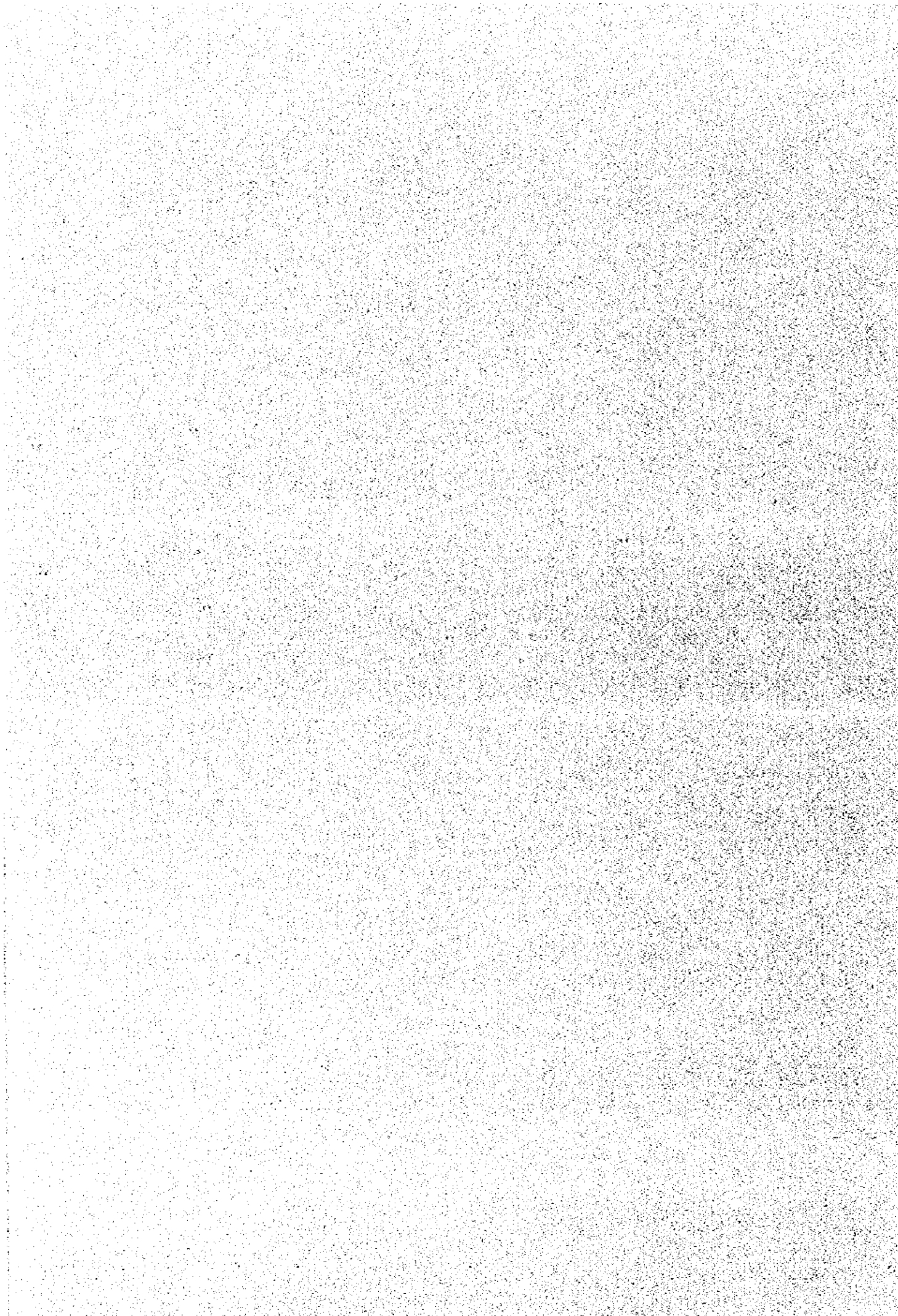


## 付 属 資 料

1. ミニッツ
2. PCMワークショップ関連資料
  - (1) 参加者リスト
  - (2) 参加者分析
  - (3) 問題系図
  - (4) 目的系図
  - (5) 改訂PDM（暫定版）
  - (6) アンケート（票）



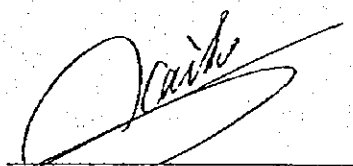
MINUTES OF DISCUSSIONS  
BETWEEN THE JAPANESE SUPPLEMENTARY STUDY TEAM  
AND  
THE AUTHORITIES CONCERNED  
OF  
THE GOVERNMENT OF THE FEDERATIVE REPUBLIC OF BRAZIL  
ON  
THE JAPANESE TECHNICAL COOPERATION  
FOR  
THE URBAN TRANSPORTATION HUMAN RESOURCES DEVELOPMENT PROJECT

The Japanese Supplementary Study Team (hereinafter referred to as "the Team") organized by Japan International Cooperation Agency (hereinafter referred to as "JICA") and headed by Mr. Seiji Kaiho, visited the Federative Republic of Brazil from 1 to 12 February 1998, for the purpose of clarifying the contents of the request for the technical cooperation program concerning the Urban Transportation Human Resources Development Project (hereinafter referred to as "the Project") in the Federative Republic of Brazil.

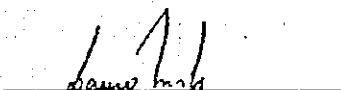
During its stay, the Team exchanged views and had a series of discussions with the authorities concerned of the Government of the Federative Republic of Brazil concerning the Project.

As a result of the discussions, the Team and the Brazilian authorities concerned agreed to report to their respective governments the matters referred to in the document attached hereto.

Brasilia, 12 February 1998.

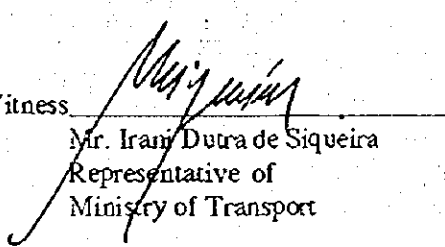


Mr. Seiji Kaiho  
Leader  
Japanese Supplementary Study Team  
Japan International Cooperation Agency  
Japan



Mr. Lauro Morby  
Rector  
University of Brasilia

As Witness



Mr. Iranj Dura de Siqueira  
Representative of  
Ministry of Transport

## ATTACHED DOCUMENT

### 1. Framework of the Project

A series of PCM (Project Cycle Management) workshop and the following discussion were held between the Team and the staff of CEFTRU concerning the Project. Consequently, a PDM (Project Design Matrix) as shown in Annex 1 was formulated and this matrix includes the essential information of the project design agreed by both parties, such as Project Purpose, Overall Goal, Outputs, Activities and so on.

### 2. The role of CEFTRU

The expected Brazilian implementing agency of the Project, CEFTRU has the following roles according to its Internal Regulation;

(1) To contribute to the proper development of the human resources servicing in the fields of planning, management and operation of transport system and the related environment system internationally and domestically at the state and city level.

(2) To conduct research and development related to planning, management and operation of transport and the impact of transport on environment.

CEFTRU is assumed to conduct the activities such as consulting, training and other services internationally and domestically for the above mentioned purpose.

### 3. Expected technical cooperation provided by the Japanese side

#### (1) Scope of cooperation

The Team stated that the Japanese side would participate in the following part of the CEFTRU's activities in the Project;

- Support for the training activities in CEFTRU
- Support for the research activities related to training, if necessary

and would not be involved in other activities of CEFTRU such as consulting.

The Brazilian side originally expected to be supported by the Japanese side in the following eight fields. The Japanese side responded that it would consider supporting the Brazilian side in the five fields (with \* below) somehow, considering the availability of appropriate technology and human resources. The Brazilian side understood this idea.

- \* 1) Urban transport planning
- \* 2) Conservation and control of transport related environment
- \* 3) Road designing
- 4) Traffic control and regulation
- 5) Traffic security
- \* 6) Management and operation of public transport
- \* 7) Logistics of urban cargo
- 8) System of river transport in urban area

## (2) Project period

At the time of the Preliminary Study of the Project conducted in March 1996, it was stated that the Project period shall be five years in the Minutes of Discussion. The Team, however, stated that it would be appropriate to have a project period of around three years based on the content of the Project discussed during its study period. On the contrary, the Brazilian side requested to have the Project period of five years mainly because that there is no laboratory yet and it takes time to set it up in terms of equipment procurement and so on, it takes some time to conduct needs analysis as the preparation for the training, there is no basis of training in some fields and also that step wise introduction of training from a higher level to a lower level is also time consuming. The Team responded that it still would be appropriate to have a Project period of three to four years, considering that the Japanese government's necessity to conduct every international project effectively and that some training has already been in practice in CEFTRU.

Accordingly, this subject needs to be discussed and settled in the so called R/D discussion expected to be undertaken shortly.

## (3) Dispatch of experts

The Team stated that it would consider the dispatch of short and long-term experts as follows:

- 1) Urban transport planning: one long-term expert (Team Leader) and short-term experts
- 2) Coordinator: one long-term expert
- 3) Conservation and control of transport related environment: short-term experts
- 4) Road designing: short-term expert (mainly to conduct seminar to introduce cases in Japan)
- 5) Management and operation of public transport: short-term experts (mainly to conduct seminar to introduce cases in Japan)
- 6) Logistics of urban cargo: short-term experts (mainly to conduct seminar to introduce cases in Japan)

The Brazilian side understood this idea.

## (4) Provision of equipment

The Team stated that possible level of equipment provision based on the standard of Japanese cooperation is around 50 million Japanese yen (about 400,000 Real) per year. The Team also requested to the Brazilian side to review their request list of equipment from the point of view of priority and quantity, considering the above mentioned indicator. The Brazilian side agreed on it.

## (5) C/P training in Japan

The Team stated that the possible level of C/P training to be undertaken in Japan is around three people per year and two months (at most) per training. The Team also requested the Brazilian side to consider this size of training in the future selection of candidates for the training and the Brazilian side understood the idea.

#### 4. Administration of the Project

##### (1) Background

- 1) The Team confirmed that CEFTRU is positioned directly under the supervision of the Rector of the University of Brasilia (UnB) and belongs to the Faculty of Technology in terms of management by the provided organigram shown in Annex 2.
- 2) The Team also confirmed the official status of CEFTRU by the provided document of agreement of establishment.
- 3) The Team was informed that CEFTRU's Internal Regulation is expected to be officially approved by the Rector of UnB in March, 1998.

##### (2) Management of CEFTRU

The Team was informed of the personnel and financial management as follows.

- 1) Around 20 C/P will be assigned for the Project as shown in Annex 3.
- 2) All the C/P are supposed to be professors or technicians of UnB and most of the C/P will be involved in both university education and activities in CEFTRU at the same time, which is in accordance with the university regulations.
- 3) The new Director of CEFTRU will be appointed in April, 1998.

The Team was also informed of CEFTRU's activity plan for the fiscal year 1998.

##### (3) Construction of the building

The Team paid the visit of CEFTRU site and observed the progress of construction.

It was also informed of that, construction is slightly behind the original schedule by around two weeks and also that approximate 450,000 Real, the half of expected construction expense were not disbursed by the government yet.

Concerning this matter, the Minister of Transport explained that the disbursement of the portion was suspended by the Ministry of Planning but he would make an effort to submit the bill of the Special Credit for this portion to the Congress and to realize the disbursement.

The Rector of UnB also stated that the university would support the project by supplementing the shortage of the above portion of construction from the university account, if necessary.

##### (4) Support to CEFTRU

The Minister of Transport stated the Ministry has an intention to provide necessary financial support with CEFTRU towards the Team's request for the support.

GEIPOT stated the necessity and importance of the cooperation between them and CEFTRU concerning the human resource development related to urban transport. GEIPOT stressed that the future cooperation method and system are now under discussion. The Team also received an organigram (Annex 4) to show the section in charge of CEFTRU within GEIPOT.

## 5. Operation of training in CEFTRU

The Team confirmed the following items with the Brazilian side.

### (1) Trainees

It was confirmed by both sides that CEFTRU would take necessary cooperative actions with GEIPOT and other organizations (including formulating any necessary system) for gathering and screening of the trainees. Other issues such as the payment of training fee and cost such as travel and accommodation allowances also need to be discussed in the future.

### (2) Training scheme

Initially, the Team raised a question that if the training was undertaken outside the CEFTRU site, the Project may lose its justification for the equipment. The Brazilian side explained that the important portion of training such as that for trainees from the institutes in neighborhood like GDF and also training which requires equipment needs to be undertaken in the CEFTRU site on regular basis and the Japanese mission understood this.

Consequently, it was confirmed that training consists of two components such as i) training in CEFTRU for trainees from the neighborhood and for training which requires practice on the equipment and ii) training by sending instructors to the local cities.

## LIST OF ATTENDANCE

### 1. BRAZILIANSIDE

#### (1) Ministry of Transport

Mr. Eliseu Lemos Padilha :Minister

Mr. Irani Dutra de Siqueira :Representative

#### (2) GEIPOP

Mr. Noboru Ofugi

Mr. Erivaldo R-Gadelha

Ms. Emily Maria Santoucy

Ms. Joanna D'arc Cardoso

#### (3) ABC

Mr. Marcos Lins Faustino

#### (4) University of Brasilia

Mr. Lauro Morhy :Rector

Mr. Timothy Mullohand :Vice Rector

Ms. Lia Zanotta Machado :Director of office of International Affairs

Mr. Rui Nedel :assessor of Rector

Mr. Jose Matsuo Shimoishi :Professor

Mr. Edwin Pinto de la Sota Silva :Professor

Ms. Yaeko Yamashita :Professor

Ms. Maria Alice Prudencio Jacques :Professor

Ms. Adelaida Pallavicini Fonseca :Professor

Mr. Marcio Muniz de Farias :Professor

#### (5) CAMARA LEGISLATIVA

Mr. Luis Carlos R. Ribeiro

#### (6) SEST/SENAT

Mr. Nereide Herrera

Ms. Maria Tereza Pantoja

#### (7) IDAQ

Mr. Sergio Granemann

#### (8) DER-DF

Mr. Rui Correa Vieira

#### (9) NTU

Mr. Abigail H Diogenes

#### (10) DETRAN-DF

Mr. Ivo Claudio de Souza



(11) ANTP

Mr. Nazareno Affonso

(12) GDF

Ms. Roberta Vieira Beck

2. JAPANESE SIDE

(1) The Japanese Supplementary study Team

Mr. Seiji Kaiho :Leader

Mr. Koshi Yamamoto:Transportation Engineering and Planning

Mr. Katsuto Yokoyama :Civil Traffic Planning

Mr. Sadakazu Yamaguchi:Public Transportation Planning

Mr. Hisashi Matsui :Cooperation Planning

Mr. Ryujiro Sasao :Human Resources Planning

Ms. Motoko Tomita Yeboles :Interpreter

(2) Embassy of Japan

Mr. Makoto Mizutani:Minister

Mr. Syuichi Tsuda :First secretary

Mr. Kengo Ochi :Second secretary

(3) JICA Brazil Office

Mr. Norihiko Matsumoto:Coordinator

Ms. Tamako Ago :Acting Coordinator

Mr. Mauro Manabu Inoue :Executive Assessor

Mr. Kazuaki Komazawa :Executive Assessor

# Annex 1

## Revised PDM for the Urban Transportation Human Resources Development (Tentative) 1/3

1. Period of Cooperation : X years (to be decided) 2. Methodology of preparation : This PDM was made based on PCM workshop held on Feb. 3 and 4, 1998 and the following discussion between Japanese mission and the staff of the Transportation Human Resources Development Center (CEFTRU). 3. Japanese Implementing Agency : JICA. 4. The Beneficiary Country's Implementing Agency : CEFTRU 5. Project Area (site) : CEFTRU  
Feb. 10, 1998

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Assumptions
<p><b>Super Goal</b></p> <p>Planning, management, operation and education in the field of urban transport are properly undertaken in Brazil.</p>	<p>By the year XX (5 ~ 10 years after the end of project period), effective Transport Development Programs (*) are formulated, transport related education is undertaken effectively and services of certain transport corporations are improved in a considerable number of cities and states attended by CEFTRU.</p>	<p>1. Survey conducted at local cities' transport sections and schools</p> <p>2. Transport Development Programs (*)</p> <p>3. Survey conducted for users of transport</p>	<p>1. There is no significant change about Governmental policies about the local cities' transport.</p> <p>2. Each city or state's assignment of budget and personnel to the transport section is maintained.</p>
<p><b>Overall Goal</b></p> <p>Capability of personnel engaged in planning, management, operation and education of urban transport is improved through the training provided by CEFTRU.</p>	<p>By the year YY (3 ~ 5 years after the end of project period), considerable number of trainees successfully complete training, (subject and level of training will also be shown separately.)</p>	<p>Training record of CEFTRU</p>	<p>1. Trainees are assigned to suitable sections related to transport administration or transport business or they remain as educators in schools.</p> <p>2. Other necessary training is also effectively provided to transport related corporations.</p> <p>3. Minimum level of hardware with which trainees can practice the acquired skills and knowledge is installed in cities and states' transport sections and in transport related corporations.</p> <p>4. The Constitution requires cities to formulate Master Plans (*) and a legislation requires schools to give education about traffic security.</p>
<p><b>Project Purpose</b></p> <p>CEFTRU is well established so that training of personnel engaged in planning, management, operation and education related to urban transport may be undertaken effectively.</p>	<p>By the end of the project period (year ZZ), certain training courses (subject and level of training is shown by attachment) are started.</p>	<p>1. Training record of CEFTRU (for the first year of training at least)</p> <p>2. Survey for trainees (conducted a certain period after the training) concerning the effect of training</p>	<p>1. Governmental agencies, UnB' keep financial and other support for CEFTRU.</p> <p>2. C/P remain as instructors in CEFTRU.</p>

(\*) Note : Transport Development Program is a component of Master Plan.

<p>Output</p> <ol style="list-style-type: none"> <li>1. Training programs which suite the demand of planning, management, operation and education in the field of urban transport are prepared.</li> <li>2. Proper instructors in the field of urban transport are available.</li> <li>3. Facilities and equipment necessary for training are well prepared.</li> <li>4. The project is properly managed in terms of organization, personnel and finance.</li> </ol>	<ol style="list-style-type: none"> <li>1-1. Training curriculum useful for planning, management, operation and education in the field of urban transport is complete.</li> <li>1-2. Proper training material is prepared.</li> <li>2. Enough number of qualified instructors necessary to conduct training stated in attachment are available.</li> <li>3. Necessary facilities and equipment* are established, are fully utilized and also well maintained. (* equipment includes software and technical literature.)</li> <li>4-1. Enough number of personnel is assigned and is operative and sound financial management is undertaken in the limit of originally made budget plan.</li> <li>4-2. Proper monitoring is undertaken based on PDM and annual Plan of Operations.</li> </ol>	<ol style="list-style-type: none"> <li>1-1. Training curriculum</li> <li>1-2. Training material and its list</li> <li>2-1. List of instructors and service records</li> <li>2-2. Career records of instructors</li> <li>3. The list of facilities and equipment, the document to show the situation of utilization</li> <li>4-1. CEFTRU's organigram, C/P assignment chart and quarterly report of activities ( "shihannki-houkoku" )</li> <li>4-2. Minutes of the executing committee, monitoring reports and background data</li> </ol>	
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<p>Activities: Items taken care of mainly by either Japanese side or Brazilian side are shown with [J] and [B].</p> <p>1-1. To collect detailed information on training needs from urban transport related organizations [B]</p> <p>1-2. To collect information on training needs from cities' transport related sections and private sector [B]</p> <p>1-3. To clarify the division of roles and exchange information among training institutes of urban transport, and to formulate and operate the CEFTRU supporting system [B]</p> <p>1-4. (According to subject, under the Japanese experts' advice) to make training curriculum</p> <p>1-5. (According to subject, under the Japanese experts' advice) to make text books</p> <p>1-6. To decide the operation method of training [B]</p> <p>1-7. To select trainees [B]</p> <p>1-8. To undertake training in CEFTRU [B]</p> <p>2-1. To invite necessary instructors from outside of CEFTRU [B]</p> <p>2-2. According to subject, to teach training method, method of equipment operation and maintenance and trainee evaluation method and to introduce cases in Japan to the Brazilian C/P [J]</p> <p>2-3. To conduct researches for the development of technology in urban transport planning</p> <p>2-4. To conduct C/P training in Japan, if appropriate.</p> <p>3-1. To secure necessary facilities [B]</p> <p>3-2. To install necessary equipment</p> <p>3-3. To maintain facilities and equipment [B]</p> <p>4-1. To establish organization of project management</p> <p>4-2. To undertake project management in terms of personnel, general affairs and finance</p> <p>4-3. To conduct various researches and surveys necessary for monitoring</p> <p>4-4. To conduct monitoring</p>	<p>Input</p> <p>1. Japanese side :</p> <p>1) Dispatch of experts</p> <p>2) Training of C/P in Japan</p> <p>3) Provision of equipment</p> <p>2. Brazilian side :</p> <p>1) Provision of land for CEFTRU</p> <p>2) Provision of buildings of CEFTRU</p> <p>3) Provision of equipment</p> <p>4) Assignment of C/P</p> <p>5) Assignment of administrative staff necessary for the project</p> <p>6) Running cost necessary for the project</p> <p>Preconditions</p> <p>Necessary support to CEFTRU in terms of land and budget for the construction of buildings and operation is provided from the Brazilian side.</p>
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Attachment : Subject and Level of Training expected to be undertaken in CEFTRU (tentative)

Training of the following subject items of No. ( to be decided ) is expected to start by the end of the project period.

Subject (* 1)	Level (course)		City and state		Transport related corporation		Educator (* 3)
	Manager(* 2)	Supportive staff (* 2)	Manager(* 2)	Supportive staff (* 2)	Manager(* 2)	Supportive staff (* 2)	
1. Urban transport planning	X	X					
2. Conservation and control of transport related environment	X	X					
3. Road designing	X	X					
4. Traffic control and regulation	X	X					
5. Traffic security	X	X					X
6. Management and operation of public transport	X	X			X	X	
7. Logistics of urban cargo	X	X			X	X	
8. System of river transport in urban area	X	X					

Note :

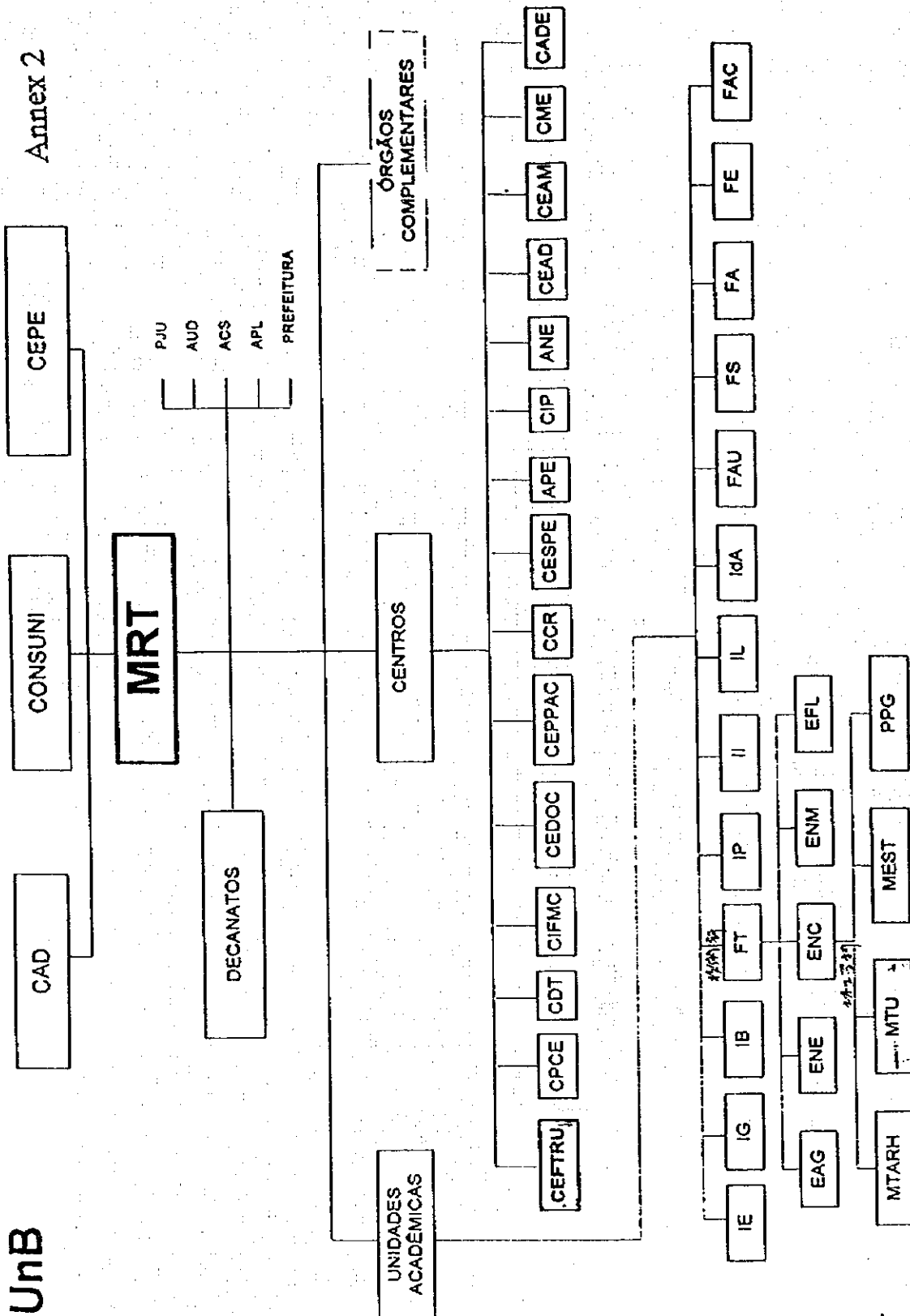
\* 1. Subjects are further broken down into specific items in actual training.

\* 2. Manager means a decision maker in an organization such as " a chief of public transport section in a municipality " and supportive staff means a person who work under the supervision of manager and support him/her in terms of collection of information, various kinds of analysis, preparation of document, field and operational work and so on.

\* 3. Educator means a teacher in primary and junior high school and an instructor in driving school.

UnB

Annex 2



### QUADRO PERMANENTE DO CEFTRU

PROFESSORES	Area de Atuação
<i>Yaeko Yamashita</i>	Transport Planning
<i>Maria Alice Prudêncio Jacques</i>	Circulation Planning and Traffic Control
<i>Joaquim José Guilherme de Aragão</i>	Public Transportation
<i>José Matsuo Shimolishi</i>	Circulation Planning / Public Transportation
<i>José Alex Santana</i>	Public Transportation
<i>José Augusto Abreu Sá Fortes</i>	Public Transportation
<i>Adelaide Pallavicini Fonseca</i>	System Logistics
<i>Paulo César Marques da Silva</i>	Circulation Plan / Traffic Control
<i>Marcelo Miniz de Farias</i>	Infrastructure / Road Design
<i>Ennio Marques Palmeira</i>	Infrastructure / Road Design
<i>José Camapum de Carvalho</i>	Infrastructure / Road Design
<i>David Duarte Lima</i>	Transport Safety
<i>Raul Yukihiro Matsushita</i>	Statistics
<i>Edina Shizue Mizaki</i>	Statistics
<i>Frederico Holanda</i>	City Planning
<i>Edwin Pinto de la Soia Silva</i>	System Logistics
<i>2 Professores (a contratar)</i>	System Transport
<i>3 Técnicos (a contratar)</i>	Enginner

<i>1 Secretária : Sra. Mônica</i>	Secretary
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付属資料2. PCMワークショップ関連資料

(1) 参加者リスト

第1回ワークショップ (2月3日)

<p>日本側 (9名)</p> <p>調査団員</p> <p>JICAブラジル事務所職員</p> <p>通訳者</p>	<p>6名 (山本・横山・山口・松井・笹尾各団員、うち笹尾団員は、モデレーター)</p> <p>2名 (吾郷・井上両職員、カードの翻訳も補佐)</p> <p>1名 (富田モトコ氏)</p>
<p>ブラジル側 (16名)</p> <p>全国公共交通協会 (ANTP)</p> <p>連邦区道路公社 (DER/DF)</p> <p>交通技術者養成機関 (SEST/SENAT)</p> <p>ブラジル都市交通企業連合 (NTU)</p> <p>連邦区交通局 (DETRAN/DF)</p> <p>ブラジル交通計画公社 (GEIPOT)</p> <p>交通の開発・技術支援・質に関する研究所 (IDAQ)</p> <p>運輸省</p> <p>連邦区衆院議員</p> <p>ブラジル大学 (CEFTRU)</p> <p>ブラジル大学 (土質工学)</p> <p>ブラジル大学国際課</p>	<p>1名</p> <p>1名</p> <p>2名</p> <p>1名</p> <p>1名</p> <p>1名</p> <p>1名</p> <p>1名</p> <p>1名</p> <p>4名</p> <p>1名</p> <p>1名 (オブザーバー)</p>
<p>合計</p>	<p>25名</p>

第2回ワークショップ（2月4日）

<p>日本側（10名）</p> <p>調査団員</p> <p>JICAブラジル事務所職員</p> <p>通訳者</p>	<p>6名（山本・横山・山口・松井・笹尾各団員、うち笹尾団員は、モデレーター）</p> <p>3名（吾郷・井上・駒沢職員、カードの翻訳も補佐）</p> <p>1名（富田モトコ氏）</p>
<p>ブラジル側（15名）</p> <p>全国公共交通協会（ANTP）</p> <p>連邦区道路公社（DER/DF）</p> <p>ブラジル都市交通企業連合（NTU）</p> <p>連邦区交通局（DETRAN/DF）</p> <p>ブラジル交通計画公社（GEIPOT）</p> <p>交通の開発・技術支援・質に関する研究所（IDAQ）</p> <p>運輸省</p> <p>連邦区衆院議員</p> <p>ブラジル大学（CEFTRU）</p> <p>ブラジル大学（土質工学）</p> <p>ブラジル大学国際課</p>	<p>1名</p> <p>1名</p> <p>1名</p> <p>1名</p> <p>1名</p> <p>1名</p> <p>1名</p> <p>1名</p> <p>5名</p> <p>1名</p> <p>1名（オブザーバー）</p>
<p>合計</p>	<p>25名</p>

付属資料 2.(2) 参加者分析

参加者グルーピング

受益者	実施者	協力者	財政負担者	反対者
交通人材開発センター (CEFTRU) 一研修生 ・地方行政官 ・交通管制官 ・公営/民間企業の 管理者/技術者 一研修講師	ブラジリア大学/ CEFTRU	1 運輸省 2 ブラジル交通計画 公社 (GEIPOP) 3 教育省 4 科学技術省 5 環境省 6 連邦区政府 (GDF) 7 交通技術者養成機関 (SENAT) 8 AUTORAC 9 ブラジル都市交通 企業連合 (NTU) 10 都市交通国家 審議会 (CNTU) 11 他大学 12 ANTP(*) 13 FORUM(*) 14 ANPET(*) 15 IDAQ(*) 16 ABDETRAM(*) 17 ABDER(*)	ブラジル政府 一企画省 一科学技術省 一運輸省 一教育省 一連邦区政府  J I C A	特になし
地方都市交通行政担当部局 公営・民間の交通関連業界 一般利用者 (交通サービス) 農業等他産業	(上位機関) 教育省			

\*注：略語の正式名称については、別紙 (次ページ) 参照

実施が要請されているプロジェクトに関連した組織・団体は以上のように整理された。ワークショップでは、前回のワークショップ (96年2月開催) で作成した表を出席者全員で見直した。結果として、以下の修正が行なわれた。

1. 「大学教官」が受益者 (「研修生」) から外され、「一般利用者」が受益者に加えられた。
2. CEFTRUも実施機関に加えられた。
3. 協力機関として、新たに6機関 (12. 番以降) が加えられた。但し、ワークショップで確認されたのは「これらの機関も何らかの協力ができる/協力すべき」ということのみである。これらの機関のCEFTRUへの協力は重要であり、具体的な協力形態については、引き続き検討が必要である。

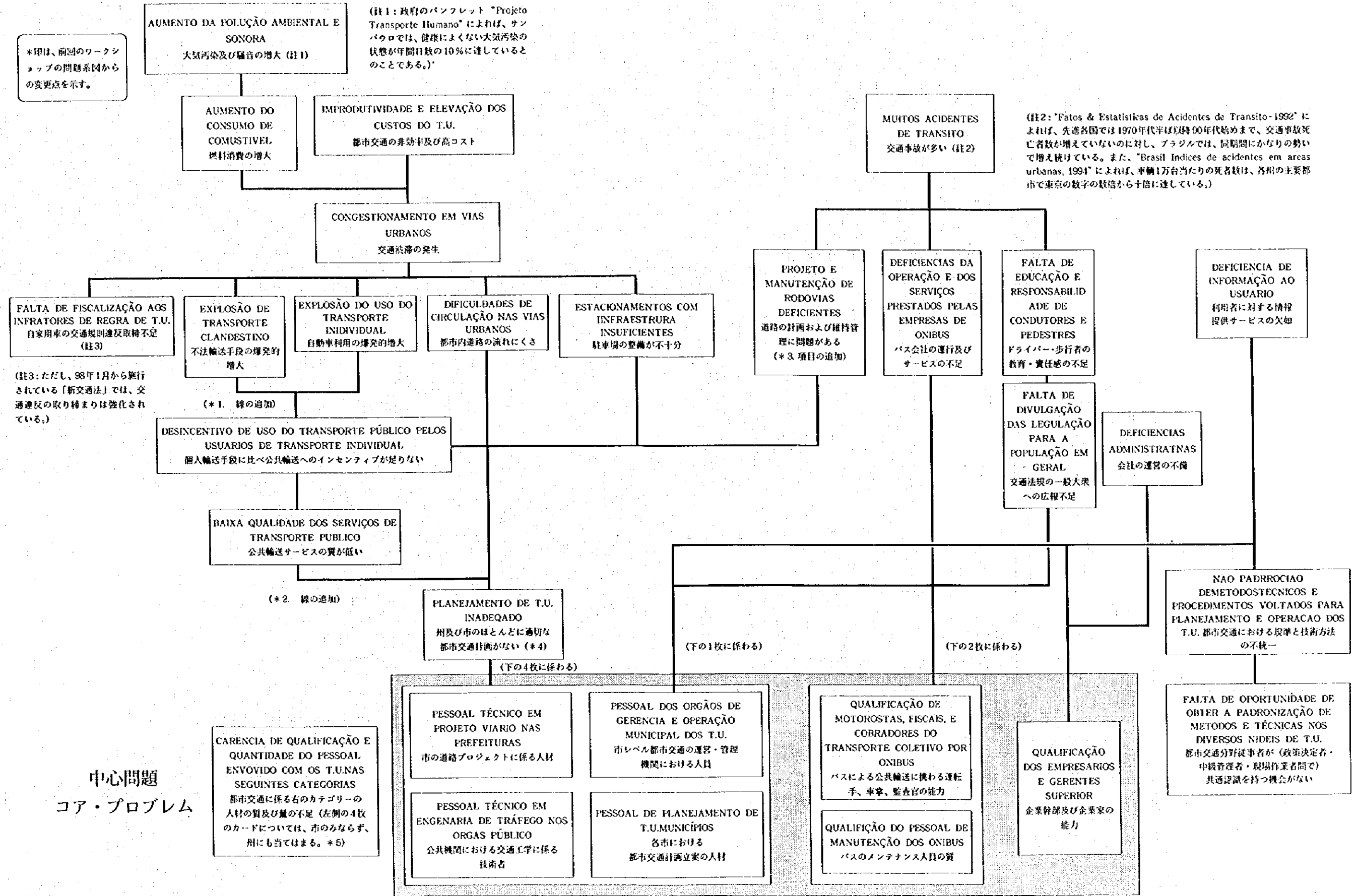
新たに追加された協力機関の正式名称及び仮訳

略 語	正 式 名 称	仮 訳
1. ANTP	Associação Nacional de Transportes Públicos	全国公共交通協会
2. FORUM	Forum dos Secretários Municipais Transportes	都市交通局長フォーラム
3. ANPET	Associação Nacional de Pesquisa e Ensino em Transportes	全国交通教育研究協会
4. IDAQ	Instituto do Desenvolvimento, Assistência e Qualidade em Transporte	交通の開発・技術支援・質に関する研究所
5. ABDETRAM	Associação Brasileira dos DETRANS	ブラジル・DETRAN(*1)協会
(*1 DETRAN	Departamento Estadual de Transportes	州交通局)
5. ABDER	Associação Brasileira dos DER	ブラジル・DER(*2)協会
(*2 DER	Departamento de Engenharia Rodoviária	道路公社)





付属資料2.(3) 問題系図 (1/2)

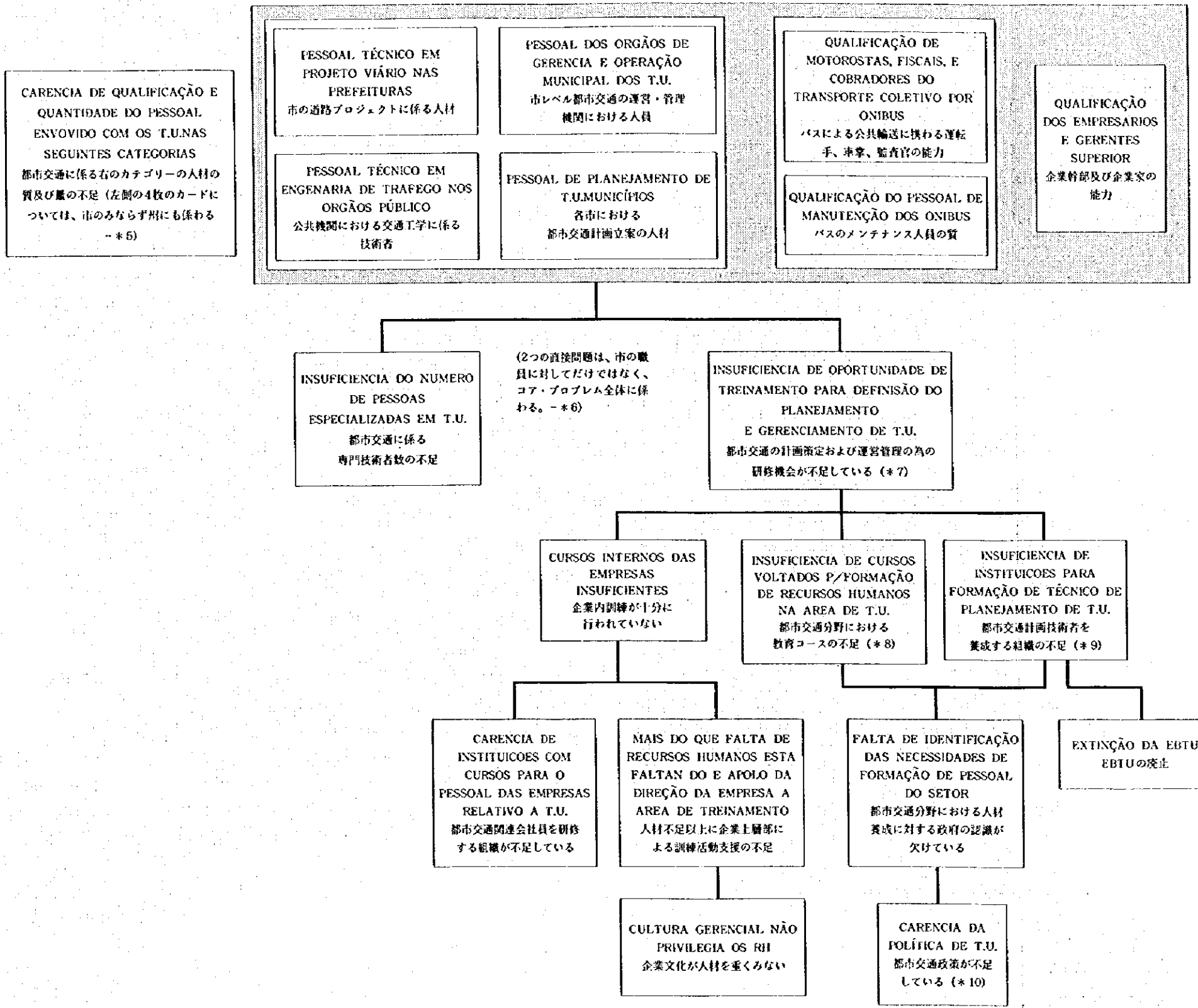








中心問題  
コア・プロブレム

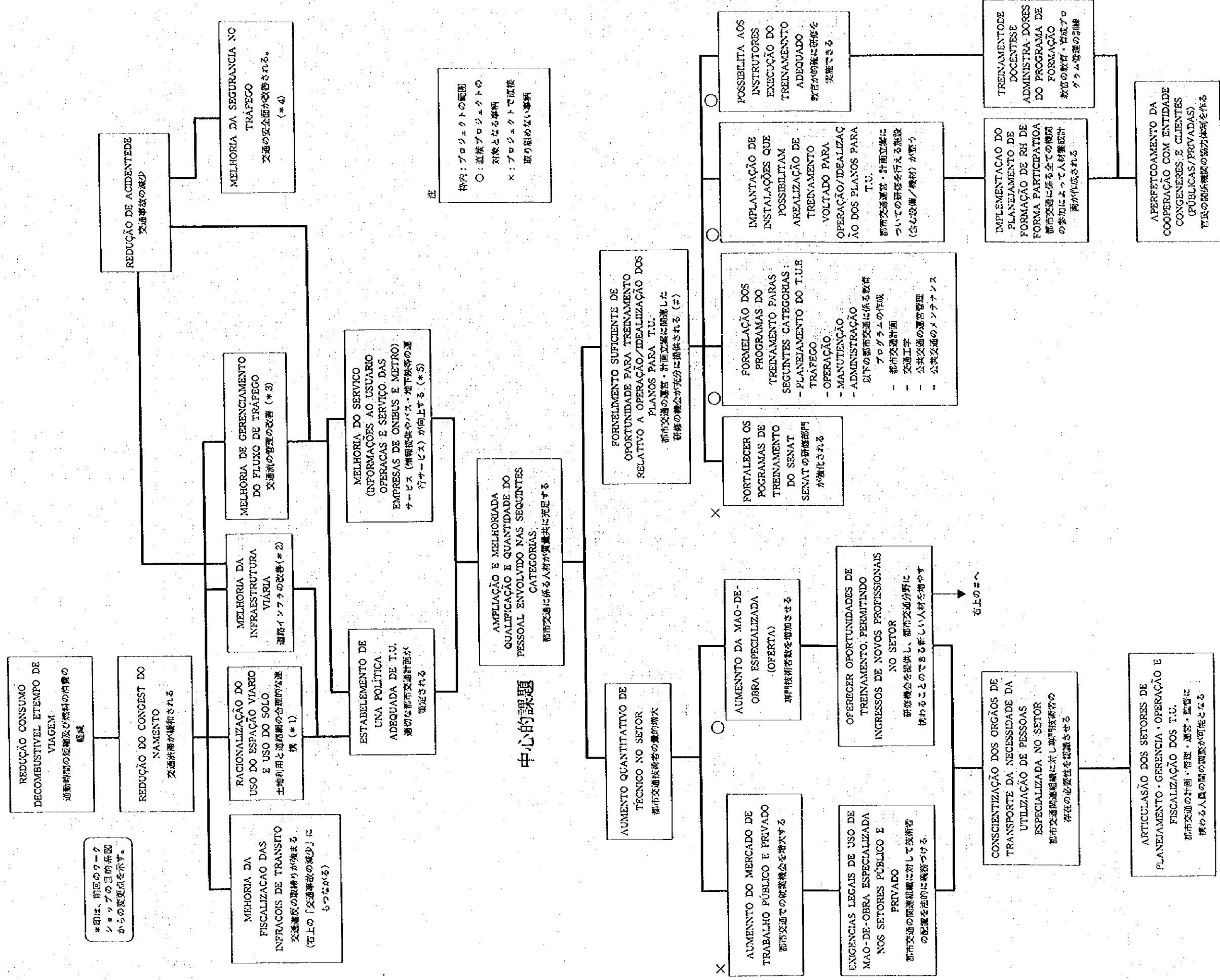


\*印は、前回のワークショップの問題系図からの変更点を示す。





付属資料2.(4) 目的系図











付属資料2.(5) 改訂PDM (暫定版)

ブラジル都市交通人材開発プロジェクト・改訂PDM (暫定版) 1/3

1. プロジェクト期間：(未定) 2. PDM作成方法：本PDMは1998年の2月3日・4日に開催されたPCMワークショップと引き続き行われた調査  
 師と交通人材開発センター(以下「CEFTRU」)の所員との協議に基づいて作成された。 3. 日本側実施機関：JICA 4. 相手国側実施機関：  
 CEFTRU 5. プロジェクト実施地：CEFTRU 作成日：1998年2月10日

プロジェクトの要約	指 標	指標の入手手段	外 部 条 件
<p>スーパーゴール</p> <p>ブラジルにおいて都市交通分野の計画・管理・運営・教育が適切に行われる。</p>	<p>××年程度(プロジェクト終了後5~10年)までに、CEFTRUが関与する相当数の市及び州において、効果的な交通開発プログラム(*)が策定され、交通に関連した教育が効果的に実施され、さらに、交通関連企業のサービスが改善される。</p>	<p>1. 各都市交通関連部署・学校に対するアンケート等による調査</p> <p>2. 交通開発プログラム(*)</p> <p>3. 利用者に対するアンケート等による調査</p>	<p>1. ブラジル国政府の地方都市交通に関する政策が現状から大幅に変化しない。</p> <p>2. 各市及び州の交通関連部署に対する予算・人員が維持される。</p>
<p>上位目標</p> <p>都市交通の計画・管理・運営・教育に携わる人材の能力が、CEFTRUにより実施される研修を通じて向上する。</p>	<p>××年程度(プロジェクト終了後3~5年)までに、</p> <p>1. 相当数の研修生(分野とレベルについても追って明示する必要あり)がCEFTRUにおいて研修を修了する。</p>	<p>CEFTRUの研修実績表</p>	<p>1. 研修修了者が市の交通関連部署や交通関連民間企業の然るべき部署に配属され、また、(教員の場合)学校に留まる。</p> <p>2. 交通関連企業に対しCEFTRU以外でも必要な研修/訓練が実施される。</p> <p>3. 各市や州及び交通関連民間企業において、研修修了者が身に付けた知識や技術を実践するための最低限のレベルのハードウェア(事務機器等)が整備されている。</p> <p>4. 憲法が各市にマスタープラン(*)の作成を義務づけ、また、法令が交通安全に関する教育を各校に義務づける。</p>
<p>プロジェクト目標</p> <p>都市交通の計画・管理・運営・教育に携わる人材の研修が効果的に行えるようにCEFTRUが整備される。</p>	<p>プロジェクト終了時(××年)までに、一定の研修コース(分野とレベルは「添付資料」に示されている)が開始される。</p>	<p>1. CEFTRUの研修実績表(最低初年度分)</p> <p>2. 研修修了者に対する研修効果に関するアンケート等による調査(事後的に実施するもの)</p>	<p>1. 政府機関やブラジリア大学からの財源を含む支援が維持される。</p> <p>2. C/PがCEFTRUにとどまる。</p>

\*注：「交通開発プログラム」は、「マスタープラン」の一部である。

<p>成果</p> <p>1. 都市交通分野の計画・管理・運営・教育の需要を満たす研修のプログラムが準備される。</p>	<p>1-1. 都市交通分野の計画・管理・運営・教育に資する研修カリキュラムが完成している。</p> <p>1-2. 適当な研修教材が整備されている。</p>	<p>1-1. 研修カリキュラム</p> <p>1-2. 研修教材及び教材リスト</p>	
<p>2. 都市交通分野の適格な指導員が確保される。</p>	<p>2. 添付資料に示された研修を行うのに十分な数の適格な研修講師が確保されている。</p>	<p>2-1. 研修講師のリスト及び勤務表</p> <p>2-2. 研修講師の経歴書</p>	
<p>3. 研修に必要な施設・機材がよく整っている。</p>	<p>3. 必要な施設・機材(*)が整備され、有効活用され、また、適切に維持管理されている。(*「機材」には、コンピュータ・プログラムのようなソフトウェアや技術資料も含まれる。)</p>	<p>3. 施設・機材リスト、機材の利用状況を示す表</p>	
<p>4. 組織・人事・財務の面においてプロジェクトが適切に運営される。</p>	<p>4-1. 組織・人事面では、十分な人員が配置されて活動し、財務面では当初予算内での健全な運営管理がなされている。</p> <p>4-2. 本PDMや各年度毎のPO(活動計画)に基づき、適切なモニタリングが実施されている。</p>	<p>4-1. CEFRUの組織図、C/P配置表、四半期報告</p> <p>4-2. 合同調整委員会議事録、モニタリング調査及びその根拠となる基礎的データ</p>	

<p>活動（特に日本側もしくは、ブラジル側主体で取り組まれる事柄には、それぞれ【日】・【ブ】と付した。その他の項目は、共同作業とする。）</p> <p>1-1. 都市交通関連機関から研修ニーズに関する詳細な情報を収集する【ブ】</p> <p>1-2. 各都市の都市交通関連部署や都市交通関連民間企業から研修ニーズに関する情報を収集する【ブ】</p> <p>1-3. 都市交通の研修関連機関の間で、研修の役割分担に関わる取り決めや情報交換を行い、さらに、CEFTRUの支援体制を整え、機能させる【ブ】</p> <p>1-4. (分野によっては日本人専門家の指導の下、) 研修カリキュラムを作成する</p> <p>1-5. (分野によっては日本人専門家の指導の下) テキストを作成する</p> <p>1-6. 研修の運営方法（募集形態や費用負担等）を決定する【ブ】</p> <p>1-7. 研修生を誘致する【ブ】</p> <p>1-8. CEFTRUにて研修を実施する【ブ】</p>	<p>投入</p> <p>1. 日本側：</p> <p>1) 専門家の派遣</p> <p>2) C/Pの日本研修</p> <p>3) 機材供与</p> <p>2. ブラジル側：</p> <p>1) CEFTRUの建設用地の提供</p> <p>2) CEFTRUの建物の建設</p> <p>3) 機材提供</p> <p>4) C/Pの配置</p> <p>5) プロジェクトの運営に必要な事務スタッフの配置</p> <p>6) プロジェクトの運営に必要な諸経費の負担</p>	<p>2-1. 必要に応じて、CEFTRUの外部から講師を招聘する【ブ】</p> <p>2-2. 分野によっては、日本人専門家が、教授法、機材の使用及び維持管理方法、及び研修生の評価方法を指導し、さらに、日本における事例の紹介をブラジル側C/Pに対して行う【日】</p> <p>2-3. 都市交通の計画に関する技術開発のための研究を行う</p> <p>2-4. 必要に応じて、C/Pの日本研修を行う</p> <p>3-1. 必要な施設を確保する【ブ】</p> <p>3-2. 必要な機材を調達する</p> <p>3-3. 施設・機材の維持管理を実施する【ブ】</p> <p>4-1. プロジェクトの運営管理体制を確立する</p> <p>4-2. プロジェクトの人事・総務・財務管理を実施する</p> <p>4-3. モニタリングに必要な各種調査/サーベイを実施する</p> <p>4-4. プロジェクトのモニタリングを行う</p>	<p>前提条件</p> <p>ブラジル側によりCEFTRUの用地提供と施設建設及び運営に必要な予算措置の面で必要な支援がなされる。</p>
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添付資料：CEFTRUで実施される予定の研修分野とレベル（暫定版）

×印は研修実施予定の組み合わせを示す。特に、以下の項目番号のうち（ ）番（未定）の研修が、本プロジェクト期間の終了時までには開始される予定である。

分野(*1)	研修生のレベル (コース)		市 及 び 州		交通関連企業（公私共）		教育者(*3)
	マネジャー(*2)	スタッフ(*2)	マネジャー(*2)	スタッフ(*2)	マネジャー(*2)	スタッフ(*2)	
1. 都市交通計画	×			×			
2. 交通に関連した環境の保全と管理	×			×			
3. 道路計画	×			×			
4. 交通运营管理（信号制御等）	×			×			
5. 交通安全	×			×			×
6. 公共輸送管理	×			×	×	×	
7. 都市貨物管理	×			×	×	×	
8. 都市部における水上交通システム	×			×			

註：

\*1. 実際の研修にあたっては、これらの分野はさらに細かな項目に分割される。なお、ミニッツにも示されているように、日本側の協力対象予定分野は、これらの8項目中の1、2、3、6、7である。

\*2. 「マネジャー」は、市の公共交通担当部局（課）の長のような政策決定者、「スタッフ」は、マネジャーの下で勤務し、情報収集・野

外調査・分析・資料作成などの面でマネジャーを補佐する者を示す。

\*3. 「教育者」は、小中学校の教員及び自動車教習所の講師を意味する。

付属資料2.(6) アンケート(票)

今回の予備調査において、PCMという手法に基づく参加型ワークショップを開催しましたが、今後の参考のために、以下の設問にお答え下さい。

1. PCM手法の理論について

(1) PCM手法の理解については、いかがでしたか？ (1つお選び下さい。)

- a. よくわかった。
- b. ある程度わかった。
- c. よくわからなかった。

(2) ((1)でcと答えた方へ) その理由は何ですか？ 具体的にお書き下さい。

(3) PCM手法の有用性については、どうお考えですか？ (1つお選び下さい。)

- a. 非常に有用である。
- b. 有用である。
- c. あまり有用とは考えない。

(4) (3)の回答に対し、(いずれの場合でも) その理由について、具体的にお書き下さい。

2. PCM手法の実践について

(1) PCM手法の利用(ワークショップの開催など)は、今回の調査の目的である本プロジェクトの妥当性・内容の検証に役立ったと思いますか？ (1つお選び下さい。)

- a. 非常に役に立ったと思う。
- b. 役に立ったと思う。
- c. あまり役に立ったとは思えない。

(2) (1)の回答に対し、(いずれの場合でも) その理由について、具体的にお書き下さい。

(3) 開催されたワークショップは、実際に“参加型”になっていましたか？

(4) 今後、同種の予備調査にPCM手法を利用する場合に、留意すべき点あるいは改良すべき点がありましたら、お書き下さい。(何点でも可)

(5) 今後、本プロジェクトの実施・モニタリング・評価にPCM手法を適用する場合に留意すべき点あるいは改良すべき点がありましたら、お書き下さい。(何点でも可)

\* ご協力ありがとうございました \*











JICA