第三国研修実施協議議事録

Record of Discussions(R/D)集

第三国研修実施協議議事録

国際協力事業団 研修

国際協力事業団
研修事業部

はじめに

第三国研修は49年度タイ・コラート養蚕研究訓練センターでの養蚕技術コース実施をもって開始され，58年度は，新設6コースを含め14コースの実施を予定している。

第三国研修を新設するためには，原則としてプロジェクト方式技術協力と同様，実施協議議事録R／D（Record of Discussions）を締結する必要があるが（次年度以降は口上書の交換等により実施），新設コースの増加が今後も予定されるところ，今般過去のR／Dを整理し，第三国研修の新設の際の資料として有効に利用できるよう，本書を作成した。

なお，49年度に実施された上記コースの他，51年度新設メキシコ電気通信学園及び52年度新設タイ・モンクット王工科大学における電気通信第三国研修については，在外公館を通じ交渉し実施したため，R／Dは締結しなかったことを申し添える。

昭和58年11月

研修事業部長

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I. 実施協議議事録要旨集

５４年度実施協議議事録要旨

1.	国　　名	ケ　ニ　ア
2.	実施機関	郵電公社中央訓練学校
3.	研修科目	電子交換システム
4.	研修期間	５５年３月～（３週間）
5.	署名年月日	５４年１２月１３日

５５年度実施協議議事録要旨

1. 国　　名　　ケニア
2. 実施機関　　郵電公社中央訓練学校
3. 研修科目　　マイクロウェーブ通信技術３コース（技師コース，上級技術者コース，技術者コース）
4. 研修期間　　５６年３月～（４０日間，但し技術者コースは３５日間）
5. 定　　員　　合計２５人以下
   (1) 第三国からの参加者数　１ケ国当り２人以下　計１０人以下
   (2) 実施国からの参加者数　１５人以下
6. 割当国（人数）　　ウガンダ（２），タンザニア（１），レソト（１），マラウイ（１）スワジランド（２），ボツワナ（１），ザンビア（１）
7. 応募資格
   (1) 電気通信あるいは電気専攻の大学卒業（上級技術者及び技術者コースは高校卒業），もしくは同程度の知識を有する者。
   (2) 英語の堪能な者。
   (3) 健康な者。
   (4) 電気通信分野において１年以上の実務経験を有する者。
8. 専門家派遣
   (1) 短　期　　３人
   (2) 長　期　　１人
9. カウンターパートの受入れ　　２～３人
   ５６年３月以前２～３週間とする。
10. 機材供与
    ５５年度２５,０００ドル，５６年度１５０,０００ドル相当の実験用機材を供与する。
11. その他
    第三国研修実施のための日本側協力期間は３年とし，両者の合意に基づき延長することができる。
12. 署名年月日　　５５年１２月２日

５５年度実施協議議事録要旨

1. 国　　名　　チ　リ
2. 実施機関　　保健省パウラ・ハラケマダ病院胃がん診断センター
3. 研修科目　　胃腸病学
4. 研修目的　　実習，講義，討論を通じ，参加者に胃腸病学に関する知識と情報を供与し，チリと参加国との友好関係を築く。
5. 研修期間　　５６年３月１６日～５６年４月１０日（２６日間）
6. 第三国からの参加者数　　１２人
7. 割当国　　アルゼンティン，ブラジル，コロンビア，エクアドル，パラグアイ，ペルー，ウルグアイ，ヴェネズエラ　（８ケ国）
8. 短期専門家派遣を行なう
9. 署名年月日　　５５年８月２６日

５５年度実施協議議事録要旨

1. 実施機関　　テクノネットアジア
2. 研修科目　　金属加工
3. 研修目的　　参加国の中小金属加工企業に関する意見交換を通じ，状況把握し，問題解決の方策を見出す。
4. 研修期間　　５５年１１月２４日～５５年１１月２８日（５日間）
5. 定員　　合計約３５人
   (1) 第三国からの参加者数　１５人
   (2) 実施国からの参加者数　２０人
6. 割当国　　フィリピン，バングラデシュ，スリ・ランカ
7. 応募資格　　各割当国の工業従業者で，企画，経理，実施担当代表者。
8. 署名年月日　　５５年１１月１３日

５６年度実施協議議事録要旨

1. 実施機関　　テクノネットアジア，タイ工業サービス研究所
2. 研修科目　　鋳造技術
3. 研修目的　　鋳造技術に関する知識を有する中小企業振興指導者を参加せしめ，参加者の能力の向上を図る。
4. 研修期間　　５６年８月６日～５６年８月２８日（２３日間）
5. 定員　　合計２２～２５人
   (1) 第三国からの参加者数　２０人
   (2) 実施国からの参加者数　２～５人
6. 割当国　　バングラデシュ，香港，インドネシア，フィジー，韓国，マレイシア，フィリピン，スリ・ランカ，ネパール，シンガポール
7. 署名年月日　　５６年６月２２日

57年度実施協議議事録要旨

1. 実施機関　　テクノネットアジア，シンガポール工業研究所
2. 研修科目　　熱処理技術
3. 研修目的　　参加者の熱処理技術の向上を図るとともに，問題解決の方策を見出すことを目的とする。
4. 研修期間　　57年10月5日～57年10月22日（18日間）
5. 定員　　合計約25人
   (1) 第三国からの参加者数　19人
   (2) 実施国からの参加者数　6人
6. 割当国　　バングラデシュ，フィジー，香港，インドネシア，韓国，マレイシア，ネパール，フィリピン，スリ・ランカ，タイ，中国
7. 応募資格
   (1) 工学分野での学位取得者あるいは熱処理技術に関する実務経験3年以上の技術卒業証書取得者。
   (2) 英語が堪能で45才以下の者。
   (3) 同様の工業振興コースに参加したことがある者，もしくは工業振興に1～3年の実務経験のある者が望ましい。
   (4) 熱処理技術の基礎知識を有する者。
8. 署名年月日　　57年7月28日

５８年度実施協議議事録要旨

1. 実施機関　　テクノネットアジア，シンガポール工業研究所
2. 研修科目　　プラスチック技術
3. 研修目的　　参加者のプラスチック技術の向上を図るとともに，問題解決の方策を見出すことを目的とする。
4. 研修機関　　５８年１１月７日～５８年１１月２５日（１９日間）
5. 定員　　２８人
   (1) 第三国からの参加者数　２１人
   (2) 実施国からの参加者数　７人
6. 割当国　　バングラデシュ，フィジー，香港，韓国，マレイシア，フィリピン，スリ・ランカ，タイ
7. 署名年月日　　５８年１１月３日

５６年度実施協議議事録要旨

1. 国　　名　　フィリピン
2. 実施機関　　道路交通訓練センター
3. 研修科目　　道路交通
4. 研修目的　　参加各国の道路交通の現状報告，討論を通し，参加者の知識を高める。
5. 研修期間　　５７年３月７日～５７年３月２０日（１４日間）
6. 定　　員
   (1) 第三国からの参加者数　１２人以下
   (2) 実施国からの参加者数　第三国からの参加者数を超えない数
7. 割当国　　ビルマ，インドネシア，マレイシア，シンガポール，スリランカ，タイ
8. 応募資格
   (1) ５年以上の実務経験を有する，道路交通の行政もしくは調査に従事する公務員。
   (2) 英語の堪能な者。
9. 短期専門家派遣　　３人
10. 署名年月日　　５６年１０月８日

57年度実施協議議事録要旨

1. 国　　名　　フィリピン
2. 実施機関　　道路交通訓練センター
3. 研修科目　　道路交通
4. 研修目的　　道路交通における計画，工学，運営に関する知識・技術の研修を通じ，参加国における道路交通の発展に寄与することを目的とする。
5. 研修期間　　57年11月7日～57年12月19日（43日間）
6. 定　　員
   (1) 第三国からの参加者数　18人
   (2) 実施国からの参加者数　3人
7. 割当国　　ビルマ，インドネシア，マレイシア，シンガポール，スリ・ランカ，タイ
8. 応募資格
   (1) 大学卒業もしくは同程度の能力を有する者。
   (2) 道路交通における計画，工学，運営に従事する技官。
   (3) 25～45才の者。
   (4) 英語が堪能で健康な者。
9. 短期専門家派遣　　2人
10. 署名年月日　　57年6月23日

５６年度事前調査団覚書

1. 国　　名　　タイ
2. 実施機関　　農業組合省畜産開発局
3. 研修科目　　口蹄疫防疫
4. 研修目的　　アジア地域における口蹄疫防疫に関する問題解決に寄与することを目的とする。
5. 研修期間
   (1) セミナー　５７年２月１５日～５７年２月２７日（１３日間）
   (2) コース　５７年１０月頃開始
6. 定員
   (1) 第三国からの参加者数　１４人
   (2) 実施国からの参加者数　第三国からの参加者数を超えない数
7. 割当国　　インドネシア，マレイシア，フィリピン，シンガポール，タイ，バングラデシュ，ビルマ，インド，パキスタン，スリ・ランカ
8. 応募資格
   (1) セミナー
      イ．政府機関において家畜衛生に関する行政及び研究に従事する上級獣医師。
      ロ．英語が堪能な者。
   (2) コース
      イ．大学卒業もしくは同程度の能力を有する者。
      ロ．政府機関において，家畜の病気に関する診断，ワクチン製造もしくは防疫に従事し，３年以上の実務経験を有する者。
      ハ．英語が堪能で健康な者。
9. 短期専門家派遣を行なう。
10. 機材供与について検討する。
11. 署名年月日　　５６年９月３日

56年度実施協議議事録要旨

1. 国　　名　　タイ
2. 実施機関　　農業組合省畜産開発局
3. 研修科目　　口蹄疫防疫
4. 研修目的　　アジア地域において口蹄疫防疫に関する問題解決に寄与することを目的とする。
5. 研修期間
   (1) セミナー　57年2月22日～57年3月6日（13日間）
   (2) コース　3～6ケ月間の予定で57年10月頃に開始する。
6. 定　　員
   (1) 第三国からの参加者数　14人
   (2) 実施国からの参加者数　第三国からの参加者数を超えない数
7. 割当国　　バングラデシュ，ビルマ，インド，インドネシア，マレイシア，パキスタン，フィリピン，シンガポール，スリ・ランカ，タイ
8. 応募資格
   (1) セミナー
      イ．政府機関において，家畜衛生に関する行政及び研究に従事する上級獣医師。
      ロ．英語が堪能な者。
   (2) コース
      イ．大学卒業もしくは同程度の能力を有する者。
      ロ．政府機関において，家畜の病気に関する診断，ワクチン製造もしくは防疫に従事し，3年以上の実務経験を有する者。
      ハ．英語が堪能な者。
9. 短期専門家派遣を行なう。
10. 機材供与　　予算の範囲内で必要な機材供与を行なう。
11. 署名年月日　　56年11月19日

56年度実施協議議事録要旨

1. 国名　インドネシア
2. 実施機関　公共事業省建築研究所
3. 研修科目　地震工学
4. 研修目的　地震工学に関する新しい知識と情報の紹介と討論を通じ，参加者の知識を高め，もって地震災害に関する問題解決の方策を見出すことを目的とする。
5. 研修機関　57年3月13日～57年4月23日（42日間）
6. 定員
   (1) 第三国からの参加者数　12人以下
   (2) 実施国からの参加者数　12人以下
7. 割当国　バングラデシュ，ビルマ，フィジー，インド，マレイシア，ネパール，パキスタン，パプア・ニューギニア，フィリピン，シンガポール，スリ・ランカ，タンザニア，タイ，西サモア
8. 応募資格
   (1) 地震工学に従事する，大学卒業者及び同程度の能力を有する者。
   (2) 住宅建築の分野で3年以上の実務経験を有する者。
   (3) 25才以上の者。
   (4) 英語が堪能で健康な者。
9. 短期専門家派遣　5人
10. 機材供与　予算に応じ必要な機材を供与する。
11. 署名年月日　56年10月2日

５６年度実施協議議事録要旨

1. 国　　名　　コスタ・リカ
2. 実施機関　　コスタ・リカ大学
3. 研修科目　　電子顕微鏡
4. 研修期間　　５６年８月３１日～５７年２月２８日（１８２日間）
5. 定　　員　　５人以下
6. 割当国　　コロンビア，エクアドル，エル・サルヴァドル，グァテマラ，ホンデュラス，ジャマイカ，メキシコ，ニカラグァ，パナマ，ペルー，ドミニカ共和国，ヴェネズエラ
7. 短期専門家派遣を行なう。
8. 機材供与を行なう。
9. カウンターパートの受入れ

   講師あるいは管理者を５７年度中に受入れ，半月間視察せしめる。
10. 署名年月日　　５６年２月４日

58年度実施協議議事録要旨

1. 国　　名　　フィジー
2. 実施機関　　電気通信訓練センター
3. 研修科目　　電気通信
4. 研修目的　　南太平洋地域において電気通信に従事する技師，または技術者に対し，当該分野の知識を向上させる機会を与えることを目的とする。
5. 研修期間　　58年10月31日～58年12月9日（40日間）
6. 定　　員
   (1) 第三国からの参加者数　13人
   (2) 実施国からの参加者数　6人
7. 割当国　　クック諸島，キリバス，マーシャル諸島，ミクロネシア連邦，ナウル，ニウエ，パラオ，パプア・ニューギニア，ソロモン諸島，トンガ，ツヴァル，ヴァヌアツ，西サモア，
8. 応募資格
   (1) 電気通信分野に従事する技術者もしくは技師。
   (2) 電気通信行政に，現在あるいは将来，幹部として従事する者。
   (3) 40才以下の者。
   (4) 英語が堪能で健康な者。
9. 短期専門家派遣　　4人
10. 機材を供与する。
11. 署名年月日　　58年6月24日

５８年度実施協議議事録要旨

1. 国　　名　　ペルー
2. 実施機関　　電気通信訓練センター
3. 研修科目　　デジタル交換
4. 研修目的　　ラテンアメリカの参加者に対し，デジタル通信技術の応用に関する知識と技術を付与し，参加国における電気通信の発展に寄与する。
5. 研修期間　　５８年１１月２８日～５８年１２月１６日（１９日間）
6. 定　　員
   (1) 第三国からの参加者数　１６人
   (2) 実施国からの参加者数　　６人
7. 割当国　　アルゼンティン，ボリヴィア，ブラジル，チリ，コロンビア，エクアドル，パナマ，パラグァイ，スリナム，ウルグァイ，ヴェネズエラ
8. 応募資格
   (1) デジタル通信技術の知識と技術を普及させることができる，電気通信分野に従事する技師もしくは上級技官。
   (2) 大学卒業者もしくは同程度の能力を有する者で，３年以上の実務経験のある者。
   (3) スペイン語が堪能な者。
   (4) 健康な者。
9. 短期専門家派遣　　２人
10. 署名年月日　　５８年７月１３日

58年度実施協議議事録要旨

1. 国　　名　　タイ
2. 実施機関　　国立皮膚病研究所
3. 研修科目　　皮膚病学
4. 研修目的　　アジア太平洋地域における皮膚科医を対象として，皮膚病治療に関する知識技術を教授し，参加国の皮膚学の発展に寄与することを目的とする。
5. 研修期間　　59年3月26日～60年1月25日（306日間）
6. 定　　員
   (1) 第三国からの参加者数　14人
   (2) 実施国からの参加者数　　7人以下
7. 割当国　　バングラデシュ，ブータン，ブルネイ，ビルマ，中国，フィジー，インド，インドネシア，韓国，マレイシア，モルディヴ，ネパール，パキスタン，フィリピン，パプア・ニューギニア，スリ・ランカ，シンガポール
8. 応募資格
   (1) 医学博士であること。
   (2) 政府機関において，1年以上の実務経験を有する者。
   (3) 45才以下の者。
   (4) 英語が堪能で健康な者。
9. 短期専門家派遣　　6人
10. 署名年月日　　58年8月10日

５８年度実施協議議事録要旨

1. 実施機関　　アジア太平洋放送研究所（在マレイシア）
2. 研修科目　　ＥＮＧ技術（小型テレビによる番組製作技術）
3. 研修目的　　アジア太平洋地域においてＥＮＧ技術に従事する，技師もしくは技官に対し，知識と技術を向上させる機会を与えることを目的とする。
4. 研修期間　　５９年２月７日～５９年３月１７日（４０日間）
5. 定員
   (1) 第三国からの参加者数　１３人
   (2) 実施国からの参加者数　　３人
6. 割当国　　バングラデシュ，ブルネイ，ビルマ，中国，インド，インドネシア，イラン，韓国，パキスタン，フィリピン，シンガポール，スリ・ランカ，タイ
7. 応募資格
   (1) テレビジョン番組製作及び保守分野に従事する技師もしくは技官。
   (2) ３年以上のＥＮＧに関する実務経験を有する者。
   (3) 現在もしくは将来，ＥＮＧ技術に関係のある部課の長である者。
   (4) ３０才～４５才の者。
   (5) 英語が堪能で健康な者。
8. 短期専門家派遣　　３人
9. 署名年月日　　５８年８月１９日

58年度実施協議議事録要旨

1. 国　　名　　マレイシア
2. 実施機関　　金属工業技術センター
3. 研修科目　　金属加工（溶接技術コース，電気めっきコース）
4. 研修目的　　金属加工に従事する，政府もしくは公立機関の技官に対し，当該分野の技術，知識を向上させる機会を与えることを目的とする。
5. 研修期間　　59年2月19日～59年3月25日（36日間）
6. 定　　員
   (1) 第三国からの参加者数　1コース8人計16人
   (2) 実施国からの参加者数　1コース4人計　8人
7. 割当国
   (1) 溶接技術コース
   フィジー，パプア・ニューギニア，フィリピン，インドネシア，ビルマ，バングラデシュ，スリ・ランカ，ネパール
   (2) 電気めっきコース
   シンガポール，タイ，フィリピン，インドネシア，ビルマ，バングラデシュ，スリ・ランカ，ネパール
8. 応募資格
   (1) 金属加工分野に従事する技官。
   (2) 5年以上の実務経験を有する者。
   (3) 40才以下の者。
   (4) 英語が堪能で健康な者。
9. 短期専門家派遣　　2人
10. 署名年月日　　58年8月25日

５８年度実施協議議事録要旨

1. 国　　名　　シンガポール
2. 実施機関　　シンガポールポリテクニック（高等専門学校）
3. 研修科目　　建設プロジェクト管理
4. 研修目的　　アセアン地域において，建設プロジェクト管理に従事する者に，当該分野の技術と知識を向上させる機会を与えることを目的とする。
5. 研修期間　　５９年３月１８日～５９年４年１日（１５日間）
6. 定　　員
   (1) 第三国からの参加者数　１６人
   (2) 実施国からの参加者数　　４人
7. 割当国　　インドネシア，マレイシア，フィリピン，タイ
8. 応募資格
   (1) 設計，建築，もしくは土木分野の学位を有する者。
   (2) 建築における建設プロジェクト管理に従事する者。
   (3) ５年以上の実務経験を有する者。
   (4) 英語が堪能で健康な者。
9. 短期専門家派遣　　２人
10. 研修員の受入れ　　１人
11. 署名年月日　　５８年１０月１日

Ⅱ. 実施協議議事録集

ケニア郵電公社中央訓練学校における電気通信第三国研修５４年度実施協議議事録

MINUTES OF A MEETING HELD ON 11.12.79 BETWEEN OFFICIALS OF THE GOVERNMENT OF JAPAN AND OFFICIALS OF KENYA POSTS AND TELECOMMUNICATIONS CORPORATION

PRESENT:

Mr. P.O. Okundi	-	Deputy Managing Director - KP&TC (Chairman)
Mr. S. Tsugawa	-	Ministry of Foreign Affairs, Japan (Team Leader)
Mr. I. Kinoshita	-	Ministry of P. & T. Japan
Miss M. Ogura	-	JICA (Japan)
Mr. K. Okabe	-	JICA (Nairobi Office)
Mr. S. Kanai	-	JICA (Nairobi)
Mr. E.N. Ndegwa	-	Personnel Manager - KP&TC
Mr. R.E. Measures	-	Chief/Productivity & Services Improvement - KP&TC
Mr. J.B.W. Kingori	-	Ag. Training Controller (Secretary)

The purpose of the meeting was to discuss and propose to the respective Governments the best method of implementing the proposed Third Country Training Programme as suggested in the letter from the Government of Japan dated 13th September, 1979.

In his opening remarks, the Deputy Managing Director welcomed the Japanese team and thanked the Government of Japan for its generous offer to support the training efforts of the countries in the Sub-region through increased usage of the facilities available at the Central Training School. He also

said that this would boost regional cooperation on training matters; thus encouraging Technical Cooperation among the developing countries in the Sub-region.

Mr. Tsugawa thanked the Kenya Posts & Telecommunications for cooperation. He said Technical Cooperation among developing Countries (TCDC) was a fairly new concept and that from their investigations, they had concluded that Kenya was best suited to undertake the training activities in the field of Telecommunications services.

After discussion, it was agreed, subject to the approval of the respective Governments, that:-

1) An Electronics Switching Systems (ESS) Orientation course of approximately three weeks will be mounted at the Central Training School, Mbagathi during March, 1980 as an addition to the C5 & C82 switching course programmed to commence on 25th February, 1980.

2) An ESS course would be mounted at the school during the first quarter of 1981.

3) Thereafter, the KP&TC in consultation with JICA Nairobi office will agree on the types of course to be mounted annually.

4) The Government of Japan will provide expert(s) and Training materials and equipment for the first two courses.

5) The expenses to be borne by the Government of Japan in the fiscal year 1979/80 will be limited to the supply of a training expert and a lump-sum payment to the school for expenses incurred by the school for conducting the course.

6) In subsequent years, the Government of Japan will assist trainees from third countries to attend courses at the school by paying the following:-

a) Travelling expenses to and from the capital of the trainees' home country.

b) Living allowance while at the school.

c) Book allowance.

d) Other expenses incurred by school for conducting the course.

7) The KP&TC will be responsible for:-

a) Provision of training facilities

b) Provision of instructors

c) Expenses incurred by Kenyan participants

8) It was agreed that each party would recommend to their respective Governments that the above proposals be implemented and that a formal agreement be entered into.

(E.N. NDEGWA)
for: MANAGING DIRECTOR
K.P.&T.C. NAIROBI

S. TSUGAWA

13th December 1979.

ケニア郵電公社中央訓練学校における電気通信第三国研修５５年度実施協議議事録

AGREED MINUTES OF A JOINT K.P. & T.C./JAPANESE GOVERNMENT REPRESENTATIVES MEETING TO DISCUSS THE ESTABLISHMENT OF THIRD COUNTRY TRAINING PROGRAMME TO BE SPONSORED BY GOVERNMENT OF JAPAN AND TO BE CENTRED AT C T S NAIROBI

1. PRESENT :

K P & T C - REPRESENTATIVES

1.	Mr. T.P. Kiambi	-	D T S - Chairman
2.	Mrs. K.S. Maluki	-	C P O/MP.& D.
3.	Mr. E.O. Allela	-	Ag. Principal, C T S
4.	Mr. S.M. Gicinga	-	SSE/P.&S.I.
5.	Mr. A. Balebwoha	-	SE/Radio, C T S
6.	Mr. J.R.O. Chemuku	-	ASE/Radio, C T S
7.	Mr. C.M. Njiru	-	Chief Instructor/Telecomms. C T S - Secretary

JAPANESE GOVERNMENT REPRESENTATIVES

1.	Mr. S Tsugawa	-	Ministry of Foreign Affairs
2.	Mr. Y. Saiki	-	Ministry of Posts & Telecommunications
3.	Mr. S. Kaneko	-	Japan Telecommunications Engineering and Consulting= (J T E C)
4.	Mr. S. Kato	-	J I C A.
5.	Mr. K. Kumagai	-	First Secretary - Embassy of Japan, Nairobi
6.	Mr. K. Okabe	-	J I C A, Nairobi
7.	Mr. Y. Shiotsuki	-	PEE/P.&S.I. - K P & T C

2. VENUE : C T S, Mbagathi

3. DATE : Tuesday 25th and Wednesday 26th November, 1980

The Chairman opened the meeting at 11.30 a.m. and asked the Japanese Representative to outline briefly the purpose of this meeting. The Japanese representative said that as part of Technical Co-operation, the Government of Japan through J I C A, has been conducting courses in Japan for participants from Kenya and other countries in various fields including telecommunications engineering. The Government of Japan has also been sending experts to work in Kenya and other countries. The Government of Japan had also launched the Third Country Training Programme as a further step in Technical cooperation between Japan and other countries. The Japanese Representative gave the example of Mexico and Thailand where the Third Country Programme had been established. In this programme, Japan and the relevant authorities in Mexico and Thailand conduct courses for participants from Mexico (or Thailand) and from neighbouring Countries. He therefore explained that Kenya had been chosen whereby participants from Kenya and other countries in Africa would attend courses at the Central Training School (C T S) Nairobi. If agreement is reached the Government of Japan through J I C A will conduct these courses jointly with Kenya Posts and Telecommunications Corporation at C T S Nairobi. The first course will be Microwave Communication Engineering with particular emphasis on the 6 GHz Microwave radio system which forms the main part of Pan African Telecommunications (Panaftel) Network.

4. P E R I O D

The first course will be conducted at C T S by the end of March, 1981. The actual date will be agreed upon by the two parties - J I C A and K P T C .

5. C U R R I C U L U M

Three courses will be conducted.

5.1 For Engineers.

This course will be for University Graduate Engineers to enable them to carry out Planning duties. This course will also be open to long experienced technicians in the radio field.

5.2 For Senior Technicians.

This course will be for long experienced technicians to enable them to carry out high level maintenance duties, minimum academic qualification - 'A' level.

5.3 For Technicians.

This course will be for technicians whose experience is not as long as those in 5.1 and 5.2 to enable them to carry out maintenance duties, minimum academic qualification - 'O' level.

See Appendix 1 for the Curricula of the above courses.

6. NUMBER OF PARTICIPANTS

The maximum number of participants per course will be twenty five (25), 60% will be Kenyans and 40% will be from other countries. However the number of participants from other countries will not exceed ten (10). The maximum number of participants per country other than Kenya will be two.

7. SELECTION OF COUNTRIES

It was agreed that Kenya as the host country will be making selection of countries which will participate in any given course.

8. GENERAL INFORMATION TO BE FORWARDED TO COUNTRIES CONCERNED

The Japanese representative informed the meeting that the general information pamphlets are normally produced for countries participating in the programme and the two examples of which are attached as Appendix 2. It was agreed that this information will be updated from time to time. This information will include accommodation, travel, per diem payments etc.

9. CHANNELS THROUGH WHICH GENERAL INFORMATION WILL BE SENT

It was agreed that in the first instance, the Government of Japan will have to inform the participating Countries about the availability of the course under Technical cooperation and the Japanese acceptance to meet the expenses of course participants under terms laid down by the government of Japan. These terms will be made available to KPTC (organisers of the course). C T S will undertake to provide Joining Instructionsand any other information related to the course to the participating countries.

10. BOARDING ARRANGEMENT

The Government of Japan is willing to pay an allowance of K.Shs.350/- per student per day for those students from other countries. This allowance will cover hotel expenses where they will be accommodated. However, accommodation is available at C T S for those students who do not wish to stay in hotels. C T S will deduct the standard rate from the per diem payment of those students who wish to stay at C T S. Otherwise those staying in hotels will be expected to meet their hotel charges from their per diem payments.

11. SENDING AIRWAY TICKETS

It was agreed that J I C A Nairobi will send airline tickets to the participants from other countries. See time table on Appendix 3.

12. INVITATION OF KENYAN OFFICIAL RELATED TO THIS PROGRAMME

The Government of Japan is willing to sponsor two or three Kenyan lecturers and administrators for a two to three week tour of Japan before the end of March, 1981. The study tour will enable them (Kenyans) to familiarise themselves with all aspects of the programme provided the necessary formalities are completed i.e. submitting forms A2 and A3 etc.

13. ARRANGEMENT OF LECTURE ROOMS AND KENYAN LECTURERS

K P T C (C T S) will provide the necessary lecture rooms. Although the lecturers for the course will be provided by Government of Japan, K P T C will have an option to attach one or more of their lecturers to the course to gain experience.

14. OTHER LOGISTICS

Transport for the participants from Nairobi Airport to C T S at the beginning of the course and from C T S to Nairobi Airport at the end of the course will be provided by K P T C. J I C A will make a lump sum payment to K P T C so that the latter can pay the per diem expenses to the participants. The lump sum payment will also cover other expenses - local study tour, teaching materials etc.

15. NUMBER OF JAPANESE EXPERTS

The Government of Japan will provide three short term experts to conduct the courses in both theory and practice. However, since this is a new project it is proposed to send a long term expert in addition to the three aforementioned, who will supervise the project. In all cases Form A1 will be submitted by K P T C to Government of Japan at appropriate time.

16. EQUIPMENT TO BE DONATED TO K P T C

The Japanese representative informed the meeting that only $25,000 had been made available for the purchase of test equipment during this fiscal year which ends in March, 1981. A further $150,000 would be allocated next fiscal year. Since this is a small amount, a sub-committee of experts from both sides was set up to:

(a) Compile a list of test equipment which will be necessary to conduct the course.

(b) Out of (a) to decide on the equipment which can be bought during this fiscal year in view of the funds available.

(c) To decide which equipment will be bought during the next fiscal year.

(d) To review the syllabus of the three types of courses to be offered. See Appendix 4 on the recommendation of the sub-committee. The Japanese representative also explained that in order that the money allocated for test equipment is released form A4 will be submitted by KPTC to Government of Japan in January, 1981.

17. ACCOUNTING PROCEDURE

In order to account for the funds expenditure on this project the Japanese representative informed the meeting that the following procedure should be followed :

17.1 C T S shall submit to J I C A a bill of estimation to be borne by the Government of Japan for implementation of the training course in consultation with J I C A Nairobi Office.

17.2 J I C A will provide the expenses necessary based on bill of estimation mentinned in 17.1 to C T S through J I C A Nairobi in accordance with laws and regulations in force in Japan.

17.3 C T S will disburse separately expenses for local travel and per diem, and those for conducting the course, since they are of different categories.

17.4 C T S will submit a statement of account to J I C A in due course and reimburse the balance if any cancellation of participation occurs upon the completion of the course. If there is over-expenditure J I C A will not pay the difference.

18. FIRST COURSE

Following deliberations of the sub-committee mentioned in para.16, it was agreed by both parties that due to limitation of funds available to purchase test equipment during this fiscal year, the engineer course will be the only convenient course that will be conducted by the end of March 1981.

19. ANY OTHER BUSINESS

19.1 The Government of Japan will pay all the expenses of the short term experts. KPTC will provide a house and medical expenses for the long term expert. Otherwise other expenses, like the short term experts, will be met by Government of Japan.

19.2 There is no limit to the length of the programme although 3 years is reasonable and can be extended by mutual consent.

19.3 6 GHz Microwave Radio System installed in C T S will form the major part of the course but the lecturers will be free to add other items which they feel will be useful to participants of other countries (in case other countries are using different systems).

19.4 K P T C selected the following countries to take part in the first course.

Uganda	-	2
Tanzania	-	1
Lesotho	-	1
Malawi	-	2
Swaziland	-	2
Botswana	-	1
Zambia	-	1

20. The following appendices form part of these Agreed Minutes :

Appendix 1 - Tentative Course Curricula for the PANAFTEL Microwave (for Engineers)

Appendix 2 - Group Training Course in Microwave Communication Engineering

Appendix 3 - Time Plan for the 1st Course

Appendix 4 - Test Equipment which can be bought during this fiscal year.

21. The Agreed Minutes herein contained have been witnessed and signed on behalf of the parties thereto this 2nd day of DEC. 1980 as follows :-

T.P. KIAMBI
FOR AND ON BEHALF OF KENYA
POSTS AND TELECOMMUNICATIONS
CORPORATION

S. TSUGAWA
FOR AND ON BEHALF OF THE
GOVERNMENT OF JAPAN

APPENDIX 1

TENTATIVE COURSE CURRICULA FOR THE PANAFTEL MICROWAVE

(For Engineers)

1. PURPOSE

This course is designed to provide wide range of knowledge in the field of microwave communications engineering, with training in practical system design and the general outline of maintenance work for the PANAFTEL Microwave.

The course, however, does not include manufacturing techniques, the installation design or methods of construction.

2. DURATION

Training periods at the Central Training School of the Kenya Posts and Telecommunication Corporations (KPTC) is scheduled from to 40 days except holidays.

3. Curriculum mainly consists of Basic Knowledge, Microwave Communications Equipment, Microwave Communications System, System Design Methods and Practical Studies.

(1) Basic Knowledge of Microwave Communications Engineering 50 class periods.

a) Microwave and Logical Circuits.
Microwave electron tubes, semiconductor devices and Microwave active circuits are explained. (30)

b) Microwave Propagation
Free space propagation, geometrical propagation path profile and Fading phenomena are explained.

c) FM Microwave Telephone Transmission

Characteristics of baseband signal, noise produced by FM transmission such as thermal noise, linear distortion noise and non-linear distortion noise are presented

d) FM Microwave TV Transmission

Characteristics of TV video signal, is explained at first, And then, impairments due to FM transmission are presented. Simultaneous transmission of video and audio signals is also included.

(20)

(2) Microwave Communications Equipment ---- 30 class periods

a) Microwave Radio Equipment (20)

Various kinds of modulator, demodulator, transmitter, receiver and repeater are introduced.

b) Microwave Antenna System (5)

Parabolic and horn reflector antenna, waveguide and microwave filter are explained.

c) Microwave Diverstity System (5)

Space and frequency diversity techniques including study for space and frequency correlation, diversity devices and improvement by adopting diversity system are presented.

(3) Microwave Communications Systems ---------- 60 class periods

Studing the principle of the various types of microwave communications systems, the participants increase their ability to choose and apply the most suitable system to their own countries.

a) Line-of-sight FM Microwave Communications System (20)

Over all configurations of line-of-sight FM microwave system including auxiliary equipments are explained.

b) Line-of-Sight PCM Microwave Communications System (20)

Principles of PCM and PCM Microwave systems are briefly presented.

c) Trans-Horizon Microwave Communications System (10)

Microwave propagation and equipment of trans-horizon systems are explained.

d) Satellite Communications System (10)

Regarding to relations between terrestrial and satellite communication system, brief explanations of satellite communication system are presented.

(4) System Design Method ---------- 60 class periods

Practical system design work based on actual transmission routes including site location, choosing facilities and system quality estimation is dealt with.

(5) Practical Studies ---------- 40 class periods

a) To test actual equipments, practical studies on microwave communications and carrier equipment are provided at the Central Training School. Here, participants can combine theoretical knowledge with practical application. (30)

b) Two days practical observation on a microwave relay station is provided in the curriculum. (10)

1 day - 6 class periods.

TENTATIVE COURSE SYLLABUS FOR THE PANAFTEL MICROWAVE

(For Senior Technicians)

1. PURPOSE

This course is designed to provide trainees with comprehensive training necessary for the operation and maintenance of microwave systems.

To ensure trainee's comprehension on practical knowledge, this course starts from the explanation of the microwave system configuration and transmission theory.

Taking in account the familiarity by trainees, the Panaftel Microwave System in Kenya is better to be chosen as a model system.

2. DURATION

Training periods at the Central Training School of Kenya Posts and Telecommunications Corporation (KPTC) is scheduled from to 40 days except holidays.

3. SYLLABUS

(1) Microwave System Configuration ---------- 50 class periods

This course shall be started from the explanation of the outline of microwave systems including radio, modulator-demodulator, supervisory, multiplex and power supply systems.

(2) Microwave propagation and Path Design ---- 20 class periods

Radio equipment, antenna system, RF propagation and system design are studied.

Space and frequency diversity techniques are treated here.

(3) Microwave Transmission Theory ---------- 20 class periods

Telephone and television transmission theories are explained.

This item is the introduction to the practical training on the operation and maintenance following.

(4) Practical Training on Operation and Maintenance ---------- 70 class periods

Using various range of test equipment, trainees can familiarize themselves with the practical technique necessary for the field job of the operation and maintenance of the Panaftel Microwave system.

Practical measuring principles and methods, and interpretation of data are studied.

(5) Philosophy of Maintenance ---------- 30 class periods

Routine maintenance, fault rectification and maintenance administration are studied.

(6) Simulation of Fault Rectification ---------- 50 class periods

Practical study of the fault rectification using the Panaftel microwave equipment in the CTS is provided.

1 day = 6 class periods.

TENTATIVE COURSE CURRICULA FOR THE PANAFTEL MICROWAVE

(For Technicians)

1. PURPOSE

This course is designed to provide participants with comprehensive theoretical and practical training in Microwave Communications Engineering so that participants will be able to acquire sufficient knowledge and ability, especially in the field of maintenance and operation work for the PANAFTEL Microwave.

2. DURATION

Training periods at the Central Training School of the Kenya Posts and Telecommunications Corporation (KPTC) is scheduled from to , 35 days except holidays.

3. CURRICULUM

The curriculum mainly consists of :

(1) Basic Study for Microwave
(2) Basic Study of MUX Terminal
(3) Microwave Components, Devices and Circuits
(4) PANAFTEL Microwave system
(5) Microwave Propagation and Path Design
(6) Microwave Transmission Theory
(7) Practical Study of PNAFTEL Microwave System.

4. Breakdown of Curriculum

(1) Basic Study for Microwave ---------- 20 class periods

To begin with microwave study, some basic study for outline of microwave, level and noise, decibel calculation practice etc. are necessary.

(2) Basic Study of MUX Terminal ---------- 20 class periods

Basic concepts such as constitution of MUX, ring moduration, frequency arrangement, reflection, return loss, etc. are studied.

(3) Microwave Components, Devices and Circuits --- 20 class periods

Recentry, new diodes, transisters, IC, devices and circuits have been developed and put into services. Theories for these are discussed.

(4) PANAFTEL Microwave System ---------- 40 class periods

Transmitter, receiver, modulator, demodulator, antenna system and auxiliary equipment used for PANAFTEL Microwave are explained together with their operational principles.

(5) Microwave Propagation and Path Design -------- 20 class periods

Frequency arrangement for PANAFTEL Microwave, microwave propagation characteristics, reliability of the systems are explained.

(6) Microwave Transmission Theory ---------- 20 class periods

Telephone and television transmission theories are treated here.

(7) Practical Study of PANAFTEL Microwave System---70 class periods

Practical study for PANAFTEL Microwave equipment and systems, measuring principles and methods etc. are studied.

1 day - 6 class periods

APPENDIX 2

GROUP TRAINING COURSE

IN

MICROWAVE COMMUNICATION ENGINEERING

, 1981

The Group Training Course in Microwave Communication Engineering will be conducted jointly by the Kenya Posts and Telecommunications Corporation (KPTC) and the Japan International Cooporation Agency (JICA) as part of its Technical Cooperation Programme.

Arrangements for conducting the course are made by the Kenya Posts and Telecommunication Corporation and Japan International Cooporation Agency, commissioned by the Government of Japan to execute technical Cooperation programmes, in collaboration with the Central Training School (CTS) and other related organizations in Kenya.

PURPOSE

This course is designed to provide wide range of knowledge in the field of microwave communications engineering, with training in practical system design and the general outline of maintenance work for the PANAFTEL Microwave.

The course, however, does not include manufacturing techniques, the installation design or methods of construction.

QUALIFICATIONS

Applicants should :

(1) be either graduates from colleges or universities who have majored in telecommunication or electrical engineering, or those who have an equivalent technical knowledge,

(2) have a sufficient command of spoken and written English.

(3) be under years of age.

(4) have appropriate physical fitness.

(5) have at least one year working experience in telecommunication field.

DURATION

From , 1981.

LANGUAGE

The course will be conducted in English.

INSTITUATION

The course will be conducted by :
Central Training School, Kenya Posts and Telecommunications Corporation.

PROCEDURES FOR APPLICATION

ALLOWANCE AND EXPENSES

The following allowance and expenses will be borne by the Kenya Posts and Telecommunications Corporation and the Japan International Cooporation Agency :

(1) Economy class air ticket between the international airport designated by KPTC and Nairobi will be sent to the applicant in advance by the representative of the International Airline in the participant country, Air Ticket for the return-trip will be arranged by KPTC.

(2) Living allowance at the rate of (equivalent to US$) per day will be paid to the participant when arriving Nairobi. This living allowance is to cover board and lodging, local transpotation and other personal daily expenses.

(3) In accordance with relevant regulations, free medical treatment will be provided for participants who become ill afterarrival in Kenya.

FACILITIES PROVIDED

The following facilities will be provided by the Kenya Posts and Telecommunications Corporation.

(1) Arrangement for the training programme.

(2) Immigration and tax clearance including the arrangement for the extension of the permit to stay in Kenya.

(3) Orientations (Briefing upon arrival)

(4) Accomodation reservation and arrangement.

CERTIFICATE

Participants who successfully complete the course will be awarded a certificate of attendance by K P T C and a certificate of academic achievement from CTS.

OTHER INFORMATION

(1) Participants are required to arrive in Nairobi on the date designated by KPTC after the confirmation of acceptance. However, the date will be finally confirmed through the airticket sent to the participants.

(2) On arrival at Nairobi International airport, participants will be met by a representative of KPTC. Necessary care of the participants, thereafter, will be taken by KPTC and CTS throughout the duration of the course.

(3) Participants are required to observe strictly the course schedule.

(4) Application to change or alter the training subject or to extend the training period will not be accepted.

(5) Participants are requested not to bring any member of their families.

The living allowance paid by Kenya Posts and Telecommunication Corporation and the Japan International Cooporation Agency is sufficient only to cover normal living expenses for one person. No allowance of any kind will be paid for their dependants.

(6) For administrative uses, participants are requested to bring six (6) copies of their photograph.

GROUP TRAINING COURSE
IN
MICROWAVE COMMUNICATION ENGINEERING
, 1981

The Group Training Course in Microwave Communication Engineering will be conducted jointly by the Kenya Posts and Telecommunications Corporation (KPTC) and the Japan International Cooporation Agency (JICA) as part of its Technical Cooperation Programme.

Arrangements for conducting the course are made by the Kenya Posts and Telecommunications Corporation and Japan International Cooporation Agency Commissioned by the Government of Japan to execute technical Cooperation Programmes, in collaboration with the Central Training School (CTS) and other related organizations in Kenya.

PURPOSE

This course is designed to provide participants with comprehensive theoretical and practical Training in Microwave Communication Engineering so that participants will be able to acquire sufficient knowledge and ability especially in the field of maintenance and operation work for the PANAFTEL Microwave.

QUALIFICATIONS

Applicants should :

(1) be graduates from Technical High School who have majored in Telecommunication or electrical technique, or those who have an equivalent technical knowledge.

(2) have a sufficient command of spoken and written English.

(3) be under years of age.

(4) have appropriate physical fitness.

(5) have at least one year working experience in telecommunication field.

DURATION

From , 1981.

LANGUAGE

The course will be conducted in English.

INSTITUATION

The course will be conducted by :
Central Training School, Kenya Posts and Telecommunications Corporation.

PROCEDURES FOR APPLICATION

ALLOWANCE AND EXPENSES

The following allowance and expenses will be borne by the Kenya Posts and Telecommunications Corporation and the Japan International Cooporation Agency :

(1) Economy class air ticket between the international airport designated by KPTC and Nairobi will be sent to the applicant in advance by the representative of the International Airline in the participant country, Air Ticket for the return-trip will be arranged by KPTC.

(2) Living allowance at the rate of (equivalent to US$) per day will be paid to the participant when arriving Nairobi. This living allowance is to cover board and lodging, local transpotation and other personal daily expenses.

(3) In accordance with relevant regulations, free medical treatment will be provided for participants who become ill afterarrival in Kenya.

FACILITIES PROVIDED

The following facilities will be provided by the Kenya Posts and Telecommunications Corporation.

(1) Arrangement for the training programme.

(2) Immigration and tax clearance including the arrangement for the extension of the permit to stay in Kenya.

(3) Orientations (Briefing upon arrival)

(4) Accomodation reservation and arrangement.

CERTIFICATE

Participants who successfully complete the course will be awarded a certificate of attendance by K P T C and a certificate of academic achievement from CTS.

OTHER INFORMATION

(1) Participants are required to arrive in Nairobi on the date designated by KPTC after the confirmation of acceptance. However, the date will be finally confirmed through the airticket sent to the participants.

(2) On arrival at Nairobi International airport, participants will be met by a representative of KPTC. Necessary care of the participants, thereafter, will be taken by KPTC and CTS throughout the duration of the course.

(3) Participants are required to observe strictly the course schedule.

(4) Application to change or alter the training subject or to extend the training period will not be accepted.

(5) Participants are requested not to bring any member of their families.

The living allowance paid by Kenya Posts and Telecommunication Corporation and the Japan International Cooporation Agency is sufficient only to cover normal living expenses for one person. No allowance of any kind will be paid for their dependants.

(6) For administrative uses, participants are requested to bring six (6) copies of their photograph.

APPENDIX 3

TIME PLAN FOR THE 1ST COURSE

DATE	KENYA	JAPAN
10 December '80	Submit to the Ministry of Finance form A1, A2/3 and A4 duly completed.	Send telex to Embassy of Japan in the countries concerned to ask them to inform the telecomms organisations in their country that the offer of the course will be forwarded to them by K P & T C.
20	Send allocation of participants including all information related to the course to telecomms organisations	
January '81		
10		Arrange for procurement of the equipment and for selection of experts
20	Receive application from telecomms organisation. Selection of participants. Inform J I C A Nairobi about the name and address of participants.	
10 February, '81	Inform the telecomms organisations concerned about the results of selection. Submit bill of estimation on the expenses which will be borne by Government of Japan to JICA Nairobi	
10		Send airway tickets to selected participants.
March ' 81		
20	Arrival of participants. Pay per diem to participants.	dispatch experts and equipment
T R A I N I N G		

APPENDIX 4

TEST EQUIPMENT WHICH CAN BE BOUGHT DURING THIS FISCAL YEAR

1.	Barreter Mounts 1700 to 8600 MHz	Anritsu MP639B, SR13
2.	Power Meter 100 KHz to 18GHz	YHP 435A, 8431A
3.	Digital Multimeter	Takeda Riken TR6875
4.	Microwave Frequency Counter 10Hz to 18 GHz	Takeda Riken TR 5211B
5.	Standard Level Meter 10Hz to 30 MHz	Anritsu ML47[illegible]A
6.	Frequency Synthesizer 10Hz to 30 MHz	Anritsu MG440A
7.	Return Loss measuring set 50 KHz to 30 MHz	Anritsu M-242B

TEST EQUIPMENT NECESSARY TO RUN THE COURSE

1.	Frequency Counter	HP model 5340A
2.	Noise Source	HP model J347A
3.	Noise Figure Meter	HP model 342A
4.	Microwave Signal Generator	HP model 618C
5.	Microwave link analyser	HP model 8620C
6.	" " "	HP model 3730A
7.	" " "	HP model 3702B
8.	" " "	HP model 3710A
9.	" " "	HP model 3716A
10.	" " "	HP model 3705A

チリ，パウラ・ハラケマダ病院胃がん診断センターにおける胃腸病学第三国研修５５年度実施協議議事録

THE RECORD OF DISCUSSIONS BETWEEN THE CONSULTATION TEAM OF THE GOVERNMENT OF JAPAN AND THE AUTHORITIES CONCERNED OF THE GOVERNMENT OF THE REPUBLIC OF CHILE WITH REGARD TO THE TECHNICAL COOPERATION PLAN FOR THE IMPLEMENTATION OF THE THIRD COUNTRY TRAINING PROGRAMME ON ADVANCES OF GASTROENTEROLOGY.

The Consultation Team of the Government of Japan (hereinafter called as the "Team") headed by Mr. Kazuhisa Koyama, Officerof the 1st Technical Cooperation Division, Economic Cooperation Bureau, Ministry of Foreign Affairs, visited Chile from August 20, 1980 to August 28, 1980 for talks with the authorities concerned of the Government of Chile on the details of the technical cooperation plan for the implementation of the Third Country Training Programme on Advances of Gastroenterology. The Team and the authorities concerned of the Government of Chile have agreed to recommend to each Government the following matters, based on "Agreement on Technical Cooperation between the Government of Japan and the Goverment of the Republic of Chile.

1. As a part of its Technical Cooperation among Developing Countries programme, the Government of Chile will conduct a course on advances of gastroenterology with the participants from vicinity countries. And the Government of Japan will cooperate in the implementation of this course.
2. The programme shall be conducted at the Gastric Cancer Center in Paula Jaraquemada Hospital of Ministry of Health (hereinafter called as the "Center") in the present japanese fiscal year (April 1, 1980 - March 31, 1981). The detail of the implementation shall be determined separately between the Team and the Center. The date and the duration of the course

from the next japanese fiscal year onward shall be determined each time by a note verbale to be exchanged between two Goverments.

3. The necessary measures and expenses in carrying out the course shall be shared between the parties hereto as follows

A. The Government of Japan

1) Expense for the participants from vicinity countries:

a) Travelling expense

b) Living allowance

c) Book allowance

2) Expenses for conducting the course within its budget.

3) Dispatch of the Japanese experts and a training coodinator.

B. The Government of Chile

1) Recruit and selection of participants.

2) Reservation of accomodations.

3) Provision of facilities.

4) Provision of Chilean instructors.

5) Expenses to be incurred by Chilean participants.

6) Expenses for conducting the course which are not covered by those mentioned in A. 2) above.

Santiago, 28 AGO. 1980

Kazuhisa Koyama

Kazuhisa Koyama
Team Leader of
Japanese Consultation Team

General Alejandro Medina Lois
Minister of Health
Republic of Chile

TENTATIVE IMPLEMENTATION PLAN OF THE COURSE ON ADVANCES OF GASTROENTEROLOGY IN FISCAL 1980.

Within the scope of "THE RECORD OF DISCUSSIONS BETWEEN THE CONSULTATION TEAM OF THE GOVERNMENT OF JAPAN AND THE AUTHORITIES CONCERNED OF THE GOVERNMENT OF THE REPUBLIC OF CHILE WITH REGARD TO THE TECHNICAL COOPERATION PLAN FOR THE IMPLEMENTATION OF THE THIRD COUNTRY TRAINING PROGRAMME ON ADVANCES OF GASTROENTEROLOGY" signed in Santiago on August 26, 1980, the Japanese Consultation Team and Chilean Authorities have jointly formulated the Tentative Implementation Plan of the Course on Advances of Gastroenterology in fiscal 1980, which is annexed hereto.

The Tentative Implementation Plan is subject to change in accordance with the progress of implementation of the course.

Santiago, August 26, 1980

Kazuhisa Koyama
Team Leader
of Japanese Consultation Team.

Dr. Pedro LLorens S.
Director Gastric Cancer
Center.
Paula Jaraquemada Hospital

ANNEX I

1.- Purpose:

The purpose of the course is to provide participants with advanced knowledges and informatinns on gastroenterology through practices, lectures, and discussions, and thus to promoting friendly relations between Chile and participating countries.

2.- Duration:

March 16, 1981 - April 10, 1981

3.- Facility:

Gastric Cancer Center in Paula Jaraquemada Hospital, Santa Rosa 1234, Santiago

4.- Number of participants from vecinity countries:

12

5.- Participating countries:

Argentina, Brasil, Colombia, Ecuador, Paraguay, Perú, Uruguay, and Venezuela.

6.- Programme:

Attached ANNEX II

7.- The budget of the Government of Japan:

Japanese budget is to be limitted within 5.000.000 Yen except expenses for dispatching the Japanese experts.

8.- Accounting Procedure:

1) The Center shall submit to the Government of Japan a bill of estimation on the whole expenses to be incurred in imple - menting the course within the Japanese budget, 5.000.000 Yen.

2) The Government of Japan shall make lump-sum payment of the expenses for conducting the course to the Center. The Center shall submit its reciept to the Government of Japan.

3) The Government of Japan shall pay travelling allowance, and living allowance, and book allowance to each participant through the training coordinator. The participants shall be required to submit its reciept to the training coordinator.

4) The Center shall submit to the Government of Japan the report of the valance of payment after completion of the course.

9.- Certificate:

Both Governments of Japan and Chile shall jointly issue the certificates to the participants who shall have sucessfully completed the course.

ANNEX II

"POST GRADUATED COURSE ON ADVANCES OF GASTROENTEROLOGY"

Practical Training

I.-Morning

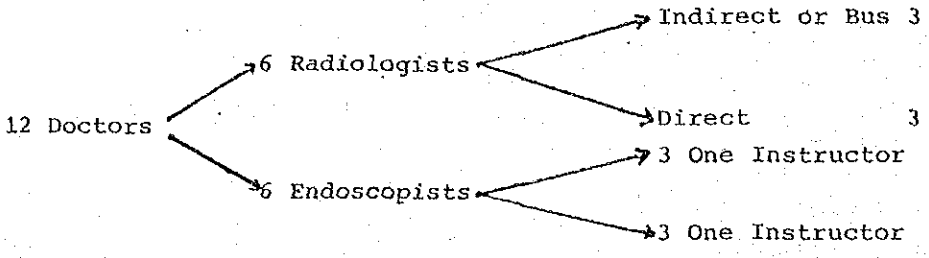
1) Direct X-Ray examination
2) Indirect X-Ray examination
   a) in the Center (Fixed)
   b) Bus (Field examination)
3) Endoscopy
4) Histological examination (Biopsy and Preparing specimen)

II.-Afternoon

1) Colonoscopy
2) ERCP
3) Polipectomy
4) Citology and other laboratory secretion Tests
5) Seminar (2 a week)
6) Clinical Meeting

PRACTICAL WORK DISTRIBUTION

MORNING:



Histological examination and preparing for the specimen once a week from 11,30 - 1,30 hrs. everybody together.

AFTERNOON

MONDAY

2,30 - 4,00
Colonoscopy
Dr. LLorens

4,00 - 5,30
Seminar

TWESDAY

2,30 - 4,00
ERCP
Dr. Klinger

4,00 - 5,30

6 Endoscopical Reading

6 X-Ray Reading

WEDNESDAY

2,30 - 4,00
Polipectomy
Dr. Llorens
Dr. LLanos

4,00 - 5,30

Endoscopical Reading
Endoscopists Invited
Dr. Rufin

X-Ray Reading

THURSDAY

11,30 - 1,30
Clinical Meeting

2,30 - 4,30
Colonoscopy
Dr. Llorens

4,30 - 5,30
Citogical Reading and
Biopsy Lectures (everybody)

FRIDAY

2,30 - 4,00
ERCP
Dr. Altschiller

4,00 - 5,30
Seminar

POST GRADUATE COURSE

42 Pupils (Mainly chileans plus private participants from abroad official participants from other countries).

Plus 12

TOTAL 54

Practical demostrationes 6 groups:

From 8,30 - 10,00

1.- Endoscopy	9
2.- Direct X-Ray	9
3.- Indirect X-Ray	9
4.- Bus (Located near the Hospital)	9
5.- Biopsy reading Lectures and Specimen	9
6.- Practical surgi-call lecture	9
	54

テクノネット・アジア（在シンガポール）における金属加工第三国研修５５年度実施に関する覚書

MEMORANDUM OF UNDERSTANDING

between

the Japan International Cooperation Agency
and TECHNONET ASIA

Concerning the Implementation of the

Symposium on Small and Medium Scale Metalworking Industries

to be held in Singapore

24-28 November 1980

Since 1978, the Japan International Cooperation Agency (JICA) and TECHNONET ASIA, the regional organization for developing small and medium scale industries in Asian countries, have jointly conducted the Research Project on Small and Medium Scale Metalworking Industries in the Philippines, Thailand, Bangladesh and Sri Lanka.

With its successful implementation and results, TECHNONET ASIA requested the Japanese Government to cooperate in holding a symposium so as to share the information accumulated in the Research Project for the mutual benefit among the Government authorities and international organizations all of which are concerned with the development of these industries.

In order to meet the request of TECHNONET ASIA, the Japanese Government decided to hold the symposium and entrusted the Japan International Cooperation Agency to undertake it. The Resident Representative of the JICA in Singapore and the Executive Director of TECHNONET ASIA have discussed the details of the joint collaboration on the symposium within the framework of the Third Country Training Program.

As a result of the discussions, both sides have jointly formulated the Program and Budget for the implementation which are attached hereto.

Singapore, 13 November 1980

T. Kurabayashi

Taro Kurabayashi
Resident Representative
in Singapore
Japan International
Cooperation Agency

Leon V Chico
Executive Director
TECHNONET ASIA

PROGRAM

of the

Symposium on Small and Medium Scale Metalworking Industries

Singapore, 24-28 November 1980

I BACKGROUND

In August 1978, the Japan International Cooperation Agency (JICA) and TECHNONET ASIA embarked on the first of three joint research projects to conduct a survey into the state-of-the-art of the small and medium scale metalworking industries in Asia. The first phase of the Project (concluded in March 1979) was participated in by the Philippines, through the University of the Philippines, Institute for Small-Scale Industries (UP ISSI) and Thailand through the Ministry of Industry's Department of Industrial Promotion (DIP), both being Participating Organizations (POs) of TECHNONET ASIA.

With the successful conclusion of the first phase, JICA and TECHNONET decided on a second phase (April 1979 - March 1980) with the involvement of Bangladesh through the Bangladesh Small and Cottage Industries Corporation (BSCIC) and Sri Lanka through the Industrial Development Board (IDB), also POs of TECHNONET.

The ongoing phase three is participated in by Indonesia through the Departemen Perindustrian (DP), Malaysia through the Majlis Amanah Ra'ayat (MARA) and Singapore through the National Productivity Board (NPB).

Using the metalworking industry as the common factor in anticipation of future comparative studies, these three phases of the Project represent JICA's and TECHNONET's first attempt at such microlevel and industry-specific research, with the purpose of probing into its status, problems and prospects in order to search for development schemes unique to that industry.

II OBJECTIVES

The Symposium will include in-depth discussions on the results of joint research, comparative evaluation of the metalworking industries

in the four countries, detailed recommendations and follow-up action by JICA/TECHNONET and by the Governments and organizations in each of the four countries.

Specifically, the Symposium is being convened with the following objectives:

1. To highlight existing conditions and problems in the small and medium scale metalworking industries in the countries concerned that participated in the TECHNONET-JICA Joint Research Project on the Small and Medium Scale Metalworking Industries in Asia, Phases I and II, i.e. Philippines, Thailand, Bangladesh and Sri Lanka;

2. To discuss ways and means to accelerate the development/improvement of the metalworking industries in these countries; and

3. To exchange views, ideas and experiences in dealing with the development of the metalworking industries.

III PROCEEDINGS

The Symposium will be led by the Project Teams from JICA and TECHNONET, which will cover the following:

1. presentation and in-depth discussions on the results of the joint research of the small and medium scale metalworking industries in the four countries involved;

2. comparative evaluation of results and identification of possible joint projects and sharing/transfer of technology among the four countries involved;

3. identification of follow-up actions necessary by the Participating Organizations, respective Governments, TECHNONET ASIA and JICA;

4. identification of possible assistance from the Japanese Government and/or Japanese public and private institutions, international organizations concerned; and

5. field trips and/or plant visits.

IV PROJECT TEAMS AND PARTICIPANTS

1. Project Teams

The Symposium will be conducted jointly by the JICA Team and TECHNONET Team.

The JICA Team comprises the following:

1. Dr Ryuzo Naito
   Senior Technical Advisor
   JICA

2. Mr Makoto Nakamura
   Head, Mining and Industrial Technical
   Cooperation Division
   Mining and Industrial Development
   Cooperation Department
   JICA

3. Mr Masayoshi Takahashi
   Techno-Economist
   Manager, International Division
   IHI International

4. Mr Yoshihide Ando
   Industrial Engineer
   Senior Manager
   IHI International

5. Mr Masayuki Imoto
   Senior Manager
   IHI International

6. Mr Tatsuo Fujimura
   Planning Officer
   Planning Division
   Planning Department
   JICA

The TECHNONET Team, representing TECHNONET Centre, comprises the following:

1. Dr Leon V Chico
   Executive Director
   TECHNONET ASIA
   Singapore

2. Mr Ernest Kwan-Boon Tan
   Program Coordinator
   TECHNONET ASIA
   Singapore

3. Mrs Sum Wai Ping
   Executive Assistant
   TECHNONET ASIA
   Singapore

2. Participants

Participants will comprise:

1. Representatives from the Ministry of Industry (policy planner, finance institution, implementing organization) in the four countries;

2. Representatives from Participating Organizations of TECHNONET ASIA (Chief Co-Researchers) of Phases I to III;

3. Representatives from the Japanese Government and Academies;

4. Representatives from other international organizations;

5. Representatives from TECHNONET Centre.

The number of participants is expected to be around 35 persons in total.

V SCHEDULE

The implementation of the Symposium will be as follows:

Day 1 - Monday, 24 November

0900 - 0930	Session I	Opening Ceremony - Remarks by Dr Leon V Chico, Executive Director, TECHNONET ASIA - Remarks by JICA Representative Introduction of Participants and Guests
0930 - 1030	Session II	Orientation on Research Objectives and Methodology - by Ernest Tan, TECHNONET ASIA and M Takahashi, JICA (Project Team Leaders) *(Session Chairman: Dr L V Chico)*
1030 - 1100		*Coffee/Tea Break*
1100 - 1230	Session III	Analysis of a Small and Medium Metalworking Industries: Existing Conditions and Problems - *Philippines and Thailand* (including a slide presentation) - by Mrs Sonia Tiong-Aquino, Chief Co-Researcher, UP ISSI Philippines - by Rangsan Prisanavanich, Chief Co-Researcher, DIP Thailand *(Session Chairman: Ernest Tan)* Discussion
1230 - 1400		*Lunch Break*
1400 - 1530	Session IV	Continuation of Session III - Bangladesh and Sri Lanka - by Shahabuddin Faruque, Chief Co-Researcher, BSCIC Bangladesh - by N Cooray, Chief Co-Researcher, IDB Sri Lanka *(Session Chairman: Ernest Tan)* *Coffee/Tea will be served*
1530-1700		Discussion

Day 2 - Tuesday, 25 November

0900 - 1230	Session V	Current and Proposed National Projects Related to Small and Medium Metalworking Industries in the Four Countries Concerned Sponsored by Local and International Organizations: - Bangladesh - Philippines - Sri Lanka - Thailand - JICA (M Nakamura) - TECHNONET ASIA (E Tan) - Other Organizations (An exchange of knowledge and experiences of such projects among the various participants, especially the representatives of international organizations.) *(Session Chairman: Eduardo Q Canela)*
		Coffee/Tea will be served
1230 - 1400		*Lunch Break*
1400 - 1700	Session VI	Presentation of Research Recommendations and Proposals; Possible Tie-Up with Other Current and Proposed National Projects *(Session Chairman: Eduardo Q Canela)* Discussion
		Coffee/Tea will be served

Day 3 - Wednesday 26 November

1000 - 1600		Field Trip (Singapore)

Day 4 - Thursday, 27 November

0900 - 1230	Session VII	Specialization and Sub-Contracting in the Metalworking Industries - by Mr Y Hayafune, Okamoto (Singapore) Pte Ltd *(Session Chairman: M Nakamura)*
		Coffee/Tea will be served
1230 - 1400		*Lunch Break*

Day 4 - contd

1400 - 1600	Session VIII	Technical Information and Other Services for the Development of Metalworking Industries; "Delivery" and Other Mechanisms in the Transfer and Sharing of Technology - by Dr John C Wright, HKPC Hong Kong *Coffee/Tea will be served*
1600 - 1700	Session IX	Technological Development Policy for Small and Medium Enterprises in Japan (Japanese Experiences) - by Mr Muneshige Yamazaki, Ministry of International Trade and Industry, Japan *(Sessions Chairman: Mrs Sonia Tiong-Aquino)*

Day 5 - Friday, 28 November

0900 - 1130	Session X	Training in the Metalworking Sector; the Training Needs, the Type and Levels of Training Necessary; Training Programs - by Cesar N Sarino, EDF Philippines *(Session Chairman: S Faruque)* *Coffee/Tea will be served*
1130 - 1300	Session XI	Integration and Conclusion; Symposium Recommendations and Follow-Up Action Closing Ceremony *(Joint Session Chairmen: Dr LV Chico and Mr M Nakamura)*
1300 - 1430		*Closing Lunch hosted by JICA and TECHNONET ASIA*

VI PROJECT ADMINISTRATION

The leaders of the JICA Team and TECHNONET ASIA Team will be jointly responsible for the implementation of the Symposium.

The Embassy of Japan and Resident Representative office of JICA in Singapore will provide advice and coordination wherever necessary for the successful implementation of the Symposium.

VII FUNDS PROVIDED BY JICA AND TECHNONET

Expenses incurred by the Japanese Experts assigned to the Project while in Japan or disbursed from funds emanating from Japan will be borne by the Government of Japan. However, expenses disbursed by the Japanese Experts (outside Japan) in Singapore, will be covered by the total budgeted amount contributed by the Government of Japan through its Third Country Training Programme to TECHNONET ASIA for the Symposium.

Some counterpart local secretariat and conference facilities in Singapore will be provided by TECHNONET Centre in support of the Symposium.

The budget to meet the expenses (i.e. outside Japan) necessary for the implementation of the Symposium will be provided through the Resident Representative of JICA in Singapore in accordance with the laws and regulations in force in Japan. Expenses disbursed under this budget will follow the Accounting Procedures established by JICA.

The budget, to be used exclusively for the implementation of the Symposium, will be managed by the leader of the TECHNONET Team (or the TECHNONET leader's designated representative) in consultation with the Resident Representative of JICA based in Singapore. The balance, if any, will be returned to JICA in due course. The final Statement of Account will be submitted to JICA's Representative in Singapore in due course upon completion of the Symposium.

VIII DATA OWNERSHIP AND PUBLICATIONS

The data accumulated in the implementation of the Symposium will be jointly owned by the head participating organizations (JICA and TECHNONET ASIA). When the reports are published and findings, results and other information of the Symposium are presented in publication form, mention will be made that the Symposium had been implemented by the participating organizations as a technical cooperation project of the Government of Japan and TECHNONET ASIA.

Symposium on Small and Medium Scale
Metalworking Industries
Singapore, 24-28 November 1980

P R O P O S E D B U D G E T

	US$
1. Expenses for Travel and Per Diems	
(1) International Airfares for 15 Participants Bangladesh 3 persons x $800 = $2 400 Sri Lanka 4 persons x $790 = $3 160 Philippines 4 persons x $470 = $1 880 Thailand 4 persons x $300 = $1 200	8 640
(2) Per Diems (including travel days) 2 persons x 8 days x $60 1 person x 8 days x $50 6 persons x 7 days x $60 6 persons x 7 days x $50	5 980
2. Expenses to conduct the Symposium	
(1) Transportation Cost (rental of coach)	200
(2) Meeting Expenses (including rental of conference room, coffee breaks, one closing lunch, overtime, etc.)	1 000
(3) Equipment and Materials Procurement (including communications, duplication, photo coverage, rental of equipment, stationery, publication of proceedings, currency conversion changes, miscellaneous)	680
	US$16 500

Note: (a) JICA will provide Yen 3,607,000 (about US$16 500) to carry out the Symposium under the above items of expenses. Any expenses beyond the above total sum (¥3,607,000) will be shouldered by TECHNONET.

(b) The budget for category 1 should be separated from that for category 2 in use, since they are of different categories according to the JICA's Accounting Rule.

SYMPOSIUM ON THE DEVELOPMENT OF
SMALL AND MEDIUM SCALE METALWORKING INDUSTRIES IN ASIA
Singapore, 24-28 November 1980

LIST OF PARTICIPANTS AND RESOURCE PERSONS

(Tentative)

COUNTRY/NAME	*ORGANIZATION*
Bangladesh	
Mr Muhammad Sirajuddin Chairman	Bangladesh Small and Cottage Industries Corporation (BSCIC)
Mr Md Shahabuddin Faruque Deputy Chief Engineer (Mech.)	Bangladesh Small and Cottage Industries Corporation *BSCIC Chief Co-Researcher*
Canada	
Mr James J Ganderton Counsellor (Commercial)	Canadian High Commission Singapore
Dr Jingjai Hanchanlash Director	International Development Research Centre (IDRC)/Asia Regional Office Singapore
Hong Kong	
Dr John C Wright Executive Director	The Hong Kong Productivity Centre (HKPC) Resource Person on Session VIII *(TECHNONET Council Chairman 1980/81)*

Indonesia

Mr D Suryana Director	Production Planning Department Direktorat Jenderal Industri Kecil Departemen Perindustrian (DP) *(TECHNONET Council Alternate Member)*
Mr M Soekmono	Production Planning Department Direktorat Jenderal Industri Kecil Departemen Perindustrian
Mr Sukardjo	Department of Programming Direktorat Jenderal Industri Kecil Departemen Perindustrian *DP Chief Co-Researcher*

Malaysia

Mr Amir Hussein Kassim	Entrepreneurial Development Division Majlis Amanah Ra'ayat (MARA) *MARA Assistant Co-Researcher*
Mr Aziz Manan Research Officer	Standards and Industrial Research Institute of Malaysia (SIRIM)
Mr Mansur Abu Research Officer	Standards and Industrial Research Institute of Malaysia

Philippines

Mr Raul Bandera	Bureau of Small and Medium Industries
Dr Antonio Arizabal Director	Metals Institute on Research and Development Centre
Mr Cesar N Sarino President	Economic Development Foundation (EDF) Resource Person on Session X *(TECHNONET Council Member)*
Mr Eduardo Taylor Director	Institute for Small-Scale Industries University of the Philippines (UP ISSI) *(TECHNONET Council Member)*
Mrs Sonia Tiong-Aquino Assistant Director	Institute for Small-Scale Industries University of the Philippines *UP ISSI Chief Co-Researcher*
Mr Eduardo Q Canela Senior Research Fellow	TECHNONET Centre, Singapore

Singapore

Mr Lee Ong Pong Secretary-General	ASEAN Chamber of Commerce and Industries Singapore
Miss Tong Eng Leong	ASEAN Chamber of Commerce and Industries Singapore
	Economic Development Board Singapore
Mrs Tonia Tsjeng Research Officer	National Productivity Board (NPB) Ministry of Labour *NPB Chief Co-Researcher*
Mr Kenneth Pang Executive Officer	Singapore Manufacturers' Association

Sri Lanka

Mr Flavian de Silva	Ministry of Industries and Scientific Affairs
Mr N I N A Cooray Engineer	Industrial Development Board (IDB) *IDB Assistant Co-Researcher*

Thailand

Mr Ari Indhasorn Deputy Director-General	Department of Industrial Promotion (DIP) Ministry of Industry
Mr Thamnu Vasinonta Director	Thailand Management and Development Productivity Centre Department of Industrial Promotion Ministry of Industry
Mr Rangsan Prisanavanich Chief	Metal Industry Development Section Industrial Service Institute Department of Industrial Promotion Ministry of Industry *DIP Chief Co-Researcher* *and TECHNONET Research Fellow*

Japan	*Organization*
Dr Ryuzo Naito Senior Technical Adviser	Japan International Cooperation Agency (JICA) *Project Team Leader*
Mr Makoto Nakamura Head	Technical Cooperation Division Mining and Industrial Development Cooperation Department JICA *Project Team Member*
Mr Muneshige Yamazaki Chief Planner	Technology Division Small and Medium Enterprise Agency Ministry of International Trade and Industry Resource Person on Session IX
Mr Hideo Nagashima First Secretary Commercial Attache	Embassy of Japan Singapore
Mr Taro Kurabayashi Resident Representative	JICA Singapore
Mr Y Hayafune Executive Director	Okamoto (Singapore) Pte Ltd, Singapore Resource Person on Session VII
Mr Jiro Yoshio Faculty Consultant Japanese Expert to Colombo Plan Staff College	Colombo Plan Staff College for Technical Education Singapore
Mr Tatsuo Fujimura Planning Officer	Planning Division Planning Department JICA *Project Team Member*
Mr Masayoshi Takahashi Techno-Economist Manager	International Division Ishikawajima-Harima Heavy Industries Co Ltd (IHI) *JICA Resource Person and Research Team Leader*
Mr Yoshihide Ando Senior Manager	International Division IHI *JICA Resource Person and Researcher*
Mr Masayuki Imoto Senior Manager	International Division IHI *JICA Resource Person and Researcher*

TECHNONET Centre Singapore

Dr Leon V Chico Executive Director	Mr Ernest Kwan-Boon Tan Program Coordinator
Mrs Sum Wai Ping Excutive Assistant	Mr Goh Seng Kuan Finance Officer

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Revised 7.11.80
TECHNONET Centre

テクノネット・アジア（在シンガポール）
における金属加工第三国研修５６年度実施
に関する覚書

MEMORANDUM OF UNDERSTANDING

between

the Japan International Cooperation Agency
and TECHNONET ASIA

Concerning the Conduct of a

Special Technical Extension Workshop on the Foundry Industry
to be held in Bangkok, Thailand
From 6 to 28 August 1981

Joint research projects between the Japan International Cooperation Agency ("JICA") and TECHNONET ASIA ("TECHNONET"), a regional network of organizations committed to the development and improvement of small and medium scale industries in Asian countries, have been embarked on since 1978.

To further enhance the spirit of development through cooperation and sharing of experiences, TECHNONET has submitted a request to the Japanese Government for the conduct of a Special Technical Extension Workshop (called "STEW III" as it will be TECHNONET's third in a series of similar workshops held) on the Foundry Industry for the mutual benefit of all governments and international organizations concerned with the progress of this industry.

In order to meet TECHNONET's request, the Japanese Government has approved the conduct of the workshop and entrusted JICA to undertake it. The Resident Representative of JICA in Singapore and TECHNONET's Executive Director have discussed the details of the joint collaboration on the workshop within the framework of the Third Country Training Program.

As a result of the discussions, both parties have jointly formulated the Program and Budget for the implementation which are attached hereto.

Singapore, 22 June 1981

T. MIZOBUCHI
Resident Representative
in Singapore
JAPAN INTERNATIONAL
COOPERATION AGENCY

LEON V CHICO
Executive Director
TECHNONET ASIA

PROGRAM

of the

Special Technical Extension Workshop (STEW III)
on the Foundry Industry

Bangkok, 6-28 August 1981

I. BACKGROUND

Since August 1978, the Japan International Cooperation Agency (JICA) and TECHNONET ASIA (TECHNONET) have jointly collaborated in the execution of various research projects.

Specifically these are:

1. JICA/TECHNONET Joint Research Project on the Small and Medium Metalworking Industries in Asia -

   Phase I involving the Philippines and Thailand (1978-79)
   Phase II involving Bangladesh and Sri Lanka (1979-80)
   Phase III involving Indonesia, Malaysia and Singapore (1980-81)

2. JICA/TECHNONET Roving Seminar on the Metalworking Industries in four countries viz. Philippines, Thailand, Bangladesh and Sri Lanka (30 March-30 April 1980).

3. JICA/TECHNONET Symposium on Small and Medium Metalworking Industries in Asia, 24-28 November 1980.

With the successful implementation and invaluable results that have contributed to the enhancement of knowledge and experiences of all the governments and international organizations involved, JICA and TECHNONET have, once again, combined their efforts to embark on a Special Technical Extension Workshop (STEW III) on the Foundry Industry to be held in Bangkok, Thailand from 6 to 28 August 1981.

This Special Technical Extension Workshop is the third of a series of specialized technology based training programs for the Small and Medium Industrial extensionists within the TECHNONET region. The foundry industry was selected based on TECHNONET's Industrial Sectoral Priorities

of Small and Medium Industries in Asia, a matrix compiled from the Participating Organizations' submissions.

STEW III will be hosted by TECHNONET's Participating Organization in Thailand - the Department of Industrial Promotion (DIP) through its Industrial Service Institute (ISI).

II. OBJECTIVES

The STEW III program has been designed for practising small and medium industrial extensionists with some knowledge of the foundry industry. With the targeted audience, STEW III will attempt to attain the following objectives:

- Enhance the participants' capabilities on providing specialized technology-based industrial extension services to their small and medium foundry clientele.
- Increase the participants' capacity to absorb foundry technologies which could be transferred to their clientele.
- Increase the sensitivities of the participants with respect to the "uniqueness" of the needs and problems of the small and medium foundry firms.
- Upgrade the participants' familiarity with the foundry technology in general and the various components (materials, processes, auxilliary supports and software) of the technology in particular.
- Provide a venue, whereby the participants can share and identify relevant industrial extension approaches, unique to the small and medium foundry firms.

III. PROGRAM

The workshop will be conducted according to the Program attached as *Annex I*.

IV. PROJECT TEAMS AND PARTICIPANTS

The workshop will be conducted jointly by JICA and TECHNONET.

The JICA Team comprises the following:

1. Mr Isamu Taki (Team Leader)
   Advisor
   Ishikawajima-Harima Heavy Industries Co Ltd (IHI)

2. Mr Toshikazu Oshima
   Senior Manager
   I H I Casting Division

3. Mr Toshikazu Watanabe
   Engineer
   I H I Casting Division

4. Mr Masayoshi Takahashi
   Manager
   I H I International

5. Mr Kisao Abe
   Manager
   Japan General Foundry Center

The TECHNONET Team comprises the following:

1. Dr Leon V Chico (Team Leader)
   Executive Director
   TECHNONET Centre, Singapore

2. Mr Ernest Kwan-Boon Tan
   Program Coordinator
   TECHNONET Centre, Singapore

3. Mr Rangsan Prisanavanich
   Program Officer
   TECHNONET Centre, Singapore

4. Mrs Sum Wai Ping
   Executive Assistant
   TECHNONET Centre, Singapore

The local host for STEW III is the

Industrial Service Institute
Department of Industrial Promotion
Ministry of Industry
Rama VI Road
BANGKOK
Thailand

with the principal contacts being:

1. Dr Damri Sukhothanang
2. Mr Somsak Ratanakomol
3. Mr Phaibul Choopungartm

The participants will be from the various Participating Organizations in TECHNONET and are expected to be around 22-25 persons in total.

V. PROJECT ADMINISTRATION

The leaders of the JICA and TECHNONET teams will be jointly responsible for the implementation of the workshop.

The Embassy of Japan and Resident Representative of JICA in Singapore will provide advice and coordination wherever necessary for the successful conduct of the workshop.

VI. FUNDS PROVIDED BY JICA AND TECHNONET

The budget (*Annex II*) to meet the expenses (i.e. outside Japan) necessary for the implementation of the workshop will be provided through the Resident Representative of JICA in Singapore in accordance with the laws and regulations in force in Japan. Expenses disbursed under this budget will follow the Accounting Procedures established by JICA.

TECHNONET will undertake to bear any additional costs, exceeding the budget for participants' and counterpart local secretariat expenses.

Expenses directly incurred by the Japanese Experts assisgned to the Project, which are not included in the budget, will be borne by the Japanese Government.

The budget, to be used exclusively for the implementation of the workshop, will be managed by the leader of the TECHNONET Team (or the TECHNONET leader's designated representative) in consultation with the Resident Representative of JICA based in Singapore. The balance, if any,

will be returned to JICA in due course. The final Statement of Account will be submitted to JICA's Representative in Singapore in due course upon completion of the Workshop.

VII. DATA OWNERSHIP AND PUBLICATIONS

The data accumulated in the implementation of the workshop will be jointly owned by the head participating organizations (JICA and TECHNONET ASIA). Any reports published will mention that the workshop had been implemented by the participating organizations as a technical cooperation project of the Government of Japan and TECHNONET ASIA.

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SWP:lks
22.6.81

Annex I

PROGRAM
of the
THIRD SPECIAL TECHNICAL EXTENSION WORKSHOP (STEW III)
on the Foundry Industry
Bangkok, 6-28 August 1981

TIME \ DAY	MONDAY (3 AUG)	TUES (4 AUG)	WEDNESDAY (5 AUG)	THURSDAY (6 AUG)	FRIDAY (7 AUG)	SATURDAY (8 AUG)
0900-1030				Opening Ceremony	Country paper Presentation (Singapore)	Plant Visit I
1100-1230			ARRIVAL OF PARTICIPANTS	Country Papers Presentation (Bangladesh/Sri Lanka/Nepal)	(Japan) *Mr I Taki*	Discussions I
1400-1530				(Philippines Thailand/Malaysia)	General Review of Foundry Processes	FREE
1600-1730				(Indonesia/Fiji/ Korea)	" " *Mr I Taki*	

Foreign Resource Persons:

	Arr	Dep
Dr K Abe	5 Aug	29 Aug
Mr I Taki	9 Aug	18 Aug
Mr M Takahashi	10 Aug	15 Aug
Mr T Watanabe	15 Aug	20 Aug
Mr T Oshima	15 Aug	25 Aug
Dr John C Wright	25/26 Aug	29 Aug
Mr Eduardo Canela	24 Aug	29 Aug

TIME \ DAY	MONDAY (10 AUG)	TUESDAY (11 AUG)	WEDNESDAY (12 AUG)	THURSDAY (13 AUG)	FRIDAY (14 AUG)	SATURDAY (15 AUG)
0900-1030	ZALAS	Overview of the Foundry Industry	HOLIDAY	Melting Processes II	Melting Processes IV	Pattern Making and Refactory Materials
1100-1230	SEMINAR	General Foundry Processes in Various Scales of Operation *Mr M Takahashi and Mr Rangsan Prisanavanich*		*Dr K Abe*	*Local Lecturer*	*Local Lecturer*
1400-1530		Melting Processes I		Melting Processes III	Casting Materials	FREE
1600-1730		*Dr K Abe*		*Dr K Abe*	*Local Lecturer*	

TIME \ DAY	MONDAY (17 AUG)	TUESDAY (18 AUG)	WEDNESDAY (19 AUG)	THURSDAY (20 AUG)	FRIDAY (21 AUG)	SATURDAY (22 AUG)
0900-1030	Moulding Processes I	Moulding Processes III	Sand Testing	Plant Visit II	Plant Visit III	Discussion on Plant Visit III & IV
1100-1230	Mr T Watanabe	Mr T Oshima	Local Lecturer	Discussion on Plant Visit II		
1400-1530	Moulding Processes II	Moulding Processes IV	Material Testing	Pollution Control Energy Management	Plant Visit IV	FREE
1600-1730	Mr T Oshima	Mr I Taki	Local Lecturer	Subcontracting System Mr I Taki		

TIME \ DAY	MONDAY (24 AUG)	TUESDAY (25 AUG)	WEDNESDAY (26 AUG)	THURSDAY (27 AUG)	FRIDAY (28 AUG)	SATURDAY (29 AUG)
0900-1030	Management I (Production Control)	Management III (Quality Control)	Industrial Selling	Technoeconomic Analysis of Local Foundry Industries II-III (Processes and Products)	Integration Session I	DEPARTMENT OF PARTICIPANTS
			Local Lecturer		*Mr Eduardo Q Canela*	
1100-1230	*Local Lecturer*	*Local Lecturer*	Presentation of Back-Home Action Plan	*Dr J C Wright*	Course Evaluation	
1400-1530	Management II (Cost Control)	Management IV (Health and Safety Control)	Technoeconomic Analysis of Local Foundry Industries I (Processes and Products)	Strategies for Improving the Productivity of Small and Medium Foundry Firm in Asia	Closing Ceremony	
1600-1730	*Local Lecturer*	*Local Lecturer*	*Dr J C Wright*	*Mr Eduardo Q Canela*		

TCentre/9.7.81 (Amended 15.7.81)
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THIRD TECHNONET SPECIAL TECHNICAL EXTENSION WORKSHOP
(STEW III) on Foundry

Bangkok, 6-28 August 1981

PROPOSED BUDGET

								US$
1.	Airfares							16 350
	Dacca	$ 470	x 2			=	940	
	Hong Kong	$ 510	x 1	+	1*	=	1 020	
	Jakarta	$ 820	x 2			=	1 640	
	Suva	$ 630	x 2			=	1 260	
	Seoul	$ 1 300	x 3			=	3 900	
	Kuala Lumpur	$ 390	x 3			=	1 170	
	Manila	$ 720	x 3	+	1*	=	2 880	
	Colombo	$ 640	x 2	+	1*	=	1 920	
	Kathmandu	$ 740	x 1			=	740	
	Singapore	$ 440	x 1	+	1*	=	880	
			20		4*	Lecturers		
2.	Per Diems							19 180
	Participants: 20 x 25 days x $35					=	17 500	
	*Lecturers/Resource Persons: 4 x 7 days x $60					=	1 680	
3.	Local Expenses							6 502.71
	3.1 Rental of Classroom and Audivisual Equipment, and Related Facilities					=	1 800	
	3.2 Supplies and Materials					=	500	
	3.3 Communications					=	500	
	3.4 Meeting Expenses					=	900	
	3.5 Administrative Services for Course Preparation					=	900	
	3.6 Field Trips					=	900	
	3.7 Honoraria for Local Resource Persons					=	900	
	3.8 Miscellaneous					=	102.71	
							Total	*US$ 42 032.71

(*or Singapore $89 971.01 or ¥9 636 000)

NOTE:

1. All related costs for Japanese Experts (4) and TECHNONET Centre staff are *not* reflected in this budget.
2. JICA will provide Yen 9 636 000 (or US$42 032.71 or Singapore $89 971.01) for the conduct of STEW III under the above items of expenditure. Any expenses beyond the above-mentioned total sum of ¥9 636 000 will be shouldered by TECHNONET ASIA.
3. Other costs e.g. honoraria for foreign lecturers, sponsorship of local (based in Bangkok) participants, etc., will be borne by TECHNONET ASIA.

15 June 1981

SWP:al

テクノネット・アジア（在シンガポール）
における金属加工第三国研修５７年度実施
に関する覚書

MEMORANDUM OF UNDERSTANDING

between

the Japan International Cooperation Agency
and TECHNONET ASIA

Pertaining to the Conduct of a

Special Technical Extension Workshop on the
Heat Treatment of Steel (STEW IV)

to be held in Singapore

From 5-22 October 1982

The Japan International Cooperation Agency ("JICA") and TECHNONET ASIA ("TECHNONET"), a regional network of organizations committed to the development and improvement of small and medium scale industries in Asian countries, have since 1978, embarked on joint research projects.

In an effort to further strengthen the spirit of development through cooperation and sharing of experiences, TECHNONET has submitted a request to the Japanese Government for the conduct of a Special Technical Extension Workshop on the Heat Treatment of Steel (called "STEW IV" as it will be TECHNONET's fourth in series of similar workshops held). The holding of this workshop is expected to satisfy a felt need of the developing Asian countries in this vital area of metallurgical engineering.

As a consequence of TECHNONET's request, the Japanese Government has approved the conduct of the workshop and entrusted JICA to undertake it. The Resident Representative of JICA in Singapore and TECHNONET's Executive Director have discussed the details of the joint collaboration on the Workshop and entered into this Memorandum of Understanding within the frame-work of the Third Country Training Program. The Program and budget jointly formulated by both parties, are attached hereto.

Singapore, 28 July 1982

T. MIZOBUCHI
Resident Representative
in Singapore
JAPAN INTERNATIONAL
COOPERATION AGENCY

LEON V CHICO
Executive Director
TECHNONET ASIA

PROGRAM
of the

Special Technical Extension Workshop on the
Heat Treatment of Steel (STEW IV)

Singapore, 5-22 October 1982

I. BACKGROUND

Since August 1978, the Japan International Cooperation Agency (JICA) and TECHNONET ASIA (TECHNONET) have jointly collaborated in the execution of various research projects.

Specifically these are:

1. JICA/TECHNONET Joint Research Project on the Small and Medium Metalworking Industries in Asia -

   Phase I involving the Philippines and Thailand (1978-79)
   Phase II involving Bangladesh and Sri Lanka (1979-80)
   Phase III involving Indonesia, Malaysia and Singapore (1980-81)

2. JICA/TECHNONET Roving Seminar on the Metalworking Industries in four countries viz. Philippines, Thailand, Bangladesh and Sri Lanka (30 March-30 April 1980).

3. JICA/TECHNONET Symposium on Small and Medium Metalworking Industries in Asia, 24-28 November 1980.

4. Special Technical Extension Workshop (STEW III) on the Foundry Industry, in Bangkok, Thailand from 6-28 August 1981.

5. JICA/TECHNONET Joint Research Project on the Wood Furniture and Joinery Industries in Asia, Phase I from January 1982 to April 1983 involving Indonesia, Malaysia, Philippines and Thailand.

6. Sharing of Technology Among ASEAN Members and the Transfer of Technology from Oeveloped Countries from July 1982 to October 1984.

This Special Technical Workshop is the fourth in a series of specialized technology-based training programs for the Small and Medium Industrial extensionists within the TECHNONET region. The Heat Treatment of Steel was selected based on TECHNONET ASIA's Industrial Sectoral Priorities in consultation with its Participating Organizations.

STEW IV will be co-hosted by the Singapore Institute of Standards and Industrial Research (SISIR), the participating organization of TECHNONET ASIA in Singapore.

II. OBJECTIVES

STEW IV, which has been designed to be a lecture cum workshop of type of activity, will attempt to achieve the following objectives:

- Upgrade the capabilities of participants in both theoretical and and practical skills in heat treatment processes;
- Familiarize the participants with the different heat treatment processes commonly employed;
- Strengthen the ability of the participants to identify the needs and problems of small and medium scale firms with respect to heat treatment processes and to render the technical services therefrom; and
- Provide the climate and opportunity, whereby the participants can share and exchange industrial extension experiences to small and medium firms, in relation to heat treatment.

III. PROGRAM

The workshop will be conducted according to the Course Timetable attached as *Annex I*.

IV. PROJECT TEAMS AND PARTICIPANTS

The workshop will be conducted jointly by JICA and TECHNONET. JICA will be represented by:

Dr Yasutsuga Tosyioka
Ishikawajima-Harima (IHI)

TECHNONET will be represented by:

1. Dr Leon V Chico
   Executive Director
   TECHNONET Centre, Singapore

2. Mr Rangsan Prisanavanich
   Program Officer
   TECHNONET Centre, Singapore

3. Mrs Sum Wai Ping
   Executive Assistant/Administrative Officer
   TECHNONET Centre, Singapore

The principal contacts for SISIR - co-host for STEW IV will be:

1. Mr Ong Chor Eong
   Director
   Materials and Electro Technology

2. Mr Seow Hong Pheow
   Head
   Metallurgy Section

The participants will be from the various Participating Organizations of TECHNONET and are expected to be around 25 persons in total.

V. PROJECT ADMINISTRATION

The leaders of the JICA and TECHNONET teams will be jointly responsible for the implementation of the workshop.

The Embassy of Japan and Resident Representative of JICA in Singapore will provide advice and coordination wherever necessary for the successful conduct of the workshop.

VI. FUNDS PROVIDED BY JICA AND TECHNONET

The budget (*Annex II*) to meet the expenses (i.e. outside Japan) necessary for the implementation of the workshop will be provided through the Resident Representative of JICA in Singapore in accordance with the

laws and regulations in force in Japan. Expenses disbursed under this budget will follow the Accounting Procedures established by JICA.

TECHNONET will undertake to bear any additional costs, exceeding the budget for participants' and counterpart local secretariat expenses.

Expenses directly incurred by the Japanese Experts assigned to the Project, which are not included in the budget, will be borne by the Japanese Government.

The budget, to be used exclusively for the implementation of the workshop, will be managed by the leader of the TECHNONET Team (or the TECHNONET leader's designated representative) in consultation with the Resident Representative of JICA based in Singapore. The balance, if any, will be returned to JICA in due course. The final Statement of Account will be submitted to JICA's Representative in Singapore in due course upon completion of the Workshop.

VII. DATA OWNERSHIP AND PUBLICATIONS

The data accumulated in the implementation of the workshop will be jointly owned by the head participating organizations (JICA and TECHNONET ASIA). Any reports published will mention that the workshop had been implemented by the participating organizations as a technical cooperation project of the Government of Japan and TECHNONET ASIA.

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SWP:lks
21 May 1982

Annex I

COURSE DESIGN

SPECIAL TECHNICAL EXTENSION WORKSHOP (STEW IV) ON THE HEAT TREATMENT OF STEEL

Singapore, 5-22 October 1982

INTRODUCTION

This Special Technical Extension Workshop (STEW) is the fourth in a series of specialized technology-based training programs designed for upgrading the technical capabilities of the Industrial Extension Officers particularly in the TECHNONET member organizations. The first training course on "Food Processing Technology" was conducted in Sri Lanka, while Thailand was the venue for the second and third training courses on "Furniture and Joinery Technology" and "Foundry Technology", respectively.

STEW IV on the Heat Treatment of Steel was selected based on TECHNONET's Industrial Sectoral Priorities of Small and Medium Industries in consultation with its member organizations.

OBJECTIVES

Unlike the first three special technical training workshops, where the industries involved in the TECHNONET member countries were significant in size and operated independently, heat treatment firms are not commonly found as such. Rather, they operate as part of the manufacturing process. As industrialization in the Asian and Pacific countries develops and is upgraded to a higher level of technology, the needs and roles of heat treatment processes become very significant in controlling the quality of metal products. With the relatively high specialization of heat treatment processes and the above reasons in mind, this training workshop is designed to be a lecture-cum-workshop type of activity instead of covering only the theoretical aspects as in earlier courses.

The objectives of STEW IV to be achieved are as follows:

- upgrade the capabilities of participants in both theoretical and practical skills in heat treatment processes;
- familiarize participants with the different heat treatment processes commonly employed;
- increase their ability to identify the needs and problems of small and medium firms with respect to heat treatment processes and enable them to render technical services therefrom; and
- provide a venue and opportunity whereby participants can share and exchange industrial extension experiences given to small and medium firms with respect to heat treatment.

TRAINING FRAMEWORK

Figure I illustrates the design of the training framework adopted for STEW IV as a means of achieving the above-mentioned objectives. The subjects will be handled in sequential order as will the heat treatment process. Classroom lectures-cum-workshop practices will be used extensively as a tool to upgrade the participants' knowledge and practical experiences. Plant visits will be arranged to enhance the knowledge already gained.

Country paper presentations, development of heat treatment technology in the 80s, management of heat treatment plant and an integration session, are topics aimed at upgrading the participants' ability to identify the needs and problems of small and medium firms to enable them to provide industrial extension services more effectively and for the mutual interchange of industrial extension experiences and strategies.

The total training time (see Attachment I) for STEW IV is three weeks and is grouped as follows:

TIME INPUT (HOURS)

Topics	Lecture	Workshop	Plant Visit	Total Time
1. Heat treatment and Allied Technologies	51 (65.4%)	18 (23.1%)	9 (11.5%)	78 (100%)
2. Country Paper Presentations	4.5	-	-	4.5
3. Future Development Trends	1.5	-	-	3
4. Management of Heat Treatment Plant	1.5	-	-	6
5. Integration	3	-	-	3
Total Time	61.5 (69.5%)	18 (20.3%)	9 (10.2%)	88.5 (100%)

Country papers are necessary pre-requisites for accepted participants. The suggested format is shown in Attachement II and should be submitted to TECHNONET Centre, Tanglin PO Box 160, Singapore 9124, by 31 August 1982. Presentations by participants are expected to increase their ability to selectively absorb the technologies that are relevant to small and medium heat treatment firms in their respective countries.

TARGETED PARTICIPANTS

As with the three previous STEWs, the preferred participants are industrial extension officers of TECHNONET's Participating Organizations and selected institutions. With limited training time and the aims that have to be achieved, participants should have the following qualifications:

1. Educational Background -

   1.1. Engineering degrees in one of the following areas: mechanical mechanical, metallurgical, chemical and industrial engineering or

   1.2. Technical diploma with direct production experience in heat treatment or allied processes for more than 3 years;

2. Less than 45 years of age and fluent in English;

3. Preference will be given to those who have attended either local or regional Industrial Extension Training Courses (INDEXTRACs) or have had 1-3 years in industrial extension activities; and

4. Possess some basic knowledge on heat treatment technology.

A class of 20-25 participants is envisaged.

TRAINING FRAMEWORK FOR STEM IV

	HEAT TREATMENT PROCESS	TRAINING MODULE	MODES OF TRAINING		
			LECTURE	WORKSHOP	PLANT VISIT
HARDWARE TECHNOLOGY	. Introduction Session	. The Role of Heat Treatment on the Production of Machinery, Equipment & Tools - Productivity & Durability	1.5 hours		
	Correct Choice of Steel	. Metallurgy of Steel - Steel and its Mechanical Properties - Iron Carbon Diagram & Changes of Microstructure by Heating & Cooling - Relationship between Microstructure and Mechanical Properties - ITT and CCT Diagrams - Alloying Elements and their Effects on the Properties of Steel	10.5 hours		
		. Classifications, Nomenclatures, Availabilities and Costs	3 hours		
		. Properties and Selections of Steel	6 hours		
	Fabrication	. Heat Treatment Processes - Scope of Heat Treatment Processes and their Aim - Stress Relieving, Annealing, Normallizing, Spheroidizing, Austenitizing, Quenching, Tempering, Cold Treating of Steel, Austempering, Martempering, Flame and Induction Hardening, Case Hardening Processes	12 hours	3 hours	
	Preparation of Workpiece for Heat Treatment				
	Heat Treatment Equipment + Various Heat Treatment Processes (see Table I for typical combination)	. Heat Treatment Practices and Equipment - Heat Processing Equipment - Heat Resistant Alloys for Furnace Parts, Trays and Fixtures - Furnace Control Instrumentation - Equipment for Localized Heat Treating - Heat Treating of Machinery Steels - Heat Treating of Tool Steels - Heat Treating of Stainless Steels - Heat Treating of Welded Products	12 hours	12 hours	9 hours
		. Harmful Side Effects and their Prevention	1.5 hours		
	Finishing	. Shot Blasting, Washing, Degreasing, Straightening of bended Workpiece, Selection of Grinding Wheel	1.5 hours		
	Inspection	. Hardness Test, Measurement of Case Depth, Tensile and Bend Test, Impact Test, Microscopic Inspection, Dye Penetration and Magnetic Particle Test	3 hours	3 hours	
	Finished Heat Treated Parts				
SOFTWARE TECHNOLOGY	Status of Heat Treatment Activities in Asian Countries	. Country Paper Presentation	4.5 hours		
	Management	. Management of Heat Treatment Shop - Planning & Layout of Equipment - Production Control, Quality Control - Safty Control, Pollution & Waste Control - Energy Management - Processes - Equipment	1.5 hours		
	Technology for the 80's Integration Session	. Development Trends in Future . Strategies for Development of Heat Treating Industries	1.5 hours 3 hours		
		Total: 88.5 hours	61.5 hours (69.5%)	18 hours (20.3%)	9 hours (10.2%)