-	with Tepeji river
Field Number(s)	1
	(1) Name: Carlos Cruickshank
Contact Point	(2) Title:
	(3) Phone: 5-6-22-35-00
	Fax: 5-6-17-07-89
	E-mail:
Schedule	from to 1970 ( year(s))
Record of Cooperation	
Other Remarks	Project number 268

KEY PROJECTS UNDERWAY	
Name of the Project	Erosion in concrete caused by high speed flow
Field Number(s)	1
	(1) Name: Gabriel Echavez
Contact Point	(2) Title:
	(3) Phone: 5-6-22-35-00
	Fax: 5-6-17-07-89
	E-mail:
Schedule	from to 1969 ( year(s))
Record of Cooperation	
Other Remarks	Project number 226

	KEY PROJECTS UNDERWAY
Name of the Project	A contribution to the study of the local undermining in bridges piles
Field Number(s)	1
	(1) Name: Jose a. Maza
Contact Point	(2) Title:
	(3) Phone: 5-6-22-35-00
	Fax: 5-6-17-07-89
	E-mail:
Schedule	from to 1964 ( year(s))
Record of Cooperation	
Other Remarks	Project number 84

KEY PROJECTS UNDERWAY	
Name of the Project	Introduction to marine hydrodynamics.
Field Number(s)	9
Contact Point	(1) Name: J. L. Bribiesca (2) Title:
	(3) Phone: 5-6-22-35-00
	Fax: 5-6-17-07-89 E-mail:
Schedule	from to 1978 ( year(s))
Record of Cooperation	
Other Remarks	Project number D-13

	KEY PROJECTS UNDERWAY
Name of the Project	Valuation of maximum entropy in urban transport models
Field Number(s)	
Contact Point	(1) Name: Servio T. Guillen (2) Title: (3) Phone: 5-6-22-35-00 Fax: 5-6-17-07-89 E-mail:
Schedule	from to 1989 ( year(s))
Record of Cooperation	
Other Remarks	Project number 524

	KEY PROJECTS UNDERWAY
Name of the Project	Use of models in planning transport infraestructure
Field Number(s)	1,5,3
Ocate at Deliat	(1) Name: Enrique Diaz
Contact Point	(2) Title: (3) Phone: 5-6-22-35-00
	Fax: 5-6-17-07-89
	E-mail:
Schedule	from to 1984 ( year(s))
Record of Cooperation	
Other Remarks	Project number 487

	KEY PROJECTS UNDERWAY
Name of the Project	Infraestructure works like factor for the rural development
Field Number(s)	1
Contact Point	(1) Name: Jorge Elizondo (2) Title:
	(3) Phone: 5-6-22-35-00
	Fax: 5-6-17-07-89 E-mail:
Schedule	from to 1984 ( year(s))
Record of Cooperation	
Other Remarks	Project number 487

	KEY PROJECTS UNDERWAY
Name of the Project	Social indirect cost of road investments: the foreign component
Field Number(s)	1
Contact Point	(1) Name: Felipe Lara (2) Title: (3) Phone: 5-6-22-35-00 Fax: 5-6-17-07-89 E-mail:
Schedule	from to 1982 ( year(s))
Record of Cooperation	
Other Remarks	Project number 460

	KEY PROJECTS UNDERWAY
Name of the Project	Optimum of the social direct cost in work concepts for rural roads
Field Number(s)	1
	(1) Name: Felipe Lara
Contact Point	(2) Title:
	(3) Phone: 5-6-22-35-00
	Fax: 5-6-17-07-89
	E-mail:
Schedule	from to 1982 ( year(s))
Record of Cooperation	
Other Remarks	Project number 447

	KEY PROJECTS UNDERWAY
Name of the Project	Atmospheric contamination and their relationship with the vehicles flow in Mexico city
Field Number(s)	1
Contact Point	(1) Name: Leonel Corona (2) Title: (3) Phone: 5-6-22-35-00 Fax: 5-6-17-07-89
Schedule	E-mail: from to 1969 ( year(s))
Record of Cooperation	, Jean (9)
Other Remarks	Project number 227

	KEY PROJECTS UNDERWAY
Name of the Project	System for drop emission in automibiles by means a continuous
-	converter of pair of mechanical type
Field Number(s)	1
	(1) Name: Enrique Chicurel
Contact Point	(2) Title:
	(3) Phone: 5-6-22-35-00
	Fax: 5-6-17-07-89
	E-mail:
Schedule	from to 1972 ( year(s))
Record of Cooperation	
Other Remarks	Project number 303

	KEY PROJECTS UNDERWAY
Name of the Project	Bibliography about maves movemet produced by seisms
Field Number(s)	5
	(1) Name: Jorge Bustamante
Contact Point	(2) Title:
	(3) Phone: 5-6-22-35-00
	Fax: 5-6-17-07-89
	E-mail:
Schedule	from to 1964 ( year(s))
Record of Cooperation	
Other Remarks	Project number 110

	KEY PROJECTS UNDERWAY
Name of the Project	Instructive for structural design of flexible pavements for highways
Field Number(s)	1
Contact Point	(1) Name: Santiago Corro (2) Title:
Contact ont	(3) Phone: 5-6-22-35-00
	Fax: 5-6-17-07-89 E-mail:
Schedule	from to 1981 ( year(s))
Record of Cooperation	
Other Remarks	Project number 211

KEY PROJECTS UNDERWAY	
Name of the Project	Operation of vehicles in slopes
Field Number(s)	1
	(1) Name: Roberto Magallanes
Contact Point	(2) Title:
	(3) Phone: 5-6-22-35-00
	Fax: 5-6-17-07-89
	E-mail:
Schedule	from to 1978 ( year(s))
Record of Cooperation	
Other Remarks	Project number 413

	KEY PROJECTS UNDERWAY
Name of the Project	Vehicles sampling with dynamic weighers
Field Number(s)	1
Contact Point	(1) Name: Roberto Magallanes (2) Title:
	(3) Phone: 5-6-22-35-00
	Fax: 5-6-17-07-89
	E-mail:
Schedule	from to 1977 ( year(s))
Record of Cooperation	
Other Remarks	Project number

KEY PROJECTS UNDERWAY		
Name of the Project	Highway structural design with flexible pavement	
Field Number(s)	1	
Contact Point	(1) Name: Santiago Corro (2) Title:	
	(3) Phone: 5-6-22-35-00	
	Fax: 5-6-17-07-89 E-mail:	
Schedule	from to 1974 ( year(s))	
Record of Cooperation		
Other Remarks	Project number 325	

KEY PROJECTS UNDERWAY		
Name of the Project	Proyect of geometric specification for low cost roads.	
Field Number(s)	1	
Contact Point	(1) Name: Roberto Magallanes (2) Title:	
Goritade i Girit	(3) Phone: 5-6-22-35-00	
	Fax: 5-6-17-07-89 E-mail:	
Schedule	from to 1972 ( year(s))	
Record of Cooperation		
Other Remarks	Project number 304	

KEY PROJECTS UNDERWAY		
Name of the Project	Full scale testing applied to pavement design	
Field Number(s)	1	
Contact Point	(1) Name: Santiago Corro (2) Title:	
	(3) Phone: 5-6-22-35-00	
	Fax: 5-6-17-07-89	
	E-mail:	
Schedule	from to 1983 ( year(s))	
Record of Cooperation		
Other Remarks	Project number E-52	

KEY PROJECTS UNDERWAY			
Name of the Project	Full scale testing applied to pavement design		
Field Number(s)	1		
	(1) Name: Santiago Corro		
Contact Point	(2) Title:		
	(3) Phone: 5-6-22-35-00		
	Fax: 5-6-17-07-89		
	E-mail:		
Schedule	from to 1983 ( year(s))		
Record of Cooperation			
Other Remarks	Project number E-52		

KEY PROJECTS UNDERWAY		
Name of the Project	Recomendations for the structural design of flexible pavements	
Field Number(s)	1	
	(1) Name: Santiago Corro	
Contact Point	(2) Title:	
	(3) Phone: 5-6-22-35-00	
	Fax: 5-6-17-07-89	
	E-mail:	
Schedule	from to 1978 ( year(s))	
Record of Cooperation		
Other Remarks	Project number E-35	

Economies	Mexico
Institute	Mexican Transport Institute
Field Number(s)	1,2,3,8
Overall Contact Point	<ul> <li>(1) Name: Ing.Alfonso Rico</li> <li>(2) Title: Coordinator of Operations</li> <li>(3) Phone: 42-16-97-77</li> <li>Fax: 42-15-96-71</li> <li>E-mail: buzon@imt.mx</li> </ul>
Other Remarks	The institute is a research and development agency of the Secretary of Communications and Transport of the Mexican Government.

KEY PROJECTS UNDERWAY		
Name of the Project	Analysis of freight circulating in the road and rail networks in order to select the optimal mode for each type of freight.	
Field Number(s)	1	
Contact Point	<ul> <li>(1) Name: Ing. Alfonso Rico</li> <li>(2) Title: Coordinator of operations</li> <li>(3) Phone: 42-16-63-25</li> <li>Fax: 42-16-96-71</li> <li>E-mail: buzon@imt.mx</li> </ul>	
Schedule	from 1994 to 1995 ( 1 year(s))	
Record of Cooperation		
Other Remarks		

KEY PROJECTS UNDERWAY		
Name of the Project	Connectivity analysis of the main maritime and border ports in order to improve their integration to the road and rail networks	
Field Number(s)	1,2	
Contact Point	<ul> <li>(1) Name: Roberto Aguerrebere Salido</li> <li>(2) Title: Head of the division of regional analysis</li> <li>(3) Phone: 42-16-97-77</li> <li>Fax: 42-16-96-71</li> <li>E-mail: Roberto.Aguerrebere@imt.mx</li> </ul>	
Schedule	from 1991 to ( year(s))	
Record of Cooperation		
Other Remarks	Several case studies are finished and some others are underway which makes it a semi-permanent study.	

KEY PROJECTS UNDERWAY		
Name of the Project	Development of a computer software to calculate maintenance	
	actions of different intensity and time horizon	
Field Number(s)	1	
	(1) Name: Ing. Roberto Aguerrebere	
Contact Point	(2) Title: Coordinator of integrated transport	
	(3) Phone: 42-16-97-77	
	Fax: 42-16-96-71	
	E-mail: Roberto.Aguerrebere@imt.mx	
Schedule	from 1990 to 1993 ( 3 year(s))	
Record of Cooperation		
Other Remarks	This development is a tool of the national highway maintenance	
	strategy.	

KEY PROJECTS UNDERWAY		
Name of the Project	Dynamic ar	nalysis of bridges
Field Number(s)	1	
	(1) Name:	Ing. Miguel Barousse
Contact Point	(2) Title:	Head of the computer division
	(3) Phone:	42-16-97-77
	Fax:	42-16-96-71
	E-mail:	Miguel.Borousse@imt.mx
Schedule	from	1993 to 1995 ( 2 year(s))
Record of Cooperation		
Other Remarks		

KEY PROJECTS UNDERWAY		
Name of the Project	Effect of the slope and curvature in the operational costs and	
-	speed of the main truck types circulating in the Mexican road	
	network	
Field Number(s)	1	
	(1) Name: Ing. Roberto Aguerrebere	
Contact Point	(2) Title: Coordinator of integrated transport	
	(3) Phone: 42-16-97-77	
	Fax: 42-16-96-71	
	E-mail: Roberto.Aguerrebere@imt.mx	
Schedule	from 1990 to 1992 ( 2 year(s))	
Record of Cooperation		
Other Remarks	This study is a tool of the national highway maintenance strategy.	

KEY PROJECTS UNDERWAY		
Name of the Project	Field Studies to determine weight, dimensions and average value	
-	of the load of the vehicles circulating in the Mexican road network	
Field Number(s)	1	
	(1) Name: Ing. Alfonso Rico / Dr. Alberto Mendoza	
Contact Point	(2) Title: Coordinator of operations/Head of the Logistic studies	
	division	
	(3) Phone: 42-16-97-77	
	Fax: 42-16-96-71	
	E-mail: buzon@imt.mx	
Schedule	from 1990 to ( year(s))	
Record of Cooperation		
Other Remarks	The project is considered permanent in order to study new stations	
	every year to continuously improve the knowledge of traffic on the	
	road network.	

	KEY PROJECTS UNDERWAY
Name of the Project	General transport study of the southeast region of Mexico
Field Number(s)	1,2,3
	(1) Name: Roberto Aguerrebere Salido
Contact Point	(2) Title: Coordinador of integrated transporte
	(3) Phone: 42-16-97-77
	Fax: 42-16-96-71
	E-mail: Tristan.Ruiz@imt.mx
Schedule	from 1994 to 1996 ( 2 year(s))
Record of Cooperation	
Other Remarks	This is a comprehensive study to determine the needs and possibilities to accelerate the development in a depressed region.

	KEY PROJECTS UNDERWAY
Name of the Project	Road-vehicle interaction
Field Number(s)	1
	(1) Name: Dr. Alejandro Lozano
Contact Point	(2) Title: Coordinator of transport equipment
	(3) Phone: 42-16-97-77
	Fax: 42-16-96-71
	E-mail: Alejandro.Lozano@imt.mx
Schedule	from 1994 to 1996 ( 2 year(s))
Record of Cooperation	
Other Remarks	Permanent dealing with different issues of the subject

	KEY PROJECTS UNDERWAY
Name of the Project	National strategy for highway maintenance
Field Number(s)	1
Contact Point	<ul> <li>(1) Name: Ing. Alfonso Rico</li> <li>(2) Title: Coordinator of operations</li> <li>(3) Phone: 42-16-63-25</li> <li>Fax: 42-16-96-71</li> <li>E-mail: buzon@imt.mx</li> </ul>
Schedule	from 1991 to 1995 ( 4 year(s))
Record of Cooperation	
Other Remarks	This project is the conjunction of several studies. It gives an overall strategy from the technical, economical and managerial points of view.

	KEY PROJECTS UNDERWAY
Name of the Project	Pavement management system
Field Number(s)	1
	(1) Name: Ing. Alfonso Rico
Contact Point	(2) Title: Coordinator of operations
	(3) Phone: 42-16-63-25
	Fax: 42-16-96-71
	E-mail: buzon@imt.mx
Schedule	from 1990 to 1995 ( 5 year(s))
Record of Cooperation	
Other Remarks	The system was finished in 1992; its software is continiously being
	improved at the present time.

KEY PROJECTS UNDERWAY	
Name of the Project	Studies related with the saving of energy in the transport sector
Field Number(s)	8
	(1) Name: Mercedes Rafael
Contact Point	(2) Title: Head of the energy saving division
	(3) Phone: 42-16-97-77
	Fax: 42-16-96-71
	E-mail: Mercedes.Rafael@imt.mx
Schedule	from 1993 to 1996 ( 3 year(s))
Record of Cooperation	
Other Remarks	

KEY PROJECTS UNDERWAY	
Name of the Project	Vehicle cycle analysis
Field Number(s)	1
	(1) Name: Roberto Aguerrebere Salido
Contact Point	(2) Title: Coordinator of integrated transport
	(3) Phone: 42-16-97-77
	Fax: 42-16-96-71
	E-mail: Roberto.Aguerrebere@imt.mx
Schedule	from to 1988 ( year(s))
Record of Cooperation	
Other Remarks	Technical Publication No.4

	KEY PROJECTS UNDERWAY
Name of the Project	Analysis of three groups of methods for the study of intra and
	interregional flows balance from the freight and passengers
	circulation perspective's
Field Number(s)	1
	(1) Name: Roberto Aguerrebere Salido
Contact Point	(2) Title: Coordinator of integrated Transport
	(3) Phone: 42-16-97-77
	Fax: 42-16-96-71
	E-mail: Roberto.Aguerrebere@imt.mx
Schedule	from to 1989 ( year(s))
Record of Cooperation	
Other Remarks	Technical Publication No.9

	KEY PROJECTS UNDERWAY
Name of the Project	Methodology for freight transport corridors analysis
Field Number(s)	1,2,3
	(1) Name: Roberto Aguerrebere Salido
Contact Point	(2) Title:
	(3) Phone: 42-16-97-77
	Fax: 42-16-96-71
	E-mail: Roberto.Aguerrebere@imt.mx
Schedule	from to 1990 ( year(s))
Record of Cooperation	
Other Remarks	Technical Publication No.13

KEY PROJECTS UNDERWAY	
Name of the Project	Road desing factors and road vehicle operating costs
Field Number(s)	1
	(1) Name: Roberto Aguerrebere Salido
Contact Point	(2) Title: Coordinator of integrated transport
	(3) Phone: 42-16-97-77
	Fax: 42-16-96-71
	E-mail: Roberto.Aguerrebere@imt.mx
Schedule	from to 1991 ( year(s))
Record of Cooperation	
Other Remarks	Technical Publication No.20

	KEY PROJECTS UNDERWAY
Name of the Project	Freight transport integration as an element of the industry and
-	nations competitivity
Field Number(s)	
	(1) Name: Roberto Aguerrebere Salido
Contact Point	(2) Title: Coordinator of integrated transport
	(3) Phone: 42-16-97-77
	Fax: 42-16-96-71
	E-mail: Roberto.Aguerrebere@imt.mx
Schedule	from to 1990 ( year(s))
Record of Cooperation	
Other Remarks	Technical Publication No.24.

KEY PROJECTS UNDERWAY	
Name of the Project	Surface conditions and vehicle operating costs in roads
Field Number(s)	1
	(1) Name: Roberto Aguerrebere Salido
Contact Point	(2) Title: Coordinator of integrated transport
	(3) Phone: 42-16-97-77
	Fax: 42-16-96-71
	E-mail: Roberto.Aguerrebere@imt.mx
Schedule	from to 1991 ( year(s))
Record of Cooperation	
Other Remarks	Technical Publication No.30

KEY PROJECTS UNDERWAY	
Name of the Project	Transport situation of some products of Mexican foreing trade
Field Number(s)	1,2,3
	(1) Name: Roberto Aguerrebere Salido
Contact Point	(2) Title: Coordinator of integrated transport
	(3) Phone: 42-16-97-77
	Fax: 42-16-96-71
	E-mail: Roberto.Aguerrebere@imt.mx
Schedule	from to 1992 ( year(s))
Record of Cooperation	
Other Remarks	Technical Publication No.36

KEY PROJECTS UNDERWAY	
Name of the Project	Competitivity of the Mexican interstate common motor carriers form
-	the North American Free Trade Agreement (NAFTA) perspective.
Field Number(s)	1
	(1) Name: Roberto Aguerrebere Salido
Contact Point	(2) Title: Coordinator of integrated transport
	(3) Phone: 42-16-97-77
	Fax: 42-16-96-71
	E-mail: Roberto.Aguerrebere@imt.mx
Schedule	from to 1992 ( year(s))
Record of Cooperation	
Other Remarks	Technical Publication No 37.

KEY PROJECTS UNDERWAY	
Name of the Project	Recent evolution and trends of interstate common carriers in
-	U.S.A.
Field Number(s)	1
	(1) Name: Roberto Aguerrebere Salido
Contact Point	(2) Title: Coordinator of integrated transport
	(3) Phone: 42-16-97-77
	Fax: 42-16-96-71
	E-mail: Roberto.Aguerrebere@imt.mx
Schedule	from to 1993 ( year(s))
Record of Cooperation	
Other Remarks	Technical Publication No.45

KEY PROJECTS UNDERWAY	
Name of the Project	Economical evaluation of govern gradient in roads.
Field Number(s)	1
	(1) Name: Roberto Aguerrebere Salido
Contact Point	(2) Title: Coordinator of integrated transport
	(3) Phone: 42-16-97-77
	Fax: 42-16-96-71
	E-mail: Roberto.Aguerrebere@imt.mx
Schedule	from to 1995 ( year(s))
Record of Cooperation	
Other Remarks	Technical Publication No.54

KEY PROJECTS UNDERWAY	
Name of the Project	Economic module of Mexican Pavement Management System:
	users manual
Field Number(s)	1
	(1) Name: Roberto Aguerrebere Salido
Contact Point	(2) Title: Coordinator of integrated transport
	(3) Phone: 42-16-97-77
	Fax: 42-16-96-71
	E-mail: Roberto.Aguerrebere@imt.mx
Schedule	from to 1993 ( year(s))
Record of Cooperation	
Other Remarks	Technical Document No.9

KEY PROJECTS UNDERWAY	
Name of the Project	Competitive increases in freight transportation: worldwide carriers
	strategies.
Field Number(s)	1,2,3
	(1) Name: Roberto Aguerrebere Salido
Contact Point	(2) Title: Coordinator of integrated transport
	(3) Phone: 42-16-97-77
	Fax: 42-16-96-71
	E-mail: Roberto.Aguerrebere@imt.mx
Schedule	from to 1992 ( year(s))
Record of Cooperation	
Other Remarks	Technical Document No.10

KEY PROJECTS UNDERWAY	
Name of the Project	Freigth transportation from cartel to competition
Field Number(s)	1
Contact Point	<ul><li>(1) Name: Rafael Izquierdo Gonzalez</li><li>(2) Title:</li><li>(3) Phone: 42-16-97-77</li><li>Fax: 42-16-96-71</li></ul>
	E-mail:
Schedule	from to 1995 ( year(s))
Record of Cooperation	
Other Remarks	Technical Document No.12

KEY PROJECTS UNDERWAY	
Name of the Project	Transport and trade flows
Field Number(s)	1,2,3
Contact Point	<ul><li>(1) Name: Claude Cortez P.</li><li>(2) Title:</li></ul>
	(3) Phone: 42-16-97-77
	Fax: 42-16-96-71
	E-mail:
Schedule	from to 1995 ( year(s))
Record of Cooperation	
Other Remarks	Technical Document No.13

KEY PROJECTS UNDERWAY	
Name of the Project	A methodology to study logistic services offer and transport costs.
Field Number(s)	1,2,3
	(1) Name: Roberto Aguerrebere Salido
Contact Point	(2) Title: Coordinator of integrated transport
	(3) Phone: 42-16-97-77
	Fax: 42-16-96-71
	E-mail: Roberto.Aguerrebere@imt.mx
Schedule	from to 1995 ( year(s))
Record of Cooperation	
Other Remarks	Technical Publication No.58

KEY PROJECTS UNDERWAY	
Name of the Project	Trade exchange between Mexico and Canada and their transport
-	corridors
Field Number(s)	1,2,3
	(1) Name: Mario Salgado Viveros
Contact Point	(2) Title: Researcher
	(3) Phone: 42-16-97-77
	Fax: 42-16-96-71
	E-mail: Mario.Salgado@imt.mx
Schedule	from to 1995 ( year(s))
Record of Cooperation	
Other Remarks	Technical Publication No.66

KEY PROJECTS UNDERWAY	
Name of the Project	Structural effects of economic opening in freight motorcarrier industry
Field Number(s)	1
	(1) Name: Oscar Armando Rico Galeana
Contact Point	(2) Title: Researcher
	(3) Phone: 42-16-97-77
	Fax: 42-16-96-71
	E-mail: Oscar.Rico@imt.mx
Schedule	from to 1995 ( year(s))
Record of Cooperation	
Other Remarks	Technical Publication No.69.

KEY PROJECTS UNDERWAY	
Name of the Project	Analyses of the unit damages coefficients correspondinf to th
-	Mexican highway network
Field Number(s)	1
	(1) Name: Alfonso Rico Rodriguez
Contact Point	(2) Title: Coordinator of operations
	(3) Phone: 42-16-97-77
	Fax: 42-16-96-71
	E-mail: buzon@imt.mx
Schedule	from to 1988 ( year(s))
Record of Cooperation	
Other Remarks	Technical Publication No.5

KEY PROJECTS UNDERWAY	
Name of the Project	Methodology for the analysis of freight transport corridors
Field Number(s)	1
	(1) Name: Alfonso Rico Rodriguez
Contact Point	(2) Title: Coordinator of operations
	(3) Phone: 42-16-97-77
	Fax: 42-16-96-71
	E-mail: buzon@imt.mx
Schedule	from to 1990 ( year(s))
Record of Cooperation	
Other Remarks	Technical Publication No.13

KEY PROJECTS UNDERWAY	
Name of the Project	Estimation of the traffic demand in roads combining origin-destiny
-	studies with traffic counting actions
Field Number(s)	1
	(1) Name: Tristan Ruiz Lang
Contact Point	(2) Title: Head of the special studies division
	(3) Phone: 42-16-97-77
	Fax: 42-16-96-71
	E-mail: buzon@imt.mx
Schedule	from to 1991 ( year(s))
Record of Cooperation	
Other Remarks	Technical Publication No.25

KEY PROJECTS UNDERWAY	
Name of the Project	Geographycal Information Systems (GIS) and transport
Field Number(s)	1
	(1) Name: Miguel Angel Backhoff P.
Contact Point	(2) Title:
	(3) Phone: 42-16-97-77
	Fax: 42-16-96-71
	E-mail: Miguel.Backhoff@imt.mx
Schedule	from to 1992 ( year(s))
Record of Cooperation	
Other Remarks	Technical Publication No.32

KEY PROJECTS UNDERWAY	
Name of the Project	Strategies to conduct origin-destiny studies
Field Number(s)	1
	(1) Name: Tristan Ruiz Lang
Contact Point	(2) Title: Head of special studies division
	(3) Phone: 42-16-97-77
	Fax: 42-16-96-71
	E-mail: Buzon@imt.mx
Schedule	from to ( year(s))
Record of Cooperation	
Other Remarks	Technical Publication No.48

KEY PROJECTS UNDERWAY		
Name of the Project	Four contributions for the quantitative appraisal of transport	
	activities	
Field Number(s)	1	
	(1) Name: Alfonso Rico Rodriguez	
Contact Point	(2) Title: Coordinator of operations	
	(3) Phone: 42-16-97-77	
	Fax: 42-16-96-71	
	E-mail: buzon@imt.mx	
Schedule	from to 1994 ( year(s))	
Record of Cooperation		
Other Remarks	Technical Publication No.55	

KEY PROJECTS UNDERWAY		
Name of the Project	The integration of the optimal design and manufacture on cam	
-	mechanisms.	
Field Number(s)	1	
	(1) Name: Alejandro Lozano Guzman	
Contact Point	(2) Title: Coordinator of transport equipment	
	(3) Phone: 42-16-97-77	
	Fax: 42-16-96-71	
	E-mail: Alejandro.Lozano @imt.mx	
Schedule	from to 1989 ( year(s))	
Record of Cooperation		
Other Remarks	Technical Publication No.7	

KEY PROJECTS UNDERWAY	
Name of the Project	Energy diagnostics in the transport sector
Field Number(s)	1
	(1) Name: Jorge Antonio Ramirez
Contact Point	(2) Title:
	(3) Phone: 42-16-97-77
	Fax: 42-16-96-71
	E-mail: Jorge.Ramirez@imt.mx
Schedule	from to 1991 ( year(s))
Record of Cooperation	
Other Remarks	Technical Publication No.29

KEY PROJECTS UNDERWAY		
Name of the Project	Comparative measurements of emission and fuel consumption for	
	change of type of gasoline on vehicles without catalytic converters	
Field Number(s)	1	
	(1) Name: Jorge Antonio Ramirez	
Contact Point	(2) Title:	
	(3) Phone: 42-16-97-77	
	Fax: 42-16-96-71	
	E-mail: Jorge.Ramirez@imt.mx	
Schedule	from to 1993 ( year(s))	
Record of Cooperation		
Other Remarks	Technical Publication No.40	

KEY PROJECTS UNDERWAY	
Name of the Project	Antipolluting devices for internal combustion engines
Field Number(s)	1
	(1) Name: Jorge Antonio Ramirez
Contact Point	(2) Title:
	(3) Phone: 42-16-97-77
	Fax: 42-16-96-71
	E-mail: Jorge.Ramirez@imt.mx
Schedule	from to 1993 ( year(s))
Record of Cooperation	
Other Remarks	Technical Publication No.43

KEY PROJECTS UNDERWAY		
Name of the Project	Compendium of standars for the equipment of merchant vessels	
Field Number(s)	4	
	(1) Name: Carlos Guzman	
Contact Point	(2) Title:	
	(3) Phone: 42-16-97-77	
	Fax: 42-16-96-71	
	E-mail: Carlos.Guzman@imt.mx	
Schedule	from to 1994 ( year(s))	
Record of Cooperation		
Other Remarks	Technical Publication No.50	

KEY PROJECTS UNDERWAY	
Name of the Project	Research methodology for road engineers
Field Number(s)	1,2,3
	(1) Name: Tristan Ruiz Lang
Contact Point	(2) Title: Head of special studies division
	(3) Phone: 42-16-97-77
	Fax: 42-16-96-71
	E-mail: buzon@imt.mx
Schedule	from to 1990 ( year(s))
Record of Cooperation	
Other Remarks	Technical Publication No.12

	KEY PROJECTS UNDERWAY
Name of the Project	Mathematical Models for trip distribution
Field Number(s)	1
	(1) Name: Tristan Ruiz Lang
Contact Point	(2) Title: Head of special studies division
	(3) Phone: 42-16-97-77
	Fax: 42-16-96-71
	E-mail: buzon@imt.mx
Schedule	from to 1991 ( year(s))
Record of Cooperation	
Other Remarks	Technical Publication No.31

KEY PROJECTS UNDERWAY		
Name of the Project	Development of design guidelines for climbing lanes on two-lane	
	roads.	
Field Number(s)	1	
	(1) Name: Alberto Mendoza Diaz	
Contact Point	(2) Title: Coordinator of infraestructure	
	(3) Phone: 42-16-97-77	
	Fax: 42-16-96-71	
	E-mail: Alberto.Mendoza@imt.mx	
Schedule	from to ( year(s))	
Record of Cooperation		
Other Remarks	Technical Publications Nos. 26, 42, 44, 46 and 59	

	KEY PROJECTS UNDERWAY	
Name of the Project	Quarter car dynamic response and the interna	ational road
	roughness index	
Field Number(s)	1	
	(1) Name: Jose Antonio Romero Navarrete	
Contact Point	(2) Title:	
	(3) Phone: 42-16-97-77	
	Fax: 42-16-96-71	
	E-mail: buzon@imt.mx	
Schedule	from to 1995 ( year(s))	
Record of Cooperation		
Other Remarks	Technical Publication No.67	

KEY PROJECTS UNDERWAY		
Name of the Project	Machinery Information System (SIMAQ). System description and	
	user's manual.	
Field Number(s)	1	
	(1) Name: Jose Prado Perez	
Contact Point	(2) Title:	
	(3) Phone: 42-16-97-77	
	Fax: 42-16-96-71	
	E-mail: buzon@imt.mx	
Schedule	from to 1995 ( year(s))	
Record of Cooperation		
Other Remarks	Technical Publication No.68	

KEY PROJECTS UNDERWAY	
Name of the Project	Diesel engine based vehicles. Thechnical driving manual.
Field Number(s)	
Contact Point	<ul><li>(1) Name: Mercedes Rafael Morales</li><li>(2) Title:</li></ul>
	(3) Phone: 42-16-97-77
	Fax: 42-16-96-71
	E-mail: Mercedes.Rafael@imt.mx
Schedule	from to 1995 ( year(s))
Record of Cooperation	
Other Remarks	Technical Publication No.70

KEY PROJECTS UNDERWAY	
Name of the Project	Design of a spreader for empty containers
Field Number(s)	5
Contact Point	(1) Name: Jose Ricardo Hernandez (2) Title:
	(3) Phone: 42-16-97-77
	Fax: 42-16-96-71
	E-mail: buzon@imt.mx
Schedule	from to 1995 ( year(s))
Record of Cooperation	
Other Remarks	Technical Publication No.72

KEY PROJECTS UNDERWAY	
Name of the Project	Four studies in materials with applications in the transport industry
Field Number(s)	1
	(1) Name: Francisco Carrion Viramontes
Contact Point	(2) Title:
	(3) Phone: 42-16-97-77
	Fax: 42-16-96-71
	E-mail: Francisco.Carrion@imt.mx
Schedule	from to 1996 ( year(s))
Record of Cooperation	
Other Remarks	Technical Publication No.79

KEY PROJECTS UNDERWAY	
Name of the Project	Guide for specification of technical characteristics of port gantry
	cranes
Field Number(s)	5
	(1) Name: Alejandro Lozano Guzman
Contact Point	(2) Title: Coordinator of transport equipment
	(3) Phone: 42-16-97-77
	Fax: 42-16-96-71
	E-mail: Alejandro.Lozano@imt.mx
Schedule	from to 1995 ( year(s))
Record of Cooperation	
Other Remarks	Technical Publication No.81

KEY PROJECTS UNDERWAY	
Name of the Project	Identification and behavior of residual soils for use in highway engineering. Part 1
Field Number(s)	1
Contact Point	<ul><li>(1) Name: Daniel Camacho Barron</li><li>(2) Title:</li><li>(3) Phone: 42-16-97-77</li><li>Fax: 42-16-96-71</li><li>E-mail: buzon@imt.mx</li></ul>
Schedule	from to 1996 ( year(s))
Record of Cooperation	
Other Remarks	Technical Publication No.80

	KEY PROJECTS UNDERWAY
Name of the Project	Bridges management system
Field Number(s)	1
	(1) Name: Miguel Barousse Moreno
Contact Point	(2) Title:
	(3) Phone: 42-16-97-77
	Fax: 42-16-96-71
	E-mail: buzon@imt.mx
Schedule	from to 1994 ( year(s))
Record of Cooperation	
Other Remarks	Technical Publication No.49

Economies	New Zealand
Institute	The New Zealand Institute for Industrial Research and Development
Field Number(s)	1
Overall Contact Point	(1) Name: P.H. Baas (2) Title: Team Manager,
Other Remarks	

	KEY PROJECTS UNDERWAY
Name of the Project	Development of cost effective method of assessing vehicle
	suspensions for "road friendliness", or road wear
Field Number(s)	1
	(1) Name: Dr. John J. de Pont
Contact Point	(2) Title: Project leader
	(3) Phone: 9-3034116
	Fax: 9-3070618
	E-mail: j.dePont@irl.cri.nz
Schedule	from 1993 to 1996 ( 4 year(s))
Record of Cooperation	Closely linked to OECD coordinated research program DEVINE,
	led by 1R6 Scientific Expert Group
Other Remarks	Project leader is member of 1R6

KEY PROJECTS UNDERWAY	
Name of the Project	Interaction between road geometry, heavy vehicle performance
-	(stability, manoeuvrability, tractive effort etc.) and driver behaviour
Field Number(s)	1
	(1) Name: Dr. David M. White
Contact Point	(2) Title: Project leader
	(3) Phone: 9-3034116
	Fax: 9-3070618
	E-mail: d.white@irl.cri.nz
Schedule	from 1993 to 1996 ( 4 year(s))
Record of Cooperation	1.University of Michigan, Transport Research Institute, USA
	2.Australia Road Research Board, Australia
	3.National Research Council, Canada
Other Remarks	

KEY PROJECTS UNDERWAY	
Name of the Project	Relationship between dynamic wheel forces and pavement life
Field Number(s)	1
	(1) Name: Dr. John J. de Pont
Contact Point	(2) Title: Project leader
	(3) Phone: 9-3034116
	Fax: 9-3070618
	E-mail: j.dePont@irl.cri.nz
Schedule	from 1993 to 1996 ( 4 year(s))
Record of Cooperation	Integral part of OECD coordinated research 1R6. Devine
Other Remarks	Project funded by OECD, NZ Foundation for Research Science
	and Technology, and Transit NZ. Being undertaken in conjunction
	with Canterburg University and Transit New Zealand.

Economies	New Zealand
Institute	Transit New Zealand
Field Number(s)	1
Overall Contact Point	(1) Name: Dr. J.H. MeMillan (2) Title: Manager, Research and Development (3) Phone: 04-499-6600 Fax: 04-496-6666 E-mail:
Other Remarks	

Economies	Philippines
Institute	National Center for Transport Studies
Field Number(s)	1
Overall Contact Point	<ul><li>(1) Name: Dr. Reynaldo S. Vea</li><li>(2) Title: Director</li><li>(3) Phone: 97-56-64</li><li>Fax: 97-56-64</li><li>E-mail:</li></ul>
Other Remarks	

KEY PROJECTS UNDERWAY		
Name of the Project	Analysis of Goods Movement in Metro Manila	
Field Number(s)	1	
Contact Point	<ul><li>(1) Name: Dr. Reynaldo S. Vea</li><li>(2) Title: Director</li><li>(3) Phone: 97-56-64</li><li>Fax: 97-56-64</li><li>E-mail:</li></ul>	
Schedule	from 1993 to 1995 ( 2 year(s))	
Record of Cooperation	JICA	
Other Remarks		

KEY PROJECTS UNDERWAY	
Name of the Project	Analysis of Road Traffic Accidents in the City of Manila
Field Number(s)	1
Contact Point	<ul><li>(1) Name: Dr. Reynaldo S. Vea</li><li>(2) Title: Director</li><li>(3) Phone: 97-56-64</li><li>Fax: 97-56-64</li><li>E-mail:</li></ul>
Schedule	from 1993 to 1995 ( 2 year(s))
Record of Cooperation	JICA
Other Remarks	

	KEY PROJECTS UNDERWAY
Name of the Project	Analyzing Transfer Disutilities in Disaggregate Mode Choice
	Models for Work Trips Using Revealed and Stated Preference Data
Field Number(s)	1
	(1) Name: Dr. Reynaldo S. Vea
Contact Point	(2) Title: Director
	(3) Phone: 97-56-64
	Fax: 97-56-64
	E-mail:
Schedule	from 1993 to 1995 ( 2 year(s))
Record of Cooperation	JICA

Other Remarks	

KEY PROJECTS UNDERWAY	
Name of the Project	Cost Characteristics of Jeepney and Bus Modes in Metro Manila
Field Number(s)	1
Contact Point	<ul><li>(1) Name: Dr. Reynaldo S. Vea</li><li>(2) Title: Director</li><li>(3) Phone: 97-56-64</li><li>Fax: 97-56-64</li><li>E-mail:</li></ul>
Schedule	from 1993 to 1995 ( 2 year(s))
Record of Cooperation	JICA
Other Remarks	

KEY PROJECTS UNDERWAY	
Name of the Project	Development of a Planning and Design Criteria for Jeepney Stop
,	Facilities: Concepts and Single Lane Simulation
Field Number(s)	1
	(1) Name: Dr. Reynaldo S. Vea
Contact Point	(2) Title: Director
	(3) Phone: 97-56-64
	Fax: 97-56-64
	E-mail:
Schedule	from 1993 to 1995 ( 2 year(s))
Record of Cooperation	JICA
Other Remarks	

	KEY PROJECTS UNDERWAY
Name of the Project	Discrete Choice Models on Locational Choices of Firms in Industrial Estates: The Case of CALABARZON in the Philippines
Field Number(s)	1
Contact Point	<ul><li>(1) Name: Dr. Reynaldo S. Vea</li><li>(2) Title: Director</li><li>(3) Phone: 97-56-64</li><li>Fax: 97-56-64</li><li>E-mail:</li></ul>
Schedule	from 1993 to 1995 ( 2 year(s))
Record of Cooperation	JICA
Other Remarks	

KEY PROJECTS UNDERWAY	
Name of the Project	Effects of Fly-Over Construction on Traffic Flow: The Case of
-	Metropolitan Manila
Field Number(s)	1
	(1) Name: Dr. Reynaldo S. Vea
Contact Point	(2) Title: Director
	(3) Phone: 97-56-64
	Fax: 97-56-64
	E-mail:
Schedule	from 1992 to 1994 ( 2 year(s))
Record of Cooperation	JICA
Other Remarks	

KEY PROJECTS UNDERWAY	
Name of the Project	Effects of Opening Exclusive Residential Subdivision
Field Number(s)	1
	(1) Name: Dr. Reynaldo S. Vea
Contact Point	(2) Title: Director
	(3) Phone: 97-56-64
	Fax: 97-56-64
	E-mail:
Schedule	from 1993 to 1995 ( 2 year(s))
Record of Cooperation	JICA
Other Remarks	

KEY PROJECTS UNDERWAY		
Name of the Project	Expressway Capacity Analysis	
Field Number(s)	1	
	(1) Name: Dr. Reynaldo S. Vea	
Contact Point	(2) Title: Director	
	(3) Phone: 97-56-64	
	Fax: 97-56-64	
	E-mail:	
Schedule	from 1993 to 1995 ( 2 year(s))	
Record of Cooperation	JICA	
Other Remarks		

KEY PROJECTS UNDERWAY	
Name of the Project	Re-Evaluation of Signal Parameters in Metro Manila
Field Number(s)	1
	(1) Name: Dr. Reynaldo S. Vea
Contact Point	(2) Title: Director
	(3) Phone: 97-56-64
	Fax: 97-56-64
	E-mail:
Schedule	from 1992 to 1994 ( 2 year(s))

Record of Cooperation	JICA
Other Remarks	

Economies Singapore

Institute Nanyang Technology University Centre for Transportation Studies

Field Number(s) 1,2,3

(1) Name: Prof. Henry Fan

Overall Contact Point (2) Title:
Director

(3) Phone: (65)7911744-5328

Fax: (65)7910676

E-mail: (65)7910676

Other Remarks

## KEY PROJECTS UNDERWAY

Name of the Project Driver Behaviour in the Central Expressway Tunnels

Field Number(s) 1

(1) Name: Prof. Henry Fan

```
Contact Point
(2) Title:
Director, Centre for Transportation Studies, NTU
(3) Phone:
65-7910676
 Fax:
65-7910676
 E-mail:
chenryf@ntuvax.ntu.ac.sg
Schedule
 from
1991
to
1992
year(s))
Record of Cooperation
Public Works Department
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Slag Utilisation for Road Premix
Field Number(s)
1
(1) Name:
Mr. Lum Kit Meng
```

```
Contact Point
(2) Title:
Senior Lecturer, Center for Transportation Studies, NTU
(3) Phone:
65-7910676
 Fax:
65-7910676
 E-mail:
ckmlum@ntuvax.ntu.ac.sg
Schedule
 from
1991
to
1992
year(s))
Record of Cooperation
NatSteel Ltd., Singapore
Other Remarks
Economies
Singapore
Institute
Nanyang Technology University
Centre for Transportation Studies
Field Number(s)
1,2,3
(1) Name:
Prof. Henry Fan
```

Overall Contact Point (2) Title: Director
(3) Phone: (65)7911744-5328
Fax: (65)7910676
E-mail: (65)7910676
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project Driver Behaviour in the Central Expressway Tunnels
Field Number(s) 1
(4) 24
(1) Name: Prof. Henry Fan
Contact Point (2) Title: Director, Centre for Transportation Studies, NTU
(3) Phone: 65-7910676
Fax: 65-7910676

```
E-mail:
chenryf@ntuvax.ntu.ac.sg
Schedule
 from
1991
to
1992
year(s))
Record of Cooperation
Public Works Department
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Slag Utilisation for Road Premix
Field Number(s)
(1) Name:
Mr. Lum Kit Meng
Contact Point
(2) Title:
Senior Lecturer, Center for Transportation Studies, NTU
(3) Phone:
65-7910676
 Fax:
65-7910676
 E-mail:
```

```
ckmlum@ntuvax.ntu.ac.sg
Schedule
 from
1991
to
1992
year(s))
Record of Cooperation
NatSteel Ltd., Singapore
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Car Ownership, Traffic Congestion and Road Pricing
Field Number(s)
(1) Name:
Prof. Henry Fan
Contact Point
(2) Title:
Director, Centre for Transportation Studies, NTU
(3) Phone:
65-7910676
 Fax:
65-7910676
 E-mail:
chenryf@ntuvax.ntu.ac.sg
```

```
Schedule
 from
1991
to
1995
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Analysis of Travel Behaviour in Singapore
Field Number(s)
(1) Name:
Dr. Piotr Olszewski
Contact Point
(2) Title:
Associate Professor
(3) Phone:
65-7910676
 Fax:
65-7910676
 E-mail:
colsze@ntuvax.ntu.ac.sg
```

Schedule

```
from
1992
to
1994
2
year(s))
Record of Cooperation
Public Works Department
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Study of Transport Services in Jurong Industrial Estate
Field Number(s)
1
(1) Name:
Prof. Henry Fan
Contact Point
(2) Title:
Director, Centre for Transportation Studies, NTU
(3) Phone:
65-7910676
 Fax:
65-7910676
 E-mail:
chenryf@ntuvax.ntu.ac.sg
Schedule
 from
```

```
1993
to
1994
year(s))
Record of Cooperation
Jurong Town Corporation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Car Ownership, Traffic Congestion and Road Pricing
Field Number(s)
(1) Name:
Prof. Henry Fan
Contact Point
(2) Title:
Director, Centre for Transportation Studies, NTU
(3) Phone:
65-7910676
 Fax:
65-7910676
 E-mail:
chenryf@ntuvax.ntu.ac.sg
Schedule
 from
1991
to
```

```
1995
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Analysis of Travel Behaviour in Singapore
Field Number(s)
(1) Name:
Dr. Piotr Olszewski
Contact Point
(2) Title:
Associate Professor
(3) Phone:
65-7910676
 Fax:
65-7910676
 E-mail:
colsze@ntuvax.ntu.ac.sg
Schedule
 from
1992
to
1994
```

```
year(s))
Record of Cooperation
Public Works Department
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Study of Transport Services in Jurong Industrial Estate
Field Number(s)
(1) Name:
Prof. Henry Fan
Contact Point
(2) Title:
Director, Centre for Transportation Studies, NTU
(3) Phone:
65-7910676
 Fax:
65-7910676
 E-mail:
chenryf@ntuvax.ntu.ac.sg
Schedule
 from
1993
to
1994
```

```
year(s))
Record of Cooperation
Jurong Town Corporation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
An Experimental Study to Improve the Skid Resistance at Road Markings
Field Number(s)
(1) Name:
Mr. Lum Kit Meng
Contact Point
(2) Title:
Senior Lecturer, Centre for Transportation Studies, NTU
(3) Phone:
65-7910676
 Fax:
65-7910676
 E-mail:
ckmlum@ntuvax.ntu.ac.sg
Schedule
 from
1993
to
1994
year(s))
```

```
Record of Cooperation
Public Works Department
```

Other Remarks

year(s))

```
KEY PROJECTS UNDERWAY
Name of the Project
Deviation Bollards and Yellow Band at Bus Stops
Field Number(s)
(1) Name:
Mr. Tan Yan Weng
Contact Point
(2) Title:
Senior Lecturer, Centre for Transportation Studies, NTU
(3) Phone:
65-7910676
 Fax:
65-7910676
 E-mail:
cywtan@ntuvax.ntu.ac.sg
Schedule
 from
1993
to
1994
```

```
Record of Cooperation
Public Works Department
```

Other Remarks

```
KEY PROJECTS UNDERWAY
Name of the Project
Effectiveness of Speed-Radar Camera in Reducing High-Speed Travel
Field Number(s)
(1) Name:
Dr. Wong Yiik Diew
Contact Point
(2) Title:
Lecturer, Centre for Transportation Studies, NTU
(3) Phone:
65-7910676
 Fax:
65-7910676
 E-mail:
cydwong@ntuvax.ntu.ac.sg
Schedule
 from
1993
to
1995
year(s))
```

**Record of Cooperation** 

Traffic Police Department, Land Transport Authority

Other Remarks

# KEY PROJECTS UNDERWAY

Public Works Department

```
Name of the Project
An Experimental Study to Improve the Skid Resistance at Road Markings
Field Number(s)
(1) Name:
Mr. Lum Kit Meng
Contact Point
(2) Title:
Senior Lecturer, Centre for Transportation Studies, NTU
(3) Phone:
65-7910676
 Fax:
65-7910676
 E-mail:
ckmlum@ntuvax.ntu.ac.sg
Schedule
 from
1993
to
1994
year(s))
Record of Cooperation
```

Other Remarks

# KEY PROJECTS UNDERWAY

```
Name of the Project
Deviation Bollards and Yellow Band at Bus Stops
Field Number(s)
(1) Name:
Mr. Tan Yan Weng
Contact Point
(2) Title:
Senior Lecturer, Centre for Transportation Studies, NTU
(3) Phone:
65-7910676
 Fax:
65-7910676
 E-mail:
cywtan@ntuvax.ntu.ac.sg
Schedule
 from
1993
to
1994
year(s))
Record of Cooperation
Public Works Department
```

```
Name of the Project
Effectiveness of Speed-Radar Camera in Reducing High-Speed Travel
Field Number(s)
(1) Name:
Dr. Wong Yiik Diew
Contact Point
(2) Title:
Lecturer, Centre for Transportation Studies, NTU
(3) Phone:
65-7910676
 Fax:
65-7910676
 E-mail:
cydwong@ntuvax.ntu.ac.sg
Schedule
 from
1993
to
1995
year(s))
Record of Cooperation
Traffic Police Department, Land Transport Authority
Other Remarks
```

Name of the Project

Land Transport Authority

Other Remarks

The Effects of Traffic, Geometrics and Operational Characteristics of Signalised Junctions on Red-Light Violation Rates Field Number(s) (1) Name: Dr. Wong Yiik Diew **Contact Point** (2) Title: Lecturer, Centre for Transportation Studies, NTU (3) Phone: 65-7910676 Fax: 65-7910676 E-mail: cydwong@ntuvax.ntu.ac.sg Schedule from 1991 to 1996 year(s)) Record of Cooperation

Other Remarks

```
Name of the Project
Trip and Parking Rates for Major Land Uses in Singapore
Field Number(s)
(1) Name:
Mr. Tan Yan Weng
Contact Point
(2) Title:
Senior Lecturer, Centre for Transportation Studies, NTU
(3) Phone:
65-7910676
 Fax:
65-7910676
 E-mail:
cywtan@ntuvax.ntu.ac.sg
Schedule
 from
1992
to
1997
year(s))
Record of Cooperation
Land Transport Authority
```

```
Name of the Project
Home Interview Survey (1996) on Travel Behaviour
Field Number(s)
(1) Name:
Prof. Henry Fan
Contact Point
(2) Title:
Director, Centre for Transportation Studies, NTU
(3) Phone:
65-7910676
 Fax:
65-7910676
 E-mail:
chenryf@ntuvax.ntu.ac.sg
Schedule
 from
1996
to
1997
year(s))
Record of Cooperation
Land Transport Authority
Other Remarks
```

KEY PROJECTS UNDERWAY

```
The Effects of Traffic, Geometrics and Operational Characteristics of Signalised
Junctions on Red-Light Violation Rates
Field Number(s)
(1) Name:
Dr. Wong Yiik Diew
Contact Point
(2) Title:
Lecturer, Centre for Transportation Studies, NTU
(3) Phone:
65-7910676
 Fax:
65-7910676
 E-mail:
cydwong@ntuvax.ntu.ac.sg
Schedule
 from
1991
to
1996
year(s))
Record of Cooperation
Land Transport Authority
```

Other Remarks

Name of the Project

```
Name of the Project
Trip and Parking Rates for Major Land Uses in Singapore
Field Number(s)
(1) Name:
Mr. Tan Yan Weng
Contact Point
(2) Title:
Senior Lecturer, Centre for Transportation Studies, NTU
(3) Phone:
65-7910676
 Fax:
65-7910676
 E-mail:
cywtan@ntuvax.ntu.ac.sg
Schedule
 from
1992
to
1997
year(s))
Record of Cooperation
Land Transport Authority
Other Remarks
```

```
Name of the Project
Home Interview Survey (1996) on Travel Behaviour
Field Number(s)
(1) Name:
Prof. Henry Fan
Contact Point
(2) Title:
Director, Centre for Transportation Studies, NTU
(3) Phone:
65-7910676
 Fax:
65-7910676
 E-mail:
chenryf@ntuvax.ntu.ac.sg
Schedule
 from
1996
to
1997
year(s))
Record of Cooperation
Land Transport Authority
Other Remarks
Economies
```

Singapore

Institute

National University of Singapore Centre for Transportation Research

Field Number(s) 1,2,3

(1) Name:

Assoc. Prof. T F Fwa

**Overall Contact Point** 

(2) Title:

Director, Centre for Transportation Research

(3) Phone: 65-777-0170

Fax:

65-777-0994

E-mail:

65-777-0994

Other Remarks

# KEY PROJECTS UNDERWAY

Name of the Project Nondestructive Evaluation of Pavements

Field Number(s)

1

(1) Name:

Assoc. Prof. T F Fwa

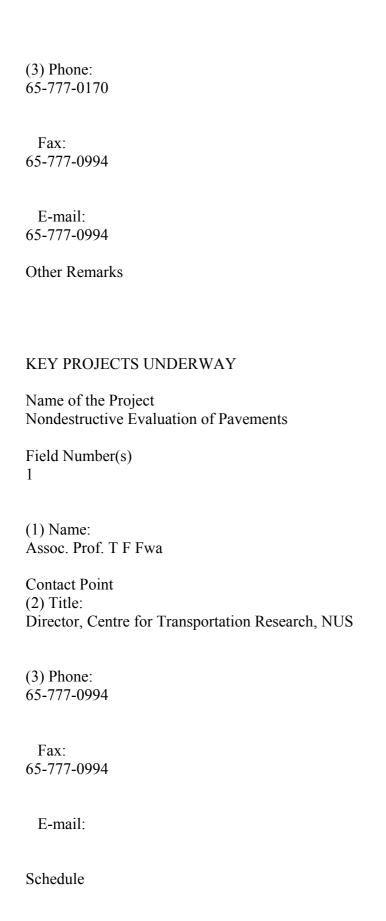
**Contact Point** 

(2) Title:

Director, Centre for Transportation Research, NUS

```
(3) Phone:
65-777-0994
 Fax:
65-777-0994
 E-mail:
Schedule
 from
1994
to
1996
3
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Pavement Management Systems for Roads
Field Number(s)
(1) Name:
Assoc. Prof. T F Fwa
Contact Point
(2) Title:
Director, Centre for Transportation Research, NUS
```

```
(3) Phone:
65-777-0994
 Fax:
65-777-0994
 E-mail:
Schedule
 from
1996
to
1999
year(s))
Record of Cooperation
Other Remarks
Economies
Singapore
Institute
National University of Singapore
Centre for Transportation Research
Field Number(s)
1,2,3
(1) Name:
Assoc. Prof. T F Fwa
Overall Contact Point
(2) Title:
Director, Centre for Transportation Research
```



```
from
1994
to
1996
3
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Pavement Management Systems for Roads
Field Number(s)
1
(1) Name:
Assoc. Prof. T F Fwa
Contact Point
(2) Title:
Director, Centre for Transportation Research, NUS
(3) Phone:
65-777-0994
 Fax:
65-777-0994
 E-mail:
Schedule
 from
```

```
1996
to
1999
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Analysis of Traffic Speed
Field Number(s)
(1) Name:
Dr. H. C. Chin
Contact Point
(2) Title:
Principal Researcher / Senior Lecturer, Center for Transportationn Research, NUS
(3) Phone:
65-779-1635
 Fax:
65-779-1635
 E-mail:
Schedule
 from
1995
to
```

```
1998
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Asphalt Road Drainage
Field Number(s)
(1) Name:
Dr. S. A. Tan
Contact Point
(2) Title:
Senior Lecturer, Centre for Transportation Research, NUS
(3) Phone:
65-779-1635
 Fax:
65-779-1635
 E-mail:
Schedule
 from
1995
to
1998
```

```
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Incident Detection Technologies
Field Number(s)
(1) Name:
Dr. R. L. Cheu
Contact Point
(2) Title:
Lecturer, Centre for Transportation Research, NUS
(3) Phone:
65-779-1635
 Fax:
65-779-1635
 E-mail:
Schedule
 from
1995
to
1998
```

```
year(s))
Record of Cooperation
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
Analysis of Traffic Speed
Field Number(s)
(1) Name:
Dr. H. C. Chin
Contact Point
(2) Title:
Principal Researcher / Senior Lecturer, Center for Transportationn Research, NUS
(3) Phone:
65-779-1635
 Fax:
65-779-1635
 E-mail:
Schedule
 from
1995
to
1998
year(s))
```

# Record of Cooperation

Other Remarks

# KEY PROJECTS UNDERWAY

```
Name of the Project
Asphalt Road Drainage
```

```
Field Number(s)
```

(1) Name: Dr. S. A. Tan

**Contact Point** 

(2) Title:

Senior Lecturer, Centre for Transportation Research, NUS

```
(3) Phone: 65-779-1635
```

Fax: 65-779-1635

E-mail:

Schedule from 1995 to 1998 ( 3 year(s))

# Record of Cooperation

Other Remarks

```
KEY PROJECTS UNDERWAY
```

```
Name of the Project
Incident Detection Technologies
```

```
Field Number(s)
```

```
(1) Name:
Dr. R. L. Cheu
```

**Contact Point** 

(2) Title:

Lecturer, Centre for Transportation Research, NUS

```
(3) Phone: 65-779-1635
```

```
Fax: 65-779-1635
```

E-mail:

```
Schedule from 1995 to 1998 ( 3 year(s))
```

Record of Cooperation

# KEY PROJECTS UNDERWAY

```
Name of the Project
IT Applications in Highway Management
Field Number(s)
(1) Name:
Dr. W. T. Chan
Contact Point
(2) Title:
Principal Researcher / Senior Lecturer, Center for Transportation Research, NUS
(3) Phone:
65-779-1635
 Fax:
65-779-1635
 E-mail:
Schedule
 from
1996
to
1999
year(s))
```

Record of Cooperation

#### KEY PROJECTS UNDERWAY

```
Name of the Project
IT Applications in Highway Management
Field Number(s)
(1) Name:
Dr. W. T. Chan
Contact Point
(2) Title:
Principal Researcher / Senior Lecturer, Center for Transportation Research, NUS
(3) Phone:
65-779-1635
 Fax:
65-779-1635
 E-mail:
Schedule
 from
1996
to
1999
year(s))
Record of Cooperation
```

Other Remarks

```
PAGE
PAGE
PAGE
PAGE
: Ä 6 Ä $%&'()*+,-./0123456789:;<=>?@ABCDEFGHâ
B:\APEC\AP2.DOC
             Rè FÍ
                  Rè FÍ
B:\TECH2\APEC\AP2.DOC
B:\TECH2\APEC\AP2.DOC
                  RèFÍ
                  RèFÍ
B:\TECH2\APEC\AP2.DOC
B:\TECH2\APEC\AP2.DOC
{ E;B:\\Z p'\&"\"\E\\\\E\\\\E\\\Z p\\| Project list (Form).doc
{ EGB:\\Z p'æ"ñŒW\%\EŠw\Z p\|—Í\APEC\Apec Transport Database
(Singapore).doc
{ ÈGB:\\Z p'æ"ñŒW\%\ÈŠw\Z p\\\_Í\APEC\Apec Transport Database
(Singapore).doc
{ ÈGB:\\Z p'æ"ñŒW\\%`ÈŠw\Z p\|—Í\APEC\Apec Transport Database
(Singapore).doc
{ È4B:\\Z p'æ"nŒW\\\EŠw\Z p\\—\I\APEC\DB(Word)\Apec si.doc\\\\\\\Z}
AutoMarginAdjustment2
AutoMarginAdjustment2
AutoMarginAdjustment3L
CharSpaceModep
AutoMarginAdjustment3 H
CharSpaceMode H
DocLay1/4
HeaderDateTimeMode(
HeaderDateTimeOptì
HeaderDateTimeOpt K
HeaderDocInfoModeP
HeaderDocInfoMode H
HeaderDocInfoOpt`
HeaderDocInfoOpt≠K
HeaderPageNumberMode
HeaderPageNumberMode I
OverlayMode4
PageNUp L
```

ValidCPLLPP4

ValidCPLLPP J

ViewGrid

ViewGrid K

69.3 pt,4.1 pt

69.3 pt,4.1 pt

64.5 pt,-0.7 pt

64.5 pt,-0.7 pt

@NEC MultiWriter 2000E NPDL2

 $\Svusx1\usx1p10$ 

NPDL2MS

NEC MultiWriter 2000E NPDL2

Times New Roman

Symbol

Century

!%),.:;?]}¡**F**£

\$([\{¢

Attachment A

**Root Entry** 

WordDocument

WordDocument

CompObj

CompObj

SummaryInformation

SummaryInformation

Microsoft Word •¶

MSWordDoc

Word.Document.6

Attachment A

Microsoft Word for Windows 95

DocumentSummaryInformation

DocumentSummaryInformation

Attachment A

Attachment A

```
Name of the Project
Project Evaluation
Field Number(s)
1,2,3,4,5
(1) Name:
Somsak Hommuang
Contact Point
(2) Title:
Chief of Projects Sub-division
(3) Phone:
662-2816263
 Fax:
662-2816263
 E-mail:
Schedule
 from
1997
```

Record of Cooperation

#### Other Remarks

to 1997

year(s))

The aim of this project is to develop a standardized system for projects appraisal analysis and projects ranking. The standard process of cooperation between the Transport and Communication Policy and Planning Bureau and the agencies under the Ministry and also the action plan to implement the proposed system will be developed.

The comprehensive manual of the system will be provided in order to prepare the Action

```
Plan.
```

```
Name of the Project
Study on Transport Master Plan
```

```
Field Number(s) 1,2,3,4,5
```

(1) Name:

Jatuporn Suwanpangpraek

**Contact Point** 

(2) Title:

Chief of Planning Sub-division

(3) Phone: 662-2816243

Fax: 662-2816243

E-mail:

Schedule from 1995 to 1996 ( 1 year(s))

Record of Cooperation

# Other Remarks

The objectives of this project is to study and implement the Integrated Transport

# Planning Technique for long-term Transport Master Plan of MOTC (1997-2006)

#### KEY PROJECTS UNDERWAY

```
Name of the Project
Study on the Policy for Port and ICD Roles and Location
Field Number(s)
(1) Name:
Wijit Nimitrwanich
Contact Point
(2) Title:
Chief of Research Sub-division
(3) Phone:
662-2801008
 Fax:
662-2801008
 E-mail:
Schedule
 from
1996
to
1996
year(s))
Record of Cooperation
```

# Other Remarks

The objectives of this project are as follows: -

- to determine the characteristics and roles of existing ports and location of future ports,
- to set up the master plan for the establishment of ICD.

```
Name of the Project
Project Evaluation
Field Number(s)
1,2,3,4,5
(1) Name:
Somsak Hommuang
Contact Point
(2) Title:
Chief of Projects Sub-division
(3) Phone:
662-2816263
 Fax:
662-2816263
 E-mail:
Schedule
 from
1997
to
```

Record of Cooperation

#### Other Remarks

1997

year(s))

The aim of this project is to develop a standardized system for projects appraisal analysis

and projects ranking. The standard process of cooperation between the Transport and Communication Policy and Planning Bureau and the agencies under the Ministry and also the action plan to implement the proposed system will be developed.

The comprehensive manual of the system will be provided in order to prepare the Action Plan.

#### KEY PROJECTS UNDERWAY

```
Name of the Project
Study on Transport Master Plan
```

```
Field Number(s) 1,2,3,4,5
```

```
(1) Name:
Jatuporn Suwanpangpraek
```

Contact Point
(2) Title:
Chief of Planning Sub-division

```
(3) Phone: 662-2816243
```

```
Fax: 662-2816243
```

E-mail:

```
Schedule from 1995 to 1996 ( 1 year(s))
```

Record of Cooperation

The objectives of this project is to study and implement the Integrated Transport Planning Technique for long-term Transport Master Plan of MOTC (1997-2006)

```
KEY PROJECTS UNDERWAY
Name of the Project
Study on the Policy for Port and ICD Roles and Location
Field Number(s)
(1) Name:
Wijit Nimitrwanich
Contact Point
(2) Title:
Chief of Research Sub-division
(3) Phone:
662-2801008
 Fax:
662-2801008
 E-mail:
Schedule
 from
1996
to
1996
```

**Record of Cooperation** 

year(s))

The objectives of this project are as follows: -

- to determine the characteristics and roles of existing ports and location of future ports,
- to set up the master plan for the establishment of ICD.

**Economies** 

Thailand

Institute

Department of Highways

Road Research and Development Center

Field Number(s)

(1) Name:

Dr. Teeracharti Ruenkrairergsa

**Overall Contact Point** 

(2) Title:

Director

(3) Phone:

662-245-5504

Fax:

662-247-9425

E-mail:

662-247-9425

Other Remarks

KEY PROJECTS UNDERWAY

Name of the Project

Techniques to improve soft clay foundation

```
Field Number(s)
(1) Name:
Dr. Teeracharti Ruenkrairergsa
Contact Point
(2) Title:
Director
(3) Phone:
662-247-9425
 Fax:
662-247-9425
 E-mail:
Schedule
 from
1996
to
1998
year(s))
Record of Cooperation
cooperated with JICA
```

### Other Remarks

To study and evaluate tentative techniques for improving the properties of the soft cray foundation to lengthen the service life of the road.

# KEY PROJECTS UNDERWAY

Name of the Project

Road design and construction techniques on soft foundation

```
Field Number(s)
(1) Name:
Dr. Teeracharti Ruenkrairergsa
Contact Point
(2) Title:
Director
(3) Phone:
662-247-9425
 Fax:
662-247-9425
 E-mail:
Schedule
 from
1996
to
1997
year(s))
Record of Cooperation
cooperated with Swedish National Road Consulting AB (SweRoad) and Swedish
Geotechnical Institute (SGI)
```

#### Other Remarks

To apply the new techniques (available in European countries) for designing the road on soft clay in Thailand.

Economies Thailand

Institute
Department of Highways
Road Research and Development Center

Field Number(s)

(1) Name:

Dr. Teeracharti Ruenkrairergsa

**Overall Contact Point** 

(2) Title: Director

(3) Phone: 662-245-5504

Fax: 662-247-9425

E-mail: 662-247-9425

Other Remarks

# KEY PROJECTS UNDERWAY

Name of the Project Techniques to improve soft clay foundation

Field Number(s)

1

(1) Name:

Dr. Teeracharti Ruenkrairergsa

**Contact Point** 

(2) Title:

```
Director
(3) Phone:
662-247-9425
 Fax:
662-247-9425
 E-mail:
Schedule
 from
1996
to
1998
year(s))
Record of Cooperation
cooperated with JICA
Other Remarks
To study and evaluate tentative techniques for improving the properties of the soft cray
foundation to lengthen the service life of the road.
KEY PROJECTS UNDERWAY
Name of the Project
Road design and construction techniques on soft foundation
Field Number(s)
(1) Name:
Dr. Teeracharti Ruenkrairergsa
Contact Point
(2) Title:
```

```
Director
(3) Phone:
662-247-9425
 Fax:
662-247-9425
 E-mail:
Schedule
 from
1996
to
1997
year(s))
Record of Cooperation
cooperated with Swedish National Road Consulting AB (SweRoad) and Swedish
Geotechnical Institute (SGI)
Other Remarks
To apply the new techniques (available in European countries) for designing the road on
soft clay in Thailand.
KEY PROJECTS UNDERWAY
Name of the Project
Pilot project on evaluation of road conditions by using FWD
Field Number(s)
(1) Name:
Dr. Teeracharti Ruenkrairergsa
Contact Point
(2) Title:
```

```
Director
(3) Phone:
662-247-9425
 Fax:
662-247-9425
 E-mail:
Schedule
 from
1997
to
1999
year(s))
Record of Cooperation
Cooperated with Danish Road Directorate
Other Remarks
To evaluate road conditions and obtain elastic modulus and induced strain due to the
wheel load in road pavement structure, which are used to design the thickness of overlay
by an analytical design method
KEY PROJECTS UNDERWAY
Name of the Project
Pilot Study to develop performance-based specifications for paving materials
Field Number(s)
(1) Name:
Dr. Chayatan Phromsorn
```

**Contact Point** 

```
(2) Title:
Research Engineer
(3) Phone:
662-247-9425
 Fax:
662-247-9425
 E-mail:
Schedule
 from
1997
to
2000
year(s))
Record of Cooperation
Other Remarks
- To study properties of materials based on their performance under traffic,
- To study the Pros and Cons of performance-based specifications for paving materials
which have been used in USA.
currently and try to apply the concepts for developing an appropriate specifications for
use in Thailand
KEY PROJECTS UNDERWAY
Name of the Project
Pilot project on evaluation of road conditions by using FWD
Field Number(s)
(1) Name:
```

Dr. Teeracharti Ruenkrairergsa

**Contact Point** 

```
(2) Title:
Director
(3) Phone:
662-247-9425
 Fax:
662-247-9425
 E-mail:
Schedule
 from
1997
to
1999
year(s))
Record of Cooperation
Cooperated with Danish Road Directorate
Other Remarks
To evaluate road conditions and obtain elastic modulus and induced strain due to the
wheel load in road pavement structure, which are used to design the thickness of overlay
by an analytical design method
KEY PROJECTS UNDERWAY
Name of the Project
Pilot Study to develop performance-based specifications for paving materials
Field Number(s)
1
(1) Name:
```

Dr. Chayatan Phromsorn

```
Contact Point
(2) Title:
Research Engineer

(3) Phone:
662-247-9425

Fax:
662-247-9425

E-mail:

Schedule from
1997
to
2000
(
4
year(s))

Record of Cooperation
```

## Other Remarks

- To study properties of materials based on their performance under traffic,
- To study the Pros and Cons of performance-based specifications for paving materials which have been used in USA.

currently and try to apply the concepts for developing an appropriate specifications for use in Thailand

s environment.

Economies Thailand

Institute

Port Authority of Thailand

Field Number(s)

5

(1) Name: Mr. Anuparb Sunananta **Overall Contact Point** (2) Title: Director General (3) Phone: 66-2-2490399 Fax: 66-2-2490885 E-mail: 66-2-2490885 Other Remarks KEY PROJECTS UNDERWAY Name of the Project The Study on Modernization of Bangkok Port in the Kingdom of Thailand Field Number(s) 5 (1) Name: Mr. Payoongkich Chivamit **Contact Point** (2) Title: Managing Director of Bangkok Port (3) Phone:

66-2-2490885

```
Fax:
66-2-2490885
 E-mail:
Schedule
 from
1993
to
1994
year(s))
Record of Cooperation
Japan International Cooperation Agency (JICA)
Other Remarks
- To formulate the Masterplan for the period up to the year 2005,
- To conduct a feasibility study for the short-term plan to mordernize Bangkok port for
the period up to the year 1997
KEY PROJECTS UNDERWAY
Name of the Project
The Development of Laem Chabang Port Phase I
Field Number(s)
5
(1) Name:
Cdr. Karn Tantivejakul R.T.N.
Contact Point
(2) Title:
Director of Laem Chabang Port
(3) Phone:
66-038-490141
```

```
Fax:
66-038-490141
 E-mail:
Schedule
 from
1984
to
1986
year(s))
Record of Cooperation
PAAS CONSORTIUM
Other Remarks
- To conduct the detail design of the constructions for the firs basin of Laem Chabang
Port.
Economies
Thailand
Institute
Port Authority of Thailand
Field Number(s)
5
(1) Name:
Mr. Anuparb Sunananta
Overall Contact Point
(2) Title:
Director General
(3) Phone:
66-2-2490399
```

```
Fax:
66-2-2490885
 E-mail:
66-2-2490885
Other Remarks
KEY PROJECTS UNDERWAY
Name of the Project
The Study on Modernization of Bangkok Port in the Kingdom of Thailand
Field Number(s)
5
(1) Name:
Mr. Payoongkich Chivamit
Contact Point
(2) Title:
Managing Director of Bangkok Port
(3) Phone:
66-2-2490885
 Fax:
66-2-2490885
 E-mail:
Schedule
 from
1993
to
1994
```

```
year(s))
Record of Cooperation
Japan International Cooperation Agency (JICA)
Other Remarks
- To formulate the Masterplan for the period up to the year 2005,
- To conduct a feasibility study for the short-term plan to mordernize Bangkok port for
the period up to the year 1997
KEY PROJECTS UNDERWAY
Name of the Project
The Development of Laem Chabang Port Phase I
Field Number(s)
5
(1) Name:
Cdr. Karn Tantivejakul R.T.N.
Contact Point
(2) Title:
Director of Laem Chabang Port
(3) Phone:
66-038-490141
 Fax:
66-038-490141
 E-mail:
Schedule
 from
```

1984 to

```
1986
year(s))
Record of Cooperation
PAAS CONSORTIUM
Other Remarks
- To conduct the detail design of the constructions for the firs basin of Laem Chabang
Port.
KEY PROJECTS UNDERWAY
Name of the Project
The Development of Laem Chabang Port Phase II
Field Number(s)
5
(1) Name:
Cdr. Karn Tantivejakul R.T.N.
Contact Point
(2) Title:
Director of Laem Chabang Port
(3) Phone:
66-038-490141
 Fax:
66-038-490141
 E-mail:
Schedule
 from
1996
```

to 1997

```
year(s))
Record of Cooperation
PCI, Dorsch, AEC, Team
Other Remarks
- To conduct the detail design of the constructions for the firs basin of Laem Chabang
Port.
KEY PROJECTS UNDERWAY
Name of the Project
The Development of Laem Chabang Port Phase II
Field Number(s)
(1) Name:
Cdr. Karn Tantivejakul R.T.N.
Contact Point
(2) Title:
Director of Laem Chabang Port
(3) Phone:
66-038-490141
 Fax:
66-038-490141
 E-mail:
Schedule
 from
1996
to
1997
```

```
year(s))
Record of Cooperation
PCI, Dorsch, AEC, Team
Other Remarks
- To conduct the detail design of the constructions for the firs basin of Laem Chabang
Port.
Economies
Thailand
Institute
Office of Maritime Promotion Commission
Field Number(s)
(1) Name:
Mr. Somsak Piensakool
Overall Contact Point
(2) Title:
Director of Research and Planning Division
(3) Phone:
662-281-5104
 Fax:
662-280-0563
 E-mail:
662-280-0563
Other Remarks
```

KEY PROJECTS UNDERWAY

```
Name of the Project
Outbound Ocean Transportation of Frozen Products in Thailand
Field Number(s)
(1) Name:
Mr. Somsak Piensakool
Contact Point
(2) Title:
Director of Research and Planning Division
(3) Phone:
662-280-0561
 Fax:
662-280-0561
 E-mail:
Schedule
 from
1996
to
1997
```

Record of Cooperation

### Other Remarks

year(s))

- To Study the Situation of Phailand Exportations and Transportation of frozen products,
- To amlyse the prothms of Transportation including the Expenditure Concerned,
- To recommend guidelines and measures to improve the Situation

#### **Economies**

# Thailand Institute Office of Maritime Promotion Commission Field Number(s) (1) Name: Mr. Somsak Piensakool **Overall Contact Point** (2) Title: Director of Research and Planning Division (3) Phone: 662-281-5104 Fax: 662-280-0563 E-mail: 662-280-0563 Other Remarks KEY PROJECTS UNDERWAY Name of the Project Outbound Ocean Transportation of Frozen Products in Thailand Field Number(s) (1) Name: Mr. Somsak Piensakool **Contact Point**

(2) Title:
Director of Research and Planning Division

(3) Phone:
662-280-0561

Fax:
662-280-0561

E-mail:

Schedule from

Record of Cooperation

## Other Remarks

1996 to 1997

year(s))

- To Study the Situation of Phailand Exportations and Transportation of frozen products,
- To amlyse the prothms of Transportation including the Expenditure Concerned,
- To recommend guidelines and measures to improve the Situation

**PAGE PAGE PAGE PAGE** õ 0 Ä ê !"#\$%&'()\*+,-./0123456789:;õ B:\TECH2\APEC\AP2.DOC Rè FÍ B:\TECH2\APEC\AP2.DOC RèFÍ

```
B:\TECH2\APEC\AP2.DOC R è F Í
B:\TECH2\APEC\AP2.DOC
{ È;B:\<Z p'æ"ñŒW\%\EŠw<Z p<\---Í\APEC\Key Project list (Form).doc
{ ÈFB:\\Z p'æ"nŒW\%EŠw\Z p\|—Í\APEC\Apec Transport Database
(Thailand).doc
{ ÈFB:\\Z p'æ"ñŒW\%\ÈŠw\Z p\\_Í\APEC\Apec Transport Database
(Thailand).doc
{ ÈFB:\\Z p'æ"ñŒW\%\ÈŠw\Z p\\\_Í\APEC\Apec Transport Database
(Thailand).doc
{ ÈFB:\\Z p'æ"ñŒW\%\ÈŠw\Z p\\\_Í\APEC\Apec Transport Database
(Thailand).doc
{ È4B:\\Z p'æ"ñŒW\\%ÈŠw\Z p\\=\I\APEC\DB(Word)\Apec th.docÿÿ,
AutoMarginAdjustment2À
AutoMarginAdjustment2 B
AutoMarginAdjustment3.
CharSpaceModeà
AutoMarginAdjustment3 I
CharSpaceMode B
HeaderDateTimeMode|
HeaderDateTimeMode J
HeaderDateTimeOpt`
HeaderDateTimeOpt≠K
HeaderDocInfoModeP
HeaderDocInfoMode H
HeaderDocInfoOptì
HeaderDocInfoOpt K
HeaderPageNumberMode(
OverlavMode'
PageNUp$
Η
66.19 pt,1 pt
58.09 pt,-7.1 pt
58.09 pt,-7.1 pt
@NEC MultiWriter 2000E NPDL2
\Svusx1\usx1p10
NPDL2MS
NEC MultiWriter 2000E NPDL2
NEC MultiWriter 2000E NPDL2
NEC MultiWriter 2000E NPDL2
NEC MultiWriter 2000E NPDL2
NEC MultiWriter 2000E NPDL2
Times New Roman
Symbol
Century
!%),.:;?]}¡F£
$([\{¢
```

Attachment A

Root Entry

WordDocument

WordDocument

CompObj

CompObj

SummaryInformation

SummaryInformation Microsoft Word •¶ '

MSWordDoc

Word.Document.6

Attachment A

Microsoft Word for Windows 95

Document Summary Information

Document Summary Information

Attachment A

Attachment A

Economies	U.S.A.
Institute	Department of Transport Assistant Secretary for Policy and International Affairs, Office of Economics
Field Number(s)	
Overall Contact Point	(1) Name: Carl N. Swerdloff (2) Title: Chief,
Other Remarks	

Economies	U.S.A.
Institute	Federal Highway Administration Associate Administrator for Research, Development, and Technology
Field Number(s)	
Overall Contact Point	(1) Name: Chuck Niesser (2) Title: Managing Director, Nationnally Coordinated Program of Highway Research, Development, and Technology (3) Phone: 703-285-2100 Fax: E-mail:
Other Remarks	

Economies	U.S.A.
Institute	Federal Highway Administration Associate Administrator for Research, Development, and Technology
Field Number(s)	
Overall Contact Point	<ul> <li>(1) Name: R.J. Betsold</li> <li>(2) Title: Acting Associate Administrator</li> <li>(3) Phone: 703-285-2051</li> <li>Fax: 703-285-2379</li> <li>E-mail:</li> </ul>
Other Remarks	

Economies	U.S.A.
Institute	Federal Highway Administration Associate Administrator for Safety and System Applications
Field Number(s)	
Overall Contact Point	(1) Name: Douglas A. Bernard (2) Title: Director, Office of Technology Applications (3) Phone: 202-366-9210 Fax: 202-366-7909 E-mail:
Other Remarks	

Economies	U.S.A.
Institute	Federal Highway Administration Office of Engineering and Highway Operations Research and Development
Field Number(s)	
Overall Contact Point	(1) Name: (2) Title: (3) Phone: 703-285-2001 Fax: 703-285-2379 E-mail:
Other Remarks	

Economies	U.S.A.
Institute	Federal Highway Administration Office of Engineering and Highway Operations Research and Development
Field Number(s)	
Overall Contact Point	(1) Name: (2) Title: Chief,
Other Remarks	

Economies	U.S.A.
Institute	Federal Highway Administration Office of Engineering and Highway Operations Research and Development
Field Number(s)	
Overall Contact Point	(1) Name: Byron N. Lord (2) Title: Chief, Pavements Division (3) Phone: 703-285-2062 Fax: 703-285-2791 E-mail:
Other Remarks	

Economies	U.S.A.
Institute	Federal Highway Administration Office of Engineering and Highway Operations Research and Development
Field Number(s)	
Overall Contact Point	<ul> <li>(1) Name: Louis J. Colucci</li> <li>(2) Title: Contract Manager, Structures Division</li> <li>(3) Phone: 703-285-2975</li> <li>Fax: E-mail:</li> </ul>
Other Remarks	

Economies	U.S.A.
Institute	Federal Highway Administration Office of Highway Information Management
Field Number(s)	
Overall Contact Point	(1) Name: David R. McElhaney (2) Title: Director (3) Phone: 202-366-0180 Fax: 202-366-7742 E-mail:
Other Remarks	

Economies	U.S.A.
Institute	Federal Highway Administration Office of Policy Development
Field Number(s)	
Overall Contact Point	(1) Name: Gary E. Maring (2) Title: Chief,
Other Remarks	

Economies	U.S.A.
Institute	Federal Highway Administration Office of Policy Development
Field Number(s)	
Overall Contact Point	(1) Name: James W. March (2) Title: Chief, Systems Analysis Branch, Transportation Studies Division (3) Phone: 202-366-9237 Fax: 202-366-7696 E-mail:
Other Remarks	

Economies	U.S.A.
Institute	Federal Highway Administration Office of Technology Applications
Field Number(s)	
Overall Contact Point	(1) Name: Douglas A. Bernard (2) Title: Director (3) Phone: 202-366-9218 Fax: 202-366-7909 E-mail:
Other Remarks	

Economies	U.S.A.
Institute	Federal Highway Administration Turner-Fairbank Highway Research Center
Field Number(s)	
Overall Contact Point	<ul><li>(1) Name: Charles Miller</li><li>(2) Title: Associate Administrator</li><li>(3) Phone: 703-285-2054</li><li>Fax: 703-285-2379</li></ul>

	E-mail:
Other Remarks	

Economies	U.S.A.
Institute	Federal Highway Administration Turner-Fairbank Highway Research Center
Field Number(s)	
Overall Contact Point	(1) Name: Ramon Bonaquist (2) Title: Dir., Pavement Testing Facility (3) Phone: 703-285-2629 Fax: 703-285-2791 E-mail:
Other Remarks	

Economies	U.S.A.
Institute	Federal Highway Administration Turner-Fairbank Highway Research Center
Field Number(s)	
Overall Contact Point	(1) Name: Rudy Hegmon (2) Title: Contact, Pavement Performance Laboratory (3) Phone: 703-285-2072 Fax: 703-385-2791 E-mail:
Other Remarks	

Economies	U.S.A.
Institute	Federal Highway Administration Vanderbilt Engineering Center for Transportation Operations and Research
Field Number(s)	
Overall Contact Point	(1) Name: William Bowlby (2) Title: Dir. (3) Phone: 615-322-3683 Fax: 615-322-3365 E-mail:
Other Remarks	

Economies	U.S.A.
Institute	Federal Railroad Administration Association of American Railroads
Field Number(s)	
Overall Contact Point	(1) Name: Keith L. Hawthorne (2) Title: Assistant Vice-President,
Other Remarks	

Economies	U.S.A.
Institute	Federal Railroad Administration Office of Research and Development
Field Number(s)	
Overall Contact Point	(1) Name: Robert L. Krick (2) Title: Director (3) Phone: 202-366-9601 Fax: 202-366-7150 E-mail:
Other Remarks	

Economies	U.S.A.
Institute	Federal Transit Administration
	Research, Training, and Rural Transportation
Field Number(s)	
Overall Contact Point	<ul> <li>(1) Name: Roger Tate</li> <li>(2) Title: Chief, Research and Rural Transportation Division</li> <li>(3) Phone: 202-366-0235 Fax: E-mail:</li> </ul>
Other Remarks	

Economies	U.S.A.
Institute	Federal Transit Administration Transit Research Information Center
Field Number(s)	
Overall Contact Point	<ul> <li>(1) Name: Marina Drancsak</li> <li>(2) Title: Manager</li> <li>(3) Phone: 202-366-9157</li> <li>Fax: 202-366-3765</li> <li>E-mail:</li> </ul>

Other Remarks	

Economies	U.S.A.
Institute	National Highway Traffic Safety Administration Office of Crash Avoidance Research
Field Number(s)	
Overall Contact Point	(1) Name: Robert M. Clarke (2) Title: Chief, Heavy Vehicle Research Division (3) Phone: 202-366-5664 Fax: 202-366-7237 E-mail:
Other Remarks	

Economies	U.S.A.
Institute	National Highway Traffic Safety Administration Office of Ragulatory Analysis
Field Number(s)	
Overall Contact Point	(1) Name: L. Robert Shelton III (2) Title: Director (3) Phone: 202-366-1581 Fax: 202-366-2559 E-mail:
Other Remarks	

Economies	U.S.A.
Institute	National Highway Traffic Safety Administration Vehicle Research and Test Center
Field Number(s)	
Overall Contact Point	<ul><li>(1) Name: James E. Hofferberth</li><li>(2) Title: Director</li><li>(3) Phone: 513-666-4511</li><li>Fax: E-mail:</li></ul>
Other Remarks	

Economies	U.S.A.
Institute	Research and Special Programs Administration
Field Number(s)	
Overall Contact Point	<ul><li>(1) Name: Ana Sol Gutierrez</li><li>(2) Title: Acth. Administrator</li><li>(3) Phone: 202-366-4433</li><li>Fax: E-mail:</li></ul>
Other Remarks	

Economies	U.S.A.
Institute	Research and Special Programs Administration Volpe National Transportation Systems Center
Field Number(s)	
Overall Contact Point	<ul> <li>(1) Name: Dr. Richard R. John</li> <li>(2) Title: Director,</li></ul>
Other Remarks	

Economies	U.S.A.
Institute	Research and Special Programs Administration Volpe National Transportation Systems Center
Field Number(s)	
Overall Contact Point	<ul><li>(1) Name: Dr. Richard R. John</li><li>(2) Title: Director</li><li>(3) Phone: 617-494-2222</li><li>Fax: E-mail:</li></ul>
Other Remarks	

Economies	U.S.A.
Institute	Research and Special Programs Administration Volpe National Transportation Systems Center, Office of Research and Analysis
Field Number(s)	
Overall Contact Point	<ul> <li>(1) Name: Santo J. LaTores</li> <li>(2) Title: Chief,</li></ul>
Other Remarks	