資料７．テキストの作成状況

## (1) LIST OF TEXTBOOK

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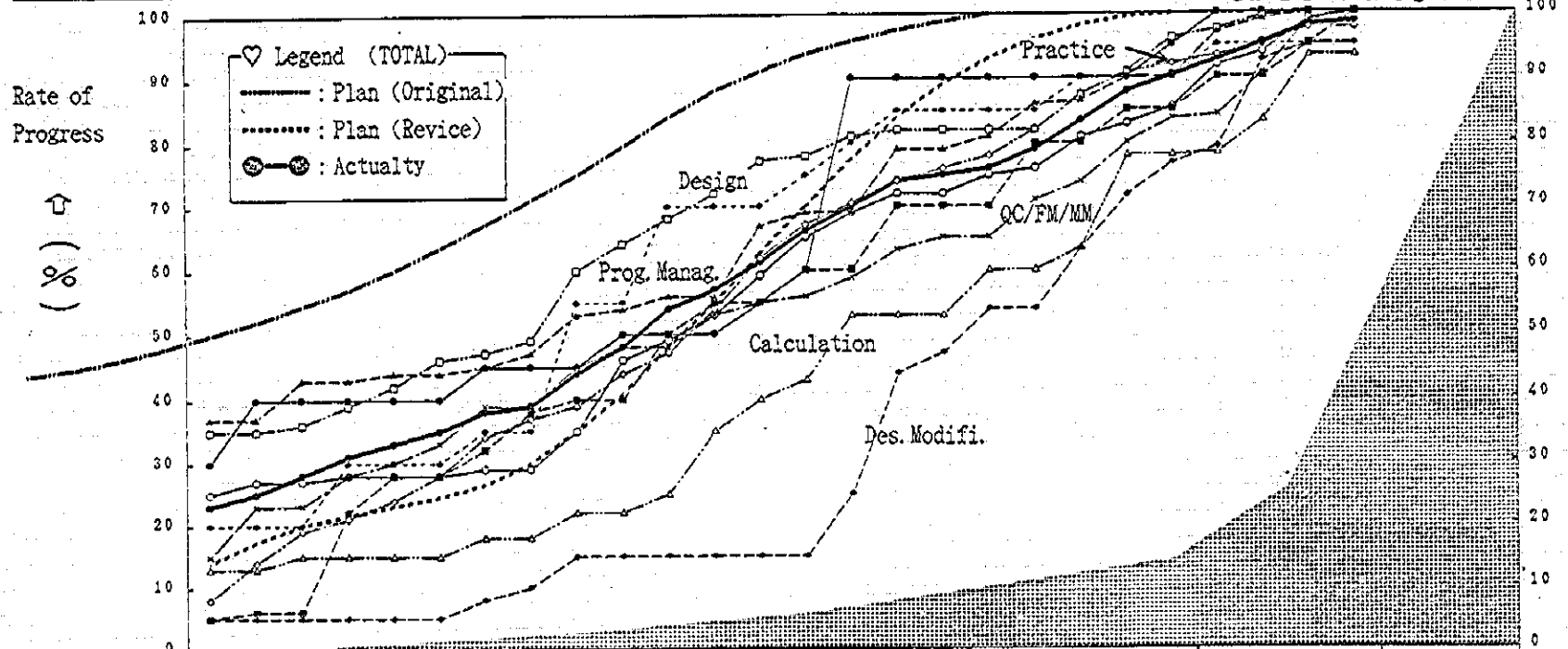
| | TOTAL | 3,519 |

## (2) 実行ベースの時間配分

| No. 26 Octo. 27th 1995 [ MAKING TEXT BOOK PROGRESS ] | | | | | Lc. Units | | R.A ① | 11.27② | ①×②(% |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Outline of Comminucations Network | | | | (0.5) | 4 | 0.01136364 | 100 | 1.14 |
| 2 | Transmission Theory | | | | (2.0) | 10 | 0.02840909 | 100 | 2.84 |
| 3 | Aerial Cable Structural Design | | | | (1.0) | 8 | 0.02272727 | 100 | 2.27 |
| 4 | Opitical Fiber Cable in General | | | | (2.0) | 8 | 0.02272727 | 100 | 2.27 |
| 5 | Customer Premises Work in General | | | | (0.5) | 4 | 0.01136364 | 100 | 1.14 |
| 6 | General Knowledge of construction Supervesing Work | | | | (0.5) | 4 | 0.01136364 | 100 | 1.14 |
| 7A | Design | (a) Cable Engineering | (1) Metalic | | (5.3) | 42 | 0.11931818 | 100 | 11.93 |
| 7B | | | (2) Optical Fiber | | (0.3) | 2 | 0.00568182 | 100 | 0.57 |
| 8 | | (b) Civil Eng. | (1) MH/HH, Duct | | (2.0) | 16 | 0.04545455 | 100 | 4.55 |
| 9 | | | (2) Duct Attachment O.B | | (1.0) | 8 | 0.02272727 | 100 | 2.27 |
| 10 | | Customer Premises Engineering | | | (1.0) | 8 | 0.02272727 | 100 | 2.27 |
| 12 | Calcu- | (a) Cable Engineering | | | (1.0) | 8 | 0.02272727 | 90 | 2.05 |
| 13 | lation | (b) Civil Engineering | | | (0.5) | 4 | 0.01136364 | 100 | 1.14 |
| 14 | Work Imple. (Prac- tice) | (a) Cable Eng. | (1) Inst./Splicing Duct Cable (M) | | (3.5) | 28 | 0.07954546 | 95 | 7.56 |
| 15 | | | (2) Inst./Splicing Direct Buried Cable (M) | | (2.0) | 16 | 0.04545455 | 95 | 4.32 |
| 16 | | | (3) Pole, Guy & Stay Construction | | (1.5) | 12 | 0.03409091 | 100 | 3.41 |
| 17 | | | (4) Inst./Splicing of Aerial Casble (M) | | (2.0) | 16 | 0.04545455 | 100 | 4.55 |
| 18 | | | (5) Cross Connection Cabinet (DP, RK) | | (1.0) | 8 | 0.02272727 | 100 | 2.27 |
| 19 | | | (6) MDF Cable Terminating (M) | | (0.5) | 4 | 0.01136364 | 100 | 1.14 |
| 20 | | | (7) Final Test (M) | | (0.8) | 6 | 0.01704545 | 100 | 1.70 |
| 21 | | | (6) Inst./Splicing Duct Cable (F) | | (3.5) | 28 | 0.07954545 | 95 | 7.56 |
| 22 | | | (9) Opitical Fiber Cable Termination (CTF) | | (1.0) | 8 | 0.02272727 | 100 | 2.27 |
| 23 | | | (10) Final Test (F) | | (1.5) | 12 | 0.03409091 | 100 | 3.41 |
| 24 | | (b) Customer Premises Engineering (costruction) | | | (1.5) | 12 | 0.03409091 | 100 | 3.41 |
| 26 | Quality Control | | | | (1.3) | 10 | 0.02840909 | 100 | 2.84 |
| 27 | Facilities Management | | | | (0.8) | 6 | 0.01704545 | 100 | 1.70 |
| 28 | Maintenance Management | | | | (0.8) | 6 | 0.01704545 | 100 | 1.70 |
| 29 | Progress Management | | | | (1.0) | 8 | 0.02272727 | 95 | 2.16 |
| 30 | Inspection | | | | (1.3) | 10 | 0.02840909 | 100 | 2.84 |
| 33 | Work Imple. Man./ Equip. Manag. | (a) Civil Eng. | (1) Duct | | (1.0) | 8 | 0.02272727 | 100 | 2.27 |
| 34 | | | (2) Manhole/Handhole | | (1.0) | 8 | 0.02272727 | 100 | 2.27 |
| 35 | | | (3) Concrete Construction | | (0.5) | 4 | 0.01136364 | 100 | 1.14 |
| 38 | Design Modification | (a) Cable Implementation Work | | | (0.8) | 6 | 0.01704545 | 90 | 1.53 |
| 39 | | (b) Civil Implementation Work | | | (0.5) | 4 | 0.01136364 | 100 | 1.14 |
| | Modification | (c) Customer Premises Engineering | | | (0.3) | 2 | 0.00568182 | 100 | 0.57 |
| 41 | Safety Management | | | | (0.5) | 4 | 0.01136364 | 100 | 1.14 |
| 42 | TOTAL (Rate of Total Progress ; % ) | | | | (44Days) | 352h | 1.00000000 | | 98.48% |

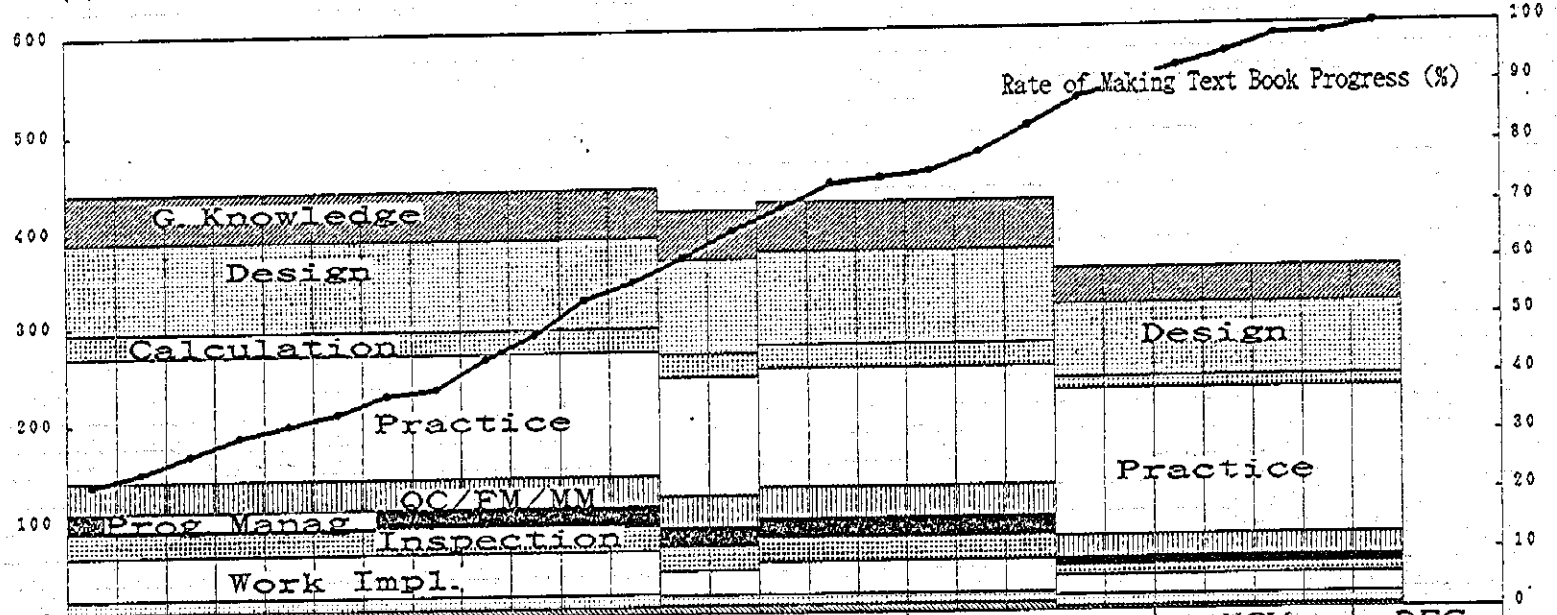
## (3) RATE OF MAKING TEXT BOOK PROGRESS (TOATAL PROGRESS) — OPCC-Project




| Month / Day | JUN. | | | | JUL. | | | | | AUG. | | | | SEP. | | | | OCT. | | | | | NOV. | | | | DES. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5 | 12 | 19 | 26 | 3 | 10 | 17 | 24 | 31 | 7 | 14 | 21 | 28 | 4 | 11 | 18 | 25 | 2 | 9 | 16 | 23 | 30 | 6 | 13 | 20 | 27 | 4 | 11 | 18 |
| Total Rate (%) | 23 | 25 | 28 | 31 | 33 | 35 | 38 | 39 | 44 | 48 | 54 | 57 | 61 | 66 | 70 | 74 | 75 | 76 | 79 | 83 | 88 | 90 | 93 | 95 | 98 | 98 | | | |
| G. Knowledge —○ | 25 | 27 | 27 | 28 | 28 | 28 | 29 | 29 | 35 | 46 | 49 | 53 | 59 | 65 | 69 | 72 | 72 | 75 | 76 | 81 | 83 | 85 | 92 | 94 | 99 | 100 | ♡ | | |
| Design ---□ | 35 | 35 | 36 | 39 | 42 | 46 | 47 | 49 | 60 | 64 | 68 | 72 | 77 | 78 | 81 | 82 | 82 | 82 | 82 | 87 | 91 | 96 | 97 | 99 | 100 | ♡ | | | |
| Calculation ---△ | 13 | 13 | 15 | 35 | 15 | 15 | 18 | 18 | 22 | 22 | 25 | 35 | 40 | 43 | 53 | 53 | 53 | 60 | 60 | 63 | 73 | 78 | 78 | 83 | 93 | 93 | | | |
| Practice ---◇ | 8 | 14 | 19 | 21 | 24 | 28 | 34 | 37 | 39 | 44 | 47 | 54 | 62 | 67 | 70 | 74 | 79 | 79 | 82 | 87 | 91 | 92 | 93 | 95 | 98 | 98 | | | |
| QC/FM/MM ---× | 20 | 23 | 23 | 28 | 30 | 33 | 39 | 39 | 44 | 48 | 48 | 53 | 55 | 56 | 59 | 62 | 65 | 65 | 71 | 74 | 80 | 84 | 84 | 90 | 99 | 100 | ♡ | | |
| Prog. Manag. ---◆ | 20 | 20 | 20 | 30 | 30 | 30 | 35 | 35 | 55 | 55 | 70 | 70 | 70 | 75 | 80 | 85 | 85 | 85 | 85 | 90 | 90 | 90 | 95 | 95 | 95 | 95 | | | |
| Inspection --■ | 5 | 6 | 6 | 22 | 28 | 29 | 32 | 38 | 40 | 40 | 50 | 55 | 55 | 60 | 60 | 70 | 70 | 70 | 85 | 85 | 85 | 85 | 90 | 90 | 95 | 100 | ♡ | | |
| Work Impl. --▲ | 37 | 37 | 43 | 43 | 44 | 44 | 45 | 47 | 53 | 54 | 56 | 56 | 57 | 69 | 69 | 79 | 79 | 81 | 86 | 88 | 90 | 90 | 97 | 99 | 100 | ♡ | | | |
| Des. Modifi. --◆ | 5 | 5 | 5 | 5 | 5 | 5 | 8 | 10 | 15 | 15 | 15 | 15 | 15 | 15 | 25 | 42 | 47 | 54 | 54 | 63 | 72 | 77 | 79 | 92 | 95 | 95 | | | |
| Safe. Manag. —⊗ | 30 | 40 | 40 | 40 | 40 | 40 | 45 | 45 | 45 | 50 | 50 | 50 | 55 | 60 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 95 | 95 | 100 | ♡ | | | | |

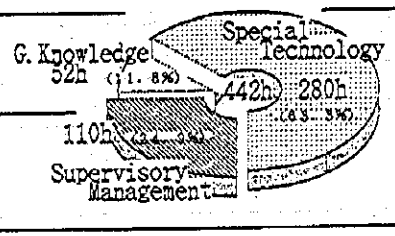
## (4) CHANGES OF LECTURE TIME

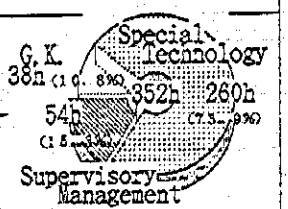
OPCC-Project




| Month / Day | JUN. | | | | JUL. | | | | | AUG. | | | | SEP. | | | | OCT. | | | | | NOV. | | | | DEC. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5 | 12 | 19 | 26 | 3 | 10 | 17 | 24 | 31 | 7 | 14 | 21 | 28 | 4 | 11 | 18 | 25 | 2 | 9 | 16 | 23 | 30 | 6 | 13 | 20 | 27 | 4 | 11 | 18 |
| Rate of Prog. (%) | 23 | 25 | 28 | 31 | 33 | 35 | 38 | 39 | 44 | 48 | 54 | 57 | 61 | 66 | 70 | 74 | 75 | 76 | 79 | 83 | 88 | 90 | 93 | 95 | 98 | 98 | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Lecture Time | ⇐ 442 h ⇒ | | | | | | | | | | | | 418 h | ⇐ 426 h ⇒ | | | | | | | ⇐ 352 h ⇒ | | | | | | | | |
| h / 1:C/P | 49.1h/ 1:C/P | | | | | | | | | | | | 46.4h | 47.3h/1:C/P | | | | | | | 39.1h/ 1:C/P | | | | | | | | |
| G. Knowledge | 52 h (11.8%) | | | | | | | | | | | | 52 h | 52 h (12.2%) | | | | 52 h | | | 38 h (10.8%) | | | | | | | | |
| Sp. Te. Design | 96 h (21.7%) | | | | | | | | | | | | 99 h | 99 h (23.2%) | | | | 277 h (65.0%) | | | 76 h (21.6%) | | | | | | | | |
| Sp. Te. Calculation | 24 h (5.4%) | | | | | | | | | | | | 24 h | 24 h (5.6%) | | | | | | | 12 h (3.4%) | | | | | | | | |
| Sp. Te. Practice | 128 h (29.0%) | | | | | | | | | | | | 122 h | 122 h (28.7%) | | | | | | | 150 h (42.6%) | | | | | | | | |
| Sp. Te. QC/FM/MM | 32 h (7.2%) | | | | | | | | | | | | 32 h | 32 h (7.5%) | | | | | | | 22 h (6.3%) | | | | | | | | |
| Su. Ma. Prog. Manag. | 20 h (4.5%) | | | | | | | | | | | | 20 h | 20 h (4.7%) | | | | 97 h (22.8%) | | | 8 h (2.3%) | | | | | | | | |
| Su. Ma. Inspection | 24 h (5.4%) | | | | | | | | | | | | 24 h | 24 h (5.6%) | | | | | | | 10 h (2.8%) | | | | | | | | |
| Su. Ma. Work Impl. | 44 h (10.0%) | | | | | | | | | | | | 33 h | 33 h (7.8%) | | | | | | | 20 h (5.7%) | | | | | | | | |
| Su. Ma. Des. Modifi. | 14 h (3.2%) | | | | | | | | | | | | 11 h | 11 h (2.6%) | | | | | | | 12 h (3.4%) | | | | | | | | |
| Su. Ma. Safe. Manag. | 8 h (1.8%) | | | | | | | | | | | | 9 h | 9 h (2.1%) | | | | | | | 4 h (1.1%) | | | | | | | | |



## (5) CHANGES OF OPCC OFFICE

OPCC-Project

| | Nov. 22th 1994 ~ | Apr. 10th 1995 ~ | May. 8th 1995 ~ | Jul. 26th 1995 ~ | Oct. 20th 1995 ~ | Nov. 10th 1995 ~ |
|---|---|---|---|---|---|---|
| Bld.M 4F | Office Room 126m² | Office Room 126m² | Office Room 126m² | — | — | — |
| | 126 m² | 126 m² | 126 m² | — m² | — m² | — m² |
| Bld.M 1F | M:Meeting Room<br>V:VTR Editing Room | Of. 29 / M. 29 | Of. 33m² / V. 29 / M. 29 | Office Room 58m² / Office Room 58m² / Office Room 58m² / V. 29 / M. 29 | Office Room 58m² / Office Room 58m² / Office Room 58m² / V. 29 / M. 29 | Store Room 73m² / Office Room 58m² / Office Room 58m² / Store Room 20m² / Office Room 58m² / Office Room 33m² / V. 29 / M. 29 |
| | — m² | 58 m² | 91 m² | 265 m² | 265 m² | 358 m² |
| Other Places | — | — | — | — | Practical Room 36m² / Store Room 36m² | Practical Room 36m² / Store Room 36m² |
| | — m² | — m² | — m² | — m² | 72 m² | 72 m² |
| Total | 126 m²<br>Office R.: 126<br>Store R.: -<br>Practice: -<br>Common R.: - | 184 m²<br>Office R.: 155<br>Store R.: -<br>Practice: -<br>Common R.: 29 | 217 m²<br>Office R.: 159<br>Store R.: -<br>Practice: -<br>Common R.: 58 | 265 m²<br>Office R.: 207<br>Store R.: -<br>Practice: -<br>Common R.: 58 | 337 m²<br>Office R.: 207<br>Store R.: 36<br>Practice: 36<br>Common R.: 58 | 430 m²<br>Office R.: 207<br>Store R.: 129<br>Practice: 36<br>Common R.: 58 |

## (6) MAKING TEXT BOOK PROGRESS

OPCC PROJECT

1. Basic Technology

| Curriculum | | | | Lecture Units | Responsible Person | | JULY 3 | JULY 10 | JULY 17 | JULY 24 | JULY 31 | AUG 7 | AUG 14 | AUG 21 | AUG 28 | SEPT 4 | SEPT 11 | SEPT 18 | SEPT 25 | OCT 2 | OCT 9 | OCT 16 | OCT 23 | OCT 30 | NOV 6 | NOV 13 | NOV 20 | NOV 27 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| General Knowlegde (48) | Outline of Communications Network | | | 0.5 (4) | TO | BS (SWB) | 40% | 40% | 40% | 40% | 45% | 50% | 60% | 70% | 70% | 80% | 80% | 80% | 80% | 90% | 90% | 90% | 100% | 100% | 100% | 100% | 100% | 100% |
| | Transmission Theory | | | 1.25 (10) | TO | RAD | 40% | 40% | 40% | 40% | 40% | 60% | 60% | 70% | 70% | 70% | 70% | 70% | 70% | 70% | 70% | 75% | 75% | 80% | 85% | 90% | 100% | 100% |
| | Aerial Cable Structural Design | | | 1.0 (8) | TO | SUP | 35% | 35% | 35% | 35% | 35% | 60% | 70% | 70% | 75% | 75% | 75% | 75% | 75% | 75% | 80% | 80% | 85% | 90% | 100% | 100% | 100% | 100% |
| | Optical Fiber Cable In General | | | 1.0 (8) | TO | AP | 10% | 10% | 10% | 10% | 30% | 30% | 30% | 30% | 45% | 60% | 70% | 75% | 75% | 80% | 80% | 90% | 90% | 90% | 100% | 100% | 100% | 100% |
| | Customer Premises Work In General | | | 0.5 (4) | FU | AS | 40% | 40% | 50% | 50% | 55% | 55% | 60% | 65% | 70% | 75% | 85% | 90% | 90% | 90% | 90% | 90% | 90% | 90% | 90% | 95% | 100% | 100% |
| Special Technology (235) | General Knowledge of Construction Supervising Work | | | 0.5 (4) | TO | HAR | 10% | 10% | 10% | 10% | 10% | 10% | 10% | 20% | 20% | 20% | 20% | 30% | 30% | 40% | 50% | 50% | 60% | 60% | 70% | 70% | 90% | 100% |
| | Design | (a) Cable Eng. | (1) Metalic Cable | 5.25 (42) | SA, HO | AP | 55% | 60% | 60% | 60% | 65% | 85% | 88% | 90% | 90% | 90% | 90% | 90% | 90% | 90% | 90% | 95% | 95% | 100% | 100% | 100% | 100% | 100% |
| | | | (2) Optical fiber Cable | 0.25 (2) | FU, HO | AP | 10% | 10% | 10% | 20% | 30% | 30% | 35% | 50% | 60% | 60% | 60% | 60% | 60% | 60% | 60% | 75% | 75% | 90% | 100% | 100% | 100% | 100% |
| | | (b) Civil Eng. | (1) MH/HH, Duct | 2.0 (16) | TA, HI | BA, BS | 45% | 50% | 50% | 50% | 50% | 55% | 60% | 70% | 75% | 75% | 85% | 85% | 85% | 85% | 85% | 85% | 85% | 90% | 95% | 100% | 100% | 100% |
| | | | (2) Duct Attachment onto Bridge | 1.0 (8) | TA, HI | HAR | 80% | 80% | 80% | 85% | 85% | 70% | 80% | 80% | 90% | 90% | 85% | 90% | 90% | 90% | 90% | 90% | 90% | 95% | 95% | 100% | 100% | 100% |
| | | (c) Cabling in High Rise building | | 1.0 (8) | FU | MCL | 35% | 35% | 35% | 45% | 45% | 45% | 50% | 55% | 55% | 70% | 70% | 75% | 75% | 75% | 80% | 80% | 85% | 90% | 90% | 95% | 100% | 100% |
| | Calculation | (a) Cable Engineering | | 1.0 (8) | SA | RAD | 5% | 5% | 5% | 5% | 10% | 10% | 15% | 30% | 35% | 40% | 55% | 55% | 55% | 60% | 60% | 60% | 70% | 75% | 75% | 80% | 90% | 90% |
| | | (b) Civil Engineering | | 0.25 (4) | TA, HI | BA | 35% | 40% | 45% | 45% | 45% | 45% | 45% | 45% | 50% | 50% | 50% | 50% | 50% | 60% | 60% | 70% | 80% | 85% | 85% | 90% | 100% | 100% |
| | Work Imple. (Practice) | (a) Cable Eng. | (1) Inst./Splicing Duct Cable (Metalic) | 3.5 (28) | SA, YA | LM | 30% | 30% | 35% | 35% | 40% | 45% | 45% | 50% | 60% | 70% | 75% | 75% | 75% | 80% | 80% | 90% | 90% | 90% | 90% | 90% | 95% | 95% |
| | | | (2) Install./Splicing of Direct Buried Cable | 2.0 (16) | SA, YA | LM | 25% | 30% | 35% | 35% | 40% | 40% | 40% | 50% | 60% | 60% | 65% | 70% | 70% | 75% | 80% | 90% | 90% | 90% | 95% | 95% | 95% | 95% |
| | | | (3) Pole, Guy and Stay Construction | 1.5 (12) | SA, YA | RAD | 25% | 30% | 30% | 35% | 35% | 40% | 45% | 50% | 60% | 70% | 70% | 75% | 75% | 80% | 85% | 90% | 95% | 100% | 100% | 100% | 100% | 100% |
| | | | (4) Inst./Splicing of Aerial Cable (Metalic) | 2.0 (16) | SA, YA | RAD | 25% | 30% | 30% | 35% | 35% | 40% | 45% | 45% | 60% | 70% | 70% | 75% | 75% | 75% | 80% | 90% | 95% | 95% | 95% | 100% | 100% | 100% |
| | | | (5) Cross Connection Cabinet (DP, RK) | 1.0 (8) | SA, YA | RAD | 30% | 30% | 30% | 30% | 30% | 40% | 45% | 45% | 60% | 70% | 80% | 80% | 80% | 80% | 90% | 90% | 90% | 100% | 100% | 100% | 100% | 100% |
| | | | (6) MDF Cable Terminating (Metalic) | 0.5 (4) | SA, YA | RAD | 30% | 30% | 30% | 30% | 30% | 40% | 40% | 45% | 60% | 70% | 80% | 80% | 80% | 80% | 85% | 90% | 90% | 95% | 95% | 100% | 100% | 100% |
| | | | (7) Final Test (Metalic) | 0.75 (6) | SA, YA | RAD | 25% | 30% | 30% | 30% | 45% | 50% | 50% | 55% | 60% | 60% | 60% | 65% | 70% | 75% | 75% | 90% | 95% | 100% | 100% | 100% | 100% | 100% |
| | | | (8) Inst./Splicing of Duct Cable (OFC) | 3.5 (28) | FU, HO | SUP | 10% | 20% | 30% | 30% | 35% | 35% | 45% | 60% | 65% | 65% | 65% | 70% | 75% | 75% | 80% | 80% | 85% | 85% | 85% | 90% | 95% | 95% |
| | | | (9) Optical Fiber Cable Terminating | 1.0 (8) | FU, HO | SUP | 10% | 20% | 30% | 35% | 35% | 55% | 60% | 65% | 65% | 65% | 65% | 70% | 75% | 75% | 80% | 80% | 85% | 85% | 85% | 85% | 100% | 100% |
| | | | (10) Final Test (Optical Fiber Cable) | 1.5 (12) | FU, HO | AP | 10% | 20% | 30% | 35% | 35% | 35% | 35% | 55% | 65% | 65% | 70% | 75% | 75% | 75% | 90% | 90% | 90% | 90% | 100% | 100% | 100% | 100% |
| | | (b) Cust. Premises Eng. (Construction) | | 1.5 (12) | FU | AS | 40% | 40% | 50% | 60% | 60% | 60% | 60% | 65% | 65% | 70% | 80% | 90% | 90% | 90% | 90% | 90% | 100% | 100% | 100% | 100% | 100% | 100% |
| | Quality Control | | | 1.25 (10) | FU | MCL | 40% | 40% | 47% | 55% | 55% | 55% | 55% | 55% | 55% | 65% | 55% | 60% | 65% | 65% | 70% | 75% | 80% | 80% | 80% | 85% | 100% | 100% |
| | Facilities Management/Cable Administration (SISKAMAYA) | | | 0.75 (6) | FU, HO | AS | 15% | 15% | 25% | 25% | 35% | 40% | 40% | 50% | 55% | 55% | 60% | 60% | 60% | 60% | 70% | 70% | 70% | 75% | 80% | 90% | 95% | 100% |
| | Maintenance Management (Repair Work) | | | 0.75 (6) | FU, YA | AS | 15% | 15% | 20% | 20% | 35% | 40% | 40% | 50% | 55% | 60% | 65% | 70% | 70% | 70% | 75% | 75% | 90% | 90% | 95% | 100% | 100% | 100% |

## MAKING TEXT BOOK PROGRESS

OPCC PROJECT

2. Supervisory Management

| Curriculum | | | Lecture Units | Responsible Person | | JULY 3 | 10 | 17 | 24 | 31 | AUG 7 | 14 | 21 | 28 | SEPT 4 | 11 | 18 | 25 | OCT 2 | 9 | 16 | 23 | 30 | NOV 6 | 13 | 20 | 27 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Progress Management (20) | Preparation of Work Implementation Schedule/Progress Management | | 1.0 (8) | TA | LM | 30% | 30% | 35% | 35% | 55% | 55% | 70% | 70% | 70% | 75% | 80% | 85% | 85% | 85% | 85% | 90% | 90% | 90% | 95% | 95% | 95% | 95% |
| Inspection (24) | | | 1.25 (10) | SA, TA FU | MCL, HAR, SUP | 30% | 30% | 35% | 40% | 40% | 40% | 50% | 55% | 55% | 60% | 60% | 70% | 70% | 70% | 80% | 80% | 85% | 85% | 90% | 90% | 95% | 100% |
| Work Imple. Man./ Equip. Manage. (45) | Civil Engineering | (a) Duct | 1.0 (8) | TA | BS | 45% | 45% | 45% | 45% | 50% | 50% | 50% | 50% | 50% | 60% | 60% | 75% | 75% | 80% | 85% | 85% | 90% | 90% | 100% | 100% | 100% | 100% |
| | | (b) Manhole/Handhole | 1.0 (8) | TA | BA | 45% | 45% | 45% | 45% | 50% | 50% | 50% | 50% | 50% | 70% | 75% | 80% | 80% | 80% | 85% | 85% | 90% | 90% | 95% | 100% | 100% | 100% |
| | | (c) Concrete Construction | 0.5 (4) | TA | BA | 45% | 45% | 45% | 50% | 65% | 70% | 70% | 70% | 70% | 80% | 80% | 85% | 85% | 85% | 90% | 90% | 90% | 90% | 95% | 95% | 100% | 100% |
| Design Modification (13) | Cable Implementation Work | | (6) | SA | LM | 15% | 15% | 15% | 15% | 15% | 15% | 15% | 15% | 15% | 15% | 25% | 40% | 45% | 45% | 45% | 45% | 50% | 60% | 60% | 85% | 90% | 90% |
| | Civil Implementation Work | | 1.5 (4) | TA | BS | 5% | 5% | 5% | 10% | 15% | 15% | 15% | 15% | 15% | 15% | 25% | 50% | 50% | 70% | 70% | 95% | 95% | 95% | 100% | 100% | 100% | 100% |
| | Customer Premises | | (2) | FU | MCL | | | | | | | | | | | | | | | | | | 90% | 90% | 95% | 100% | 100% | 100% |
| Safety Management (9) | | | 0.5 (4) | TA, HI | HAR | 40% | 40% | 45% | 45% | 45% | 50% | 50% | 50% | 55% | 60% | 90% | 90% | 90% | 90% | 90% | 90% | 90% | 95% | 95% | 100% | 100% | 100% |

Note : Percentage of the progress sguld be writen following the standard below.

10% 1. Decide the frame work (skeleton)
30% 2. Collect necessary information and existing text book
60% 3. Draft text book (finish translation from Japanese to English or Indonesia)
90% 4. Complete the text book (finish input to computer)
100% 5. Make teaching materials

TO = TOKUMOTO = Satriowibowo
SA = SASHIHARA = Lubiyo Mardjuki
TA = TAKAHASHI = Adji Permana
FU = FURUTACHI = Mochamad Cholil
YA = YAMAGUCHI = Hardjanto
HO = HONDA = Supranyono
HI = HIYAMA = Radiana
= Arief Sya'bani
= Basir Akhmadi
= Bambang Gunarmo

= Making Text Book
= Translation (J→ I, E)
= Technical Transfer

# 資料８．供与資機材リスト

INVENTORY OF EQUIPMENT FOR FY 1994 (REQUESTED BY INDONESIA SIDE)



| NO. | ITEM | COMPANY | MODEL | SERIAL NUMBER | SPECIFICATION | CODE NO. | DATE ARRIVED | QTY | DISPOSED/ CONSUMED | PRESENT QTY | LOCATION | REMARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Photocopy Machine | | | | | | | | 1 Set | | 1 Set | | |
| | 1) Photocopy Machine | XEROX | VIVACE - 400 | 604184 | 220V,50-60 HZ | JA94-001 | Mar.31,95 | 1 Unit | - | 1 Unit | Coordinator Rm | |
| | 2) ADF | | | 300536 | 220V,50-60 HZ | JA94-002 | Mar.31,95 | 1 Unit | - | 1 Unit | Coordinator Rm | |
| | 3) Sorter | | | 308714 | 220V,50-60 HZ | JA94-003 | Mar.31,95 | 1 Unit | - | 1 Unit | Coordinator Rm | |
| 2. Electric Print Board | | PANASONIC | KX - 6520 | 0754-ZJA 4654 | 220V,50-60 HZ | JA94-004 | Mar.31,95 | 1 Unit | - | 1 Unit | Conference Rm | |
| 3. White Board | | DAICHI | - | | 90 x 120 cm | JA94-005 | Mar.31,95 | 2 Units | - | 2 Units | Conference Rm | |
| 4. Overhead Projector | | ELMO | HP-A360 Zoom | 628070 | 220V,50-60 HZ | JA94-006 | Mar 31,95 | 1 Unit | - | 1 Unit | Coordinator Rm | |
| 5. LCD Panel for OHP | | PROXIMA | Ovation-820 | 031494 01536 | Input 5V-DC-3A, +12V-DC-2A -5VDC-0 3A | JA94-007 | Mar.31,95 | 1 Unit | - | 1 Unit | Coordinator Rm | |
| 6. Screen for OHP | | EIKI | - | | 1.7 M x 1.7 M | JA94-008 | Mar.31,95 | 1 Unit | - | 1 Unit | Conference Rm | |
| 7. Slide Projector | | KODAK | Extarpo-5000 | 071382 5000 | 120-220V,220-240V,50-60 HZ | JA94-009 | Mar.31,95 | 1 Unit | - | 1 Unit | Coordinator Rm | |
| 8. Personal Computer | | | | | | | | | | | | |
| | 1. Desk Top Type (Value Point) | IBM | 6482-X4F | | | | | 6 Sets | | 6 Sets | | |
| | 1.1. Computer Processing Unit | | | | | | | | | | | |
| | a. CPU | IBM | 6482 | 23RHPGD | 220V,50-60HZ | JA94-010 | Mar.31,95 | 1 Unit | - | 1 Unit | WF-Rm B | |
| | b. CPU | IBM | 6482 | 23RHFMP | 220V,50-60HZ | JA94-011 | Mar.31,95 | 1 Unit | - | 1 Unit | WF-Rm A | |
| | c. CPU | IBM | 6482 | 23RHLLH | 220V,50-60HZ | JA94-012 | Mar.31,95 | 1 Unit | - | 1 Unit | WF-Rm B | |
| | d. CPU | IBM | 6482 | 23RHMNV | 220V,50-60HZ | JA94-013 | Mar.31,95 | 1 Unit | - | 1 Unit | WF-Rm B | |
| | e. CPU | IBM | 6482 | 23RHPMN | 220V,50-60HZ | JA94-014 | Mar.31,95 | 1 Unit | - | 1 Unit | WF-Rm A | |
| | f. CPU | IBM | 6482 | 23RHPLF | 220V,50-60HZ | JA94-015 | Mar.31,95 | 1 Unit | - | 1 Unit | Coordinator Rm | |
| | 1.2. MONITOR | | | | | | | | | | | |
| | a. Monitor | IBM | 96G0126 | 5502600 | 100-240V | JA94-016 | Mar.31,95 | 1 Unit | - | 1 Unit | WF-Rm A | |
| | b. Monitor | IBM | 96G0126 | 5503324 | 100-240V | JA94-017 | Mar.31,95 | 1 Unit | - | 1 Unit | WF-Rm B | |
| | c. Monitor | IBM | 96G0126 | 5503579 | 100-240V | JA94-018 | Mar.31,95 | 1 Unit | - | 1 Unit | WF-Rm A | |
| | d. Monitor | IBM | 96G0126 | 5506601 | 100-240V | JA94-019 | Mar.31,95 | 1 Unit | - | 1 Unit | WF-Rm B | |
| | e. Monitor | IBM | 96G0126 | 5506959 | 100-240V | JA94-020 | Mar.31,95 | 1 Unit | - | 1 Unit | WF-Rm A | |
| | f. Monitor | IBM | 96G0126 | 5503739 | 100-240V | JA94-021 | Mar.31,95 | 1 Unit | - | 1 Unit | Coordinator Rm | |
| | 1.3. KEYBOARD | | | | | | | | | | | |
| | a. Keyboard | IBM | 52G9700 | 0244416 | +5V | JA94-022 | Mar.31,95 | 1 Unit | - | 1 Unit | WF-Rm B | |
| | b. Keyboard | IBM | 52G9700 | 0250189 | +5V | JA94-023 | Mar.31,95 | 1 Unit | - | 1 Unit | WF-Rm A | |
| | c. Keyboard | IBM | 52G9700 | 0249579 | +5V | JA94-024 | Mar.31,95 | 1 Unit | - | 1 Unit | WF-Rm B | |
| | d. Keyboard | IBM | 52G9700 | 0249693 | +5V | JA94-025 | Mar.31,95 | 1 Unit | - | 1 Unit | WF-Rm A | |
| | e. Keyboard | IBM | 52G9700 | 0248697 | +5V | JA94-026 | Mar.31,95 | 1 Unit | - | 1 Unit | WF-Rm B | |
| | f. Keyboard | IBM | 52G9700 | 0248696 | +5V | JA94-027 | Mar.31,95 | 1 Unit | - | 1 Unit | Coordinator Rm | |

INVENTORY OF EQUIPMENT FOR FY 1994 (REQUESTED BY INDONESIA SIDE)



| NO. | ITEM | COMPANY | MODEL | SERIAL NUMBER | SPECIFICATION | CODE NO. | DATE ARRIVED | QTY | DISPOSED/ CONSUMED | PRESENT QTY | LOCATION | REMARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2) Laptop Type | | | | | | | | | | | |
| | 2.1. Laptop with adaptor | TOSHIBA | T4900CT/810 | 12426329 | 220V,DC18V | JA94-028 | Mar.31,95 | 1 Unit | - | 1 Unit | Chief Rm | Mr.Tokum |
| | 2.2. Laptop with adaptor | TOSHIBA | T4900CT/810 | 12426832 | 220V,DC18V | JA94-029 | Mar.31,95 | 1 Unit | - | 1 Unit | WF- Rm A | Mr. Sashi |
| | 2.3. Laptop with adaptor | TOSHIBA | T4900CT/810 | 03531351 | 220V,DC18V | JA94 030 | Mar.31,95 | 1 Unit | - | 1 Unit | WF- Rm B | Mr. Furuta |
| | 2.4. Laptop with adaptor | TOSHIBA | T4900CT/810 | 12426650 | 220V,DC18V | JA94-031 | Mar.31,95 | 1 Unit | - | 1 Unit | WF- Rm B | Mr.Takahe |
| | 3) Computer Software | LOTUS | Lotus 123 for Windows | - | Release 4.0 | JA94-032 | Mar.31,95 | 1 Unit | - | 1 Unit | Coordinator Rm | |
| | 4) Computer Software | WORDSTAR | Wordstar for Windows | - | Ver 2 0 | JA94-033 | Mar.31,95 | 1 Unit | - | 1 Unit | Coordinator Rm | |
| | 5) Computer Software | CORELDRAW | Graphic Design | - | Ver.5.0 | JA94-034 | Mar.31,95 | 1 Unit | - | 1 Unit | Coordinator Rm | |
| | 6) Laser Printer | HEWLETT PACKARD | 4 MV (C 3142 A) | GSR006-461 | 220-240V,50 HZ | JA94-035 | Mar.31,95 | 1 Unit | - | 1 Unit | WF-Rm B | |
| | 7) Image Scanner | HEWLETT PACKARD | Scanjet II CX (C 2500 A) | 3424A70 316 | 220-240V,50 HZ | JA94-036 | Mar.31,95 | 1 Unit | - | 1 Unit | WF-Rm B | |
| | 8) Uninterruptable Power Supply (UPS) | MERLIN GERIN | 900 Watt | | | | Mar.31,95 | 6 Units | | 6 Units | | |
| | 8.1. UPS | MERLIN GERIN | 6760426 | 145351187 | 230V,50-60 HZ | JA94-037 | Mar.31,95 | 1 Unit | - | 1 Unit | WF-Rm A | |
| | 8.2. UPS | MERLIN GERIN | 6760426 | 145351234 | 230V,50-60 HZ | JA94-038 | Mar.31,95 | 1 Unit | - | 1 Unit | WF-Rm B | |
| | 8.3. UPS | MERLIN GERIN | 6760426 | 145351236 | 230V,50-60 HZ | JA94-039 | Mar.31,95 | 1 Unit | - | 1 Unit | WF-Rm B | |
| | 8.4. UPS | MERLIN GERIN | 6760426 | 145352021 | 230V,50-60 HZ | JA94-040 | Mar.31,95 | 1 Unit | - | 1 Unit | WF-Rm B | |
| | 8.5. UPS | MERLIN GERIN | 6760426 | 145445009 | 230V,50-60 HZ | JA94-041 | Mar.31,95 | 1 Unit | - | 1 Unit | WF-Rm A | |
| | 8.6. UPS | MERLIN GERIN | 6760426 | 145445010 | 230V,50-60 HZ | JA94-042 | Mar.31,95 | 1 Unit | - | 1 Unit | Coordinator Rm | |
| | 9) Stabilizer (AVR) | | | | | | | 6 Units | | 6 Units | | |
| | 9.1. AVR | MATSUNAGA | SVC- 1000 N | B402056 | 110V - 220V 50HZ - 60HZ | JA94-043 | Mar.31,95 | 1 Unit | - | 1 Unit | WF-Rm A | |
| | 9.2. AVR | MATSUNAGA | SVC- 1000 N | B402073 | 110V - 220V 50HZ - 60HZ | JA94-044 | Mar.31,95 | 1 Unit | - | 1 Unit | WF-Rm B | |
| | 9.3. AVR | MATSUNAGA | SVC- 1000 N | B402304 | 110V - 220V 50HZ - 60HZ | JA94-045 | Mar.31,95 | 1 Unit | - | 1 Unit | WF-Rm B | |
| | 9.4. AVR | MATSUNAGA | SVC- 1000 N | B406044 | 110V - 220V 50HZ - 60HZ | JA94-046 | Mar.31,95 | 1 Unit | - | 1 Unit | WF-Rm A | |
| | 9.5. AVR | MATSUNAGA | SVC- 1000 N | B406050 | 110V - 220V 50HZ - 60HZ | JA94-047 | Mar.31,95 | 1 Unit | - | 1 Unit | WF-Rm B | |
| | 9.6. AVR | MATSUNAGA | SVC- 1000 N | B402081 | 110V - 220V 50HZ - 60HZ | JA94-048 | Mar.31,95 | 1 Unit | - | 1 Unit | Coordinator Rm | |
| | 12) Automatic Printer Switch | IBM | Automatic for 10 Computers | JPBR00-8451 | 220 - 240 V 50 HZ, 2.8 A | JA94-049 | Mar.31,95 | 1 Set | - | 1 Set | WF-Rm B | |
| 9. Facsimile | | CANON | FAX-T301 | 11854 | 200-240V 50 - 60 HZ | JA94-050 | Mar.31,95 | 1 Unit | - | 1 Unit | Coordinator Rm | |

INVENTORY OF EQUIPMENT FOR FY 1994 (REQUESTED BY INDONESIA SIDE)



| NO. | ITEM | COMPANY | MODEL | SERIAL NUMBER | SPECIFICATION | CODE NO. | DATE ARRIVED | QTY | DISPOSED/ CONSUMED | PRESENT QTY | LOCATION | REMARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | Video Camera Set | | | | | | | | | | | |
| 1) | Video Camera (Handy type with controler battery pack) | SONY | CCD-TR2000E (HI-8) | 61741 (453200 -156) | DC-6V | JA94-051 | Mar.31,95 | 1 Unit | - | 1 Unit | Coordinator Rm | |
| 2) | Video Camera (Handy type with controler battery pack) | SONY | CCD-TR2000E (HI-8) | 63324 (453200 -158) | DC-6V | JA94-052 | Mar.31,95 | 1 Unit | - | 1 Unit | Coordinator Rm | |
| 3) | AC Power Adaptor | SONY | AC-V-35 | 219580 | 110-220V | JA94-053 | Mar.31,95 | 1 Unit | - | 1 Unit | Coordinator Rm | |
| 4) | AC Power Adaptor | SONY | AC-V-35 | 209310 | 110-220V 50 - 60 HZ | JA94-054 | Mar.31,95 | 1 Unit | - | 1 Unit | Coordinator Rm | |
| 5) | Carrying Case Handycam | SONY | - | - | Soft Case | JA94-055 | Mar.31,95 | 2 Pcs | - | 2 Pcs | Coordinator Rm | |
| 6) | Sparebatery Pack | SONY | NP-77H | - | - | JA94-056 | Mar.31,95 | 2 Packs | - | 2 Packs | Coordinator Rm | |
| 11 | Photo Camera Set | | | | | | | | | | | |
| 1) | Foto Camera | NIKON | F-90-S | 2131190 | MF25 - MF26 | JA94-057 | Mar.31,95 | 1 Unit | - | 1 Unit | Coordinator Rm | |
| 2) | Camera Lens | NIKON | F-AF-D | 506871 | 20mm/2.8D | JA94-058 | Mar.31,95 | 1 Unit | - | 1 Unit | Coordinator Rm | |
| 3) | Camera Lens | NIKON | F-AF-D | 6064742 | 35-80mm/5.6D | JA94-059 | Mar.31,95 | 1 Unit | - | 1 Unit | Coordinator Rm | |
| 4) | Carrying Case for Camera | NIKON | CF - 470 | - | Soft Case | JA94-060 | Mar.31,95 | 1 Unit | - | 1 Unit | Coordinator Rm | |
| 12 | Vehicle | | | | | | | | | | | |
| 1) | Four Wheel Drive Vehicle (4 WD) | DAIHATSU | ROCKY | 973756 | 2765 CC, DIESEL | JA94-061 | Mar.31,95 | 1 Unit | - | 1 Unit | Car Pool | |
| 2) | Van Type | MITSUBISHI | Colt High Roof L - 300 | 4D56C-4Y9545 | 3000 CC,DIESEL | JA94-062 | Mar.31,95 | 1 Unit | - | 1 Unit | Car Pool | |
| 13 | Video Editing System | | | | | | | | | | | |
| 1) | Betacam SP one-piece Camcorder with Lens | SONY | UVW-100P | 41094 | PAL | JA94-063 | Mar.31,95 | 1 Unit | - | 1 Unit | Video Editing Rm | |
| 2) | Rechargeable Battery Pack | SONY | NP - 1B | - | 12V, 2.3AH | JA94-064 | Mar.31,95 | 5 Pcs | - | 5 PCs | Video Editing Rm | |
| 3) | Battery Charger for NP-1A/1B | SONY | BC-1WDCE | 16191 | PAL 220-240V | JA94-065 | Mar.31,95 | 1 PC | - | 1 PC | Video Editing Rm | |
| 4) | Camera Connecting Cable for ext | SONY | CCQX - 3 | - | DC Input 3M | JA94-066 | Mar.31,95 | 1 Roll | - | 1 Roll | Video Editing Rm | |
| 5) | Tripod/Dolly/Carrying bag Spreader | SONY | LBEC- 70 | - | - | JA94-067 | Mar.31,95 | 1 PC | - | 1 PC | Video Editing Rm | |
| 6) | AC Adaptor for VO and DXC Series | SONY | CMA - 8 AC | 46036 | 110-240V | JA94-068 | Mar.31,95 | 1 PC | - | 1 PC | Video Editing Rm | |
| 7) | Playback Adaptor for Camcorder | SONY | VA - 300P | 10134 | PAL (DC12V) | JA94-069 | Mar.31,95 | 1 PC | - | 1 PC | Video Editing Rm | |
| 8) | 6-Inch Color Monitor for Standards | SONY | PVM-6401 QM | 2002961 | 100-240V, 40W | JA94-070 | Mar.31,95 | 1 PC | - | 1 PC | Video Editing Rm | |
| 9) | BetacamSP Editor Metal Tape Only | SONY | UVW - 1500P | 13964 | PAL | JA94-071 | Mar.31,95 | 1 PC | - | 1 PC | Video Editing Rm | |

INVENTORY OF EQUIPMENT FOR FY 1994 (REQUESTED BY INDONESIA SIDE)



| NO. | ITEM | COMPANY | MODEL | SERIAL NUMBER | SPECIFICATION | CODE NO. | DATE ARRIVED | QTY | DISPOSED/ CONSUMED | PRESENT QTY | LOCATION | REMARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10) | Betacam SP Feeder/ Player Metal Tape only,Pal | SONY | UVW - 1600P | 13482 | PAL | JA94-072 | Mar.31,95 | 1 PC | - | 1 PC | Video Editing Rm | |
| 11) | Auto Editing Control Unit For VO | SONY | PVE- 500 EXP | 802297 | 33 PIN,RS 122 | JA94-073 | Mar.31,95 | 1 PC | - | 1 PC | Video Editing Rm | |
| 12) | Video Switcher with Digital Multi Effect | SONY | DFS- 500P | 24341 | PAL | JA94-074 | Mar.31,95 | 1 PC | - | 1 PC | Video Editing Rm | |
| 13) | Trail and Lighting Board For DFS- 500P | SONY | BKDF - 501P | 22408 | PAL | JA94-075 | Mar.31,95 | 1 PC | - | 1 PC | Video Editing Rm | |
| 14) | Down Stream Keyboard for DFS-500P | SONY | BKDF - 502P | 10236 | PAL | JA94-076 | Mar.31,95 | 1 PC | - | 1 PC | Video Editing Rm | |
| 15) | Video-audio selector | SONY | VCS - 63A | 21942 | 8 Input | JA94-077 | Mar.31,95 | 1 PC | - | 1 PC | Video Editing Rm | |
| 16) | 14 Inch Color Monitor for Standards | SONY | | | | | | | | | | |
| | a) Color Monitor | SONY | PVM -1454QM | 2006643 | 220V | JA94-078 | Mar.31,95 | 1 PC | - | 1 PC | Video Editing Rm | |
| | b) Color Monitor | SONY | PVM -1454QM | 2006647 | 220V | JA94-079 | Mar.31,95 | 1 PC | - | 1 PC | Video Editing Rm | |
| | c) Color Monitor | SONY | PVM -1454QM | 2006653 | 220V | JA94-080 | Mar.31,95 | 1 PC | - | 1 PC | Video Editing Rm | |
| | d) Color Monitor | SONY | PVM -1454QM | 2006924 | 220V | JA94-081 | Mar.31,95 | 1 PC | - | 1 PC | Video Editing Rm | |
| | e) Color Monitor | SONY | PVM -1454QM | 2006928 | 220V | JA94-082 | Mar.31,95 | 1 PC | - | 1 PC | Video Editing Rm | |
| | f) Color Monitor | SONY | PVM -1454QM | 2006930 | 220V | JA94-083 | Mar.31,95 | 1 PC | - | 1 PC | Video Editing Rm | |
| 17) | Remote Control Cable 9pin- | SONY | RCC - 5 G | P94071301 | 9 PIN, 5 M | JA94-084 | Mar.31,95 | 2 Rolls | - | 2 Rolls | Video Editing Rm | |
| 18) | 8-Channel Audio Mixer W/ Video Editor Interface | SONY | MXP-290 | 54479 | 220-240V 50-60 HZ | JA94-085 | Mar.31,95 | 1 PC | - | 1 PC | Video Editing Rm | |
| 19) | Power amplifier | SONY | SRP-P2070 | 500143 | 234V,50-60HZ | JA94-086 | Mar.31,95 | 1 PC | - | 1 PC | Video Editing Rm | |
| 20) | Studio Monitor Speaker System | SONY | SMS-3 | 900377 900378 | 300 W | JA94-087 | Mar.31,95 | 1 Pair | - | 1 Pair | Video Editing Rm | |
| 21) | Dinamic Microphone | SONY | F-740 | 100921 100922 | - | JA94-088 | Mar.31,95 | 2 PCs | - | 2 PCs | Video Editing Rm | |
| 22) | Table Microphone Stand FF-1/2 | SONY | A - 25 | - | - | JA94-089 | Mar.31,95 | 1 PC | - | 1 PC | Video Editing Rm | |
| 23) | Microphone Stand Pole | SONY | SAD-26 | - | - | JA94-090 | Mar.31,95 | 1 PC | - | 1 PC | Video Editing Rm | |
| 24) | Microphone Boom Stand U 5/1 6PF -1/2 | SONY | B-306B | - | - | JA94-091 | Mar.31,95 | 1 PC | - | 1 PC | Video Editing Rm | |
| 25) | Cassette Tape Recorder | SONY | TC-K333ESL | 300360 | 31W100/220V | JA94-092 | Mar.31,95 | 1 PC | - | 1 PC | Video Editing Rm | |
| 26) | Betacam SP Tape Small Size | SONY | UVWT-30MA | - | 30 Min | JA94-093 | Mar.31,95 | 50 PCs | 6 Pcs | 44 PCs | Video Editing Rm | |
| 27) | Betacam SP Tape Large Size 60 Min | SONY | UVWT-60MLA | - | 60 Min | JA94-094 | Mar.31,95 | 50 PCs | 6 Pcs | 44 PCs | Video Editing Rm | |

INVENTORY OF EQUIPMENT FOR FY 1994 (REQUESTED BY INDONESIA SIDE)



| NO. | ITEM | COMPANY | MODEL | SERIAL NUMBER | SPECIFICATION | CODE NO. | DATE ARRIVED | QTY | DISPOSED/ CONSUMED | PRESENT QTY | LOCATION | REMARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28) | Professional Hi8 Tape | SONY | ES-60HMEX | - | PAL | JA94-095 | Mar.31,95 | 50 PCs | 27 Pcs | 23 PCs | Video Editing Rm | |
| 29) | Portable Battery Lighting System | RDS CORP. | CAT-KIT 3 | | | | Mar.31,95 | 1 Unit | | 1 Unit | | |
| | a. Lighting System (Stand) | RDS CORP. | Type S-2 | 89410090 | - | JA94-096 | Mar.31,95 | 1 Pc | - | 1 Pc | Video Editing Rm | |
| | b. Lighting System (Stand) | RDS CORP. | Type S-2 | 89410091 | - | JA94-097 | Mar.31,95 | 1 Pc | - | 1 Pc | Video Editing Rm | |
| | c. Lighting System (Stand) | RDS CORP. | Type S-2 | 89410092 | - | JA94-098 | Mar.31,95 | 1 Pc | - | 1 Pc | Video Editing Rm | |
| | d. Lighting System (Lamp) | RDS CORP. | LQM/W-8EC | 8410144 | 220/240V-800W | JA94-099 | Mar.31,95 | 1 Pc | - | 1 Pc | Video Editing Rm | |
| | e. Lighting System (Lamp) | RDS CORP. | LQM/W-8EC | 8410147 | 220/240V-800W | JA94-100 | Mar.31,95 | 1 Pc | - | 1 Pc | Video Editing Rm | |
| | f. Lighting System (Lamp) | RDS CORP. | LQM/W-8EC | 8410150 | 220/240V-800W | JA94-101 | Mar.31,95 | 1 Pc | - | 1 Pc | Video Editing Rm | |
| 30) | Portable Lighting System | ANTON BAUER | | | | | | | | | | |
| | a) Ultra Light | ANTON BAUER | EL | 2732 | 80W/30V | JA94-102 | Mar.31,95 | 1 Set | - | 1 Set | Video Editing Rm | |
| | b) Nickel Cadmium Rechargeable Battery Kit | ANTON BAUER | | | | | | | | | | |
| | -Controler | ANTON BAUER | VCD-30 | 94264 | 80W/30V | JA94-103 | Mar.31,95 | 1 PC | - | 1 PC | Video Editing Rm | |
| | -Battery | ANTON BAUER | - | - | 80W/30V | JA94-104 | Mar.31,95 | 6 PCs | - | 6 PCs | Video Editing Rm | |
| | -Cable | ANTON BAUER | ULC-30 | 1959 | 80W/30V | JA94-105 | Mar.31,95 | 1 PC | - | 1 PC | Video Editing Rm | |
| | -Filter | ANTON BAUER | ULWA | - | | | Mar.31,95 | 2 PCs | - | 2 PCs | Video Editing Rm | |
| 31) | General Electric Quartzline Lamp for Ultra Light | SONY | - | - | 30V, 80W | JA94-106 | Mar.31,95 | 40 PCs | - | 40 PCs | Video Editing Rm | |
| 32) | B/W Video Typewriter | SONY | VTW-100 | 1561999 | PAL DC6VA 50-60HZ | JA94-107 | Mar.31,95 | 1 PC | - | 1 PC | Video Editing Rm | |
| 33) | VHS Multi VTR World Wide | PANASONIC | NV-W1 | G4MD00431 | 220-240V, 42W | JA94-108 | Mar.31,95 | 1 PC | - | 1 PC | Video Editing Rm | |
| 34) | Hi8 Hi-Fi VTR | SONY | EV-C500E | 31318 | PAL | JA94-109 | Mar.31,95 | 1 PC | - | 1 PC | Video Editing Rm | |
| 35) | VHS VTR | SONY | | | | | | | | | | |
| | a. VHS VTR | SONY | SLV-X521 | 21501 | Multi system | JA94-110 | Mar.31,95 | 1 Pc | - | 1 PC | Video Editing Rm | |
| | b. VHS VTR | SONY | SLV-X730 | 21504 | Multi system | JA94-111 | Mar.31,95 | 1 Pc | - | 1 PC | Video Editing Rm | |
| | c. VHS VTR | SONY | SLV-X730 | 20716 | Multi system | JA94-112 | Mar.31,95 | 1 Pc | - | 1 PC | Video Editing Rm | |
| | d. VHS VTR | SONY | SLV-X730 | 20629 | Multi system | JA94-113 | Mar.31,95 | 1 Pc | - | 1 PC | Video Editing Rm | |
| | e. VHS VTR | SONY | SLV-X730 | 21493 | Multi system | JA94-114 | Mar.31,95 | 1 Pc | - | 1 PC | Video Editing Rm | |
| 36) | 19 inch side rack | ULTIMA | 600 | - | - | JA94-115 | Mar.31,95 | 1 Pc | - | 1 PC | Video Editing Rm | |
| 37) | Editing Console (Custom Made) | GALVA | - | - | - | JA94-116 | Mar.31,95 | 1 Pc | - | 1 PC | Video Editing Rm | |
| 38) | Connecting Cables and Installation material | GALVA | - | - | - | JA94-117 | Mar.31,95 | 1 Pc | - | 1 PC | Video Editing Rm | |
| 39) | VHS tape | SONY | E-120VHGE | - | PAL | JA94-118 | Mar.31,95 | 1 Pak (50PCs) | 3 Pcs | 47 PCs | Video Editing Rm | |
| 40) | Multi System Color TV | SONY | KV2965MTJ | | | | | | | | | |
| | a. Multi System Color TV | SONY | KV2965MTJ | 350407031 | 29" | JA94-119 | Mar.31,95 | 1 Pc | - | 1 PC | Video Editing Rm | |
| | b. Multi System Color TV | SONY | KV2965MTJ | 350407032 | 29" | JA94-120 | Mar.31,95 | 1 Pc | - | 1 PC | Conference Rm | |
| | c. Multi System Color TV | SONY | KV2965MTJ | 350407033 | 29" | JA94-121 | Mar.31,95 | 1 Pc | - | 1 PC | Video Editing Rm | |
| | d. Multi System Color TV | SONY | KV2965MTJ | 350404778 | 29" | JA94-122 | Mar.31,95 | 1 Pc | - | 1 PC | Chief Room | |

INVENTORY OF EQUIPMENT FOR FY 1994 (REQUESTED BY INDONESIA SIDE)



| NO. | ITEM | COMPANY | MODEL | SERIAL NUMBER | SPECIFICATION | CODE NO. | DATE ARRIVED | QTY | DISPOSED/ CONSUMED | PRESENT QTY | LOCATION | REMARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 41) | Monitor Stand (Custom Made 29" Monitor Stand) | GALVA | - | - | 29" | JA94-123 | Mar.31,95 | 2 Pc | - | 2 PC | Video Editing Rm | |
| 42) | Betacam SP Player | SONY | UVW-1600P | 12061 | PAL | JA94-124 | Mar.31,95 | 1 Pc | - | 1 PC | Video Editing Rm | |
| 43) | Hi8 Handycam | SONY | CCD-TR2000 | 73436 87621 | - | JA94-125 | Mar.31,95 | 2 Pc | - | 2 PC | Video Editing Rm | |
| 44) | Monitor Stand (Custom Made 29" Monitor Stand) | GALVA | - | - | 29" | JA94-126 | Mar.31,95 | 2 Pc | - | 2 PC | Video Editing Rm | |
| 45) | Sine Wave Cont. UPS | AECO | UPS | 395001 | 2,000VA | JA94-127 | Mar.31,95 | 1 Pc | - | 1 PC | Video Editing Rm | |
| 46) | Battery Charger for Handycam | SONY | AC-V30 | 4Z0001427 | 110 - 240V | JA94-128 | Mar.31,95 | 1 Pc | - | 1 PC | Video Editing Rm | |
| 47) | Battery Charger for Handycam | SONY | AC-V55 | MC12931 | 100-240V | JA94-129 | Mar.31,95 | 1 Pc | - | 1 PC | Video Editing Rm | |
| 48) | Battery Pack | SONY | NP-77 | - | - | JA94-130 | Mar.31,95 | 20 PCs | 10 Pcs | 10 PCs | Video Editing Rm | |
| 49) | Compact Disk Music Album | DUCA DISC | - | - | - | JA94-131 | Mar.31,95 | 10 PCs | - | 10 PCs | Video Editing Rm | |
| 50) | Denon Compact disk Player | SONY | DCD-1290 | 406150160 | 220V | JA94-132 | Mar.31,95 | 1 Pc | - | 1 PC | Video Editing Rm | |
| 51) | Portable Lighting System for Handycam | SONY | | | | JA94-133 | Mar.31,95 | 1 Set | | 1 Set | | |
| | a. Battery | SONY | NP-12000 | 106041 106042 106077 | 6V-12Ah | | | 3 Pcs | - | 3 PCs | Video Editing Rm | |
| | b. Lamp | SONY | HVL-500W | - | DC6V-50W | | | 3 Pcs | - | 3 PCs | Video Editing Rm | |
| 52) | Microphone cable | CANARE | EC-0502 | | | JA94-134 | Mar.31,95 | 1 Pc | - | 1 PC | Video Editing Rm | |
| 53) | Audio Cable | CANARE | EC-5XLR2 | | | JA94-135 | Mar.31,95 | 1 Pc | - | 1 PC | Video Editing Rm | |
| 54) | Color Video Printer | SONY | UP-5200MDP | 20022 | PAL | JA94-136 | Mar.31,95 | 1 Pc | - | 1 PC | Video Editing Rm | |
| 55) | Color Printing Paper pack | SONY | UPC-5010A | - | 100 PCs | JA94-137 | Mar.31,95 | 8 Pcs | - | 8 PCs | Video Editing Rm | |
| 14. | Electronic Filling System | PANASONIC | F - 51 E | | | | | | | | | |
| | 1) Main Unit | PANASONIC | KV-F5100 | 1004780 0111 | 220-240V 50-60 HZ | JA94-138 | May.08,95 | 1 Unit | - | 1 Unit | WF Rm-B | |
| | 2) Scanner/Printer | PANASONIC | KV-F5210 | 1674YCA 0019 | 220-240V 50-60 HZ | JA94-139 | May.08,95 | 1 Unit | - | 1 Unit | WF Rm-B | |
| | 3) Facsimile Unit (Install in main unit) | PANASONIC | KV-F502 | - | - | JA94-140 | May.08,95 | 1 Unit | - | 1 Unit | WF Rm-B | |
| | 4) Hard Disk Unit (Install in main unit) | PANASONIC | KV-F506 | - | - | JA94-141 | May.08,95 | 1 Unit | - | 1 Unit | WF Rm-B | |
| | 5) Toner Cartridge | PANASONIC | KX-P455N | 492909 | - | JA94-142 | May.08,95 | 5 Pcs | - | 5 PCs | WF Rm-B | |
| | 6) Drum Cartridge | PANASONIC | KX-PDM 6-N | 41AFA01 431 | - | JA94-143 | May.08,95 | 3 Pcs | - | 3 PCs | WF Rm-B | |
| | 7) Disk Cartridge | PANASONIC | KX-F50 MGI | - | 3.5", 128 MB | JA94-144 | May.08,95 | 5 Pcs | - | 5 PCs | WF Rm-B | |

INVENTORY OF EQUIPMENT FOR FY 1994 (REQUESTED BY JAPANESE EXPERTS)



| NO. | ITEM | COMPANY | MODEL | SERIAL NUMBER | SPECIFICATION | CODE NUMBER | DATE ARRIVED | QTY | DISPOSED/ CONSUMED | PRESENT QTY | LOCATION | REMARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | Personal Computer Unit | | | | | | | | | | | |
| | 1) Personal Computer with mouse | APPLE<br>APPLE | Power Macintosh 8100<br>Desktop Bus Mouse II | SG4404MG1HO<br>LT441588T18 | 100 - 240V/3A<br>- | JB94-001<br>- | Feb. 01, 1995<br>Feb. 01, 1995 | 1 PC<br>1 PC | 0<br>0 | 1 PC<br>1 PC | Chief Rm | Mr. Tokumoto |
| | 2) Multi Scan | APPLE | 15 Inch display | CY4309NV3CV | - | JB94-002 | Feb. 01, 1995 | 1 PC | 0 | 1 PC | Chief Rm | Mr. Tokumoto |
| | 3) Key Board II (J) | APPLE | M0487J/A | T24310FNG3N | 5 V - 40 mA | JB94-003 | Feb. 01, 1995 | 1 PC | 0 | 1 PC | Chief Rm | Mr. Tokumoto |
| | 4) Laser Writer Select 610 | APPLE | M2748 | SG40104B20F | 100-120B/60Hz-4A | JB94-004 | Feb. 01, 1995 | 1 PC | 0 | 1 PC | Chief Rm | Mr. Tokumoto |
| | 5) Printer Cable for Laser Writer | APPLE | Din - 8 | - | - | JB94-005 | Feb. 01, 1995 | 1 PC | 0 | 1 PC | Chief Rm | Mr. Tokumoto |
| | 6) Image Scanner | EPSON | GT-9000 ART | ITE0002844 | 100V/50-60Hz/0.8 A | JB94-006 | Feb. 01, 1995 | 1 PC | 0 | 1 PC | Chief Rm | Mr. Tokumoto |
| | 7) SCSI Cable for Image Scanner | EPSON | MOA - C 10 T | 10350 - 1 | - | JB94-007 | Feb. 01, 1995 | 1 PC | 0 | 1 PC | Chief Rm | Mr. Tokumoto |
| | 8) MO Disk Unit (3.5 Inch) | SONY | RMO-S360 | 225750 | 100V 50/60Hz 0.55A | JB94-008 | Feb. 01, 1995 | 1 PC | 0 | 1 PC | Chief Rm | Mr. Tokumoto |
| | 9) Interface Dther for MO Disk Unit | SONY | - | - | - | JB94-009 | Feb. 01, 1995 | 1 PC | 0 | 1 PC | Chief Rm | Mr. Tokumoto |
| | 10) SCSI Cable for MO Disk Unit | SONY | 25SP-SOH | 10350 - 2 | - | JB94-010 | Feb. 01, 1995 | 1 PC | 0 | 1 PC | Chief Rm | Mr. Tokumoto |
| | 11) MO Disk | MITSUBISHI - KASEI | MR 3H 1 | - | 3.5 Inch MO | JB94-011 | Feb. 01, 1995 | 1 Box | 0 | 1 Box | Chief Rm | Mr. Tokumoto |
| | 12) Tonner Cartridge for Laser Printer | APPLE | M1560G/A | - | Black Ink | JB94-012 | Feb. 01, 1995 | 3 PCs | 1 PC | 2 PCs | Chief Rm | Mr. Tokumoto |
| 2. | Technical Books | | | | | | | (TOTAL) | | | | |
| | 1) Terminal Equipment and Protocols for Telematic Services Vol. VIII.5 - Fascicle VII. 3 ITU-TREC T-0 (Blue Book) | IXth Plenary Assembly | - | - | - | JB94-013 (E - 002) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |

INVENTORY OF EQUIPMENT FOR FY 1994 (REQUESTED BY JAPANESE EXPERTS)



| NO. | ITEM | COMPANY | MODEL | SERIAL NUMBER | SPECIFICATION | CODE NUMBER | DATE ARRIVED | QTY | DISPOSED/ CONSUMED | PRESENT QTY | LOCATION | REMARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2) Terminal Equipment and Protocols for Telematic Services Vol. VIII.5 - Fascicle VII. 5 ITU-TREC T351 (Blue Book) | IXth Plenary Assembly | | - | - | JB94 - 014 (E - 003) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| | 3) Text Book Digital Transmission (Digital Kaiko) | Ocm | - | - | - | JB94 - 015 (J-002) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| | 4) INS Guide (INS Nyumon) | Denki Tsushin Kyokai | - | - | - | JB94 - 016 (J-003) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| | 5) NTIA Telecom 2000 | Denki Tsushin Kyokai | - | - | - | JB94 - 017 (J-004) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| | 6) Optical Submarine Cable (Hikari Kaitei Cable Tsushin) | Maruzen | - | - | - | JB94 - 018 (J-005) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| | 7) Terminal Equipment and Protocols for Telematic Services ITU TREC T-4 | IXth Plenary Assembly | - | - | - | JB94 - 019 (E - 004) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| | 8) Terminal Equipment and Protocols for Telematic Services ITU TREC T-22 | IXth Plenary Assembly | - | - | - | JB94 - 020 (E - 005) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| | 9) Terminal Equipment and Protocols for Telematic Services ITU TREC T-30 | IXth Plenary Assembly | - | - | - | JB94 - 021 (E - 006) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| | 10) Terminal Equipment and Protocols for Telematic Services ITU TREC T-80 | IXth Plenary Assembly | - | - | - | JB94 - 022 (E - 007) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |

INVENTORY OF EQUIPMENT FOR FY 1994 (REQUESTED BY JAPANESE EXPERTS)



| NO. | ITEM | COMPANY | MODEL | SERIAL NUMBER | SPECIFICATION | CODE NUMBER | DATE ARRIVED | QTY | DISPOSED/ CONSUMED | PRESENT QTY | LOCATION | REMARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11) | Terminal Equipment and Protocols for Telematic Services ITU TRECT503 | IXth Plenary Assembly | - | - | - | JB94 - 023 (E - 008) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 12) | Terminal Equipment and Protocols for Telematic Services ITU TREC T 521 | IXth Plenary Assembly | - | - | - | JB94 - 024 (E - 009) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 13) | G3/G4 for Facsimile ITU - T (White Book) | Shinnihon ITU Kyokai | - | - | - | JB94 - 025 (E - 010) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 14) | Introduction to Fiber Optic Communication (Yasashi Hikari Fiber Tsushin) | Denki Tsushin Kyokai | - | - | - | JB94 - 026 (J-006) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 15) | Introduction to Digital Transfer (Yasashi - Digital Denso) | Denki Tsushin Kyokai | - | - | - | JB94-027 (J-007) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 16) | ISDN Terminology - (ISDN Yougoshu | Denki Tsushin Kyokai | - | - | - | JB94-028 (J-008) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 17) | ISDN (I- Series International Standards and Their Technology (I - Series Kokusai Hyojun- to - sonogijutsu) | Denki Tsushin Kyokai | - | - | - | JB94-029 (J-009) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 18) | Collection of Ideas on ISDN Application (ISDN Application Idea Shu) | Denki Tsushin Kyokai | - | - | - | JB94-030 (J-010) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 19) | INS Tomorrow's Integrated Technology | NTT | | | | JB94-031 (E-011) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |

INVENTORY OF EQUIPMENT FOR FY 1994 (REQUESTED BY JAPANESE EXPERTS)



| NO. | ITEM | COMPANY | MODEL | SERIAL NUMBER | SPECIFICATION | CODE NUMBER | DATE ARRIVED | QTY | DISPOSED/ CONSUMED | PRESENT QTY | LOCATION | REMARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20) | Basic Terminology on Information Communication (Johoutsushinkiso-yogojten) | Denki Tsushin Kyokai | - | - | - | JB94-032 (J-011) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 21) | Modem Terminology on Telecommunication (Saishin - Telkom Yogoshu 2nd Edition) | - | - | - | - | JB94-033 (J-012) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 22) | Terminology of Digital Transfer (Digital Denso Yogodenshu) | Denki Tsushin Kyokai | - | - | - | JB94-034 (J-013) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 23) | Basic Knowledge on Telecommunication Equipment (Denki Tsushinsetsubi Kanri-nokisho) | Denki Tsushin Kyokai | - | - | - | JB94-035 (J-014) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | WF Rm-B | Mr. Tokumoto |
| 24) | Telecommunication Network Maintenance | The Telecommunication Association | - | - | - | JB94-036 (E-012) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | WF Rm-B | Mr. Tokumoto |
| 25) | Theory of Electricity for Telecommunication Engineers (Denki Riron) | Denki Tsushin Kyokai | - | - | - | JB94-037 (J-015) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 26) | Overview of Telecommunication (Denki Tsushin Gaiyou) | Denki Tsushin Kyokai | - | - | - | JB94-038 (J-016) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 27) | Telecommunications (Denki Tsushin Jigyorin-no-tameno - Rigo) | Denki Tsushin Kyokai | - | - | - | JB94-039 (J-017a / J-017b) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 28) | Tips on Successful Work (I) (Shigoto - no - chie I) | Denki Tsushin Kyokai | - | - | - | JB94-040 (J-018) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |

INVENTORY OF EQUIPMENT FOR FY 1994 (REQUESTED BY JAPANESE EXPERTS)



| NO. | ITEM | COMPANY | MODEL | SERIAL NUMBER | SPECIFICATION | CODE NUMBER | DATE ARRIVED | QTY | DISPOSED/ CONSUMED | PRESENT QTY | LOCATION | REMARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29) | Tips on Successful Work (II) (Shigoto-no-chie 2) | Denki Tsushin Kyokai | - | - | - | JB94-041 (J-019) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 30) | Introduction to Statistics and O.R. (Shigoto-ni-Yakudatsu Yasashikoukei-to O.R) | Oom | - | - | - | JB94-042 (J-020) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 31) | Introduction to Electronic Device and Its Application (Denshi Device-to-sono-ouyou) | Denki Tsushin Kyokai | - | - | - | JB94-043 (J-021) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 32) | The Management of Telecommunication Networks | Ellis Horwood | - | - | - | JB94-044 (E-013) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 33) | Lesson for Basic Electricity Engineering/Electric Circuit I (Kiso Denshi-kogaku-Denshikairohen-I) | Oosai Doukagaku (Suetake) | - | - | - | JB94-045 (J-022) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 34) | Lesson for Basic Electricity Engineering/Electric Circuit II (Kiso Denshi-kogaku-Denshikairohen-II) | Oosai Doukagaku (Matsushita Denki) | - | - | - | JB94-046 (J-023) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 35) | Lesson for Basic Electricity Engineering/Magnetic Static Electricity (Kiso Denkikogaku-Jiki/Seiden-kihen) | Oosai Doukagaku | - | - | - | JB94-047 (J-024) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 36) | Lesson for Basic Electricity Engineering/Alternating Current (Kiso Denki kogaku-Kouryuhen) | Oosai Doukagaku | - | - | - | JB94-048 (J-025) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |

INVENTORY OF EQUIPMENT FOR FY 1994 (REQUESTED BY JAPANESE EXPERTS)



| NO. | ITEM | COMPANY | MODEL | SERIAL NUMBER | SPECIFICATION | CODE NUMBER | DATE ARRIVED | QTY | DISPOSED/ CONSUMED | PRESENT QTY | LOCATION | REMARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 37) | Lesson for Basic Electricity Engineering/Electronic Circuit (Kiso Denkikogaku-Denkikairohen) | Oosai Doukagaku | - | - | - | JB94-049 (J-026) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 38) | Lesson for Basic Electricity Engineering/Direct Current (Kiso Denki kogaku Chokuryuhen) | Oosai Doukagaku | - | - | - | JB94-050 (J-027) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 39) | Lesson for Basic Mechatronics-Analogue and Digital (Analogue Digital) | Oosai Doukagaku | - | - | - | JB94-051 (J-028) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 40) | Standard Technology on Electric Equipment (Denki shupan setsubi-no-gijutsukijun | Bunichisogo-shupan | - | - | - | JB94-052 (J-029) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 41) | Standard Technology on Electric Equipment (New Technology Vs Old One) (Denkisetsubi-no-gijutsu-kijun-shinkyuta'aho) | Bunichisogo-shupan | - | - | - | JB94-053 (J-030) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 42) | Fiber Optic Communication | Prentice Hall | - | - | - | JB94-054 (E-014) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 43) | Electric Circuits | McGraw Hill Inc. | - | - | - | JB94-055 (E-015) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 44) | DC/AC Fundamentals 2nd Edition | Prentice Hall | - | - | - | JB94-056 (E-016) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 45) | Handbook on Electronic Communication (in 2 Vols) (Denshiholousshin Handbook) | Oom | - | - | - | JB94-057 (J-031) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |

INVENTORY OF EQUIPMENT FOR FY 1994 (REQUESTED BY JAPANESE EXPERTS)



| NO. | ITEM | COMPANY | MODEL | SERIAL NUMBER | SPECIFICATION | CODE NUMBER | DATE ARRIVED | QTY | DISPOSED/ CONSUMED | PRESENT QTY | LOCATION | REMARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 46) | Network System for Telecommunication (NetworkSystem) | Denki Tsusin Kyokai | - | - | - | JB94-058 (J-032) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 47) | English to Japanese and Japanese to English Dictionary for Telecommunication (Jobotsushin Eiwa-Waejiten) | Jobotsishin Sogokenkyusho | - | - | - | JB94-059 (J-033) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 48) | Collection of Visual Data on World Telecommunication (World Telecom Visual Data Hen) | Shinnihon ITU Kyokai | - | - | - | JB94-060 (J-034) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 49) | How to Use Optical Fiber at Various Experiments for Beginners (Hikari Fiber-no-Tsukikata-to-Ruiten) | Opotoronikusu | - | - | - | JB94-061 (J-035) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 50) | Handbook for Optical Telecommunication Network (Hikari - Kanyusha Tsushinmo) | | - | - | - | JB94-062 (J-036) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 51) | Standard Specification for Electrical Work (Denkisetsubikoujikyo-tsushiyousho) | Nihondensetsu-kogikyokai | - | - | - | JB94-063 (J-037) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 52) | Electrical Transmission Engineering - Line Transmission (Yusendenwa-densokougaku-senro-ron) | Gakkenshu | - | - | - | JB94-064 (J-038) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |

INVENTORY OF EQUIPMENT FOR FY 1994 (REQUESTED BY JAPANESE EXPERTS)



| NO. | ITEM | COMPANY | MODEL | SERIAL NUMBER | SPECIFICATION | CODE NUMBER | DATE ARRIVED | QTY | DISPOSED/ CONSUMED | PRESENT QTY | LOCATION | REMARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 53) | ISDN for Telecommunication Workers (Tsushintantoshya-no-tameno-ISDN) | Rikuteikom | - | - | - | JB94-065 (J-039) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 54) | Multi-Media Network Series - Network Architecture | Oom | - | - | - | JB94-066 (J-040) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 55) | Multi-Media Network Series - Network Nord System | Oom | - | - | - | JB94-067 (J-041) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 56) | Multi-Media Network Series - Photo Access System | Oom | - | - | - | JB94-068 (J-042) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 57) | Multi-Media Network Series - Network Operation | Oom | - | - | - | JB94-069 (J-043) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 58) | Illustrated Digital Circuit (Degitarudenso) | Denki Tsushin Kyokai | - | - | - | JB94-070 (J-044) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 59) | ABC of ISDN Technology (ABC-ISDN Gijutsu) | Oom | - | - | - | JB94-071 (J-045) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 60) | Illustrated Book on Digital PBX in ISDN Age (Digital PBX-Etokido-kuhon) | Oom | - | - | - | JB94-072 (J-046) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 61) | Illustrated Book on Packet Communication (Packet tsushin-Etokidokuhon) | Oom | - | - | - | JB94-073 (J-047) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 62) | Illustrated Book on B-ISDN (B-ISDN-Etokidokuhon) | Oom | - | - | - | JB94-074 (J-048) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |

INVENTORY OF EQUIPMENT FOR FY 1994 (REQUESTED BY JAPANESE EXPERTS)



| NO. | ITEM | COMPANY | MODEL | SERIAL NUMBER | SPECIFICATION | CODE NUMBER | DATE ARRIVED | QTY | DISPOSED/ CONSUMED | PRESENT QTY | LOCATION | REMARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 63) | State of Art Technology-Optical Fiber (Hikari Fiber) | Asakura-Shoten | - | - | - | JB94-075 (J-049) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Tokumoto |
| 64) | Illustrated Guidebook on Macintosh (Machintosh Nyumon) | Impress | - | - | - | JB94-076 (J-050) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Coordinator Rm | Mr. Tokumoto |
| 65) | Introduction to File Maker Pro (File Maker Pro Nyumon) | BNN | - | - | - | JB94-077 (J-051) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Coordinator Rm | Mr. Tokumoto |
| 66) | Master Page Maker 5.0J in One Week | Dainihon Insatsu | - | - | - | JB94-078 (J-052) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Coordinator Rm | Mr. Tokumoto |
| 67) | Handbook on Japanese Character Talk System 7 (Kanji Talk - 7) | Natsume | - | - | - | JB94-079 (J-053) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Coordinator Rm | Mr. Tokumoto |
| 68) | Electric Telecommunication Outline (Denkitsushingairon) | Denki Tsushin Kyokai | - | - | - | JB94-080 (J-054) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | WF Rm-B | Mr. Takahashi |
| 69) | Concrete Standard Indicate (Construction) (Concrete Hyujunshiho sho- Heisei 3 - Shikohen) | Dobokugakkai | - | - | - | JB94-081 (J-055) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | WF Rm-B | Mr. Takahashi |
| 70) | Concrete Standard Indicate (Guidance) (Concrete Hyujunshiho sho- Heisei 8 - Kijunhen) | Dobokugakkai | - | - | - | JB94-082 (J-056) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | WF Rm-B | Mr. Takahashi |
| 71) | Concrete Standard Indicate (Plan) (Concrete Hyujunshiho sho- Heisei 3 - Sekkeihen) | Dobokugakkai | - | - | - | JB94-083 (J-057) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | WF Rm-B | Mr. Takahashi |

INVENTORY OF EQUIPMENT FOR FY 1994 (REQUESTED BY JAPANESE EXPERTS)



| NO. | ITEM | COMPANY | MODEL | SERIAL NUMBER | SPECIFICATION | CODE NUMBER | DATE ARRIVED | QTY | DISPOSED/ CONSUMED | PRESENT QTY | LOCATION | REMARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 72) | Engineering Surveying (Dobokusokuho) | NTT | - | - | - | JB94-084 (J-058) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | WF Rm-B | Mr. Takahashi |
| 73) | Beginner's Correspondence for Engineering and Construction (Tsushin-Dobokukensetsu-Sokyu) | NTT | - | - | - | JB94-085 (J-059) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | WF Rm-B | Mr. Takahashi |
| 74) | Correspondence for Engineering and Construction (Tsushin Dobokukensetsu) | NTT | - | - | - | JB94-086 (J-060) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | WF Rm-B | Mr. Takahashi |
| 75) | Engineering Dynamics (2) (Dobokurikigaku-2 / Doshitsurikigakuhen) | NTT | - | - | - | JB94-087 (J-061) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | WF Rm-B | Mr. Takahashi |
| 76) | Line Office Work Handbook (Sennotakunai jimuhandobokuKoojimuhen) | Denki Tsushin Kyokai | - | - | - | JB94-088 (J-062) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Furutachi |
| 77) | Safety Information (Shikekiainzenchishikiyokugaihen) | Denki Tsushin Kyokai | - | - | - | JB94-089 (J-063) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | WF Rm-B | Mr. Furutachi |
| 78) | Technical Standards of Electric Communication Apparatus (Tanmatsuseetsubiyuusendenkitsushinsetsubi-gijutsukijunkaisetsu) | Denki Tsushin Kyokai | - | - | - | JB94-090 (J-064) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Furutachi |
| 79) | Terminal Equipment Rule (Gijutsukijun/Gitsutsu - Teki-Jyoken) | Denki Tsushin Kyokai | - | - | - | JB94-091 (J-065) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Furutachi |

INVENTORY OF EQUIPMENT FOR FY 1994 (REQUESTED BY JAPANESE EXPERTS)



| NO. | ITEM | COMPANY | MODEL | SERIAL NUMBER | SPECIFICATION | CODE NUMBER | DATE ARRIVED | QTY | DISPOSED/ CONSUMED | PRESENT QTY | LOCATION | REMARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 80) | Catalogue for Communication Terminal (Denki-tsushin tanmatsudenkibin-ran , 94) | Denki Tsushin Kyokai | - | - | - | JB94-092 (J-066) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Furutachi |
| 81) | Manual for Communication Terminal (Tanmatsukiki-Manual) | Denki Tsushin Kyokai | - | - | - | JB94-093 (J-067) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Furutachi |
| 82) | Terminal Equipment Wiring Communication Terminal | Denki Tsushin Kyokai | - | - | - | JB94-094 (E-017) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Furutachi |
| 83) | Q & A Terminal Standard (Q & A Tanmatsukiki teki-gou-Ninki) | Denki Tsushin Kyokai | - | - | - | JB94-095 (J-068) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Furutachi |
| 84) | Basic of Electrical Circuit (Denshikiro-no-kiso) | Ohm | - | - | - | JB94-096 (J-069) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Furutachi |
| 85) | Basic Information for Digital Communication (Digital Tsushin-no-kiso chishiki) | Ohm | - | - | - | JB94-097 (J-070) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Furutachi |
| 86) | Guide for Communication Rule (Denkitsushinhoki-kaisetsu) | Ohm | - | - | - | JB94-098 (J-071) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Furutachi |
| 87) | NTT Technical Condition | NTT | - | - | - | JB94-099 (E-018) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Furutachi |
| 88) | Guide for Equipment Management (Setsubi-kanrikaisetsu) | Denki Tsushin Kyokai | - | - | - | JB94-100 (J-072) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Furutachi |
| 89) | Guide for Tubing & Wiring (Haikan/Haisen Guide Book) | Denki Tsushin Kyokai | - | - | - | JB94-101 (J-073) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Furutachi |

INVENTORY OF EQUIPMENT FOR FY 1994 (REQUESTED BY JAPANESE EXPERTS)



| NO. | ITEM | COMPANY | MODEL | SERIAL NUMBER | SPECIFICATION | CODE NUMBER | DATE ARRIVED | QTY | DISPOSED/ CONSUMED | PRESENT QTY | LOCATION | REMARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 90) | Guide for Wiring for Telephone (Dewa-you-haikan-no-Tebiki) | NTT | - | - | - | JB94-102 (J-074) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Furutachi |
| 91) | Communication Technic Darenimowakaru-Denki tsushingijutsu) | NTT | - | - | - | JB94-103 (J-075) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Furutachi |
| 92) | Operation Manual for Line Hazard Measuring Instrument (Senrohoan-to-Raigaitsaku-no-jisai) | Denki Tsushin Kyokai | - | - | - | JB94-104 (J-076) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Sashihara |
| 93) | Line Maintenance and Thunder Hazard Preventi (Zodemiru-Senrohogai-shokutaiki-no-shosaiejun) | Denki Tsushin Kyokai | - | - | - | JB94-105 (J-077) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Sashihara |
| 94) | Manual on Preventing Electrolytic Corrosion (Denshokuboshikaisaku-no-tebiki) | Denki Tsushin Kyokai | - | - | - | JB94-106 (J-078) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Sashihara |
| 95) | Optical Fiber Cable | Denki Tsushin Kyokai | - | - | - | JB94-107 (E-019) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Sashihara |
| 96) | Manual of Coaxial Cable (Dojiku Cable Hitei) | Denki Tsushin Kyokai | - | - | - | JB94-108 (J-079) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Sashihara |
| 97) | Construction on Intelligent Building (Intelligent Bi-no-Kouchiku-o-medashite) | Denki Tsushin Kyokai | - | - | - | JB94-109 (J-080) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Sashihara |
| 98) | Illustrated Manual on Laws for Safe Line Work (Senrosagyoo-no-Anzen-hourekizukaishu) | Denki Tsushin Kyokai | - | - | - | JB94-110 (J-081) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | WF Rm B | Mr. Sashihara |

INVENTORY OF EQUIPMENT FOR FY 1994 (REQUESTED BY JAPANESE EXPERTS)



| NO. | ITEM | COMPANY | MODEL | SERIAL NUMBER | SPECIFICATION | CODE NUMBER | DATE ARRIVED | QTY | DISPOSED/ CONSUMED | PRESENT QTY | LOCATION | REMARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 99) | Manual on Exclusive Circuit for Telephone Line Engineers (Senyosen-Manual) | Denki Tsushin Kyokai | - | - | - | JB94-111 (J-082) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Chief Rm | Mr. Sashihara |
| 100) | Japanese Indonesian Dictionary (Nihongo-Indonesiago-Jiten) | Kyokasangyo Daigaku Shuppankai | - | - | - | JB94-112 (J-083) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Coordinator Rm | Mr. Nonaka |
| 101) | New English-Japanese Dictionary (Shin-Eiwa-daijten- 5th Edition) | Kenkyusha | - | - | - | JB94-113 (J-084) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Coordinator Rm | Mr. Nonaka |
| 102) | New Japanese-English Dictionary (Shin-Waei-daijten- 4th Edition) | Kenkyusha | - | - | - | JB94-114 (J-085) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Coordinator Rm | Mr. Nonaka |
| 103) | Dictionary of Physics and Chemistry (Rikagaku Jiten - 4th Edition) | Iwanami | - | - | - | JB94-115 (J-086) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Coordinator Rm | Mr. Nonaka |
| 104) | Kojien Japanese Dictionary (Kojien-4th Edition) | Iwanami | - | - | - | JB94-116 (J-087) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Coordinator Rm | Mr. Nonaka |
| 105) | Longman Contemporary English to English (Genda Eiei-Jiten) | Maruzen | - | - | - | JB94-117 (J-088) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Coordinator Rm | Mr. Nonaka |
| 106) | Introduction to Illustrator for Power User (Illustrator Nyumon) | Mcraki | - | - | - | JB94-118 (J-089) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Coordinator Rm | Mr. Nonaka |
| 107) | Introduction to Egword 6. for Power User (Egword 6.0 Nyumon) | Mcraki | - | - | - | JB94-119 (J-090) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Coordinator Rm | Mr. Nonaka |

INVENTORY OF EQUIPMENT FOR FY 1994 (REQUESTED BY JAPANESE EXPERTS)



| NO. | ITEM | COMPANY | MODEL | SERIAL NUMBER | SPECIFICATION | CODE NUMBER | DATE ARRIVED | QTY | DISPOSED/ CONSUMED | PRESENT QTY | LOCATION | REMARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 108) | Introduction to Mac Draw Proapplication Guide for Beginners (Hajimete No-Macro Pro) | Natsume | - | - | - | JB94-120 (J-091) | Feb. 01, 1995 | 1 Vol. | - | 1 Vol. | Coordinator Rm | Mr. Nonaka |
| 3. | Technical Books : | | | | | | | | | | | |
| 1) | 1994 - JIS, Handbook-14 (Hinshitsu Kanri) | JIS | - | - | - | JB94-121 (J-093) | Mar. 08, 1995 | 1 Vol. | - | 1 Vol. | WF Rm-B | Mr. Kuromi |
| 2) | 1994 JIS, Handbook - Quality Control - 94 | JIS | - | - | - | JB94-122 (E-020) | Mar. 08, 1995 | 1 Vol. | - | 1 Vol. | WF Rm-B | Mr. Kuromi |
| 3) | Hinshitsu Hosho No Kokusai Kikaku (ISO Kikaku No Taiyaku to Kaisetsu) | JIS | - | - | - | JB94-123 (J-094) | Mar. 08, 1995 | 1 Vol. | - | 1 Vol. | WF Rm-B | Mr. Kuromi |
| 4) | ISO - 5725 (1 - 4, 6) (Basshu Kensa) | ISO | - | - | - | JB94-124 (E-021) | Mar. 08, 1995 | 5 Vol. | - | 5 Vol. | WF Rm-B | Mr. Kuromi |
| 5) | ISO - 2859 (1 - 3) (Basshu Kensa) | ISO | - | - | - | JB94-125 (E-022) | Mar. 08, 1995 | 3 Vol. | - | 3 Vol. | WF Rm-B | Mr. Kuromi |
| 6) | ISO - 3534 (1 - 3) (Basshu Kensa) | ISO | - | - | - | JB94-126 (E-023) | Mar. 08, 1995 | 3 Vol. | - | 3 Vol. | WF Rm-B | Mr. Kuromi |
| 4. | Icosahedron Dice (Random Numbers Generating) | JIS | - | - | - | JB94-127 | Mar. 08, 1995 | 2 Vol. | - | 2 Vol. | WF Rm-B | Mr. Kuromi |
| 5. | Technical Book | | | | | | | | | | | |
| 1) | Optical Fibres for Telecommunication 1994 | ITU | - | - | - | JB94-128 (E-026) | Apr. 13, 1995 | 1 Vol. | - | 1 Vol. | WF Rm-B | Mr. Kuromi |
| 2) | Optical Fibre System Planning Guide 1989 | ITU | - | - | - | JB94-129 (E-027) | Apr. 13, 1995 | 1 Vol. | - | 1 Vol. | WF Rm-B | Mr. Kuromi |

INVENTORY OF EQUIPMENT FOR FY 1994 (REQUESTED BY JAPANESE EXPERTS)



| NO. | ITEM | COMPANY | MODEL | SERIAL NUMBER | SPECIFICATION | CODE NUMBER | DATE ARRIVED | QTY | DISPOSED/ CONSUMED | PRESENT QTY | LOCATION | REMARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3) Construction Installation Jointing and Protection of Optical Fiber Cables 1993 | ITU | - | - | - | JB94-130 (E-028) | Apr. 13, 1995 | 1 Vol. | - | 1 Vol. | WF Rm-B | Mr. Kuroma |
| | 4) Handbook on Outside Plant Technologies for Public Networks 1991 | ITU | - | - | - | JB94-131 (E-029) | Apr. 13, 1995 | 1 Vol. | - | 1 Vol. | WF Rm-B | Mr. Kuroma |
| 6. | Software ADOBE Illustator For IBM Computer | WINDOWS | 4.0J | - | - | JB94-132 | Apr. 25, 1995 | 1 PC | - | 1 PC | Coordinator Rm | Mr. Takahashi |
| 7. | Software MS-Office For IBM Computer | WINDOWS | 4.2 | - | - | JB94-133 | Apr. 25, 1995 | 1 PC | - | 1 PC | Coordinator Rm | Mr. Takahashi |
| 8. | Personal Computer IBM Thinkpad | IBM | 555BJ | 2437-JWC | 20V, 2.0A, 40 W | JB94-134 | Apr. 25, 1995 | 1 Unit | - | 1 Unit | Coordinator Rm | Mr. Takahashi |
| 9. | Ink Cartridge for Thinkpad | IBM | 49G0176 | | BLACK | JB94-135 | Apr. 25, 1995 | 20 PCS | 0 | 20 PCS | Coordinator Rm | Mr. Takahashi |
| 10. | Extention Memory 8 MB (Instalied for Item 8 ) | IBM | 49G6317 | - | - | JB94-136 | Apr. 25, 1995 | 1 PC | - | 1 PC | Coordinator Rm | Mr. Takahashi |
| 11. | Mouse for Thinkpad | IBM | 8-B | 99-81041 | - | JB94-137 | Apr. 25, 1995 | 1 PC | - | 1 PC | Coordinator Rm | Mr. Takahashi |
| 12. | Software EG Talk for Macintosh | ERGO | 2.02 | - | - | JB94-138 | Apr. 25, 1995 | 1 PC | - | 1 PC | Coordinator Rm | Mr. Takahashi |
| 13. | Software EG Word for Macintosh | ERGO | 6.0 | - | - | JB94-139 | Apr. 25, 1995 | 1 PC | - | 1 PC | Coordinator Rm | Mr. Takahashi |
| 14. | Software MS-Word for Macintosh | MICROSOFT | 6.02 | - | - | JB94-140 | Apr. 25, 1995 | 1 PC | - | 1 PC | Coordinator Rm | Mr. Takahashi |

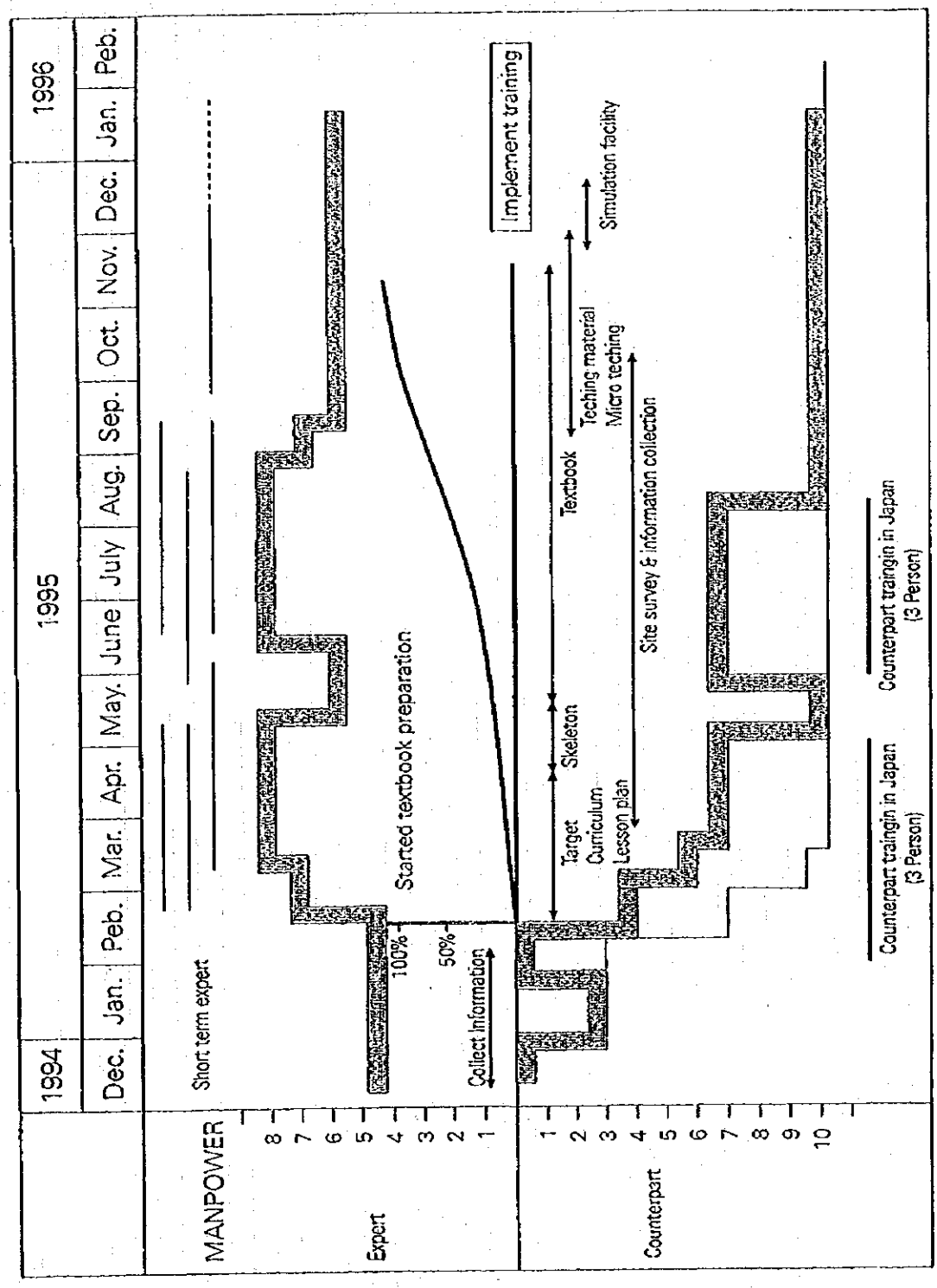
INVENTORY OF EQUIPMENT FOR FY 1994 (REQUESTED BY JAPANESE EXPERTS)



| NO. | ITEM | COMPANY | MODEL | SERIAL NUMBER | SPECIFICATION | CODE NUMBER | DATE ARRIVED | QTY | DISPOSED/ CONSUMED | PRESENT QTY | LOCATION | REMARK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15. | Software MS Excel 5.0J | MICROSOFT | 5.0 | - | - | JB94-141 | Apr. 25, 1995 | 1 PC | - | 1 PC | Coordinator Rm | Mr. Takahashi |
| 16. | Software File Maker Pro. for Macintosh | CLARIS | 2 | - | - | JB94-142 | Apr. 25, 1995 | 1 PC | - | 1 PC | Coordinator Rm | Mr. Takahashi |
| 17. | Tepura PRO with Adaptor (9410) | KING JIM | SR-707 | - | DC9V/9W 1.5V/X5 | JB94-143 | Apr. 25, 1995 | 1 Unit | - | 1 Unit | Coordinator Rm | Mr. Takahashi |
| 18. | Tape Cartridge | KING JIM | SC12B | - | 12 mm Blue | JB94-144 | Apr. 25, 1995 | 5 PCs | 0 | 5 PCs | Coordinator Rm | Mr. Takahashi |
| 19. | Tape Cartridge 12 mm Yellow SC12Y | KING JIM | SC12Y | - | 12 mm Yellow | JB94-145 | Apr. 25, 1995 | 5 PCs | 0 | 5 PCs | Coordinator Rm | Mr. Takahashi |
| 20. | Tape Cartridge "King Jim" 12 mm Clear SC12K | KING JIM | SC12K | - | 12 mm Clear | JB94-146 | Apr. 25, 1995 | 5 PCs | 0 | 5 PCs | Coordinator Rm | Mr. Takahashi |
| 21. | Transformer for Thinkpad | TOYOZUMI | KDA-20 | - | In-200V Out-100V | JB94-147 | Apr. 25, 1995 | 1 PC | - | 1 PC | Coordinator Rm | Mr. Takahashi |

## 1. Progress of OPCC's activities

### (1) Action report



## MICRO TEACHING SCHEDULE
## TIME PERIOD : 1995, SEPTEMBER

| NO. | PRESENTATOR | TOPIC | DATE | TIME | REMARKS |
|---|---|---|---|---|---|
| 1 | BAMBANG SUNARMO | DESIGN DUCT | THURSDAY SEPT 07,1995 | 14:30-16:30 | 90 MINUTE PRESENTATION AND 30 MINUTE DISCUSSION |
| 2 | MOCHAMAD CHOLIL | HOUSE CABLING DESIGN IN HIGH RISE BUILDING | FRIDAY SEPT 08,1995 | 15:00-17:00 | |
| 3 | RADIANA | CROSS CONNECTION CAB. | THURSDAY SEPT 14, 1995 | 14:30-16:30 | |
| 4 | HARDJANTO | SAFETY MANAGEMENT | FRIDAY SEPT 15,1995 | 15:00-17:00 | |
| 5 | LUBIYO MARDJUKI | INST. & SPLICING DUCT CABLE | THURSDAY SEPT 22, 1995 | 14:30-16:30 | |
| 6 | ARIEF SYA'BANI | CUSTOMER PREMISES ENGINEERING | FRIDAY SEPT 23,1995 | 15:00-17:00 | |
| 7 | BASIR AHMADI | CONCRETE | THURSDAY SEPT 22, 1995 | 14:30-16:30 | |
| 8 | SUPRANYONO | AERIAL CABLE DESIGN | FRIDAY SEPT 30,1995 | 15:00-17:00 | |

BANDUNG, SEPTEMBER 05, 1995

CHIEF OF COUNTERPART

SATRIOWIBOWO
NIK : 460776

SCHEDULE . F MICRO TEACHING AND PRACTICAL ./UDY
TIME PERIOD : OCTOBER 1995

| NO | NAME | SUBJECT | | DATE | PLACE | REMARKS |
|---|---|---|---|---|---|---|
| 1. | ALL MEMBER | TYPE & STRUCTURE OF OSP CABLE | (P) | 03-10-95 | OSP LAB | MICRO TEACHING<br>14.30 - 16.30 |
| 2. | ALL MEMBER | METALIC CABLE COLOR CODE CALCULATION | (P) | 04-10-95 | OSP LAB | Friday :<br>15.00 - 17.00 |
| 3. | H A R D J A N T O | SAFETY MANAGEMENT | (T) | 05-10-95 | M. BUILDING | (90 minute teaching, 30 minute discussion) |
| 4. | BASIR AKHMADI | MANHOLE DESIGN | (T) | 06-10-95 | M. BUILDING | Class room :<br>2 nd floor, M. Building |
| 5. | ALL MEMBER | INTRODUCTION OF JOINTING MATERIALS | (P) | 10-10-95 | OSP LAB | PRACTICAL STUDY<br>09.00 - 11.00 |
| 6. | ALL MEMBER | CABLE JOINTING | (P) | 11-10-95 | OSP LAB | - OSP LAB<br>- SITE<br>- OPMC |
| 7. | BAMBANG SUNARMO | DESIGN MODIFICATION | (T) | 12-10-95 | M. BUILDING | |
| 8. | RADIANA | MDF CABLE TERMINATING | (T) | 13-10-95 | M. BUILDING | P = Practise<br>T = Theory |
| 9. | ALL MEMBER | MDF, CC, DP, CONSTRUCTION | (P) | 17-10-95 | OSP FIELD/SITE | |
| 10. | ALL MEMBER | MH, HH, DUCT | (P) | 18-10-95 | SITE | |

SCHEDULE F MICRO TEACHING AND PRACTICAL TUDY
TIME PERIOD : OCTOBER 1995

| NO | NAME | SUBJECT | | DATE | PLACE | REMARKS |
|---|---|---|---|---|---|---|
| 11. | SUPRANYONO | AERIAL CABLE DESIGN | (T) | 19-10-95 | M. BUILDING | |
| 12. | MOCH. CHOLIL | CABLING IN HIGH RISE BUILDING | (T) | 20-10-95 | M. BUILDING | |
| 13. | ALL MEMBER | OSP ACTUAL CONDITION | (P) | 24-10-95 | SITE (BD. CENTRUM & BD.GGK) | |
| 14. | FX. LUBIYO MARDJUKI | INST. DIRECT BURRIED CABLE CONSTRUCTION | (T) | 25-10-95 | M. BUILDING | |
| 15. | ARIEF SYA'BANI | MAINTENANCE MANAGEMENT | (T) | 27-10-95 | M. BUILDING | |

Bandung, October 2, 1995
Chief of counterpart,

SATRIOWIBOWO
NIK : 460776

Plan of operation for whole period

Project: OPCC Outside Plant Construction Center

Project Purpose: To establish the supervisor training course and to train personnel in charge of TOPC supervision

| Output | Activities | Target | Schedule (Japanese Fiscal Year) 1994 III IV | 1995 I II III IV | 1996 I II III IV | 1997 I II III IV | 1998 I II III IV | Responsible person in project team | Input |
|---|---|---|---|---|---|---|---|---|---|
| 1. The Telkom staff is to be trained in TOPC work supervision and inspection method | 1. To train TELKOM staff for the TOPC work supervision and inspection method<br>1-1. To select counterpart personnel for instructors<br>1-2. To make a curriculum and textbooks based on the revised work method<br>1-3. To make training plans including practical training<br>1-4. To implement the training<br>1-5. To appraise the training | The end of October<br>From the end of November | | | | | | Chief advisor<br>Chief counterpart | * Material and equipment for practical study<br>* Construction vehicles<br>* Short term expert<br>* Counterpart training in Japan |
| 2. The TOPC problems are to be identified and countermeasures are to be found in the course of preparation and revision of the supervisor training | 2. To advise each responsible department to fix the standard on TOPC work, supervision and inspection method.<br>2-1. To make a report to the department concerned on the TOPC problems found in the course of preparation and revision of the training textbooks.<br>2-2. To make a report to the department concerned on the TOPC problems found in the site survey.<br>2-3. To make a report to the department concerned on imperfections found in standards in the course of reviewing existing standard. | | | | | | | | * Short term expert<br>* Local cost |
| 3. The revised TOPC standard and methods are to be disseminated to WITELs | 3. To disseminate the revised TOPC standards and methods to WITELs.<br>3-1. To train the TOPC supervisor training instructors from the regional training units.<br>3-2. To develop illustrated TOPC standard guide books and video texts in order to improve the TOPC supervisor training at the regional training units. | | | | | | | | * Short term expert<br>* Local cost |

## Plan of operati on for whole period

Project : OPCC Outside Plant Construction Center
Cable engineering

| Output | Activities | Schedule (Japanese Fiscal Year) 1994 III IV | 1995 I II III IV | 1996 I II III IV | 1997 I II III IV | 1998 I II III IV | Remarks |
|---|---|---|---|---|---|---|---|
| 1-1. Making lesson plan | (1) Make lesson skeleton | | | | | | |
| | (2) Make lesson plan | | | | | | |
| 1-2. Preparation of making textbook | (1) Assemble the existing textbooks. standard and specification | | | | | | |
| | (2) Translate them into English | | | | | | |
| 1-3. Making textbook | (1) Inst./Splicing Duct cable | | | | | | |
| | (2) Installation of Direct Buried Cable | | | | | | |
| | (3) Pole, Guy and Stay Construction | | | | | | |
| | (4) Inst./splicing of Aerial cable | | | | | | |
| | (5) Cross Connection Cabinet | | | | | | |
| | (6) MDF Cable Terminating | | | | | | |
| | (7) Final Test (Metalic Cable) | | | | | | |
| | (8) Design of cable Eng. (Metalic cable) | | | | | | |
| | (9) Calculation of Cable Engineering | | | | | | |
| | (10) Inspection | | | | | | |
| | (11) Design Modification | | | | | | |
| 1-4. Counterpart Training | (1) Study and discussion with expert | | | | | | |
| | (2) Instructor Training | | | | | | |
| 1-5. Training | (1) Execution of training | | | | | | |
| | (2) Support to the implementation training | | | | | | |
| | (3) Revise textbook and lesson plan | | | | | | |
| 2-1. Site Survey | (1) Site Survey | | | | | | |
| | (2) Make report regarding the imparfection of standard. | | | | | | |
| | (3) Discuss and study about the countermeasures based on the report | | | | | | |
| 3-1. Technical support | (1) Aftercare for graduated trainees | | | | | | |
| 3-2. Making Video texts | (1) Develop Video training Text | | | | | | |
| | (2) master the operation of video editing equipment | | | | | | |
| 3-3 Illustrated guide book. | (1) Develop illustrated and easy guide book to follow (OSP technical word dictionary) | | | | | | |
| | (1-1). Installation of Duct cable | | | | | | |
| | (1-2) Installation of Direct buried Cable | | | | | | |
| | (1-3) Pole, Guy and Stay Construction. | | | | | | |
| | (1-4) Installation of Aerial Cable | | | | | | |
| | (1-5) Cross Connection Cabinet | | | | | | |
| | (1-6) MDF Cable Terminating | | | | | | |
| | (1-7) Final Test | | | | | | |
| | (1-8) Splicing of metalic cable | | | | | | |

Plan of operation for whole period

Project : OPCC Outside Plant Construction Center
Civil Engineering

| Output | Activities | Schedule (Japanese Fiscal Year) 1994 III IV | 1995 I II III IV | 1996 I II III IV | 1997 I II III IV | 1998 I II III IV | Remarks |
|---|---|---|---|---|---|---|---|
| 1-1 Making lesson plan | (1) Make lesson skeleton | | | | | | |
| | (2) Make lesson plan | | | | | | |
| 1-2 Preparation of making textbook | (1) Assemble the existing textbooks, standard and specification | | | | | | |
| | (2) Translate them into English | | | | | | |
| 1-3 Making textbook | (1) Design of MH/HH | | | | | | |
| | (2) Design of Duct | | | | | | |
| | (3) Design of Duct for Bridge | | | | | | |
| | (4) Calculation of Civil Construction | | | | | | |
| | (5) Implementation of MH/HH | | | | | | |
| | (6) Implementation of Duct | | | | | | |
| | (7) Implementation of Concrete | | | | | | |
| | (8) Design Modification | | | | | | |
| | (9) Inspection | | | | | | |
| | (10) Safety Management | | | | | | |
| 1-4 Counterpart Training | (1) Study and discussion with expert | | | | | | |
| | (2) Instructor Training | | | | | | |
| 1-5 Training | (1) Execution of training | | | | | | |
| | (2) Revise textbook and lesson plan | | | | | | |
| 2-1 Collection of current construction and design method | (1) Collect bidding documents | | | | | | |
| | (2) Collect bidders documents | | | | | | |
| 2-2 Review existing standard | (1) Tekjar, STEL, POSTEL, SII, etc. | | | | | | |
| 2-3 Site survey | | | | | | | |
| 2-4 Compile outside plant material specification | (1) Compile outside plant material spec. | | | | | | |
| | (2) Make database | | | | | | |
| 2-5 Assist DITPRANTEK to make standard | (1) Prefabricated concrete manhole | | | | | | |
| | (2) Concrete construction method | | | | | | |
| | (3) Manhole specification | | | | | | |
| | (4) Duct jointing method to manhole | | | | | | |
| | (5) Duct attachment of bridge | | | | | | |
| 2-6 Investigate current supervisor's scope of work | (1) Hear from Telkom and contractors | | | | | | |
| 2-7 Assist DITPRANTEK to make supervisor's manual | (1) Make supervisor's manual | | | | | | |
| 3-1 Disseminate TOPC standard | (1) Hold seminars regarding new technology | | | | | | |
| 3-2 Training instructors from regional training sections | (1) Training instructors from regional Training sections | | | | | | |
| 3-3 Making video texts | (1) Implementation of MH/HH, Duct | | | | | | |
| | (2) Implementation of concrete | | | | | | |

Project : OPCC Outside Plant Construction Center
(Name:Yukiharu FURUTACHI)

| Output | Activities | Schedule (Japanese Fiscal Year) 1994 III IV | 1995 I II III IV | 1996 I II III IV | 1997 I II III IV | 1998 I II III IV | Remarks |
|---|---|---|---|---|---|---|---|
| 1-1 Making lesson plan | (1) Make lesson skeleton | | | | | | |
| | (2) Make lesson plan | | | | | | |
| 1-2 Preparation of making textbook | (1) Assemble the existing textbooks, standard and specification | | | | | | |
| | (2) Translate them into English | | | | | | |
| 1-3(a) Making textbook | (1) Customer Premises Work in General | | | | | | • Customer Premises Work |
| | (2) Cabiling in High Rise Building | | | | | | • Pipe arrangment |
| | (3) Customer Premises Eng. (Construction) | | | | | | |
| | (4) Quality Control | | | | | | • Cace study Fault analysis |
| | (5) Facilities Management/Admi. SISKAMAYA) | | | | | | |
| | (6) Maintenace Management | | | | | | • Fault repair |
| | (7) Design Modification | | | | | | |
| (b) Making attachment-book | (1) Telecommunication Machine Technique | | | | | | • Cordless, Digital PBX, etc. |
| | (2) Facimilile Equipment | | | | | | |
| | (3) Outline of ISDN | | | | | | |
| | (4) Ligtning Trouble | | | | | | • include Lighting protection |
| 1-4 Counterpart Training | (1) Study and discussion with expert | | | | | | |
| | (2) Instructor Training | | | | | | |
| 1-5 Training | (1) Execution of training | | | | | | • 97' ~ ; Not Fix |
| | (2) Revise textbook and lesson plan | | | | | | |
| 1-6 Set up the office | (1) Make a plan new office arrangment | | | | | | • 97' ~ ; New building |
| 2-1 Collection of current construction and design method | (1) Collect bidding documents | | | | | | |
| | (2) Collect bidders documents | | | | | | |
| 2-2 Review existing standard | (1) Tekjar, STEL, POSTEL, SIL etc. | | | | | | |
| 2-3 Site survey | | | | | | | |
| 2-4 Compile outside plant material specification | (1) Compile outside plant material spec. | | | | | | |
| | (2) Make database | | | | | | |
| 2-5 Assist DITPRANTEK to make standard | (1) Fault Analsys | | | | | | |
| | (2) Pipe Arrangment | | | | | | |
| | (3) Ligtning Countermeasures | | | | | | |
| | (4) Introduce Protection for customer | | | | | | |
| 2-6 Investigate current supervisor's scope of work | (1) Hear from Telkom and contractors | | | | | | |
| 2-7 Assist DITPRANTEK to make supervisor's manual | (1) Make supervisor's manual | | | | | | |
| 3-1 Disseminate TOPC standard | (1) Hold seminars regarding new technology | | | | | | |
| 3-2 Training instructors from regional training sections | (1) Training instructors from regional Training sections | | | | | | |
| 3-3 Making video texts | (1) Pipe Arrangment | | | | | | |
| | (2) Ligtning Countermeasures | | | | | | |
| 3-4 Mini project | (1) Operation of optical filing system | | | | | | |

# CHANGES OF OPCC OFFICE

OPCC-Project

| | Nov. 22th 1994 ~ | Apr. 10th 1995 ~ | May. 8th 1995 ~ | Jul. 26th 1995 ~ | Oct. 20th 1995 ~ | Nov. 10th 1995 ~ |
|---|---|---|---|---|---|---|
| Bld. M 4F | Office Room 126㎡ | Office Room 126㎡ | Office Room 126㎡ | — | — | — |
| | 126 ㎡ | 126 ㎡ | 126 ㎡ | – ㎡ | – ㎡ | – ㎡ |
| Bld. M 1F | M:Meeting Room<br>V:VTR Editing Room | Of. 29 / M. 29 | Of. 33㎡ / V. 29 / M. 29 | Office Room 58㎡ / Office Room 58㎡ / Office Room 58㎡ / V. 29 / M. 29 | Office Room 58㎡ / Office Room 58㎡ / Office Room 58㎡ / V. 29 / M. 29 | Store Room 73㎡ / Office Room 58㎡ / Office Room 58㎡ / Office Room 58㎡ / Store Room 20㎡ / V. 29 / M. 29 |
| | – ㎡ | 58 ㎡ | 91 ㎡ | 265 ㎡ | 265 ㎡ | 358 ㎡ |
| Other Places | — | — | — | — | Practical Room 36㎡ / Store Room 36㎡ | Practical Room 36㎡ / Store Room 36㎡ |
| | – ㎡ | – ㎡ | – ㎡ | – ㎡ | 72 ㎡ | 72 ㎡ |
| Total | 126 ㎡<br>Office R. : 126<br>Store R. : -<br>Practice : -<br>Common R. : - | 184 ㎡<br>Office R. : 155<br>Store R. : -<br>Practice : -<br>Common R. : 29 | 217 ㎡<br>Office R. : 159<br>Store R. : -<br>Practice : -<br>Common R. : 58 | 265 ㎡<br>Office R. : 207<br>Store R. : -<br>Practice : -<br>Common R. : 58 | 337 ㎡<br>Office R. : 207<br>Store R. : 36<br>Practice : 36<br>Common R. : 58 | 430 ㎡<br>Office R. : 207<br>Store R. : 129<br>Practice : 36<br>Common R. : 58 |

MEETING WITH MR. JOHN WELLY
(Director of Human Resources Development, PT. TELKOM)

Date : December 14, 1995
Time : 13:00 p.m.
Place : Meeting Room of HRD

Participants :

a. TELKOM Side :

1. Mr. John Welly
   Director of Human Resources Development
2. Mr. Suprapto
   Secretary of HRD Director
3. Mr. Satriowibowo
   Chief Counterpart of OPCC Project

b. JICA Side :

1. Mr. Takahashi Tomio
   Team Leader
   Special Advisor, International Cooperation Division,
   International Affairs Department,
   Ministry of Posts and Telecommunication.

2. Mr. Sugiyama Takeshi
   Technical Cooperation
   Assistant Director, Technical Cooperation Division,
   Economic Cooperation Bureau,
   Ministry of Foreign Affairs,

3. Mr. Takada Nobuo
   Civil Engineering,
   Manager, Planning and Research Group,
   International Affairs Department,
   Nippon Telegraph and Telephone Corporation.

4. Mr. Kioka Kiyokazu
   Subscriber Premises Engineering,
   Senior Manager
   International Affairs Department,
   Nippon Telegraph and Telephone Corporation.

5. Mitzumoto Toshiyuki
   Cable Engineering,
   Overseas Division,

Nippon COMSYS Corporation.

6. Mr. Takahashi Toshio
   Cooperation Planning
   Staff, First Technical Cooperation Division,
   Social Development Cooperation Department,
   Japan International Cooperation Agency.

7. Mr. Tokumoto Keiichiro
   Chief Advisor of OPCC Project

8. Mr. Nonaka Yasunobu
   Coordinator of OPCC Project

Result :

1. Purpose of the Mission coming to Indonesia is :

   a. To observe the progress of OPCC Progress.
   b. To analyze the status of the Project after re-structuring of TELKOM's organization.

   The problem to solve is to establish the status of OPCC Project, because after the re-structuring of PT. TELKOM, OPCC seems to be floating.

   Before the re-structuring, OPCC is under the Development Division, but now that division has been eliminated. DIVLAT is now the one division which is taking care of the OPCC Project, and the Chief of DIVLAT is as the Project Manager.

2. Comment From The Team :

   OPCC will not expand the working scope of the Project, as OPCC has not enough man power if OPCC must handle all the construction job in DIVLAT. That is why the Team must ensure about the status of the OPCC.
   As mentioned in the R/D, the purpose of the Project is to establish the supervising training and give enough knowledge to the trainers in the supervisory work. While, now the activity of the Project will be focused to revise and review the the supervisory training inDIVLAT.

3. The Idea From Mr. John Welly :

   a. To invite DIVLAT to represent their idea / proposal about the new organization, and submit it the the HRD. Then the director of HRD will bring the proposal to the Board Meeting, because it must be approved by the Board of the company.
   b. The telecommunication technology is running very fast. Now DIVLAT receives many requests related to the "fiber" training. It is rather different with the enviroment before the OPCC running. Within 4 (four) years of the Project, TELKOM hope that OPCC / JICA can adjust to the changing enviroment of the Company.

4. Comment From Mr. Takahashi (JICA) :

   a. The main purpose of the Project will not be changed
   b. The Team does not want to change the Master Plan or R/D of the Project, nor expand the working scope of the Project.

5. Agreement :

   There will be 1 (one) signer on behalf of PT. TELKOM, that is the KA-DIVLAT.

## MEETING WITH CHIEF OF COUNTERPART AND GENERAL MANAGER OF BUSINESS DEVELOPMENT

Date : December 13, 1995
Time : 10:00 a.m.
Place : OPCC Meeting Room

Participants :

a. Member of TELKOM side :

1. Mr. Abdul Hadi
   General Manager of Business Development,
   Education and Training Center, PT. TELKOM

2. Mr. Satriowibowo
   Chief Counterpart of OPCC Project.

3. Mr. Udiyatno
   Staff of Business Development Center,
   PT. TELKOM.

4. Mr. Husni Amani
   Staff of Business Development Center,
   PT. TELKOM.

b. JICA Side :

1. Mr. Takahashi Tomio
   Team Leader
   Special Advisor, International Cooperation Division,
   International Affairs Department,
   Ministry of Posts and Telecommunication.

2. Mr. Sugiyama Takeshi
   Technical Cooperation
   Assistant Director, Technical Cooperation Division,
   Economic Cooperation Bureau,
   Ministry of Foreign Affairs,

3. Mr. Takada Nobuo
   Civil Engineering,
   Manager, Planning and Research Group,
   International Affairs Department,
   Nippon Telegraph and Telephone Corporation.

4. Mr. Kioka Kiyokazu
   Subscriber Premises Engineering,
   Senior Manager
   International Affairs Department,
   Nippon Telegraph and Telephone Corporation.

5. Mitzumoto Toshiyuki
   Cable Engineering,
   Overseas Division,
   Nippon COMSYS Corporation.

6. Mr. Takahashi Toshio
   Cooperation Planning
   Staff, First Technical Cooperation Division,
   Social Development Cooperation Department,
   Japan Internation Cooperation Agency.

7. Mr. Tokumoto Keiichiro
   Chief Advisor of OPCC Project

8. Mr. Nonaka Yasunobu
   Coordinator of OPCC Project

Result :

a. Report from Mr. Satrio :

The OSP Training Course has been started from December 4, 1995 and it has run very smooth. This course is a good chance for the counterparts to sharpen their skill in the field of Outside Plant. We hope it will be better day by day.

b. The Matters that must be discussed between TELKOM/DIVLAT and the Japanese side are suggested as follows :

1. It is needed a modification on the R/D of the OPCC Project, because there is a re-organization in TELKOM. Then it must be discussed with Mr. John Welly.

2. There must be a serious discussion between DIVLAT, OPCC, and the Team after the re-organization of TELKOM. Now, OPCC is like an orphanage as OPCC is not under any division / department.

c. Suggestion from DIVLAT :

1. OPCC will be directly under the DIVLAT organization, because DIVLAT will make one more division called OPTC (Outside Plant Training Center). Later, OPTC will consist of : OPCC and the existing OSP. It is done because OPCC and OSP has a close job in doing their own job.

2. OPTC will be run in the beginning of 1996.

d. Comment/question on Mr. Abdul Hadi's Presentation :

1. Actually the Mission Team has no objection on the change of OPCC status, but we must keep on the master plan or R/D which had already signed by the both sides (Indonesia and Japan). Furthermore, one of the overall goal of OPCC is to improve the construction field in Indonesia. By changing the status of OPCC, it seem not in the line with that goal.
   Answer : The status of OPCC will not be changed, so it will not change the master plan either. OPTC is just an organization under DIVLAT which will consist of OPCC and existing OSP.

2. Will OPCC under the OPTC become a profit making organization ?
   Answer : Talking about profit, we will think about the quality. That is why we make a policy to make DIVLAT as a profit center. In the line with this, OPCC will work with DIVLAT to achieve the aims.

MEETING WITH KADIVLAT
(Mr. Partono)

Date : December 13, 1995
Time : 1:00 p.m.
Place : Room of KADIVLAT

Participants :

a. TELKOM Side :

1. Mr. Partono
   Chief of TELKOM Education and Training Center

2. Mr. Satriowibowo
   Chief of Counterpart, OPCC Project

3. Mr. Lubiyo Marjuki
   Counterpart of OPCC Project

b. JICA Side :

1. Mr. Takahashi Tomio
   Team Leader
   Special Advisor, International Cooperation Division,
   International Affairs Department,
   Ministry of Posts and Telecommunication.

2. Mr. Sugiyama Takeshi
   Technical Cooperation
   Assistant Director, Technical Cooperation Division,
   Economic Cooperation Bureau,
   Ministry of Foreign Affairs,

3. Mr. Takada Nobuo
   Civil Engineering,
   Manager, Planning and Research Group,
   International Affairs Department,
   Nippon Telegraph and Telephone Corporation.

4. Mr. Kioka Kiyokazu
   Subscriber Premises Engineering,
   Senior Manager
   International Affairs Department,
   Nippon Telegraph and Telephone Corporation.

5. Mitzumoto Toshiyuki
   Cable Engineering,
   Overseas Division,
   Nippon COMSYS Corporation.

6. Mr. Takahashi Toshio
   Cooperation Planning
   Staff, First Technical Cooperation Division,
   Social Development Cooperation Department,
   Japan Internation Cooperation Agency.

7. Mr. Tokumoto Keiichiro
   Chief Advisor of OPCC Project

8. Mr. Nonaka Yasunobu
   Coordinator of OPCC Project

Result :

The aims of the Mutual Consulting Team are :

1. To see the progress of the Project and what can be achieved by the Project after 1 (one) year running.

2. Due to the TELKOM's re-structuring, the Team wants to clarify the status of the Project. So, how will the re-structuring of TELKOM/DIVLAT affect the OPCC Project ?

The telecommunication area in Indonesia devided into :

1 Sumatra
3 West Java
4 Central Java
6 Kalimantan
7 Sulawesi
Eastern Archipelago
} Done by the Joint Cooperation Scheme ( KSO)

2 Jakarta
5 East Java
——— Directly controled by TELKOM

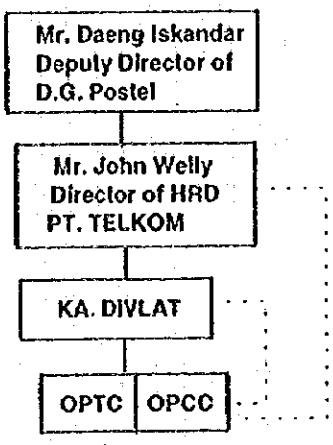
There are 4 (four) support division :

- SISFO (System Information)
- Property
- LAT (Training Division)

- RISTI (Research of Technology Information)

The problem then apprears, because DIVLAT has to give services to all KSO according to their premises. So, DIVLAT is to train the trainer and it will done by OPCC.

Due to the re-organization of PT. TELKOM, the organization structure which is related to the OPCC status will be as follows :



MEETING WITH MR. D. ISKANDAR
(Deputy Director of DG. Postel)

Date : December 11, 1995
Time : 11:00 a.m. ~ 13:00 p.m.
Place : Meeting Room of DG. Postel

Participants :

a. Indonesia Side :

1. Mr. D. Iskandar
   Deputy Director of DG. Postel

2. Mr. Bonny
   Deputy Director of Plan Division for Planning and Programme

b. Japanese Side :

1. Mr. Takahashi Tomio
   Team Leader
   Special Advisor, International Cooperation Division,
   International Affairs Department,
   Ministry of Posts and Telecommunication.

2. Mr. Sugiyama Takeshi
   Technical Cooperation
   Assistant Director, Technical Cooperation Division,
   Economic Cooperation Bureau,
   Ministry of Foreign Affairs,

3. Mr. Takada Nobuo
   Civil Engineering,
   Manager, Planning and Research Group,
   International Affairs Department,
   Nippon Telegraph and Telephone Corporation.

4. Mr. Kioka Kiyokazu
   Subscriber Premises Engineering,
   Senior Manager
   International Affairs Department,
   Nippon Telegraph and Telephone Corporation.

5. Mitzumoto Toshiyuki
   Cable Engineering,
   Overseas Division,
   Nippon COMSYS Corporation.

6. Mr. Takahashi Toshio
   Cooperation Planning
   Staff, First Technical Cooperation Division,
   Social Development Cooperation Department,
   Japan International Cooperation Agency.

7. Mr. Tokumoto Keiichiro
   Chief Advisor of OPCC Project

8. Mr. Nonaka Yasunobu
   Coordinator of OPCC Project

9. Mr. Suzuki
   JICA expert of DG. Postel

Result :

1. Report From Mr. Bonny :

   - Introduction of DG. Postel.
   - Future plan of REPELITA - VI
   - KSO scheme

2. Report From Mr. Tokumoto

   - Restructuring of PT. TELKOM.
   - The status of OPCC Project at present
   - The plan to hold the 2nd Joint Committee Meeting on December 19, 1995.

3. Comment From Mr. Iskandar

   - Mr. Iskandar hoped that DIVLAT will be opened to all institution whose relation with the telecommunication technology.
   - He agreed with the idea of DIVLAT as a profit center, and he has no objection if DIVLAT would take charge for giving thetraining.
   - He suggested that the certificate of training given by DIVLAT, might be issued by DG. Postel

4. Comment From Mr. Takahashi Toshio :

   - In the line with Mr. Iskandar, he also agreed that DIVLAT is opened to all institutions in order to introduce the Project technology to Indonesia, not TELKOM only.
   - The Team was not thinking to increase the budget, manpower, ect for the Project nor expand the working scope of it.

5. Question : What is the relation between the KSO and the Project ?
   Comments :

- DG Postel had a plan to conduct the training by itself.
- The main goal of DG Postel is to increase the number of telephone line. If the KSO wanted to conduct the training between themselves, he had no objection as far as it was still in the line of the main goal.

6. Comments From Mr. Takahashi :

   - If the KSO or DG Postel have their own training of supervisory work, what is the function of OPCC between this group ?

7. Comments From Mr. Bonny :

   - He had the same opinion with Mr. Iskandar and Mr. Takahashi about who will be the participants of the training in DIVLAT.

8. Comments From Mr. Tokumoto :

   - He wanted to discuss with TELKOM about the participants of the training, due to the limitation of training duration, subject, and the number of theparticipants.

9. Question From Mr. Bonny :
   If OPCC has wider scope of work, could JICA give / add the budget for it ?
   Answer : No !

10. Question and Suggestion From Mr. Takahashi :

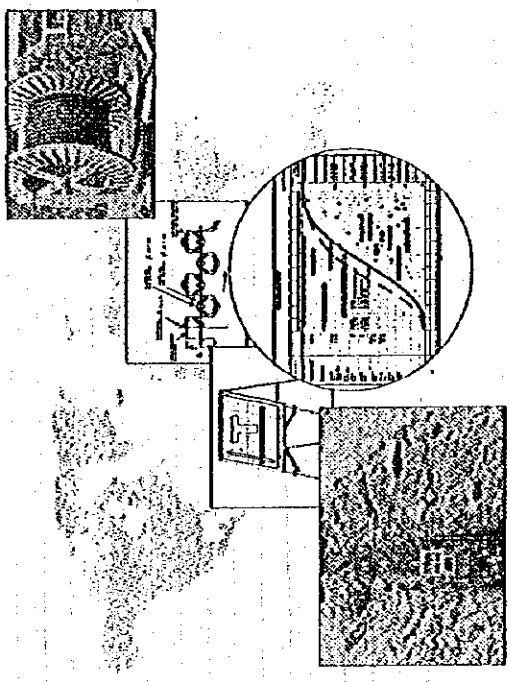
    - Could DG. Postel issue the certificate of the supervisory training conducted by DIVLAT ?

11. Agreement Between Both Sides About the Training Certificate :

    There will be 1 (one) from DG. Postel and 1 (one) from TELKOM.

2nd Joint Coordination Comitee Meeting

# Progress report of OPCC project



December 1995

## OPCC

Outside Plant Construction Centre

TELKOM

JICA

# Activity report

1. Progress of the project

(1) Implementation of construction supervisory training

Due to the delay of material procurement, we scheduled the first training commencing from 4th of December 1995. Although there was a little lag from the previous schedule, the end of November, it can be said to be satisfied on time if we think about the training demand arising during next vast network expansion. This is the result of the united hard work of counterparts and experts. Actions which we took as below were very effective.

a) Counterpart training in Japan
6 of 10 counterparts have already received the training especially supervisory programme in Japan. They could have basic technique and management knowledge.

b) Assistance from short term experts
We had 6 experts to make the draft of textbooks.

c) Periodical progress check
Every Monday we have technical meeting to clarify the problems and find the countermeasures.

d) Instruction practice called "Micro teaching"
After making draft of textbook, we conducted short teaching practice led by the chief counterpart. Mutual comments on that helped them to improve instruction technique.

e) Fully used computer
Computer used textbook making made us more active.

(2) Textbook preparation

We concentrated on making textbook since June, which is indispensable for implementing the training. As the curriculum covering almost all area of supervisor's job, total volume of the textbook reached 48 units and over 3000 pages. However, we completed them in a short period with the following actions:

a) Supervisor's job analysis and skeleton of textbook
After analysing the supervisor's job, we contained necessary technical and management knowledge in it. Whole structure of training became clear.

b) Introduce new textbook format
By describing the summary, the students may easily understand.

c) Textbook database

Using the same software made us possible to revise the textbook easily and We can make them as a database.

(3) Facilities for practical study

By receiving the aids from JICA, we procured materials, tools and measurement equipment which is necessary for the practical study, and we are also buying packet vehicle for machinery work. Wider site space for the practical study is desirable.

2. The change of project environment

After decentralization of TELKOM, the function to control the construction of network shifted to DIVISI or KSO. Therefore, as the project aimed at the improvement of construction quality, it became necessary to make the project status clear'y in TELKOM and which department would support the project. Considering this change of project environment, we propose to come close to the organization of DIVLAT as the best way to achieve the main purpose of the project, that is to implement the supervisor training course.

3. Next year activity plan

Next year's main activities are to improve the supervisory training. VIDEO text or depicted manual will be made for understanding technology easily.

In order to realize these action, there will be necessary to grasp the problems in the site and also collect the requirement to our training from the site.

Close relationship with relative department is also necessary.

(1) Increase the opportunity to make site survey and try to attend construction progress meeting.

(2) Hold the supervisor's meeting as a follow up action for graduates.

# CONTENT

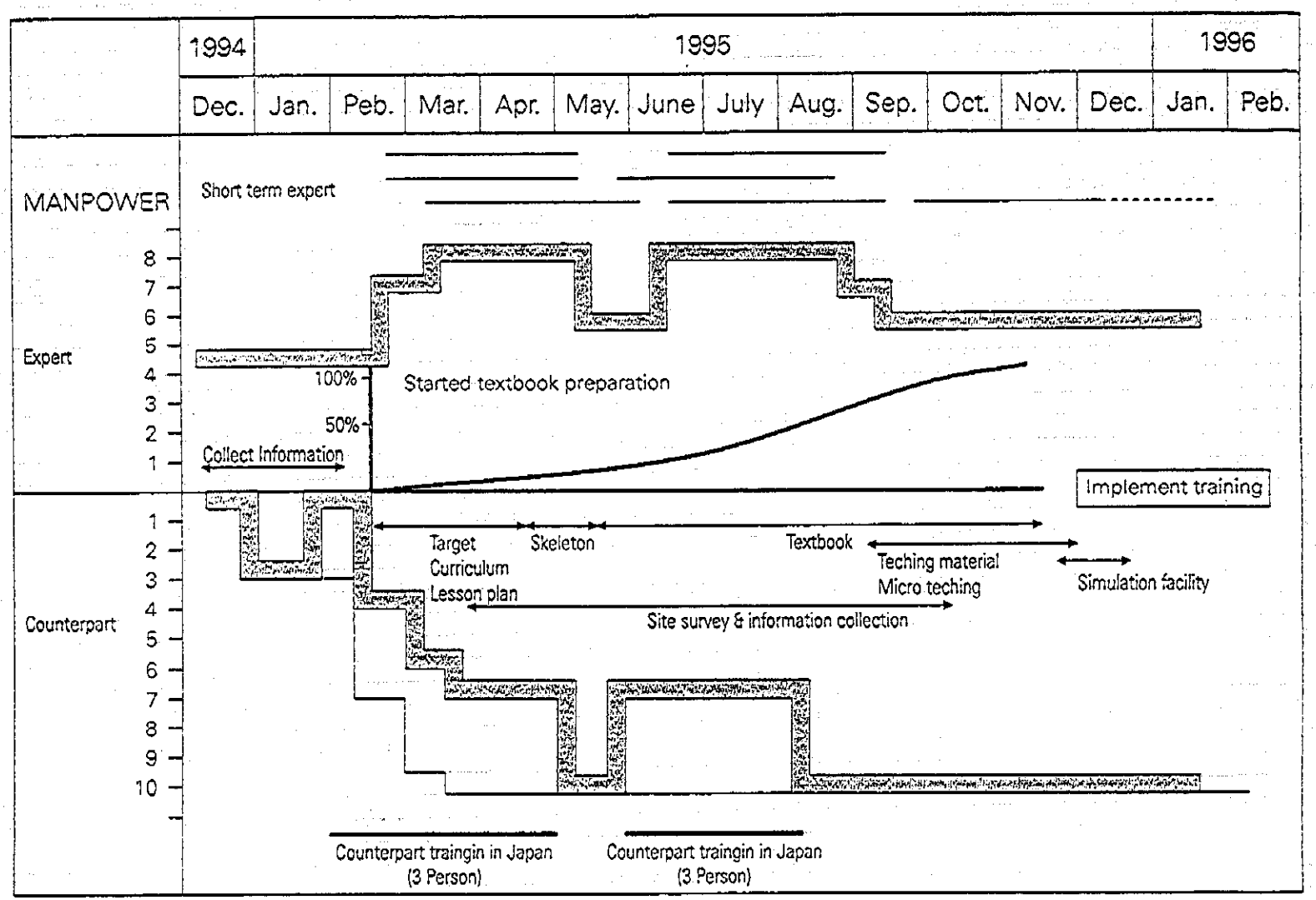
1. Progress of OPCC activities
   - (1) Action report
   - (2) Outline of training
   - (3) Training plan
   - (4) Practical study
   - (5) Progress how we made textbook

2. The change of project environment

3. Future direction of the project

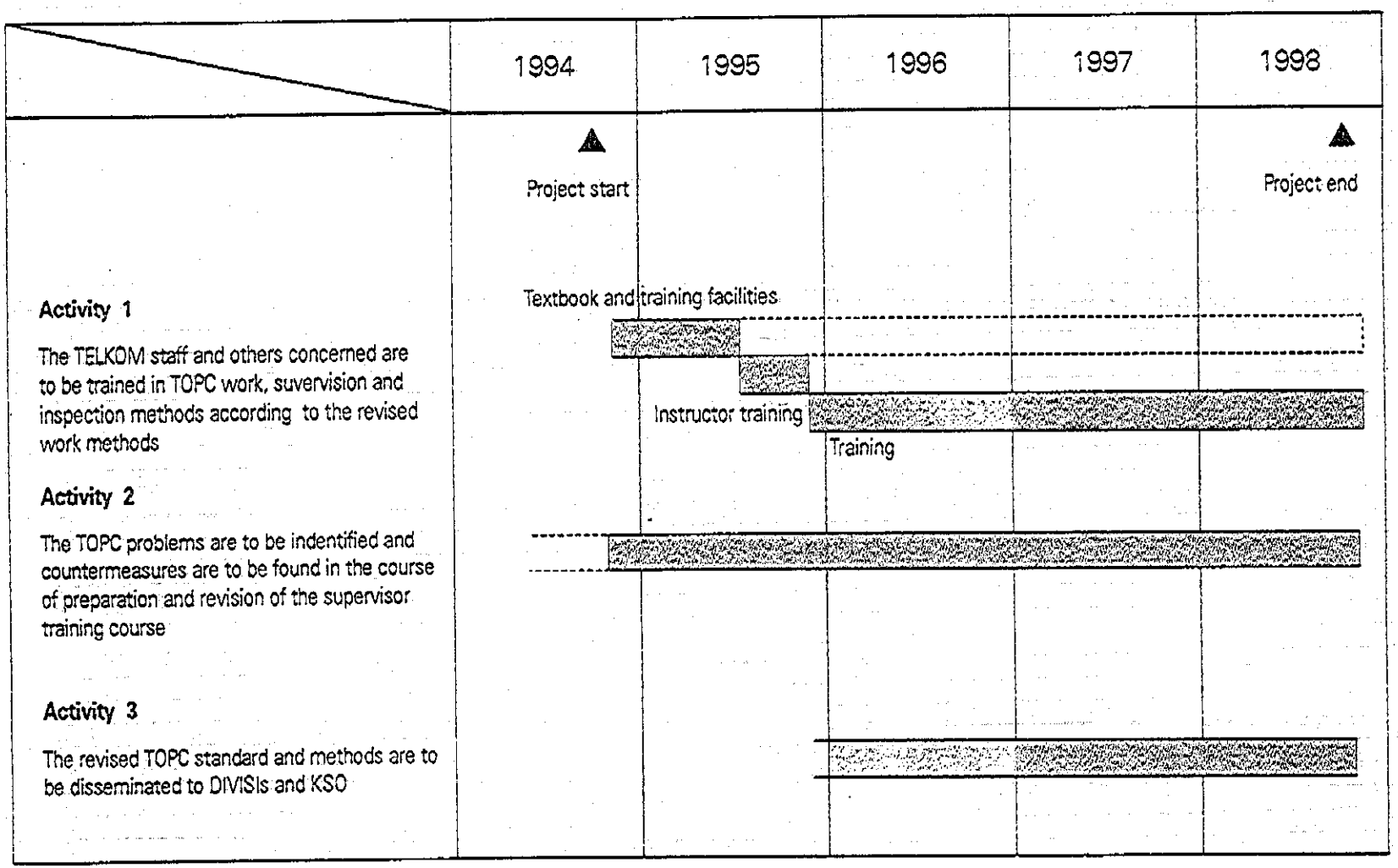
## 1.Progress of OPCC's activities

### (1) Action report



# APPENDIX A

## Overall Schedule of Project Activities



# APPENDIX B

## Schedule of Project Activities : Activities 1

| | 1994 | 1995 | 1996 | 1997 | 1998 | Achieving ratio |
|---|---|---|---|---|---|---|
| 1. The TELKOM staffs and others concerned are to be trained in TOPC work, supervision and inspection methods according to revised work methods | Project start | | | | Project end | |
| * Textbooks and training facilities for practical study | | | | | | |
| * Instructor training | | | | | | |
| * Training | | | | | | |
| 1-1 Set up the office | | | | | | 100 % |
| 1-2 Prepare lesson plan | | | | | | 100 % |
| 1-3 Prepare textbooks | | | | | | 100 % |
| 1 Assemble and revise existing textbooks | | | | | | |
| * Assembling existing textbooks and standards | | | | | | |
| * Translating them into english | | | | | | |
| * Textbooks to be studied and revised | | | | | | |
| 2 Improvement of textbook | | | | | | Rivising continues |
| * Collect existing manual | | | | | | 100 % |
| * Modify textbooks on supervising management, optical fiber, etc. | | | | | | |
| * Translate them into english | | | | | | 100 % |
| 1-4 Counterpart training | | | | | | 100 % |
| * Study textbooks with experts | | | | | | 60 % |
| * Receive training in Japan | | | | | | 100 % |
| * Instructur training | | | | | | |
| 1-5 Equipment installation for practical study | | | | | | 90 % |
| * Construct simulation cable for acceptance test (Metal and optical cable) | | | | | | |
| * Set up facilities for construction practice | | | | | | 100 % |
| 1-6 Training | | | | | | Just started |
| * Training (About 2 month training) | | | | | | |
| * Revise textbooks and lesson plan | | | | | | |

# APPENDIX C

## Schedule of Project Activities : Activities 2

| | 1994 | 1995 | 1996 | 1997 | 1998 | Achieving ratio |
|---|---|---|---|---|---|---|
| | ▲ Project start | | | | | |
| 2. The TOPC problems are to be identified and countermeasures are to be found in the course of preparation and revision of the supervisor training course. | | | | | | |
| 2-1 Collect current construction and design methods which were applied to past projects | | | | | | 100 % |
| 2-2 Review existing standard | | | | | | 100 % |
| 2-3 Site survey (Collect site information) | | | | | | 20 % |
| 2-4 Compile outside plant material specification list supplied by DIVRISTI and make a database | | | | | | 50 % Database is not yet |
| 2-5 Assist DITPRANTEK to make standard considering existing method and new technology | | | | | | 10 % Block M. H |
| * Develop illustrated and easy to follow guiedebook | | | | | | 10 % |
| 2-6 Investigate current superviser's scope of work | | | | | | 60 % |
| 2-7 Assist DITPRANTEK to make supervisor's manual | | | | | | 0 % |

# APPENDIX D

## Schedule of Project Activities : Activities 3

| | 1994 | 1995 | 1996 | 1997 | 1998 | Achieving ratio |
|---|---|---|---|---|---|---|
| | | | | | ▲ Project end | |
| 3. The revised TOPC standards and methods are to be disseminated to DIVISIs | | | | | | |
| 3-1 Disseminate TOPC standards and methods<br>* Hold seminars regarding new technology, preventive measures for construction faults, security control, etc.<br>* Introduce TQC method and publish fault case study in order to improve quality. | | | | | | 0 % |
| 3-2 To train instructors from regional training units | | | | | | 10 %<br>1st trial training |
| 3-3 Make video texts for easy and effective understanding<br>* Key point of construction work and acceptance test | | | | | | 0 % |
| 3-4 Plan to certify contractors rank and introduce licensing system to improve contractors' ability | | | | | | DGPostel has started |

## (2) Outline of training

### a) Target and Level of training

1. To increase the number of qualified supervisors to cope with the rapid network expansion and level up the construction quality. It can be called "Intensive course for the person to be a supervisor".
2. It covers all technical area which is necessary for supervisor. Therefore the trainee must have basic electric knowledge.
3. The training is planned for trainee to understand easily. A lot of practical study are included.

### b) Conformation of training

Basic technology

1. General knowledge: Theoretical knowledge necessary to understand outside plant construction.
2. Actual technical knowledge which is indispensable for supervisor: Designing, B/Q calculation, Construction method, Q.C., F.M., etc.

Management

1. Supervisory management : Progress, inspection, work implementation and safety management, design modification.

Construction practice

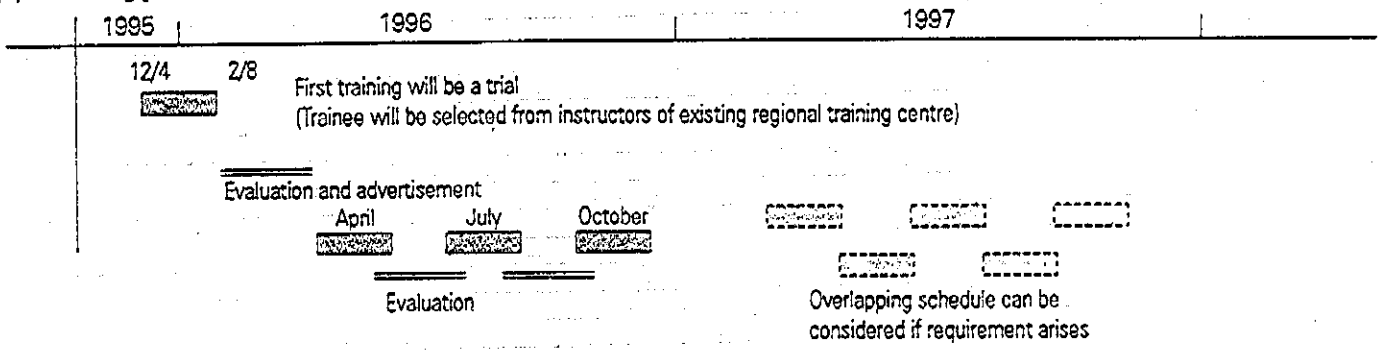
1. Practice using standard construction method: Metalic & optic cable installation, splicing and termination

Candidate of trainees

- DIVISI 2 and 5
- KSO team
- Contractors, etc. and also
- From other countries

(This training course is fully opened)

## (3) Training plan



## (4) Practical study

### a) Curriculum structure of practical study

* Contains almost all main works of OSP construction which is necessary for supervisors to lead the contructor

**Installation**

* Metalic : Duct cable, direct buried cable and overhead cable installation
* Optic fiber : Duct cable installation

**Splicing**

* Metalic and optic cable splicing
* Termination to kabinet

**Final test**

* Metalic and optic cable final test
* Fault location measurement

**Problems**

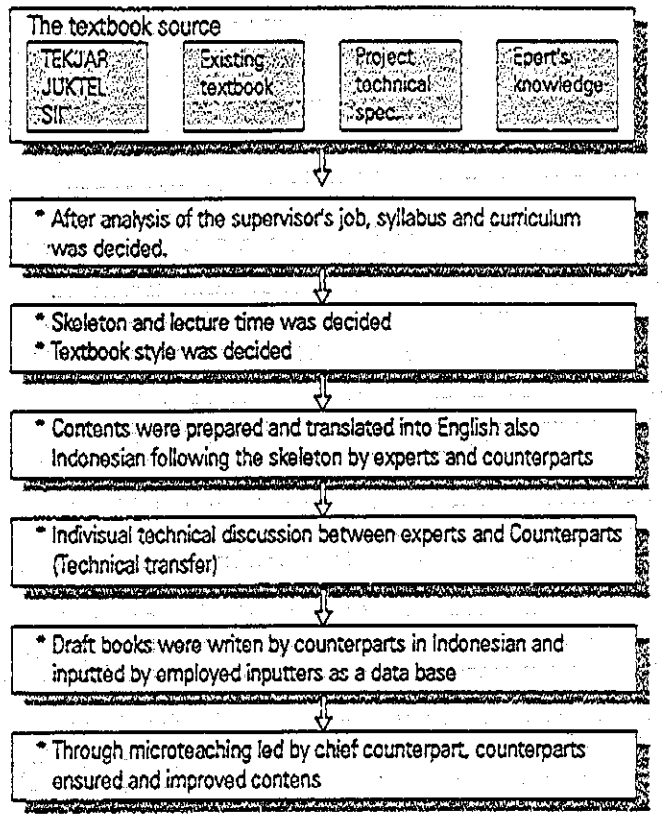
* Field for practice is not satisfactory wide enough
* Machinery work would be introduced

### b) Equipment provide by JICA

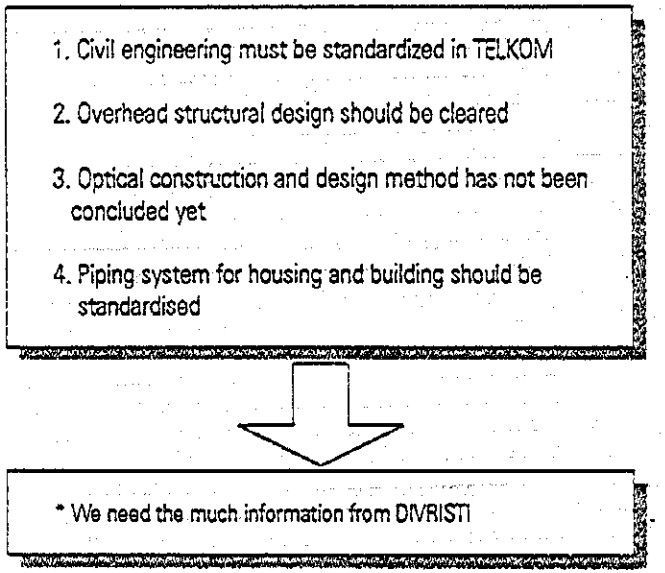
| Pupose | Name of equipment | Usage |
|---|---|---|
| 1. Installation practice | - Cable winch & Generator<br>- Gas detector<br>- Ventilating blower<br>- Water pump<br>- Tension meter<br>- Duct rod<br>- Cable (metal & optic) etc. | - Duct cable installation<br>- Direct burried cable installation<br>- Overhead cable installation<br>- Subscriber premises installation |
| 2. Splicing | - Tool kit US<br>- Tool kit PSI<br>- UY crimping tool<br>- Cable cutter<br>- Optic cable Fusion splicer<br>- etc | - Metalic cable splicing<br>- Optic cable cplicing<br>- Metalic cable termination |
| 3. Final test | - Optical LD pulse reflect meter<br>- Optical light source & power meter<br>- Optical ID tester<br>- Crosstalk meter<br>- Pulse<br>- etc | - Optic & metalic cable final test |
| 4. Machinery work | - Packet vehicle | - Construction work |
| | Total amount | Approx. Rp. 2660 million |

(5) **Progress how we made textbook**

a) **How was the 3000 pages textbooks made ?**




b) **Technical incompletion found during textbook preparation period**



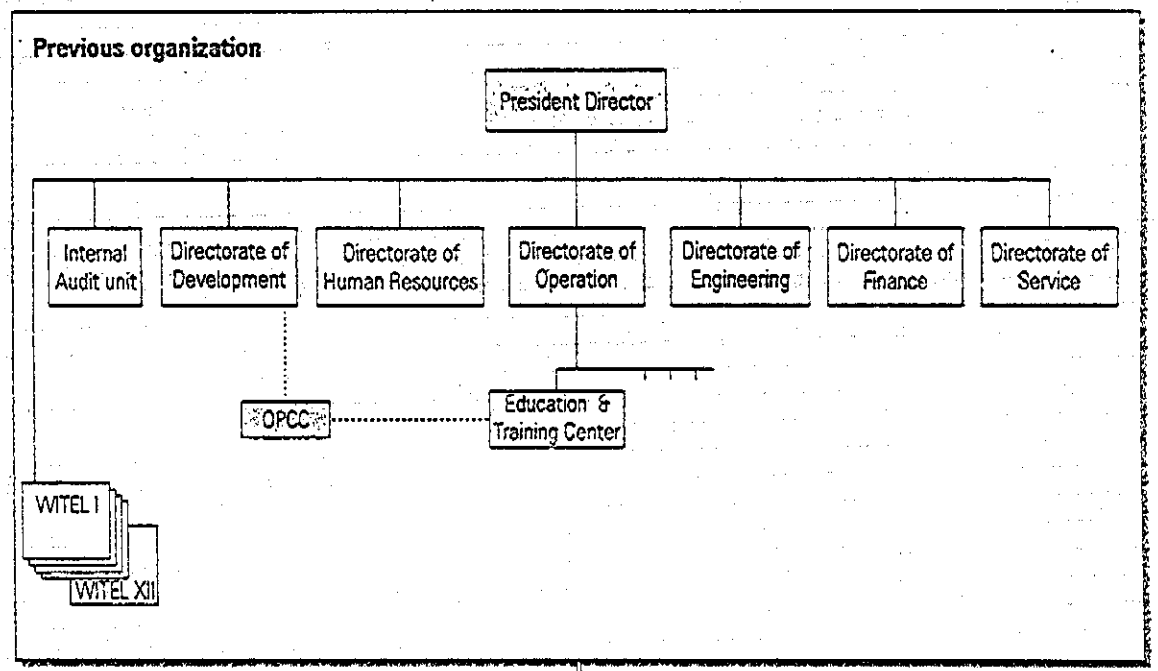
## 2. The change of project environtment

The change of project environment

- Decentralization of TELKOM was carried out
- After restructuring, DITPEM cut its function and merged
- Controlling function for construction quality moved to DITPRANTEK and DIVISI
- KSO started

Necessity arised to clarify the project status in the internal organization of TELKOM

- Became not clear which department back up OPCC
- Became difficult to recruit trainees after decentralization




**COME CLOSE TO THE DIVLAT**

## 3. Future direction of the project

### a) We will not warm chair

1. More attractive training
   - High quality courses
   - High quality facilities
   - Adequete delivery time ( On time for demand )
   - Customer oriented approach
2. More practical and easy understanding training

Vigorous and aggresive action

1. Maintain the close realtion with other department concerned.
2. Go to the site and the progress meeting to get the problems on the construction and maintenance work.
3. Get the latest technological information spontaneosly

### b) Circulation for improvement

Graps the problem in the site

- Attend the construction progress meeting
- Get the fault analysis data
- Organize the supervisor meeting
- Join the QC circle

Cooperation with Operation Dep. and DIVISI

Graps the requirement of the Site

- Aftercare mission
- Round tour for advertisement

Cooperation with DIVISI and KSO

Develop countermeasures and introduce new technologies in the training course

- Improve the simulation facility
- Establish laboratory where the new material or construction method are checked
- Hold technical exibition

Cooperation with R&D department

Improve the training - Target on more easy, practical and effective training

- Improve curriculum, Facility and textbook
- Level up the instructor's capability
- Introduce the VIDEO text
- Introduce the CAD system
- Introduce the CAL (Computer Aided Learning)

D I V E A T O P T C

Joint coordinating committee meeting

# Progress report of OPCC project

June 1995

OPCC

Outside Plant Construction Center

# Contents


1. Review of original plan
   * Purpose of project
   * OPCC function
   * Cooperation relationship with other department
   * Project design matrix
   * Original schedule

2. Progress of OPCC project
   * OPCC activities since last December
   * Cooperation image for project implementation
   * OPCC project implementation plan in 1995
   * Workflow for training preparation
   * Preparation schedule for supervisor training
   * Training target and candidate
   * Equipment provided by JICA
   * Counterpart training in Japan
   * Short term experts

# I. Project purpose

Problems in Maintenance
- Fault ratio should come down inversely proportional to the increase of facilities
- Fault seems occuring even in the newly constructed plant

- Necessary to analyse problems in maintenece, construction methods, material specification, etc.
- Necessary to bring up versatile supervisers who can lead construction work and process control
- Necessary to improve contractor's level in construction

- Technical document database such as standard and construction manual

Smooth and good quality construction is expected through large expansion of network so called REPELITAVI

## OPCC
Project scope

① Implement construction supervisor training

② Asist standardization of technical and construction method

③ Deploy OPCC activities
- Publish illustrated standard book for easy understanding
- Make and use video text for instruction
- Support to bring up contractor
- Bring up instructors for local training institute

With full support of every DIRECTORATE

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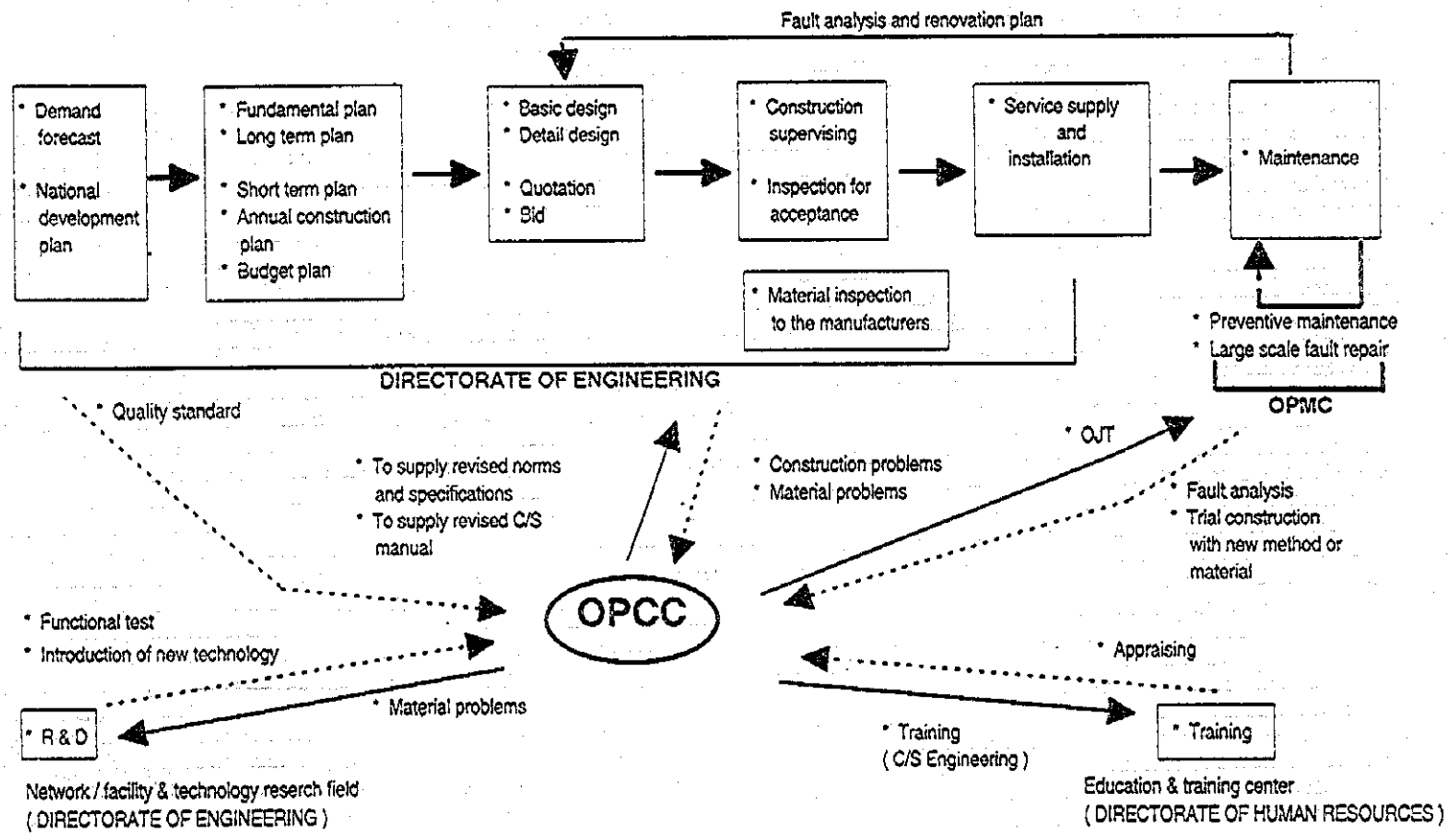
With full support of every DIRECTORATE

# II. OPCC FUNCTION

## OUTSIDE PLANT CONSTRUCTION FLOW AND OPCC FUNCTION



# COOPERATION RELATIONSHIP

WITH OTHER DEPARTMENT

**Directorate of Engineering**

* Introduction od new technology and establishment of tehnical standard
* Establishment of equipment specification
* Standardization of installation, designing, and inspection
* Supervision of construction planning and technical guidance for contractors

**Directorate of Operations**

* Analysis of faults and establisment of countermeasures
* Establisment of repairing method against the large scale damage

**Training Center**

* Development of training facilities and improvement of training contents

Relevant directorates should provide necessary information to OPCC

**OPCC's resource**

from TELKOM
* Chief counterpart and 10 counterparts
* Office, furniture, similation facilities, and equipment

from JICA
* Chief advisor, 3 long term experts, coordinator, and short term experts
* Counterparts training in Japan
* Equipment

**OPCC's goal**

(1) Implement supervisor training
(2) Assist fixing standard
(3) Disseminate the standard and the supervisor training

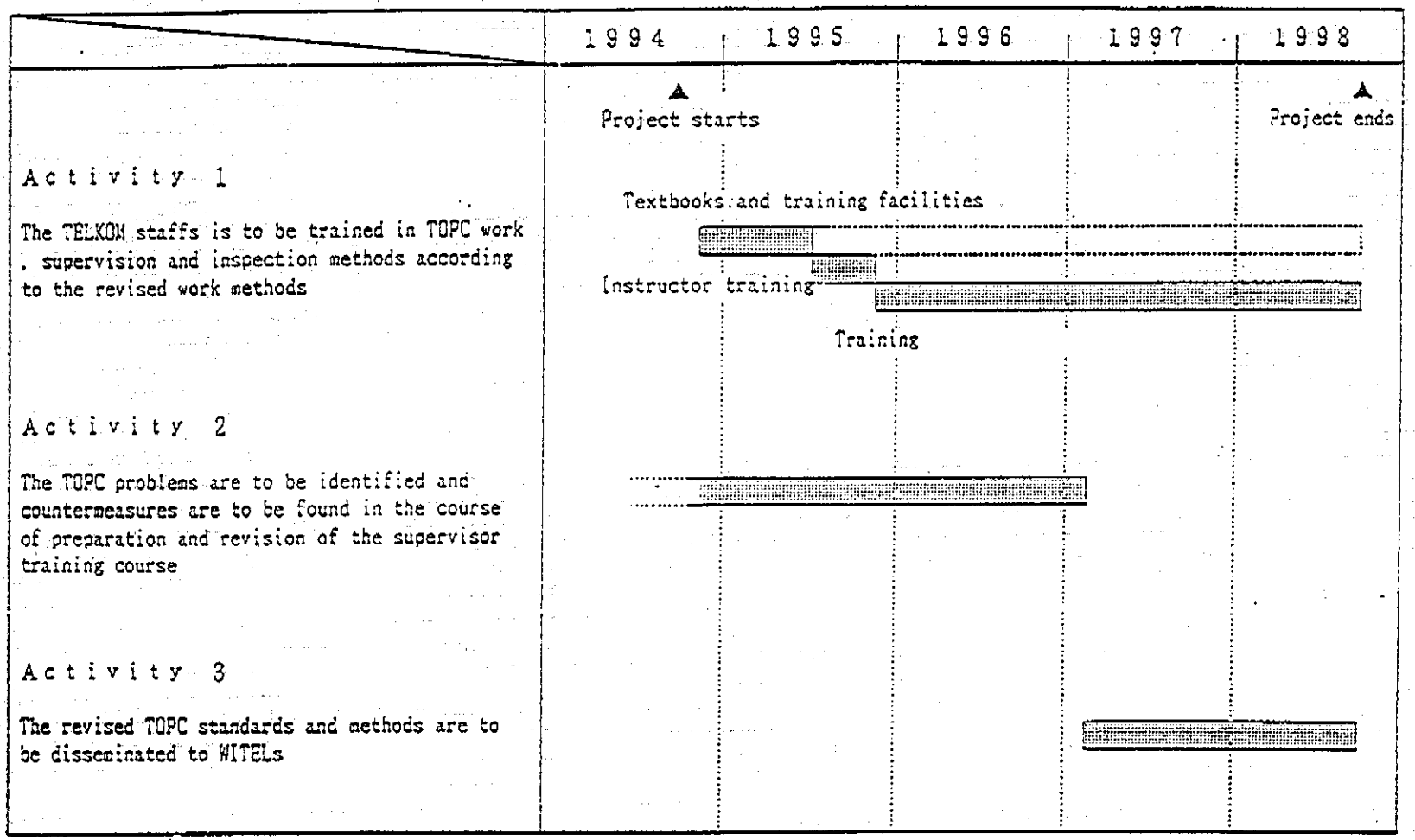
# APPENDIX E

PROJECT DESIGN MATRIX of the TELEPHONE OUTSIDE PLANTS CONSTRUCTION CENTER PROJECT 10 Oct.1984

| Narrative Summary | Verifiable Indicators | Means of Verification | Important Assumptions |
|---|---|---|---|
| Overall Goal<br>To improve the quality of the Telephone Outside Plant Construction (TOPC) | The Telephone Faults Ratio is less than 1.0 per month-100 subscribers. | Telephone Faults Data of the Maintenance and Operation Department of P.T.TELKOM | |
| Project Purpose<br>To establish the supervisor training course and to train personnel in charge of TOPC supervision | TELKOM is able to produce more than 100 TOPC supervisors every year. (except those of local institutions) | Training record of the TELKOM Training Center | 1.Well trained supervisors will be able to manage contractors in TOPC.<br>2.The established standards and guidelines will be updated. |
| Outputs<br>1.The Telkom staff is to be trained in TOPC work,supervision and inspection methods according to the revised work methods in the fields of cable engineering, civil engineering and subscriber premises engineering at the TELKOM Training Center.<br>2.The TOPC problems are to be identified and countermeasures are to be found in the course of preparation and revision of the supervisor training course.<br>3.The revised TOPC standards and methods are to be disseminated to WITELs. | 1-1. More than 150 TOPC supervisors are trained according to the revised work method<br>1-2. All counterparts become supervisor training instructors.<br>1-3. Facilities for practical training for supervisors are constructed.<br>2. The number of reports submitted to related departments from the Project.<br>3-1. More than 32 trainees from the supervisor training course are TOPC instructors from regional training units.<br>3-2 Number of guide books and video texts | 1-1. Training record of the TELKOM Training Center Development Dep., P.T.TELKOM.<br>1-2. Project activity record<br>1-3. "<br>2. Project activity record<br>Business log of each responsible department<br>Development dpt.:construction,designing, and supervising method<br>R&D dpt.:material specification,factory inspection manual<br>3. Project activity record | 1-1. Instructors will not change jobs.<br>1-2. Some excellent trainees will become instructors<br>1-3. TELKOM will increase the number of TOPC supervisors every year by at least 100 people.<br>2.The standard manual for TOPC will be improved and updated properly according to the Project's proposal.<br>3. TELKOM will make regional TOPC instructors to be trained in supervision training course |
| Activities<br>1.To train TELKOM staff for the TOPC work, supervision and inspection method.<br>1-1. To select counterpart personnel for instructors<br>1-2. To make a curriculum and text books based on the revised work methods.<br>1-3. To make training plans including practical training.<br>1-4. To implement the training<br>1-5. To appraise the training<br>2.To advise each responsible department to fix the standard on TOPC work, supervision and inspection method<br>2-1. To make a report to the department concerned on the TOPC problems found in the course of preparation and revision of the training textbooks.<br>2-2. To make a report to the department concerned on the TOPC problems found in the site survey.<br>2-3. To make a report to the department concerned on imperfections found in standards in the course of reviewing existing standard.<br>3.To disseminate the revised TOPC standards and methods to WITELs.<br>3-1. To train the TOPC supervisor training instructors from the regional training units.<br>3-2. To develop illustrated TOPC standard guide books and video texts in order to improve the TOPC supervisor training at the regional training units. | I n p u t s<br>INDONESIAN SIDE<br>1.Building Space and Equipment for the Project<br>2.Personnel: 6 counterpart people and Operation staffs<br>3.Budget for the Project operation<br>JAPANESE SIDE (PROJECT TERM: 4 Years)<br>1.Long term experts :5 fields<br>Chief Advisor<br>Coordinator<br>TOPC cable engineering<br>TOPC civil engineering<br>TOPC subscriber premises engineering<br>2.Short term experts :<br>Fields:<br>Overhead cable<br>Underground cable<br>Subscriber Premises<br>Civil Engineering<br>3.Counterpart Training in Japan : 8 People (2 people * 4 years)<br>4.Equipment : appr. 200 million Yen<br>5.Part of the local cost<br>(Figures above are subject to change depending on the budget) | 1. Development Department will set TOPC work standard and make a manual of it.<br>2. Development Department will make TOPC supervision and inspection guideline.<br>3. Development Department will provides the Project current TOPC method.<br>4. Operation Department will provides the Project fault analysis of Telkom Outside Plant<br>5. TELKOM will allocate enough budget to spread the results of the Project to WITELs.<br><br>Pre-Conditions<br>1.Agreement and coordination between TELKOM departments concerned are confirmed. |

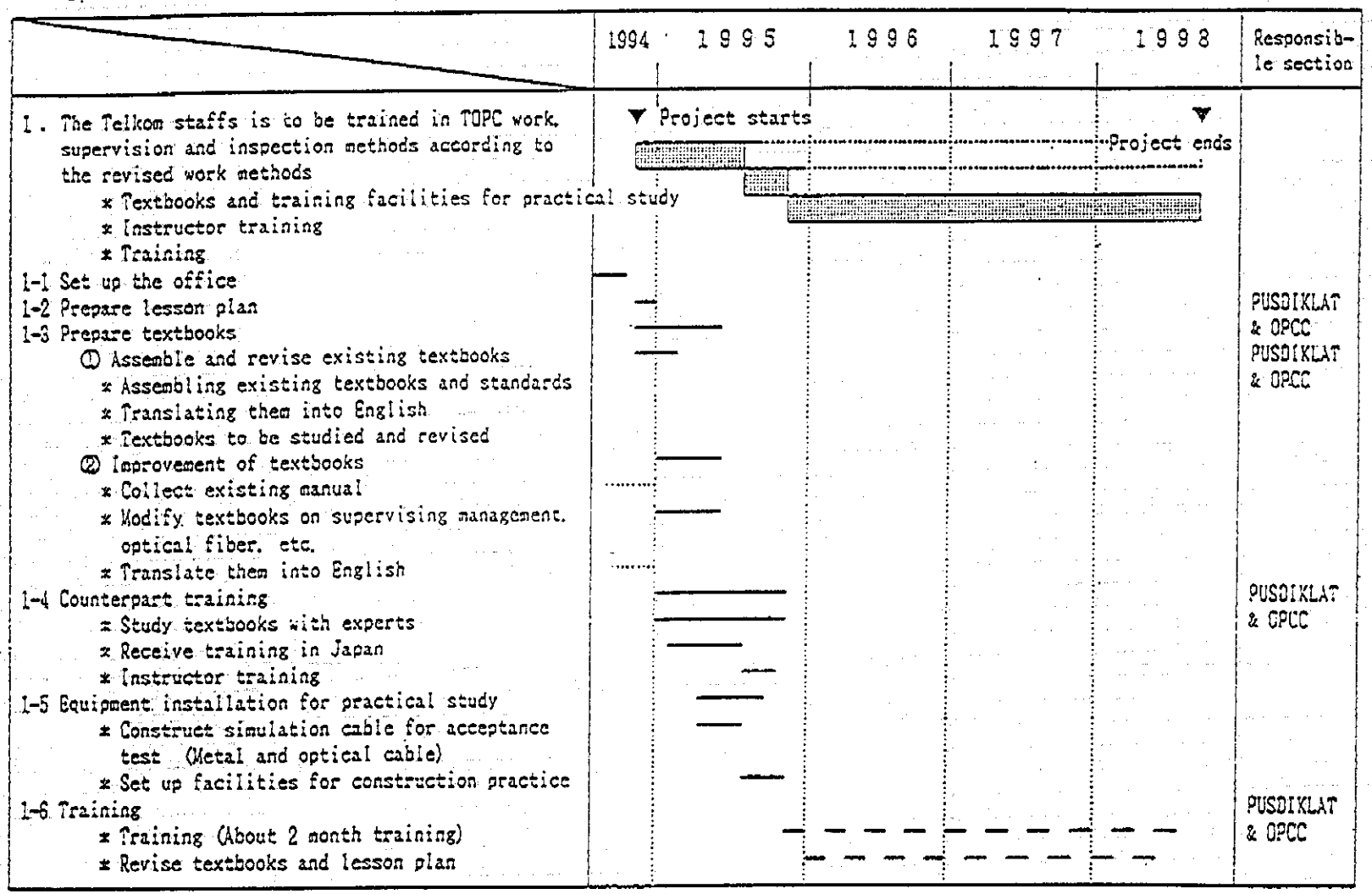
# APPENDIX A

## Overall Schedule of Project Activities



APPENDIX B

Schedule of Project Activities: Activities 1




PUSDIKLAT:PT. TELKOM Training Center

APPENDIX C

Schedule of Project Activities: Activities 2

| | 1994 | 1995 | 1996 | 1997 | Responsible section |
|---|---|---|---|---|---|
| 2. The TOPC problems are to be identified and countermeasures are to be found in the course of preparation and revision of the supervisor training course. | ▲ Project starts | | | | |
| 2-1 Collect current construction and design methods which were applied to past projects | | | | | DITPEM |
| 2-2 Review existing standard | | | | | DITOP & OPCC |
| 2-3 Site survey (Collect site information) | | | | | OPCC |
| 2-4 Compile outside plant material specification list supplied by PUSERENBANGTI and make a database | | | | | PUSRENBANGTI & OPCC |
| 2-5 Assist DITPEM to make standard considering existing method and new technology | | | | | DITPEM & OPCC |
| * Develop illustrated and easy to follow guidebook | | | | | OPCC |
| 2-6 Investigate current superviser's scope of work | | | | | DITPEM & OPCC |
| 2-7 Assist DITPEM to make supervisor's manual | | | | | DITPEM & OPCC |

DITPEM: Development Department, PT. TELKOM DITOP: Operation Department, PT. TELKOM
PUSRENBANGTI: R&D Section, Engineering Department, PT. TELKOM

APPENDIX D

Schedule of Project Activities: Activities 3

| | 1997 | 1998 | 1999 | Responsible work section |
|---|---|---|---|---|
| | | | Project ends | |
| 3. The revised TQPC standards and methods are to be disseminated to WITSLs | | | | |
| 3-1 Disseminate TQPC standards and methods | | | | OPCC & DITPEM |
| * Hold seminars regarding new technology, preventive measures for construction faults, security control, etc. | | | | |
| * Introduce TQC method and publish fault case study in order to improve quality | | | | |
| 3-2 To train instructors from regional training units | | | | OPCC & DITPEM |
| 3-3 Make video texts for easy and effective understanding | | | | OPCC & DITPEM |
| * Key point of construction work and acceptance test | | | | |
| 3-4 Plan to certify contractors rank and introduce licensing system to improve contractors' ability | | | | OPCC & DITPEM |

# OPCC Activities since last December

1. To train TELKOM staff for the TOPC work, supervision and inspection methods

   ① OPCC sent 3 counterparts for the supervisor training in Japan

   ② OPCC is buying:
   * 2 vehicles for site investigation
   * VIDEO editing system to clarify problems in the site
   * Optical filing system to make technical document database
   * 10 computers to make technical documents and data analysis

   ③ OPCC is decided training curriculum and lesson plan (See appendix )

   ④ OPCC decided the skeleton of textbook

   ⑤ OPCC is now procuring the tools and materials for practical study

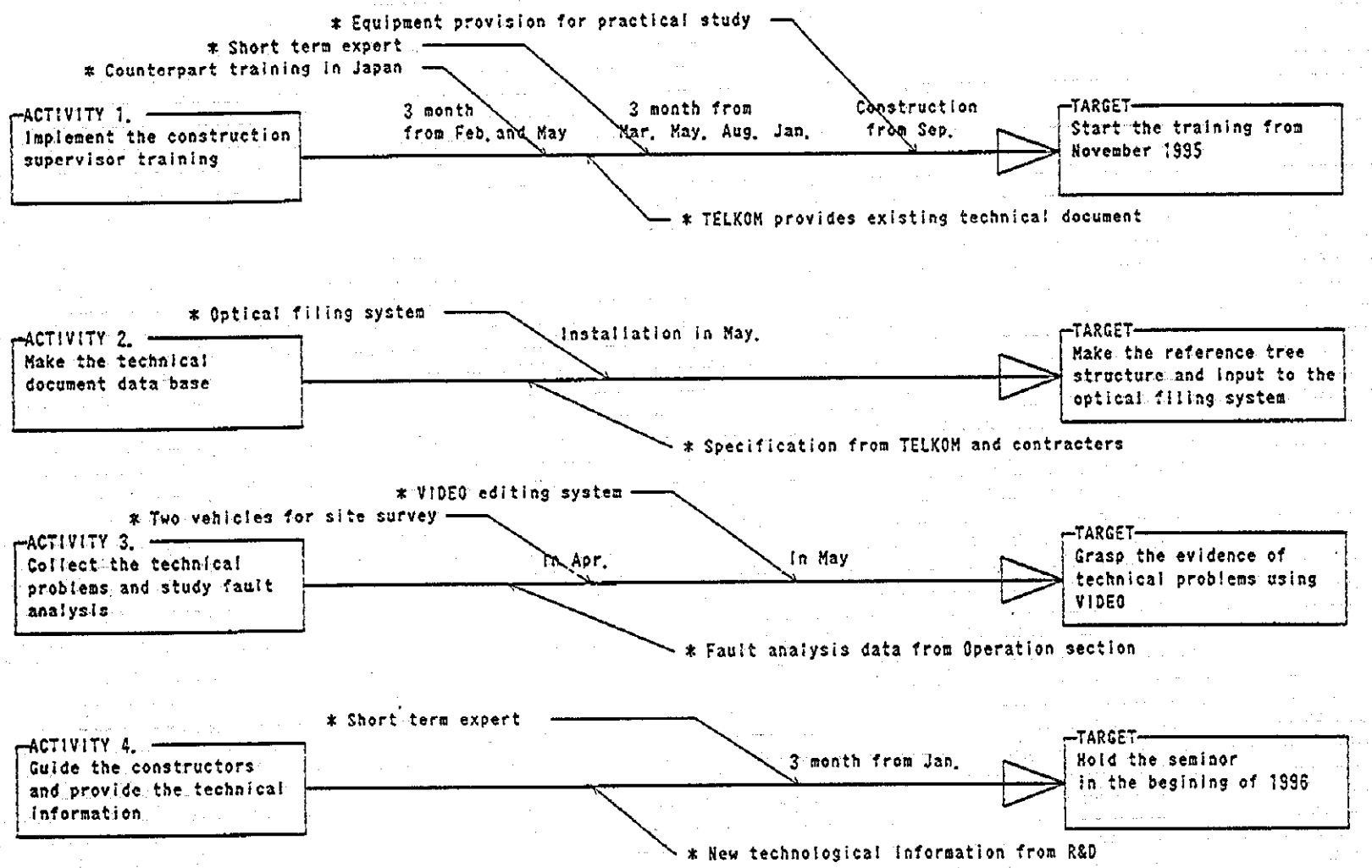
2. To advise each responsible department to fix the standard on TOPC

   ① OPCC is collecting and reviewing the current technical document (See appendix )

3. To disseminate the revised TOPC standards and method methods to WITELs

   Not yet started

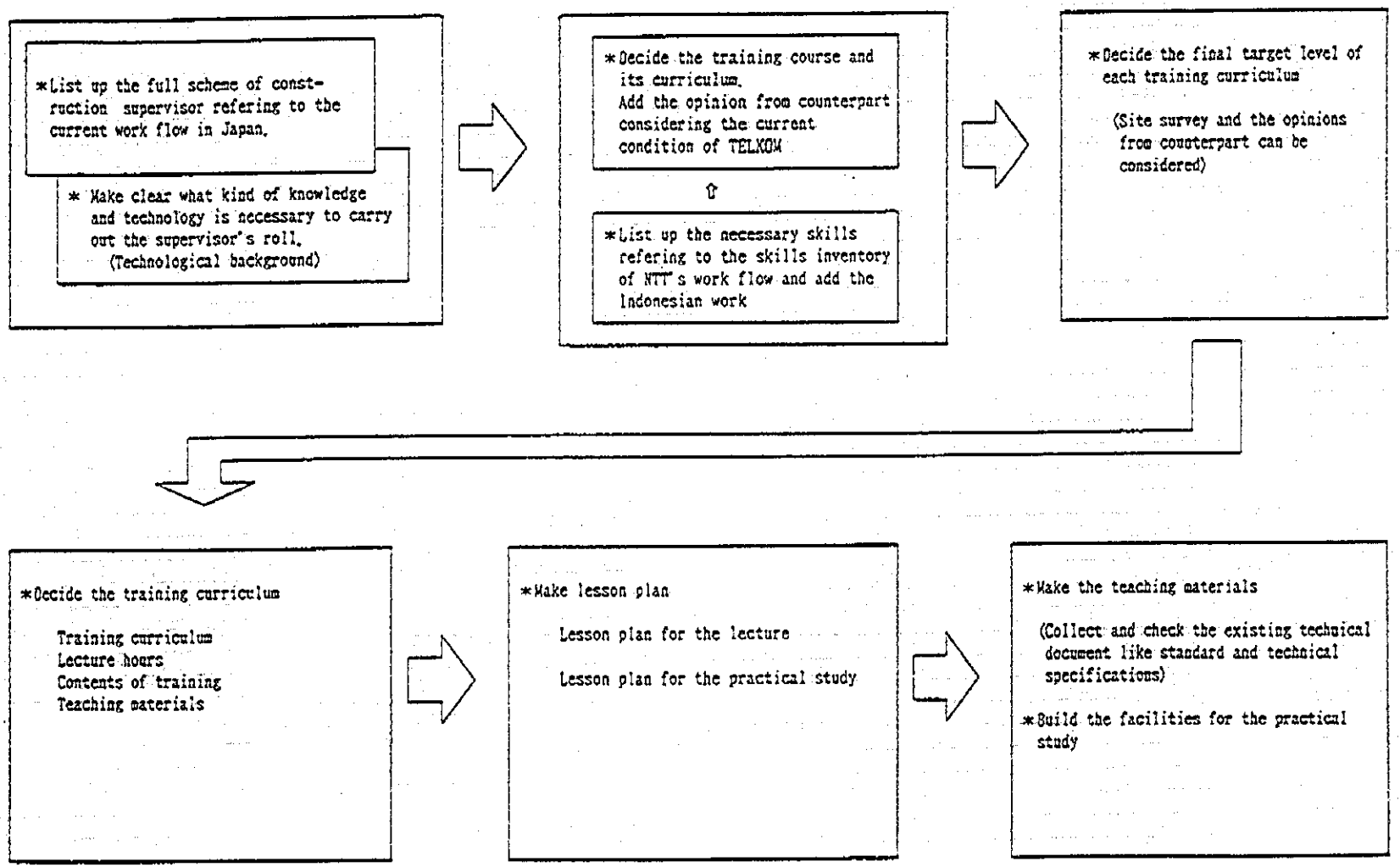
## Cooperation image for project implementation



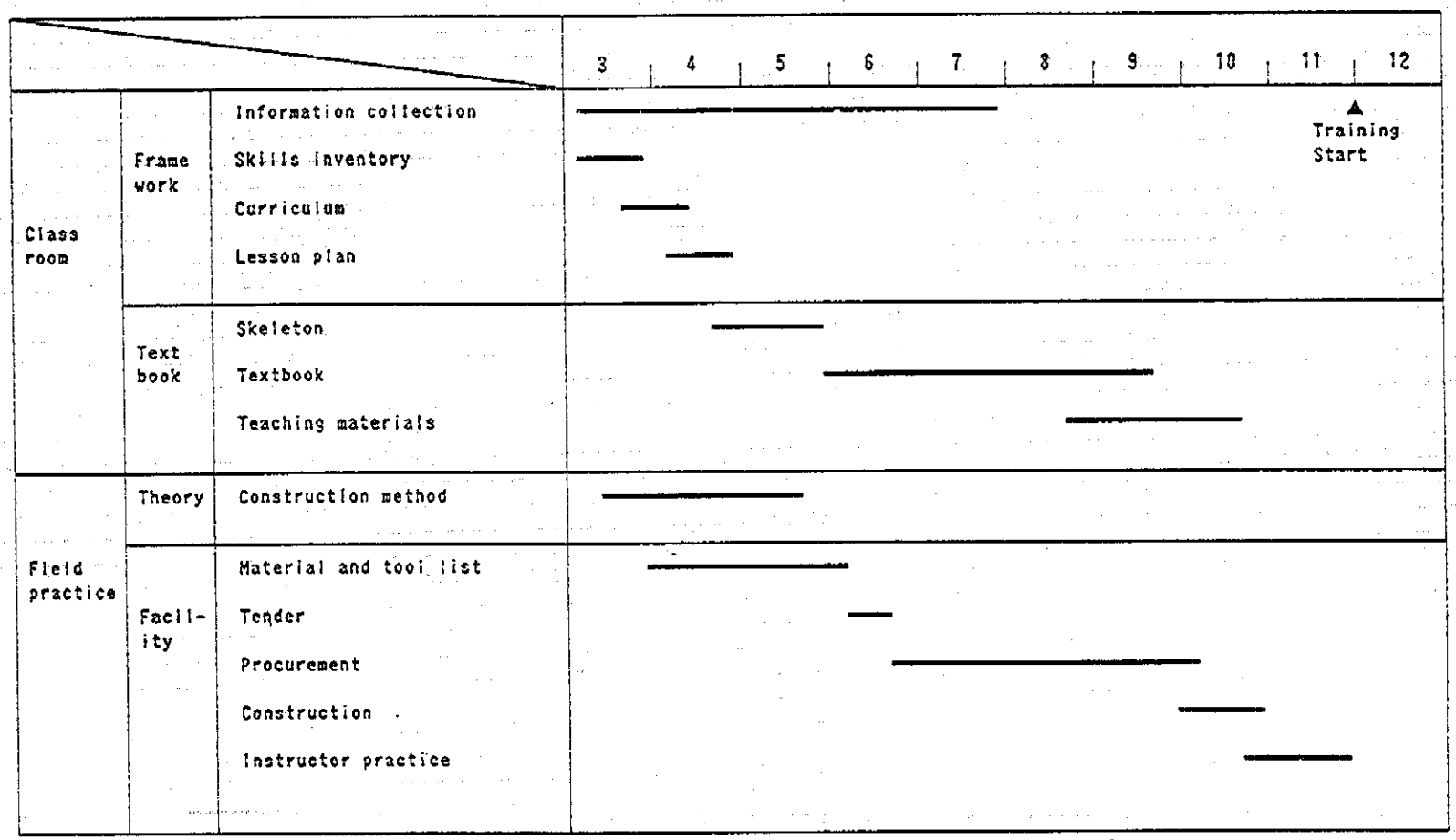
## OPCC Project implementation plan in 1995

| Main theme | Activity | 1994 | 1995 3 | 1995 6 | 1995 9 | 1996 |
|---|---|---|---|---|---|---|
| 1. To implement construction supervisor training | ① To decide the training target, curriculum, lesson plan | | | | | ▲ Start training |
| | ② To make textbooks and training material | | | | | |
| | ③ To construct the facility for the practical study | | | | | |
| | ④ To train counterparts as instructors | | | | | |
| | ⑤ To make the invitation plan of trainees | | | | | |
| 2. To collect existing technical document and make its data base | ① To collect existing technical document | | | | | |
| | ② To make the data base tree structure | | | | | |
| | ③ To input data to optical filing system | | | | | |
| 3. To collect technical problems in the site | ① To collect fault analysis data and grasp the technical problems | | | | | |
| | ② To survey and record the evidence of problems by VIDEO | | | | | |
| 4. To guide the constructers | ① To hold the seminor to instruct the right construction method or provide the new technical information | | | | | Preparation |

# Workflow for training preparation



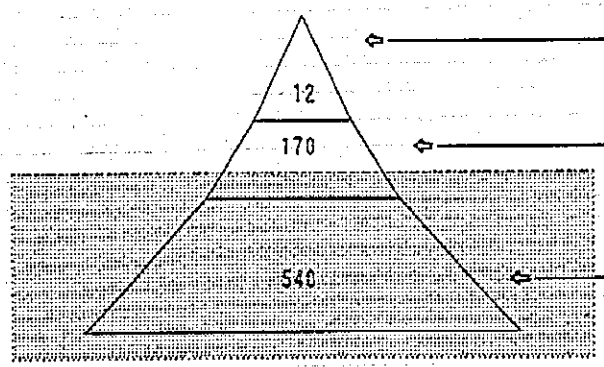
# Preparation for C/S training



# Training target and candidate

1. Training target ——— To bring up versatile supervisors who can instruct constracters technically

2. Estimated number of candidate




Area manager :Total knowledge of supervisor, especially process control, quality control and safety control

Asistant manager :Technical and management knowledge of design and construction work method, and inspection

Supervisor :Technical and management knowledge of design, construction method and final inspection

OPCC trains the person who will be a supervisor and a part of asistant manager

3. Candidate of trainees:

* Who has the basic general knowledge of outside plant engineering
* Who will be a supervisor or an asistant manager

# Equipment provided by JICA

## 1. Already set up

| Purpose | Equipment | | Approx. Price x 1000 Rp | Reference |
|---|---|---|---|---|
| 1. For training | * OHP & Screen<br>* Photocopy machine<br>* Slide projector | (1)<br>(1)<br>(1) | 34000 | |
| 2. For making textbook and analyse data | * Personal computer<br>* Lazer printer | (10)<br>(1) | 136000 | IBM latest model<br>(Adapt "Windows") |
| 3. For document data base | * Optical filing system | (1) | 47000 | 1300 A4 document/1 disk |
| 4. For site survey | * Camera<br>* VIDEO camera | (1)<br>(1) | 11000 | With close up lense |
| 5. Transportation for site survey | * VanType<br>* Jeep type | (1)<br>(1) | 97000 | Four wheel drive car |
| 6. To record fault and to make instruction VIDEO | * VIDEO editing system | (1) | 493000 | Possible to make original VIDEO movie |

## 2. On the procurement

| Purpose | Equipment | Approx. Price x 10000 Rp | Reference |
|---|---|---|---|
| 1. For practical training | | | |
| a. Installation practice | * Material and tools<br>* Construction vehicle | Now bidding | Duct cable laying<br>Direct cable laying<br>Aerial line construction<br>In-house wiring practice |
| b. Final test practice | * Measurement equipment | | |

# Counterpart training in Japan

## 1. Number of trainees

| Japanese fiscal year | No. of counterpart | Training period ( 3 month ) |
|---|---|---|
| 1994 | 3 person | February 1, 1995 ~ May 2, 1995 |
| 1995 | 3 person | May 10, 1995 ~ August 6, 1995 |

## 2. Outline of curriculum

| Curriculum | Duration | Place |
|---|---|---|
| Latest facility observation | 1 week | NTT Tokyo |
| Optical cable design and measurement (theory and practice) | 2 weeks | NTT Suzuka training center |
| OSP construction method (theory and practice) | 2.5 weeks | NTT Kyushyu branch |
| OSP construction OJT | 1 week | ditto |
| OSP construction supervising method (theory and practice) | 1.5 weeks | ditto |
| OSP maintenance | 1.5 weeks | ditto |
| Access network laboratory observation | 0.5 weeks | NTT Tokyo |

# Short term experts

| Japanese Fiscal year | Main job | No. of experts | Duration | Reference |
|---|---|---|---|---|
| 1994 | Optical fiber cable engineering | 1 person | Feb. 14 ~ May. 13 | Helped to make skills inventory, curriculum, and lesson plan |
| | OSP civil engineering | 1 person | Feb. 14 ~ May. 13 | |
| | Construction and supervising technology | 1 person | Mar. 3 ~ June 2 | |
| 1995 | OSP designing and construction Engineering | 1 person | May. 31 ~ Aug. 30 | Will help to make textbook and teaching materials |
| | Optical fiber cable design and construction Engineering | 1 person | Jun. 13 ~ Sep. 12 | |
| | OSP civil engineering | 1 person | Jun. 13 ~ Sep. 12 | |
| | Cable and inhouse wiring construction Practical, engineering | 1 person | Mid. of Aug. ~ Mid. of Nov. | To build simulation facilities and Instruct the construction |
| | Latest technology of cable and civil engineering | 1 person | Beginig of Jan. ~ End of Feb. | To hold the seminar regarding the new technology |