添　付　資　料

添　付　資　料

1. 調査団員氏名
2. 調査日程
3. 相手国関係者リスト
4. Minutes of Discussions (2001.5.23, 2001.10.9)
5. PROPENAS の「開発プログラム政策マトリックス」における高等教育マトリックス
6. 学科別 EEPIS の D4 コースの取得単位計画数
7. EEPIS の D4 コースカリキュラム
8. ポリテクニック情報工学科開発事業・マトリックス（抜粋）
9. インドネシア国家歳出入実績 1992/93～1997/98
10. 1996～1999 年の産業別国内総生産 GDP 成長率の推移
11. 「イ」国側負担工事分及び同予算資料
12. LAN 仕様書
13. 要請機材リスト
14. 当該国の社会経済状況
15. 収集資料一覧

インドネシア共和国
電気系ポリテクニック教育センター教員訓練計画基本設計調査団　団員名簿
(2001 年 5 月 17 日～6 月 15 日)

Member List of Basic Design Study
on the Project for Expansion of Electronic Engineering Polytechnic Institute of Surabaya
in the Republic of Indonesia

1.	**総括／多田　知幸** Mr. Tomoyuki TADA Team Leader	**国際協力事業団社会開発協力部　社会開発協力第 1 課** Deputy Director Social Development Cooperation Dep. Japan International Cooperation Agency (JICA)
2.	**技術参与／杉野　暢彦** Dr. Nobuhiko SUGINO Technical Advisor	**東京工業大学大学院総合理工学研究科** **電子機能システム専攻　助教授** Associate Professor, Department of Advanced Applied Electronics, Interdisciplinary Graduate School of Science and Engineering, Tokyo Institute of Technology
3.	**計画管理／中山　嘉人** Mr. Yoshihito NAKAYAMA Project Coordinator	**国際協力事業団無償資金協力部　業務第 1 課** First Project Management Div. Grant Aid Management Dep. Japan International Cooperation Agency (JICA)
4.	**業務主任／建築計画** **波多野　哲次** Mr. Tetsuji HATANO Project Manager/Architectural Planner	**(株)パシフィック コンサルタンツ インターナショナル** PACIFIC CONSULTANTS INTERNATIONAL
5.	**高等技術教育計画** **高井　壮一** Mr. Soichi TAKAI Higher Technical Education Specialist	**インテムコンサルティング(株)** INTEM CONSULTING, INC.
6.	**施設／設備計画** **鎌形　亜土** Mr. Ado KAMAGATA Facilities and Utilities Specialist	**(株)パシフィック コンサルタンツ インターナショナル** PACIFIC CONSULTANTS INTERNATIONAL
7.	**機材計画 I** **亀田　篤** Mr. Atsushi KAMEDA Equipment Planner I	**インテムコンサルティング(株)** INTEM CONSULTING, INC.

8. **機材計画Ⅱ**
土井　保道
Mr. Yasumichi DOI
Equipment Planner Ⅱ
インテムコンサルティング(株)
INTEM CONSULTING, INC.

9. **積算／施工調達計画**
加藤　宏承
Mr. Hirotsugu KATO
Cost Estimator/Procurement Planner
(株)パシフィック コンサルタンツ インターナショナル
PACIFIC CONSULTANTS INTERNATIONAL

10. **業務調整／建築設計**
小池　竜雄
Mr. Tatsuo KOIKE
Coordinator/Architect
(株)パシフィック コンサルタンツ インターナショナル
PACIFIC CONSULTANTS INTERNATIONAL

インドネシア共和国
電気系ポリテクニック教育センター教員訓練計画基本設計概要説明調査団　団員名簿
(2001 年 10 月 3 日～12 日)

Member List of Draft Report Explanation Study
on the Project for Expansion of Electronic Engineering Polytechnic Institute of Surabaya
in the Republic of Indonesia

1.	**総括／乾 英二** Mr. Eiji INUI Team Leader	**国際協力事業団 社会開発協力部　第 1 課課長** Director Social Development Cooperation Dep. Japan International Cooperation Agency (JICA)
2.	**技術参与／杉野　暢彦** Dr. Nobuhiko SUGINO Technical Advisor	**東京工業大学大学院総合理工学研究科** **電子機能システム専攻　助教授** Associate Professor, Department of Advanced Applied Electronics, Interdisciplinary Graduate School of Science and Engineering, Tokyo Institute of Technology
3.	**計画管理／中山　嘉人** Mr. Yoshihito NAKAYAMA Project Coordinator	**国際協力事業団無償資金協力部　業務第 1 課** First Project Management Div. Grant Aid Management Dep. Japan International Cooperation Agency (JICA)
4.	**業務主任／建築計画** **波多野　哲次** Mr. Tetsuji HATANO Project Manager/Architectural Planner	**(株)パシフィック コンサルタンツ インターナショナル** PACIFIC CONSULTANTS INTERNATIONAL
5.	**施設／設備計画** **鎌形　亜土** Mr. Ado KAMAGATA Facilities and Utilities Specialist	**(株)パシフィック コンサルタンツ インターナショナル** PACIFIC CONSULTANTS INTERNATIONAL
6.	**機材計画 I** **亀田　篤** Mr. Atsushi KAMEDA Equipment Planner I	**インテムコンサルティング(株)** INTEM CONSULTING, INC.
7.	**積算／施工調達計画** **加藤　宏承** Mr. Hirotsugu KATO Cost Estimator/Procurement Planner	**(株)パシフィック コンサルタンツ インターナショナル** PACIFIC CONSULTANTS INTERNATIONAL
8.	**業務調整／建築設計** **小池　竜雄** Mr. Tatsuo KOIKE Coordinator/Architect	**(株)パシフィック コンサルタンツ インターナショナル** PACIFIC CONSULTANTS INTERNATIONAL

2. 調査日程

基本設計調査 (17 / May. / 2001 ～ 15/ Jun. / 2001)

No	月 日	行 程	業 務 概 要
1.	May.17 (Thu)	NRT 11:00→16:30 JKT (GA881) (A,B) NRT 10:50→16:05 JKT (JL725) (C,D,F,G,I,J)	団内打合せ
2.	May.18 (Fri)	(A,B,C,D,F,G,I,J) JKT 18:00→19:20 SUB (All Members)	8:50~10:55 DGHE 表敬打合せ 11:30~12:20 日本大使館 表敬,打合せ 15:15~15:30 JICA 事務所 表敬,打合せ
3.	May.19 (Sat)	(All Members)	9:30~12:30 EEPIS キックオフミーティング 13:30~18:30 EEPIS 打合せ
4.	May.20 (Sun)	(All Members)	10:30~12:10 EEPIS 打合せ 13:00~14:30 EEPIS との昼食会 団内打合せ、資料整理
5.	May.21 (Mon)	(All Members)	9:00~12:00 EEPIS 打合せ 13:40~14:30 ITS. 表敬訪問 15:10~16:00 EEPIS 打合せ
6.	May.22 (Tue)	SUB 10:00→11:20 JKT (A,B,C,D,E,I) (F,G,H,J)	15:40~17:30 団内打合せ 18:15~19:00 JICA ｲﾝﾄﾞﾈｼｱ事務所 打合せ 9:40~12:10 EEPIS 打合せ 14:30~16:10 EEPIS 打合せ
7.	May.23 (Wed)	(A,B,C,D,E,I) (F,G,H,J)	9:15~10:00 DGHE 打合せ 14:30~15:00 ミニッツ調印 15:45~16:00 日本大使館 報告 21:00~21:40 団内打合せ 9:00~19:00 EEPIS 打合せ
8.	May.24 (Thu)	JKT 22:50→8:15 NRT (GA880) JKT 23:45→8:35 NRT (JL726) (A,B,C) (D,E,I) (F,G,H,J)	9:30~12:30 機材調達事情調査 団内打合せ、資料整理
9.	May.25 (Fri)	(D,E,H) (F,G,H,J)	9:00~11:40 DGHE 打合せ 13:00~ 類似案件調査 9:00~19:00 EEPIS 打合せ
10.	May.26 (Sat)	JKT 17:00→18:20 SUB (D,E,H) (F,G,H,J)	9:30~ 類似案件調査 9:30~17:30 EEPIS 打合せ 20:00~21:20 団内打合せ
11.	May.27 (Sun)	(D,F,G,H,I,J) (E)	団内打合せ、資料整理 資料整理
12.	May.28 (Mon)	(D,F,G,H,I,J) JKT 14:00→15:20 SUB (E)	9:00~18:30 EEPIS 打合せ 9:00~12:00 DGHE 調査機関との打合せ
13.	May.29 (Tue)	(D,E,F,G,H,I,J)	9:00~19:00 EEPIS 打合せ
14.	May.30 (Wed)	(D,E,F,G,H,I,J)	13:30~18:30 ホテル会議室にて EEPIS と打合せ (情勢不安定の為)
15.	May.31 (Thu)	(D,E,F,G,H,I,J)	10:15~18:00 ホテル会議室にて EEPIS と打合せ (情勢不安定の為)

No	月　日	行　程	業　務　概　要
16.	Jun.1 (Fri)	(D,E,F,G,H,I,J) SUB 16:00→17:20 JKT→BDG (D,F,I,J)	9:00~12:00　ITS **視察、打合せ** 13:30~14:00　EEPIS **打合せ**
17.	Jun.2 (Sat)	(D,F,I,J) (E,G,H)	9:00~12:00　**ポリテク** POLBAN **視察、打合せ** 12:30~14:00　**ポリテク** POLMAN **視察** 9:00~19:00　EEPIS **打合せ**
18.	Jun.3 (Sun)	(E,G,H) (D,F,I,J)	**団内打合せ、資料整理**
19.	Jun.4 (Mon)	(E,G,H)　(D,F,I,J)	9:00~ **類似案件調査**
20.	Jun.5 (Tue)	BDG 6:30→7:40 SUB (D,E,F,G,H,I,J)	 9:00~18:30　EEPIS **打合せ**
21.	Jun.6 (Wed)	(D,E,F,G,H,I,J) SUB 18:00→19:20JKT (E)	10:00~12:15　ITS **視察** 13:30~18:30　EEPIS **打合せ** 9:00~12:00　EEPIS **教育計画関連協議**
22.	Jun.7 (Thu)	(E,F,G,H,I,J) SUB 20:00→21:20JKT (E)	9:00~　DGHE **打合せ** 14:30~　JBIC **打合せ(上田氏)** 17:00~　DGHE **打合せ**(Dr. Satryo) 9:00~18:30　EEPIS **打合せ**
23.	Jun.8 (Fri)	(D,F,G,H,I,J) (E)	9:00~18:30　EEPIS **打合せ** 9:00~　**関連機関との打合せ**
24.	Jun.9 (Sat)	(D,F,G,H,I,J) (E)	9:00~18:30　EEPIS **打合せ** 9:00~　**関連機関との打合せ**
25.	Jun.10 (Sun)	SUB 19:00→20:20JKT (D) JKT 23:45→8:35 NRT (JL726) (E) (F,G,H,I,J)	**団内打合せ、資料整理** **機材調達事情調査**
26.	Jun.11 (Mon)	JKT 23:45→8:35 NRT (JL726) (D) (F,G,H,I,J)	 9:00~19:00　DGHE、**大使館**、JICA ｼﾞｬｶﾙﾀへの報告 9:00~19:00　EEPIS **打合せ**
27	Jun.12 (Mon)	(F,G,H,I,J)	9:00~19:00　EEPIS **打合せ**
28	Jun.13 (Mon)	SUB 18:00→19:20JKT (F,G,H,I,J)	9:00~14:00　EEPIS **打合せ**
29	Jun.14 (Mon)	JKT 23:45→8:35 NRT (JL726) (F,G,H,I,J)	10:00~10:30　JICA ｼﾞｬｶﾙﾀへの報告 11:00~　**資料整理**
30	Jun.15 (Mon)	(F,G,H,I,J)	8:35 **帰国**

注）
(JICA)　　A: **多田団長**,　C:**中山氏**
(技術参与)　　B: **杉野氏**
(ｺﾝｻﾙﾀﾝﾄ)　　D: **波多野**,　E:**高井**,　F:**鎌形**,　G:**亀田**,　H:**土井**,　I:**加藤**,　J:**小池**

基本設計概要説明調査 (3 / Oct. / 2001 ～ 12 / Oct. / 2001)

No	月　日	行　程	業　務　概　要
1.	Oct.3 (Wed)	NRT 10:25→16:05 JKT (JL725) (B,C,D,E,F,G,H)	18:30~19:50　団内打合せ
2.	Oct.4 (Thu)	(B,C,D,E,F,G,H) (C,D,G) JKT→SUB (B,E,F,H)	9:15~10:00　表敬訪問･外務省 10:10~10:15　表敬訪問･JICA ｼﾞｬｶﾙﾀ事務所 13:10~14:30　表敬訪問･DGHE 15:00~15:20　表敬訪問･財務省 18:00~19:00　団内ミーティング
3.	Oct.5 (Fri)	(C,D,G) (B,E,F,H) JKT→SUB (C,D,G)	8:30~ 9:45　DGHE と打合せ 8:30~18:00　EEPIS と打合せ (Draft Report 説明)
4.	Oct.6 (Sat)	(B,C,D,E,F,G,H) (C,D,G) (B,C,D,E,F,G,H)	9:00~18:00　EEPIS と打合せ　(Draft Report 説明) 11:30~12:00　表敬訪問･ITS 19:00~20:00　団内ミーティング
5.	Oct.7 (Sun)	NRT 10:25→16:05 JKT (JL725) (A) (B,C,D,E,F,G,H,I,J) SUB→JKT (B,C,D,G,)	 8:00~18:00　EEPIS と打合せ 20:00~21:00　団内打合せ
6.	Oct.8 (Mon)	(A,B,C,D,G) (E,F,H)	11:15~12:30　DGHE とミニッツ関連打合せ 8:30~19:00　EEPIS と打合せ、サイト追加調査
7.	Oct.9 (Tue)	(A,B,C,D,G) (A,B,C,D,G) JKT23:20→ (JL726)　(B,C) JKT→SUB　(D,G) (E,F,H)	10:00~11:00　ミニッツサイン 調査結果報告/日本大使館･JICA ジャカルタ事務所 8:30~18:30　EEPIS と打合せ･追加調査
8.	Oct.10 (Wed)	→8:35NRT(JL726)　(B,C) (D,E,F,G,H)	 8:30~18:30　EEPIS と打合せ・追加調査
9.	Oct.11 (Thu)	(A,D,E,F,G,H) SUB→JKT JKT23:20→ (JL726)　(D,E,F,G)	8:30~14:30　EEPIS と最終打合せ・最終調査
10.	Oct.12 (Fri)	→8:35NRT(JL726) (D,E,F,G)	

注）
(JICA)　A: 乾団長,　C:中山氏
(技術参与)　B:杉野氏
(ｺﾝｻﾙﾀﾝﾄ)　D: 波多野,　E:鎌形,　F:亀田,　G:加藤,　H:小池

〔1〕 基本設計調査（2001 年 5 月 17 日～6 月 15 日）

Embassy of Japan：日本大使館

長谷川　和弘	：一等書記官

Japan International Cooperation Agency Indonesia Office：JICA インドネシア事務所

庵原　宏義	：所長
稲葉　誠	：次長
木村 卓三郎	：所員

Directorate General of Higher Education, Ministry of National Education：
国民教育省高等教育総局（DGHE)

Dr. Satryo Soemantri	：高等教育総局長
Mr. Suprodjo Pusposutardjo	：高等教育総局学術部長
Ir. Oetomo Djajanegara	：国民教育省高等教育国家単位認定委員会専門家

Electronic Engineering Polytechnic Institute of Surabaya：
スラバヤ電子工学ポリテクニック(EEPIS)

Dr. Mhozmmad Nuh	：校長
Mr. Era.P	：副校長（学術担当）
Ir. Nonot Harsono, MT	：副校長 (管理担当)
Mr. Gigih P	：副校長（学生担当）
Mr. Sigit Wasista	：電気工学科長
Ms. Prima K.	：通信工学科長
Mr. Titon Dutono	：情報工学科長
Mr. Sangar	：電気工学科
Mr. Ayub	：電気工学科
Mr. A. Nasir	：電気工学科
Mr. M.Syafrudin	：電子工学科
Mr. Alrijadjis	：電子工学科
Ms. Arna Fariza	：情報工学科
Mr. Ferry Astika S	：情報工学科

SPEET PROJECT-Strengthening of Polytechnic Education in Electric-related　Technology
（JICA）:**電気系ポリテクニック教員養成計画プロジェクト**

牧野　修	**：**JICA **チーフアドバイザー**
武曽　徹	**：**JICA **専門家**
佐藤　和親	**：**JICA **短期専門家**
井上　高司	**：業務調整**

Institut Teknologi Sepuluh Nopember**：スラバヤ工科大学（ITS)**

Prof. Soegiono	**：学長**
Dr. Daniel Mohammad Rosyid, Ph.D	**：副学長**
Ir. Sugeng Gunadi, MLA	**：ランドスケープ建築主任**
青木　滋麿	**：**JICA **短期専門家（情報技術）**

Politeknik Negeri Bandung：(POLBAN)

Dr Ir. Bambang Budiono, M.E.：(Director, POLBAN, Vice Rector, Polytechnic Education Development Center)

Politeknik Manufaktur Bandung：(POLMAN)

Ir. Mohammad Nurdin	：(Head of Industrial Service Center)

〔2〕**基本設計概要説明**（2001 年 10 月 3 日～10 月 12 日）

Embassy of Japan：**日本大使館**

長谷川　和弘	**：一等書記官**

Japan International Cooperation Agency Indonesia Office：**JICA インドネシア事務所**

神田　道男	**：所長**
大竹 祐二	**：次長**
木村 卓三郎	**：所員**

Directorate General of Higher Education, Ministry of National Education：
国民教育省高等教育総局（DGHE)

Dr. Satryo Soemantri	**：高等教育総局長**
Mr. Suprodjo Pusposutardjo	**：高等教育総局学術部長**
Ir. Oetomo Djajanegara	**：国民教育省高等教育国家単位認定委員会専門家**
黒田 則博	**：JICA 専門家**

Electronic Engineering Polytechnic Institute of Surabaya：
スラバヤ電子工学ポリテクニック(EEPIS)

Dr. Mhozmmad Nuh	**：校長**
Mr. Era.P	**：副校長（学術担当）**
Mr. GigiH P	**：副校長（学生担当）**
Mr. Sigit Wasista	**：電気工学科長**
Ms. Prima K.	**：通信工学科長**
Mr. Titon Dutono	**：情報工学科長**
Mr. Sangar	**：電気工学科**
Mr. Ayub	**：電気工学科**
Mr. A. Nasir	**：電気工学科**
Mr. M.Syafrudin	**：電子工学科**
Mr. Alrijadjis	**：電子工学科**
Ms. Arna Fariza	**：情報工学科**
Mr. Ferry Astika S	**：情報工学科**

SPEET PROJECT-Strengthening of Polytechnic Education in Electric-related　Technology（JICA）:**電気系ポリテクニック教員養成計画プロジェクト**

牧野　修	**：**JICA **チーフアドバイザー**
武曽　徹	**：**JICA **専門家**
佐藤　和親	**：**JICA **短期専門家**
井上　高司	**：業務調整**

Institut Teknologi Sepuluh Nopember**：スラバヤ工科大学（ITS）**

Prof. Soegiono	**：学長**
Dr. Daniel Mohammad Rosyid, Ph.D	**：副学長**
Ir. Sugeng Gunadi, MLA	**：ランドスケープ建築主任**

Minutes of Discussions
on
the Basic Design Study on
the Project for Expansion of Electronic Engineering Polytechnic Institute of Surabaya
in the Republic of Indonesia

In response to a request from the Government of the Republic of Indonesia (hereinafter referred to as "Indonesia"), the Government of Japan has decided to conduct a Basic Design Study on the Project for Expansion of Electronic Engineering Polytechnic Institute of Surabaya in the Republic of Indonesia (hereinafter referred to as "the Project"), and entrusted the study to Japan International Cooperation Agency (JICA).

JICA sent to Indonesia the Basic Design Study Team (hereafter referred to as "the Team"), which is headed by Mr. Tomoyuki Tada, Deputy Director, First Management Division, Social Development Cooperation Department, JICA, with a field survey period between the 17th of May and the 14th of June, 2001.

The Team held a series of discussions on the Project with the officials concerned with the Ministry of National Education (MONE) and Electronic Engineering Polytechnic Institute of Surabaya (EEPIS). The discussions were followed up with a field survey of the study area.

In the course of discussions and field survey, both parties confirmed the main items described on the attached sheets.

The Team will proceed to further work and prepare the Basic Design Study Report.

Jakarta, 23rd May, 2001

Mr. Tomoyuki Tada
Leader,
Basic Design Study Team,
Japan International Cooperation Agency
Japan

Prof. Dr. Ir. Satryo Soemantri Brodjonegoro
Director General,
Directorate General of Higher Education
Ministry of National Education
The Republic of Indonesia

with the Witness of

Dr. Mohammad Nuh
Director,
Electronic Engineering Polytechnic
Institute of Surabaya
The Republic of Indonesia

ATTACHMENT

1. Objective of the Project

The objective of the Project is to contribute EEPIS with the ability to educate professional skilled polytechnic teachers in electronic-related field and they will educate skilled technicians needed for industrial development. This project is also expected to support the JICA project of technical cooperation "Strengthening of Polytechnic Education in Electric-related Technology (SPEET)".

2. Project Site

The Project site is located at EEPIS in Surabaya, East Java, the Republic of Indonesia as shown in Annex-1.

3. Responsible and Implementing Organization

3-1. The responsible organization for the Project is the Directorate General of Higher Education (herein after referred as DGHE), MONE.

3-2. The implementing organization of the Project is EEPIS under the supervision of DGHE.

4.Items requested by the Republic of Indonesia

Regarding the Department of Information Technology (IT), the Indonesian side presented the practical plan for the establishment of D4 course (polytechnic teacher training course) and requested to replace the initial request for expansion of facilities and procurement of equipment which is related to D3 level (polytechnic technician training course) with D4 level.

The Team admitted the capability or potentiality of the implementing organization, EEPIS, and recognized the relevance to support D4 level of IT course rather than D3 level in this Project.

After discussions with the Team, the items described below are finally requested by the Indonesian side.

JICA will assess the appropriateness of the request and will recommend to the Government of Japan for the approval. Final components for the implementation of the Project will be decided based on the further analysis in Japan.

4-1. The project supports D4 courses in the following departments;

1) Electronics Engineering,

2) Electrical Engineering,

3) Telecommunication Engineering, and

4) Information Technology

4-2. The construction for the expansion of EEPIS facilities are as shown in Annex-2.

4-3. The procurement of equipment for EEPIS activities.

The criteria for the selection of the equipment are shown in Annex-3.

5. Japan's Grant Aid Scheme

5-1. The Indonesian side understood the Japan's Grant Aid Scheme explained by the Team, as described in Annex-4.

5-2. The Indonesian side will take the necessary measures, described in Annex-5, for the smooth implementation of the Project on condition that the Japan's grant aid is extended to the Project.

6. Schedule of the Study

6-1. The Consultant Team will proceed to further studies in Indonesia until the 14th of June 2001.

6-2. Based on the result of the field survey and analysis, JICA will prepare the Draft Report in English and dispatch a team in order to explain the outline of the Basic Design approximately around early September 2001.

6-3. In the event of the Draft Report being acceptable in principle by the Government of Indonesia, JICA will complete the Final Report and forward it to the Government of Indonesia approximately by the end of November 2001.

7.Other Relevant Items

7-1.The Indonesian side explained that EEPIS is an integrated part of Institut Teknologi Sepuluh Nopember (ITS), therefore, the policy and authority of its development are under the ITS.

However, its operational management and budget are autonomous.

7-2. The Indonesian side explained the Japan's Grant Aid of this Project will be allocated fully to the expansion of EEPIS.

7-3.The Indonesian side shall complete the replacement of existing facilities, clearance and leveling of the land in the proposed site for construction, before the commencement of the construction of the facilities by the Project.

7-4. The Indonesian side shall ensure enough budget and personnel for the smooth operation and maintenance of the facilities and equipment after the completion of the Project. The Indonesian side confirmed that the necessary staff and budget would be arranged by

January 2002, the beginning of the fiscal year of Indonesia.

7-5. Both sides agreed the importance of the administrative support for the appropriate allocation of Polytechnic teachers who would be going to graduate from D4 course of EEPIS and the Indonesian side promised to undertake necessary measures from the policy aspect.

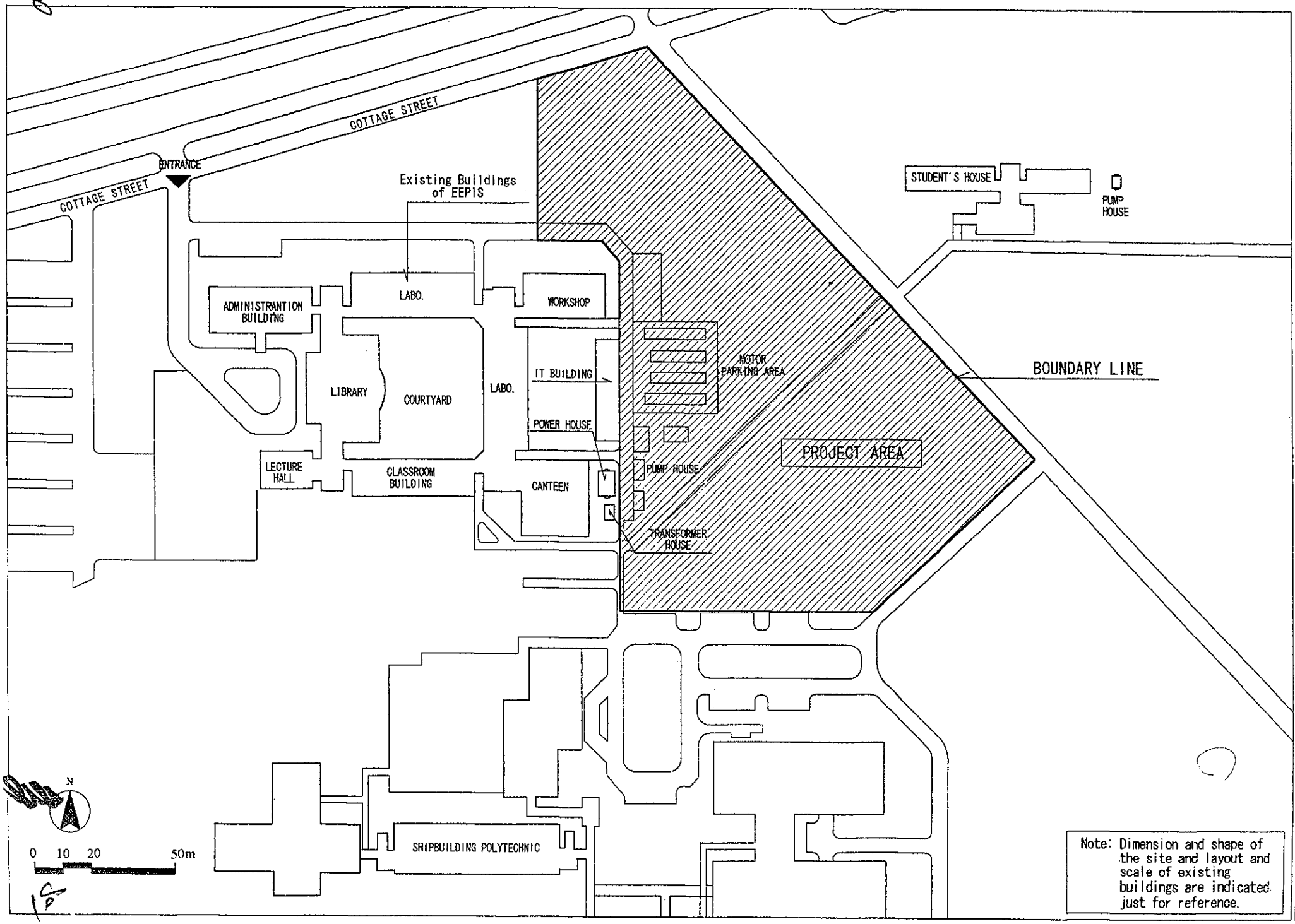
7-6. The Indonesian side agreed that the Questionnaire, which the Team handed over is replied with sufficient information for the analysis of this Basic Design Study by the 7th of June 2001.

7-7. Both sides agreed to change the name of the Project from;

"The Project for Teacher Training for Electronic Engineering Polytechnic Education Center in the Republic of Indonesia" to

"The Project for Expansion of Electronic Engineering Polytechnic Institute of Surabaya in the Republic of Indonesia"

for declaring its feature more clearly.



Note: Dimension and shape of the site and layout and scale of existing buildings are indicated just for reference.

ANNEX-1

ANNEX-2

Items Requested by EEPIS (Facilities)

Priority	Facilities
1.	**Laboratories** — Electromechanical Workshop — Electric Circuits and Measurements — Factory Automation — Power System and Electric Machine — Electronic Fundamental — Digital Electronics — Computer and Interface — Automatic Control — Intelligent Control and Robotics — Radio Wave Propagation — Optical Communications and Electro-Physics — Digital Communications — Computer Programming I — Computer Programming II — Computer Programming III — Advance Programming — Computer Aided Design and Simulation — Computer Network
2.	**Classrooms**
3.	**Library**
4.	**Administration Office**
5.	**Canteen**

Note 1. Both sides confirm that each facility mentioned above includes the related common spaces (corridors, storage, machine room, etc.) and the necessary utilities (electricity, water supply, sewage, telecommunication, campus LAN, etc.). Details of such common spaces and utilities will be discussed furthermore between the both sides.

2. Size and capacity of the facilities will be studied furthermore in the process of the Basic Design.

ANNEX-3

Criteria for Selection of Equipment

The following criteria shall be considered for selection of equipment

1. Basic criteria for equipment planning
   1) Planned equipment shall be limited for the purposes of experiment and educational support for the courses targeted in this project.
   2) Necessity of experimental equipment must be justified by curriculum, syllabus and items/methods of experiment of each course.
   3) Equipment required an excessively high operational cost should be excluded.
   4) Equipment required an excessively advanced operational technique should be excluded.
   5) Equipment in extremely low frequency of usage should be excluded.
   6) Equipment required an excessively expensive installation cost should be excluded.
   7) Equipment mainly for personal use should be excluded.
   8) Equipment for office use should be excluded.
   9) Fixtures for buildings/facilities should be excluded.
   10) Equipment for only research purpose should be excluded.
   11) Equipment, which has no local maintenance service systems, should be excluded.
   12) Equipment which could be purchased with self-effort , should be excluded

2. Equipment specifications
   1) Equipment specification must meet the technical level of staff of EEPIS for operation and maintenance.
   2) Equipment specification basically must meet the level of local agencies for maintenance services.
   3) Equipment specification must meet the same level as other similar institutes.

3. Equipment quantity
   1) Equipment quantity under the project should not duplicate with newly procured equipment under the technical cooperation.
   2) Equipment of same purpose of usage among the courses/experiments should be planned as common use.
   3) Equipment quantity should be minimized in necessity for each experiment.
   4) Equipment quantity should be minimized in necessity of student number of each course.

The Japan's Grant Aid Scheme

1. Japan's Grant Aid System

(1) Grant Aid Procedure

1) Japan's Grant Aid Program is executed through the following procedures.

Application (Request made by a recipient country)
Study (Basic Design Study conducted by JICA)
Appraisal & Approval
(Appraisal by the Government of Japan and Approval by Cabinet)
Determination of Implementation
(The Notes exchanged between the Governments of Japan and the recipient country)

2) Firstly, the application or request for a Grant Aid project submitted by a recipient country is examined by the Government of Japan (Ministry of Foreign Affairs) to determine whether or not it is eligible for Grant Aid. If the request is deemed appropriate, the Government of Japan assigns JICA to conduct a study on the request. If necessary, JICA send a Preliminary Study Mission to the recipient country to confirm the contents of the request.

Secondly, JICA conducts the study (Basic Design Study), using Japanese consulting firms.

Thirdly, the Government of Japan appraises the project to see whether or not it is suitable for Japan's Grant Aid Programme, based on the Basic Design Study report prepared by JICA, and the results are then submitted to the Cabinet for approval.

Fourthly, the project, once approved by the Cabinet, becomes official with the Exchange of Notes signed by the Governments of Japan and the recipient country.

Finally, for the implementation of the project, JICA assists the recipient country in such matters as preparing tenders, contracts and so on.

(2) Basic Design Study

1) Contents of the Study

The aim of the Basic Design Study (hereinafter referred to as "the Study"), conducted by JICA on a requested project (hereinafter referred to as "the Project"), is to provide a basic document necessary for the appraisal of the Project by the Government of Japan. The

contents of the Study are as follows:

a) confirmation of the background, objectives and benefits of the Project and also institutional capacity of agencies concerned of the recipient country necessary for the Project's implementation;
b) evaluation of the appropriateness of the Project to be implemented under the Grant Aid Scheme from the technical, social and economic points of view;
c) confirmation of items agreed on by both parties concerning the basic concept of the Project;
d) preparation of a basic design of the Project; and
e) estimation of costs of the Project.

The contents of the original request are not necessarily approved in their initial form as the contents of the Grant Aid project. The Basic Design of the Project is confirmed considering the guidelines of Japan's Grant Aid Scheme.

The Government of Japan requests the Government of the recipient country to take whatever measures are necessary to ensure its self-reliance in the implementation of the Project. Such measures must be guaranteed even through they may fall outside of the jurisdiction of the organization in the recipient country actually implementing the Project. Therefore, the implementation of the Project is confirmed by all relevant organizations of the recipient country through the Minutes of Discussions.

2) Selection of Consultants

For the smooth implementation of the Study, JICA uses a consulting firm selected through its own procedure (competitive proposal). The selected firm participates in the Study and prepares for a report based upon the terms of reference set by JICA.

At the beginning of implementation after the Exchange of Notes, for the services of the Detailed Design and Construction Supervision of the Project, JICA recommends the same consulting firm which participated in the Study to the recipient country in order to maintain the technical consistency between the Basic Design and Detailed Design.

(3) Japan's Grant Aid Scheme

1) What is Grant Aid?

The Grant Aid Program provides a recipient country with non-reimbursable funds to procure the facilities, equipment and services (engineering services and transportation of

the products, etc.) for economic and social development of the country under principles in accordance with the relevant laws and regulations of Japan. Grant Aid is not supplied through the donation of materials as such.

2) Exchange of Notes (E/N)

Japan's Grant Aid is extended in accordance with the Notes exchanged by the two Governments concerned, in which the objectives of the project, period of execution, conditions and amount of the Grant Aid, etc., are confirmed.

3) "The period of the Grant" means the one fiscal year which the Cabinet approves the project for. Within the fiscal year, all procedure such as exchanging of the Notes, concluding contracts with consulting firms and contractors and final payment to them must be completed.

However, in case of delays in delivery, installation or construction due to unforeseen factors such as weather, the period of the Grant Aid can be further extended for a maximum of one fiscal year at most by mutual agreement between the two Governments.

4) Under the Grant, in principle, Japanese products and services including transport or those of the recipient country are to be purchased.

When the two Governments deem it necessary, the Grant Aid may be used for the purchase of the products or services of a third country.

However, the prime contractors, namely consulting, contracting and procurement firms, are limited to "Japanese nationals". (The term "Japanese nationals" means persons of Japanese nationality or Japanese corporations controlled by persons of Japanese nationality.)

5) Necessity of "Verification"

The Government of the recipient country or its designated authority will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be verified by the Government of Japan. This "Verification" is deemed necessary to secure accountability of Japanese taxpayers.

6) Undertakings required to the Government of the recipient country

a) to secure a lot of land necessary for the construction of the Project and to clear the site;

b) to provide facilities for distribution of electricity, water supply and drainage and other incidental facilities outside the site;

c) to ensure prompt unloading and customs clearance at ports of disembarkation in the

recipient country and internal transportation therein of the products purchased under the Grant Aid;

d) to exempt Japanese nationals from customs duties, internal taxes and fiscal levies which may be imposed in the recipient country with respect to the supply of the products and services under the verified contracts;

e) to accord Japanese nationals whose services may be required in connection with the supply of the products and services under the verified contracts such as facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work;

f) to ensure that the facilities constructed and products purchased under the Grant Aid be maintained and used properly and effectively for the Project; and

g) to bear all the expenses, other than those covered by the Grant Aid, necessary for the Project.

7) "Proper Use"

The recipient country is required to maintain and use the facilities constructed and equipment purchased under the Grant Aid properly and effectively and to assign the necessary staff for operation and maintenance of them as well as to bear all the expenses other than those covered by the Grant Aid.

8) "Re-export"

The products purchased under the Grant Aid shall not be re-exported from the recipient country.

9) Banking Arrangement (B/A)

a) The Government of the recipient country or its designated authority should open an account in the name of the Government of the recipient country in a bank in Japan (hereinafter referred to as "the Bank"). The Government of Japan will execute the Grant Aid by making payments in Japanese yen to cover the obligations incurred by the Government of the recipient country or its designated authority under the verified contracts.

b) The payments will be made when payment requests are presented by the Bank to the Government of Japan under an Authorization to Pay (A/P) issued by the Government of recipient country or its designated authority.

c) Commission of payment will be arranged and covered by the Government of the recipient country.

2. Necessary measures undertakings by each government

Major undertakings to be taken by each government is shown in the ANNEX-5.

ANNEX-5

Necessary measures undertakings by each government

No	Items	To be covered by Grant Aid	To be covered by Recipient side
1	To secure land		●
2	To clear, level and reclaim the site when needed		●
3	To construct gates and fences in and around the site		●
4	To construct the parking lot	●	
5	To construct roads		
	1) Within the site	●	
	2) Outside the site		●
6	To construct the building	●	
7	To provide facilities for the distribution of electricity, water supply, drainage and other incidental facilities		
	1) Electricity		
	a. The distributing line to the site		●
	b. The drop wiring and internal wiring within the site	●	
	c. The main circuit breaker and transformer	●	
	2) Water Supply		
	a. The city water distribution main to the site		●
	b. The supply system within the site (receiving and/or elevated tanks)	●	
	3) Drainage		
	a. The city drainage main (for storm, sewer and others) to the site		●
	b. The drainage system (for toilet sewer, ordinary waste, storm drainage and others) within the site	●	
	4) Gas Supply		
	a. The city gas main to the site		●
	b. The gas supply system within the site	●	
	5) Telephone System		
	a. The telephone trunk line to the main distribution frame / panel (MDF) of the building		●
	b. The MDF and the extension after the frame / panel	●	
	6) Furniture and Equipment		
	a. General furniture		●
	b. Project equipment	●	
8	To bear the following commissions to a bank of Japan for the banking services based upon the B/A		
	1) Advising commission of A/P		●
	2) Payment commission		●
9	To ensure prompt unloading and customs clearance at the port of disembarkation in recipient country		
	1) Marine(Air) transportation of the products from Japan to the recipient country	●	
	2) Tax exemption and customs clearance of the products at the port of disembarkation		●
	3) Internal transportation from the port of disembarkation to the project site	●	
10	To accord Japanese nationals whose services may be required in connection with the supply of the products and the services under the verified contact such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work		●
11	To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in the recipient country with respect to the supply of the products and services under the verified contracts		●
12	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant		●
13	To bear all the expenses, other than those to be borne by the Grant, necessary for construction of the facilities as well as for transportation and installation of the equipment		●

Minutes of Discussions
on
the Project for Expansion of Electronic Engineering Polytechnic Institute of Surabaya
in the Republic of Indonesia
(EXPLANATION ON DRAFT REPORT)

In May 2001, the Japan International Cooperation Agency (JICA) dispatched a Basic Design Study Team on the Project for Expansion of Electronic Engineering Polytechnic Institute of Surabaya (hereinafter referred to as "the Project") to the Republic of Indonesia (hereinafter referred to as "Indonesia"), and through discussions, site surveys, and technical examination of the results in Japan, JICA prepared the draft report of the study.

In order to explain and to consult the Indonesia side on the components of the draft report, JICA sent to Indonesia the Draft Report Explanation Team (hereinafter referred to as "the Team"), which is headed by Mr. Eiji Inui, Director, First Technical Cooperation Division, Social Development Cooperation Department, JICA, from 3rd October to 11th October, 2001.

As a result of discussions, both sides have confirmed the main items described on the attached sheet.

Jakarta, 9th October 2001

Mr. Eiji Inui
Leader,
Basic Design Study Team,
Japan International Cooperation Agency
Japan

Mr. Satryo Soemantri Brodjonegoro
Director General,
Directorate General of Higher Education
Ministry of National Education
The Republic of Indonesia

with the Witness of

Mr. Mohammad Nuh
Director,
Electronic Engineering Polytechnic Institute of Surabaya
The Republic of Indonesia

Mr. Abdul Mukmin Siregar,
Director for Investment and Financial Cooperation,
Ministry of Foreign Affairs
The Republic of Indonesia

Mr. Agus Rahardjo.
Director of Religious Affairs and Education,
BAPPENAS
The Republic of Indonesia

Mr. Edi Karsanto
Director for Foreign Funds,
Ministry of Finance
The Republic of Indonesia

Mr. Soegiono
Rector,
Sepuluh November Institute of Technology
The Republic of Indonesia

ATTACHMENT

1. Components of the Draft Report

The Government of Indonesia agreed and accepted in principle the components of the draft report explained by the Team. After the discussions with the Team, the Indonesian side finally confirmed the items described in Annex-1 and Annex-2.
(Annex-1: Facilities, Annex-2: Equipment)

2. Japan's Grant Aid Scheme

The Indonesian side understood the Japan's Grant Aid Scheme and the necessary measures to be taken by the Indonesian side as explained by the Team and described in Annex-4 of the Minutes of Discussions signed by both parties on 23rd May 2001.

3. Schedule of the Study

JICA will complete a final report in accordance with the result of discussions and forward it to the Government of Indonesia around January 2002.

4. Other Relevant Issues

4-1. Changes of the layout plan for laboratories

The Indonesian side requested to change the layout plan for laboratories in the department of telecommunication and information technology to realize more effective class management. After the discussions, both sides agreed to change the plan shown as below:

a) The Department of Telecommunication Technology

Name of Laboratories	Layout changes
Radio Wave Propagation	1F→3F
Optical Communication	2F→1F
Digital Communication	3F→2F

b) The Department of Information Technology

Name of Laboratories	Layout changes
Computer Network	1F→3F
Advanced Programming	3F→1F

4-2. Necessary Measures to be taken by the Indonesian Side

On condition that the Grant Aid Scheme by the Government of Japan is extended to the Project, the Indonesian side will take necessary measures described in the Annex-3 for the smooth implementation of the Project.

4-3. Budgetary Arrangements

Both sides confirmed that the Indonesian side shall allocate sufficient budget necessary for:

(1) the completion of the replacement of existing facilities, clearance, leveling of the land in the proposed site by April 2002, before the commencement of construction;

(2) the recruitment of administrative staff and lectures for the smooth and effective operation of the Project.

4-4. Allocation of Personals

The Indonesian side confirmed that appropriate allocation of administrative staff and lecturers to the implementing organization, Electronic Engineering Polytechnic Institute of Surabaya (EEPIS) shall be secured for the Project.

Requested Facilities for the Project

No.	Room Name
1.	**Laboratories**
	Electrical Engineering Department
	1.1 Electromechanical Workshop
	1.2 Electric Circuits & Measurements
	1.3 Factory Automation
	1.4 Power System & Electric Machine
	Electronics Engineering Department
	1.5 Electronic Fundamental
	1.6 Digital Electronics
	1.7 Computer and Interface
	1.8 Automatic Control
	1.9 Intelligent Control & Robotics
	Telecommunication Engineering Department
	1.10 Radio Wave Propagation
	1.11 Optical Communications and Electro-Physics
	1.12 Digital Communications
	Information Technology Department
	1.13 Computer Programming I
	1.14 Computer Programming II
	1.15 Computer Programming III
	1.16 Advance Programming
	1.17 Computer Aided Design and Simulation
	1.18 Computer Network
2.	**Classrooms**
	2.1 Classroom 1 for 30 persons
	2.2 Classroom 2 for 30 persons
3.	**Library**
	3.1 Reading Room
	3.2 Head of Library Room
	3.3 Book Storage Room
	3.4 Lobby
4.	**Administration Office**
	4.1 Director Room
	4.2 Vice Director I and II (2p×1)Room
	4.3 General Administration Room
	4.4 Head of Department and Adm. Room
	4.5 Meeting Room 1
	4.6 Meeting Room 2
5.	**Common**
	5.1 Mechinical Room
	5.2 Electronic Room
	5.3 Pump Room
	5.4 Toilet
	5.5 Storage
	5.6 Guard House
	5.7 Corridor
	5.8 Others

ANNEX-2

Requested Equipment for the Project

Code No.	Description	Q'ty
WS1-2	Sockets Set	3
WS1-3	Reamer Sets	3
WS1-4	Air Compressor	1
WS1-5	Angle Grinder	3
WS1-6	Arc Welder	3
WS1-9	Circular Saw	2
WS1-11	CNC Lathe Machine	1
WS1-12	CNC Milling Machine	1
WS1-15	Cordless Metal Cutter	2
WS1-16	Deburring Kit	3
WS1-19	Drill Press	1
WS1-22	Engineering Tool Set	10
WS1-23	Engineer's Vice	3
WS1-24	Folding Machine	1
WS1-25	Hand Hole Punch Set	3
WS1-26	Hand Lever Press	1
WS1-28	Hand Spot Welder	1
WS1-37	Micro-tech Tool Sets	3
WS1-39	Mini Pipe Bender	1
WS1-42	Outside Micrometer	3
WS1-43	Pipe Bender	1
WS1-44	Power Saw (Reciprocating Type)	1
WS1-46	Tap & Die Sets	6
WS1-47	Spray Gun for Painting	2
WS1-54	AC Ammeter	5
WS1-55	AC Voltmeter	5
WS1-57	DC Ammeter	5
WS1-58	DC Voltmeter	5
WS1-59	Frequency Counter	5
WS1-60	Harmonic Analyzer	5
WS1-61	Hi Tester	5
WS1-62	Logic Probe	5
WS1-63	Analog Multimeter	10
WS1-64	Digital Storage Oscilloscope	5
WS1-66	DC Power Supply	10
WS1-67	Standard Signal Generator	5
WS1-68	DC Motor	6
WS1-69	Induction motor (3 phase)	3
WS1-70	Induction motor (1 phase)	3
WS1-72	Sliding Load Resistor	5
WS1-75	Pulse Generator	5
WS2-1	Laboratory Table & Chair Set	10
WS2-2	Cabinet for Workshop	5
EM1-1	Analog Multimeter	6
EM1-2	AC Ammeter	9
EM1-3	AC Voltmeter	9
EM1-5	Analog Frequency Meter	3
EM1-6	LCR Meter (S)	5
EM1-8	DC Ammeter	9
EM1-9	DC Ammeter	3
EM1-10	DC Potentiometer	1
EM1-11	DC Power Supply	6
EM1-12	DC Voltmeter	9
EM1-13	DC Voltmeter	6
EM1-14	Decaded Capacitor	3
EM1-15	Decaded Inductor	3
EM1-18	Decaded Resistance	6
EM1-19	Frequency Counter	6
EM1-20	Digital Multimeter	6
EM1-21	Electronic Voltmeter	6
EM1-23	Function Generator	6

Code No.	Description	Q'ty
EM1-24	Galvanometer	3
EM1-26	LCR Meter (L)	5
EM1-27	Power Factor Meter	3
EM1-28	Q Meter	1
EM1-29	Shunt Box	3
EM1-30	Single Phase Wattmeter	3
EM1-31	Slide Rheostats	3
EM1-34	Thermometer	6
EM1-35	Three Phase Wattmeter	3
EM1-37	Volt Slider	6
EM1-38	Wheatstone Bridge	5
EM1-43	Induction Voltage Regulator	1
EM1-47	Digital Storage Oscilloscope	6
EM2-1	Personal Computer with OS for Final Project Room	1
EM4-1	Laboratory Table & Chair Set	10
EM4-2	Cabinet	5
EM4-3	Laboratory Table & Chair Set for Final Project Room	5
EM4-4	Cabinet for Final Project Room	1
FA1-2	Temperature Transducers Training Apparatus	1
FA1-5	Thermometer	1
FA1-6	Optical Bench Training Apparatus	1
FA1-15	Limit Switch Training Apparatus	1
FA1-21	Magnetic Amplifier training apparatus	1
FA1-26	Linear displacement, Rotation position training apparatus	1
FA1-29	Sequence Control Timer & Counter training Apparatus	1
FA1-30	Motor Control Training Apparatus	1
FA1-31	Temperature Controller Training Apparatus	1
FA1-32	Thermometer	1
FA1-34	Water Level Controller Training Apparatus	1
FA1-36	DC Servo Motor	1
FA1-37	AC Servo Motor + Drives	1
FA1-38	Shaded Pole Motor	1
FA1-39	Tachometer (Optical)	5
FA1-40	PLC for Installation	5
FA1-51	PLC for Factory Automation	5
FA1-59	Digital Multimeter	5
FA1-60	Torque meter	1
FA1-61	Over Current Relays Training Apparatus	1
FA1-62	Over / Under Voltage Relays Training Apparatus	1
FA1-63	Reverse Power Relays Training Apparatus	1
FA1-64	Frequency Relays Training Apparatus	1
FA1-65	Programmable Relays Training Apparatus	1
FA1-70	Relay Testing / calibration	1
FA1-71	Moveable Regulated autotransformer	5
FA1-72	High inductive load	5
FA1-73	AC Ammeter	10
FA1-74	AC Voltmeter	10
FA1-76	Lighting Installation Module	1
FA1-77	Motor Control Training Apparatus	3
FA1-91	Fire Alarm System Taining Apparatus	3
FA1-96	Tool Set for Installation	6
FA1-109	MV Panel Training Apparatus	1
FA1-112	Earth tester	1
FA1-113	Insulation tester	1
FA1-115	Experiment Apparatus for ATM&AMF	1
FA1-118	Power Meter	1
FA1-120	Power Meter	3
FA1-121	Power High Tester	1
FA1-122	Electronic Circuit Tester	5
FA1-123	Computer simulation Software	1
FA1-126	Power Quality Analyze	1
FA1-127	FFT Analyzer	5

Code No.	Description	Q'ty
FA1-129	AC/DC Converter	2
FA1-130	UPS	1
FA1-131	Power Inverter	2
FA1-132	Harmonic Filter	1
FA1-134	Automatic Capacitor Bank Panel	1
FA1-136	Tele-measuring support equipment	1
FA1-137	Industrial Bus training module	5
FA1-138	Micro Controller training kit	1
FA1-139	Data Acquisition and Control Module	5
FA1-140	Embedded PC	5
FA1-141	Industrial PC	5
FA1-143	Panel PC with OS	5
FA1-146	Digital Storage Oscilloscope	5
FA1-147	Logic Analyzer	2
FA1-148	Universal Programmable	1
FA1-149	Universal Gang Programmer	1
FA1-150	EPROM Eraser	1
FA1-153	Industrial Software	1
FA1-155	Personal Computer with OS	5
FA2-1	Personal Computer with OS for Final Project Room	1
FA2-2	Multitester	1
FA2-3	Frequency Counter	1
FA2-4	Function generator	1
FA2-5	Digital Storage Oscilloscope	1
FA2-6	Power supply	1
FA2-7	Signal Conditioning	1
FA2-9	Tele-measuring support equipment	1
FA2-10	Data Acquisition and Control Module	1
FA2-11	Embedded PC	1
FA2-12	Industrial PC	1
FA2-13	Panel PC with OS	1
FA2-14	Data entry equipment	1
FA2-15	Universal Programmable	1
FA2-16	Universal Gang Programmer	1
FA2-17	EPROM Eraser	1
FA2-18	Industrial Software	1
FA2-19	Programmable Logic Controller	1
FA4-1	Laboratory Table & Chair Set	10
FA4-2	Cabinet	5
FA4-3	Laboratory Table & Chair Set for Final Project Room	5
FA4-4	Cabinet for Final Project Room	1
PE1-1	AC Ammeter	10
PE1-3	AC Ammeter	5
PE1-4	AC Mili Ammeter	2
PE1-7	AC Voltmeter	5
PE1-8	AC Voltmeter	10
PE1-14	DC Ammeter	10
PE1-17	DC Ammeter	10
PE1-20	DC Mili Ammeter	10
PE1-22	DC Voltmeter	10
PE1-24	DC Voltmeter	10
PE1-26	Digital Counter	6
PE1-34	Function Generator	6
PE1-40	Digital Storage Oscilloscope	6
PE1-48	Automatic Voltage Regulator	5
PE1-53	Wattmeter	5
PE1-54	Wattmeter	5
PE1-57	Power Factor Meter	5
PE1-58	Tachometer	5
PE1-59	Load Resistor	10
PE1-61	Inverter	10
PE1-63	Synchronous Generator Parallel Operational Panel	1

Code No.	Description	Q'ty
PE1-64	DC Motor -DC Generator Panel	1
PE1-65	Experiment Apparatus for Three Phase Induction Motor Panel	1
PE1-66	Experiment Apparatus for Static Converter-fed DC Machine Panel	1
PE1-67	Experiment Apparatus for Static Converter-fed Asynchronous Machine Panel	1
PE1-68	Experiment Apparatus for Transformer Panel	1
PE1-70	Experiment Apparatus for Asynchronous Machine Panel	1
PE1-71	Experiment Apparatus for Synchronous Generator Panel	1
PE1-76	Personal Computer with OS	6
PE1-77	ADAM Series	6
PE1-79	Current Transformer Sensor	6
PE1-80	Voltage Sensor	6
PE1-81	Experiment Apparatus for Power Electronics Panel	3
PE1-85	Transformer 1 phase	5
PE1-86	Transformer 3 phase	6
PE1-87	Volt Slider 1 phase	3
PE1-88	Volt Slider 3 phase	3
PE1-89	DC Power Source	3
PE2-1	Personal Computer with OS	1
PE3-2	Laboratory Table & Chair Set	10
PE3-3	Cabinet	5
PE3-4	Laboratory Table & Chair Set for Final Project Room	5
PE3-5	Cabinet for Final Project Room	1
EF1-1	Function Generator	5
EF1-2	Digital Storage Oscilloscope	5
EF1-3	Programmable DC Source	1
EF1-4	DC Power Supply	10
EF1-5	Electronic Voltmeter	5
EF1-6	Lux Meter	5
EF1-7	Digital Multimeter	5
EF1-8	Analog Multimeter	5
EF1-9	Thermometer	5
EF1-10	FFT Analyzer	5
EF1-11	Universal Counter	5
EF1-12	DC Ammeter	10
EF1-13	DC Ammeter	10
EF1-14	DC micro Ammeter	10
EF1-15	DC micro Ammeter	10
EF1-16	DC Voltmeter	10
EF1-17	Audio Analyzer	1
EF1-18	Random Noise Generator	1
EF1-19	Tachometer	1
EF1-20	Slid Voltage Regulator	5
EF1-21	Curve Tracer	1
EF2-1	Laboratory Table & Chair Set	10
EF2-2	Cabinet	5
DE1-1	Function Generators	5
DE1-2	Frequency Counter	5
DE1-3	Digital Storage Oscilloscope	5
DE1-4	Digital Multimeter	5
DE1-5	Logic Probe	5
DE1-6	Logic Pulser	5
DE1-7	Basic Logic Circuits Trainer	5
DE1-8	Advanced Logic Circuits Trainer	5
DE1-9	Logic Analyser	5
DE1-10	A/D D/A Conversion Module	5
DE1-11	DC Power Supply	5
DE2-1	Laboratory Table & Chair Set	10
DE2-2	Cabinet	5
CI1-1	Microprocessor Trainer	10
CI1-2	Embedded PC w/Controller Board	10
CI1-4	Micro Controller In-circuit Emulator	5
CI1-5	C Cross Compiler	5

Code No.	Description	Q'ty
CI1-6	Universal Programmer	3
CI1-7	Universal Emulator	10
CI1-8	PIC Micro Development Tools	10
CI1-9	Personal Computer with OS	10
CI2-1	Embedded PC	1
CI2-2	Micro Controller In-circuit Emulator	1
CI2-3	C Cross Compiler	1
CI2-4	PIC Micro Development Tools	1
CI2-5	Universal Programmer and Tester	1
CI2-6	Personal Computer with OS for Final Project Room	1
CI2-7	Printer (Color)	1
CI2-8	Scanner	1
CI2-9	Digital Camera	1
CI2-10	Logic Probe	1
CI2-12	Function Generator	1
CI2-13	Analog Multimeter	1
CI2-14	Frequency Counter	1
CI2-15	Pulse Generator	1
CI2-16	Logic Analyzer	1
CI2-17	Digital Storage Oscilloscope	1
CI2-18	UV EPROM Eraser	1
CI2-19	DC Power Supply	1
CI3-1	Laboratory Table & Chair Set	10
CI3-2	Cabinet	5
CI3-3	Laboratory Table & Chair Set for Final Project Room	5
CI3-4	Cabinet for Final Project Room	1
AC1-1	DC Power Supply	5
AC1-2	Digital Storage Oscilloscope	5
AC1-3	Frequency Counter	5
AC1-4	X-Y Recorder	2
AC1-5	Digital Multimeter	5
AC1-6	Process Trainer	1
AC1-7	Personal Computer with OS	5
AC1-8	PLC Trainer	3
AC1-9	Sensor & Transducer Interfacing Trainer	2
AC1-10	Mechatro Lab	2
AC1-11	Digital Servo Board	1
AC1-13	Analogue & Digital Servo Fundamental Trainer	1
AC1-14	Fundamental Pneumatic Trainer	1
AC1-15	Pneumatic Application Trainer	1
AC1-16	Fundamental Hydraulic Trainer	1
AC1-17	Hydraulic Application Trainer	1
AC1-18	Arm Robot Trainer	1
AC1-19	Relay Sequence Controller Trainer	2
AC1-23	Software(HDL Development Tool), package	1
	Software(HDL Development Tool), license	4
AC1-24	FPGA Module Design Kit	5
AC1-26	Software(for Training Kit), package	1
	Software(for Training Kit), license	4
AC1-28	Function Generator	5
AC2-1	DC Power Supply	1
AC2-2	Digital Storage Oscilloscope	1
AC2-3	Function Generator	1
AC2-4	Frequency Counter	1
AC2-5	Digital Multimeter	1
AC2-6	Personal Computer with OS	1
AC2-7	Printer (Color)	1
AC2-8	Scanner	1
AC2-9	Simulation Software for Control Automation	1
AC4-1	Laboratory Table & Chair Set	10
AC4-2	Cabinet	5
AC4-3	Laboratory Table & Chair Set for Final Project Room	5

Code No.	Description	Q'ty
AC4-4	Cabinet for Final Project Room	1
IC1-1	Function Generator	2
IC1-2	Digital Storage Oscilloscope	3
IC1-3	Complete DSP La Kit	1
IC1-4	Digital Multimeter	6
IC1-5	ECG Standard Function Generator	1
IC1-6	Remote Monitoring Modul Set	1
IC1-7	Biopac Student Lab Stimulator	1
IC1-8	MP 150 Starter System	1
IC1-9	BSL ULTIMATE SYSTEM	3
IC1-10	DC Power Supply	6
IC1-11	Optical Encoder	3
IC1-12	AD/DA Converter	2
IC1-13	Simulation Software for Fuzzy and Digital Control with Tool box	2
IC1-17	Indoor Robot Line	1
IC1-18	Single-boad Computer	6
IC1-19	Inverted Pendulum Trainer	1
IC1-20	Magnetic Levitation Trainer	1
IC1-21	RS-232C Break Box	1
IC1-22	Arm Robot	1
IC1-23	Ball and Beam Demonstrator	1
IC1-25	DC Motor w/Driver	2
IC1-26	Servo Motor w/Driver	2
IC1-27	Digital Camera	1
IC1-28	Electrical Safties Demonstrator	1
IC1-29-1	Personal Computer with OS	2
IC1-29-2	Panel PC with OS	2
IC1-30	Data Acquisition Module	2
IC1-31	Radio Modem	4
IC1-32	PLC Module	6
IC1-33	DCS Training Module	1
IC1-34	Mechatronic System Trainer	2
IC1-35	Graphic Recorder	3
IC1-37	Frequency Counter	1
IC1-38	Experimental Apparatus for Pneumatic Control	1
IC1-39	Tachometer	1
IC2-1	Function Generator	1
IC2-2	DC Power Supply	1
IC2-3	Digital Storage Oscilloscope	1
IC2-4	Personal Computer with OS for Final Project Room	1
IC2-5	DSP Board and Software	1
IC2-6	Digital Multimeter	1
IC2-7	AD/DA Converter	1
IC2-8	Simulation Software for Fuzzy and Digital Control with Tool box	1
IC2-12	Single-boad Computer	1
IC2-13	Printer	1
IC2-14	Scanner	1
IC4-1	Laboratory Table & Chair Set	10
IC4-2	Cabinet	5
IC4-3	Laboratory Table & Chair Set for Final Project Room	5
IC4-4	Cabinet for Final Project Room	1
RW1-1	DC Power Supply	3
RW1-2	DC Micro Ammeter	3
RW1-3	Personal Computer with OS	3
RW1-4	Set of Transmission Line Demonstrator	1
RW1-5	Set of Microwave Trainer	4
RW1-6	Microwave Counter	1
RW1-7	Function Generator	3
RW1-8	DC Mili Ammeter	3
RW1-9	Standard Dipole Antenna	1
RW1-11	Standard Log Periodic Antenna	2
RW1-12	Standard Signal Generator	1

Code No.	Description	Q'ty
RW1-13	Spectrum Analyzer	2
RW1-14	Tripod for Antenna	1
RW1-15	Micro Strip Antenna Trainer Set	1
RW1-16	DC-Current Measurement	6
RW1-17	AC Voltage Measurement	6
RW1-18	Standard Horn Antenna	1
RW1-19	Phase Shifter	3
RW1-20	Parabolic Antenna w/Digital Satellite Receiver	1
RW1-21	Cellular Telephony Trainer	2
RW1-22	Trainer for Interactive Multipurpose Electronics	2
RW1-23	Mobile Communication Trainer	2
RW1-24	Digital Storage Oscilloscope	3
RW1-25	Logic Analyzer	1
RW1-34	Termination Type Wattmeter	2
RW1-35	VHF Transmitter Receiver	2
RW1-36	Attenuator	2
RW1-37	Attenuator	2
RW1-38	Through Line Type Wattmeter	2
RW1-40	Frequency Counter	2
RW1-41	Universal Counter	1
RW1-43	Variable Standard Capacitance	1
RW1-44	Variable Standard Resistance	1
RW1-45	Electronic Voltmeter	3
RW2-2	Function Generator	1
RW2-3	Personal Computer with OS for Final Project Room	1
RW2-4	Digital Multimeter	1
RW2-5	Analog Multimeter	1
RW2-6	Tool Set	1
RW2-8	Oscilloscope	1
RW2-10	DC Power Supply	1
RW4-1	Laboratory Table & Chair Set	10
RW4-2	Cabinet	5
RW4-3	Laboratory Table & Chair Set for Final Project Room	5
RW4-4	Cabinet for Final Project Room	1
OP1-1	AC Mili Ammeter	3
OP1-2	AC Voltmeter	3
OP1-4	Beam Splitter	3
OP1-5	Capacity Meter	2
OP1-8	Connector Polisher	3
OP1-10	DC Ammeter	3
OP1-11	DC Micro Ammeter	3
OP1-12	DC Power Supply	3
OP1-13	DC Voltmeter	3
OP1-14	Digital Multimeter	3
OP1-17	Equipotential Lines Module	3
OP1-18	Fault Locator Tool Kits	3
OP1-19	Fiber Attenuator	3
OP1-20	Fiber Connector Equipment	6
OP1-21	Fiber Optic Clip-on Coupler	6
OP1-22	Function Generator	3
OP1-23	Galvanometer	3
OP1-34	Optical Fiber Connector	12
OP1-35	Optical Power Meter	3
OP1-36	Digital Storage Oscilloscope	3
OP1-45	Set of Grating	3
OP1-49	Set of Prism	3
OP1-53	Variable Pinhole	3
OP1-56	Volt-Stat	3
OP1-58	Optical Communication Trainer	3
OP1-59	Optoelectronic Trainer	3
OP1-60	Optical Fiber	3
OP1-61	Optical Fiber	3

Code No.	Description	Q'ty
OP1-62	Optical Fiber	3
OP2-1	Standard Signal Generator	1
OP2-2	Function Generator	1
OP2-3	Personal Computer with OS	1
OP2-4	Digital Multimeter	1
OP2-5	Analog Multimeter	1
OP2-6	Tool Set	1
OP2-8	Digital Storage Oscilloscope	1
OP2-10	DC Power Supply	1
OP4-1	Laboratory Table & Chair Set	10
OP4-2	Cabinet	5
OP4-3	Laboratory Table & Chair Set for Final Project Room	5
OP4-4	Cabinet for Final Project Room	1
DC1-1	Standard Signal Generator	3
DC1-3	Digital Storage Oscilloscope	3
DC1-5	Spectrum Analyzer	3
DC1-6	Function Generator	3
DC1-7	PAL Pattern Generator	1
DC1-8	AM/FM Radio Receiver	1
DC1-9	FSK Modem	3
DC1-10	Decaded Capacitor	3
DC1-11	Decaded Resistor	6
DC1-12	Electronic Voltmeter	3
DC1-14	Frequency Counter	3
DC1-15	Analog Multimeter	2
DC1-16	Digital Multimeter	3
DC1-18	DC Power Supply	3
DC1-19	Color TV Trainer	2
DC1-20	AM/FM Radio Trainer	2
DC1-21	Digital Modulation Apparatus	1
DC1-25	Digital Telephony Training Apparatus	1
DC1-34	PBX	1
DC1-35	Transmission System Training Apparatus	1
DC1-43	HT VHF	2
DC1-44	HT UHF	2
DC1-45	VSWR Meter	2
DC2-1	Standard Signal Generator	1
DC2-2	Function Generator	1
DC2-4	Digital Storage Oscilloscope	1
DC2-5	Analog Multimeter	1
DC2-6	Digital Multimeter	1
DC2-7	Tool Set	1
DC2-10	Personal Computer with OS for Final Project Room	1
DC2-12	Logic Probe	1
DC2-13	Electronic Voltmeter	1
DC2-14	Frequency Counter	1
DC4-1	Laboratory Table & Chair Set	10
DC4-2	Cabinet	5
DC4-3	Laboratory Table & Chair Set for Final Project Room	5
DC4-4	Cabinet for Final Project Room	1
PC1-1	Personal Computer	31
PC1-2	File Server	1
PC1-3	Printer (Monochrome)	1
PC1-4	Printer (Color)	1
PC1-5	Printer Server	1
PC1-6	Router	1
PC1-7	Switching Hub	2
PC1-8	UPS for Server, Router, Switching Hub	1
PC1-9	AVR for all PCs	1
PC1-10-1	Software (OS for Server), package	1
PC1-10-2	Software (OS for PC), package	1
	Software (OS for PC), license	31

Code No.	Description	Q'ty
PC1-10-3	Software (Programing Language), package	1
	Software (Programing Language), license	30
PC1-10-4	Software (Office Suite), package	1
PC1-10-5	Software (Anti Virus), package	1
	Software (Anti Virus), license	32
PC1-10-7	Software (FreeBSD for Router), package	1
PC1-11	LCD Projector	1
PC1-12	Screen	1
PC1-13	Cabinet	2
PC2-1	Personal Computer	31
PC2-2	File Server	1
PC2-3	Printer (Monochrome)	1
PC2-4	Printer (Color)	1
PC2-5	Printer Server	1
PC2-6	Router	1
PC2-7	Switching Hub	2
PC2-8	UPS for Server, Router, Switching Hub	1
PC2-9	AVR for all PCs	1
PC2-10-1	Software (OS for Server), package	1
PC2-10-2	Software (OS for PC:Linux), package	1
PC2-10-3	Software (Office Suite for Linux), package	1
PC2-10-7	Software(FreeBSD for Router), package	1
PC2-11	LCD Projector	1
PC2-12	Screen	1
PC2-13	Cabinet	2
PC3-1	Personal Computer	31
PC3-2	File Server	1
PC3-3	Printer (Monochrome)	1
PC3-4	Printer (Color)	1
PC3-5	Printer Server	1
PC3-6	Router	1
PC3-7	Switching Hub	2
PC3-8	UPS for Server, Router, Switching Hub	1
PC3-9	AVR for all PCs	1
PC3-10-1	Software(FreeBSD for Router), package	1
PC3-10-3	Software (for Graphics), package	1
	Software (for Graphics), license	15
PC3-10-4	Software(Anti Virus for MAC), package	1
	Software(Anti Virus for MAC), license	32
PC3-11	LCD Projector	1
PC3-12	Screen	1
PC3-13	Digital Still Camera	1
PC3-14	Scanner	1
PC3-15	Matrix Routing Switcher	1
PC3-16	Image Processing Card	1
PC3-17	TV	1
PC3-18	Digital Video Camera	1
PC3-19	Sound System Set	1
PC3-20	Cabinet	2
PC4-1	Personal Computer	36
PC4-2	File Server	1
PC4-3	Printer (Monochrome)	1
PC4-4	Printer (Color)	1
PC4-5	Printer Server	1
PC4-6	Router	1
PC4-7	Switching Hub	2
PC4-8	UPS for Server, Router, Switching Hub	1
PC4-9	AVR for all PCs	1
PC4-10-1	Software (OS for Server), package	1
PC4-10-2	Software (OS for PC), package	1
	Software (OS for PC), license	36

Code No.	Description	Q'ty
PC4-10-3	Software (Programing Language), package	1
	Software (Programing Language), license	35
PC4-10-5	Software (Word Processor), package	1
	Software (Word Processor), license	30
PC4-10-6	Software (Anti Virus), package	1
	Software (Anti Virus), license	37
PC4-10-9	Software (GIS), package	1
	Software (GIS), license	15
PC4-10-11	Software(FreeBSD for Router), package	1
PC4-11	LCD Projector	1
PC4-12	Screen	1
PC4-13	Cabinet	2
PC5-1	Personal Computer	36
PC5-2	File Server	1
PC5-3	Printer (Monochrome)	1
PC5-4	Printer (Color)	1
PC5-5	Printer Server	1
PC5-6	Router	1
PC5-7	Switching Hub	2
PC5-8	UPS for Server, Router, Switching Hub	1
PC5-9	AVR for all PCs	1
PC5-10-1	Software (OS for Server), package	1
PC5-10-2	Software (OS for PC), package	1
	Software (OS for PC), license	36
PC5-10-3	Software (Office Suite), package	1
PC5-10-4	Software (CAD), package	1
	Software (CAD), license	30
PC5-10-5	Software (For Simulation), package	1
	Software (For Simulation), license	30
PC5-10-6	Software (for Power Electronics Simulation), package	1
	Software (for Power Electronics Simulation), license	10
PC5-10-7	Software (Anti Virus), package	1
	Software (Anti Virus), license	37
PC5-10-9	Software (for Power System Simulation), package	1
	Software (for Power System Simulation), license	10
PC5-10-10	Software(FreeBSD for Router), package	1
PC5-11	LCD Projector	1
PC5-12	Screen	1
PC5-13	PC/DSP Board	2
PC5-14	Cabinet	2
PC6-1	Personal Computer	21
PC6-2	File Server	1
PC6-3	Note Book PC	1
PC6-4	Unix Server	1
PC6-5	Thin Client	10
PC6-6	Printer (Monochrome)	1
PC6-7	Printer Server	1
PC6-8	Router	1
PC6-9	Switching Hub	4
PC6-10	UPS for Server, Router, Switching Hub	1
PC6-11	AVR for all PCs	1
PC6-12-1	Software (OS for Server), package	1
PC6-12-2	Software (OS for PC), package	1
	Software (OS for PC), license	21
PC6-12-3	Software (Office Suite), package	1
PC6-12-4	Software (Anti Virus), package	1
	Software (Anti Virus), license	22
PC6-12-6	Software(FreeBSD for Router), package	1
PC6-13	LCD Projector	1
PC6-14	Screen	1
PC6-15	Cabinet	2
PC6-16	Sound Proof Chamber	1

Code No.	Description	Q'ty
PC6-17	Digital Audio Tape Recorder	1
PC6-18	Electric Condenser Microphone	1
PC6-19	Headphone	1
PC6-20	Digital Audio Processor	1
PC6-21	Precision Sound Level Meter	1
PC6-22	Audio Signal Generator	1
PC6-23	HIFI Sound System	1
PC6-24	Audio Mixer	1
PC6-25	Digital Storage Oscilloscope	1
PC6-26	Ethernet Cables	3
PC6-27	RJ-45 Connector	6
PC6-28	LAN Cable Tester	1
PC6-29	Ethernet Connector	70
PC6-30	Tool set for Networking	3
PC6-31	Communication Rack	2
PC6-32	LAN HUB	4
PC6-33	Protocol Analyzer	1
PC6-34	LAN Analyzer	1
PC6-35	Equipment for xDSL	6
PC6-36	CTI Card	6
PC6-37-1	Internet Router	2
PC6-37-2	Internet Router	2
PC6-38-2	Cable for Internet Router	4
PC6-38-3	Cable for Internet Router	4
PC6-38-5	Switching Hub	4
PC6-38-6	Switching Hub	4
PC6-39	Ethernet Tranceiver	6
PC6-41	Wave LAN Card	6
PC6-42	Indoor Antenna for Wave LAN	6
PC6-43	Outdoor Antenna for Wave LAN	3
PC6-44	Wave LAN Booster	3
PC6-45	Wave LAN Remote Outdoor Router	2
PC6-46	Ethernet Card	15
PC6-47	Ethernet Cables	70
PC6-48	Modem	10
PC6-49	PBX	1
PC6-50	VoIP Blaster Card	4
PC6-51	ISDN Emulator	2
PC6-52	A/D Converter	4
PC6-53	D/A Converter	4
PC6-54	Programmable Peripheral Interface Card	4
PC6-55	PC Interface Trainer	4
PC6-56	ADAMS Series	4
PC6-57	Cabinet	2
GN-1	Table for General Class Room (for Student)	420
GN-2	Chair for General Class Room (for Student)	420
GN-3	Table for General Class Room (for Lecturer)	14

ANNEX - 3

Necessary Measures to be taken by the Indonesian Side

(1) Procedure Items of the Indonesian Side

1) Tax Exemption

- Under the Japanese Grant Aid scheme, the equipment and materials purchased for this project shall be free of tax.
- Based on the certified contract, the provided equipment and service, and the Japanese who are involved in this project shall be exempt from custom tariff, domestic tax and other financial taxes.

2) Convenience Provision

- Based on the certified contract, the convenience for entry and stay permit in Indonesia to the Japanese who will be involved in this project shall be provided.

3) Obtain Building Permits:

- As EEPIS is recognized as the institution under the direct control of DGHE, the building planning shall be applied to the authority concerned so as to be approved as the public facility.
- An application to receive fire-fighting permission to submit necessary application documents to fire station Headquarter in Surabaya City for fire fighting approval.
- An application to receive electric power shall be submitted to PLN (an electric power company) with necessary documents which indicates an estimated demand for approval.
- An application to receive water supply shall be submitted to PDAM (a water supply enterprise) with necessary documents for approval.
- An application to receive sewage disposal shall be submitted to Environment Bureau in Surabaya City with necessary documents for approval.

(2) Portions by the Indonesian Side

The portions by the Indonesian side except 'Table 2-7' on page 2-38 of the Draft Report are as follows:

1) Before Implementation

- To construct water supply pipe for construction work use;
- To remove the existing warehouses, the existing bicycle parking, and all the existing facilities inside of the project site;
- To construct an access road for the construction of new buildings, if necessary;
- To remove the existing electric power service line and the existing water supply pipe, main feeder wiring, telephone line, Public Address Line under the ground in the project site.

2) During Implementation

- To landscape and to garden of EEPIS site;
- To purchase the install office furniture, curtain, and carpet, etc. of EEPIS;
- planting trees;
- To construct cabling or piping work for main feeder wiring, water supply, telephone line and LAN, etc. to the project site;
- To issue permissions and the licenses, etc., necessary for the implementation of the project, without delay.