

**付録 5 地上伝送路整備計画
(REPELITA-V)**

付録 5 地上伝送路整備計画 (REPELITA-V)

REPELITA-Vにおける、基幹地上伝送路およびスーパー地上伝送路の整備計画を次頁以降に示す。

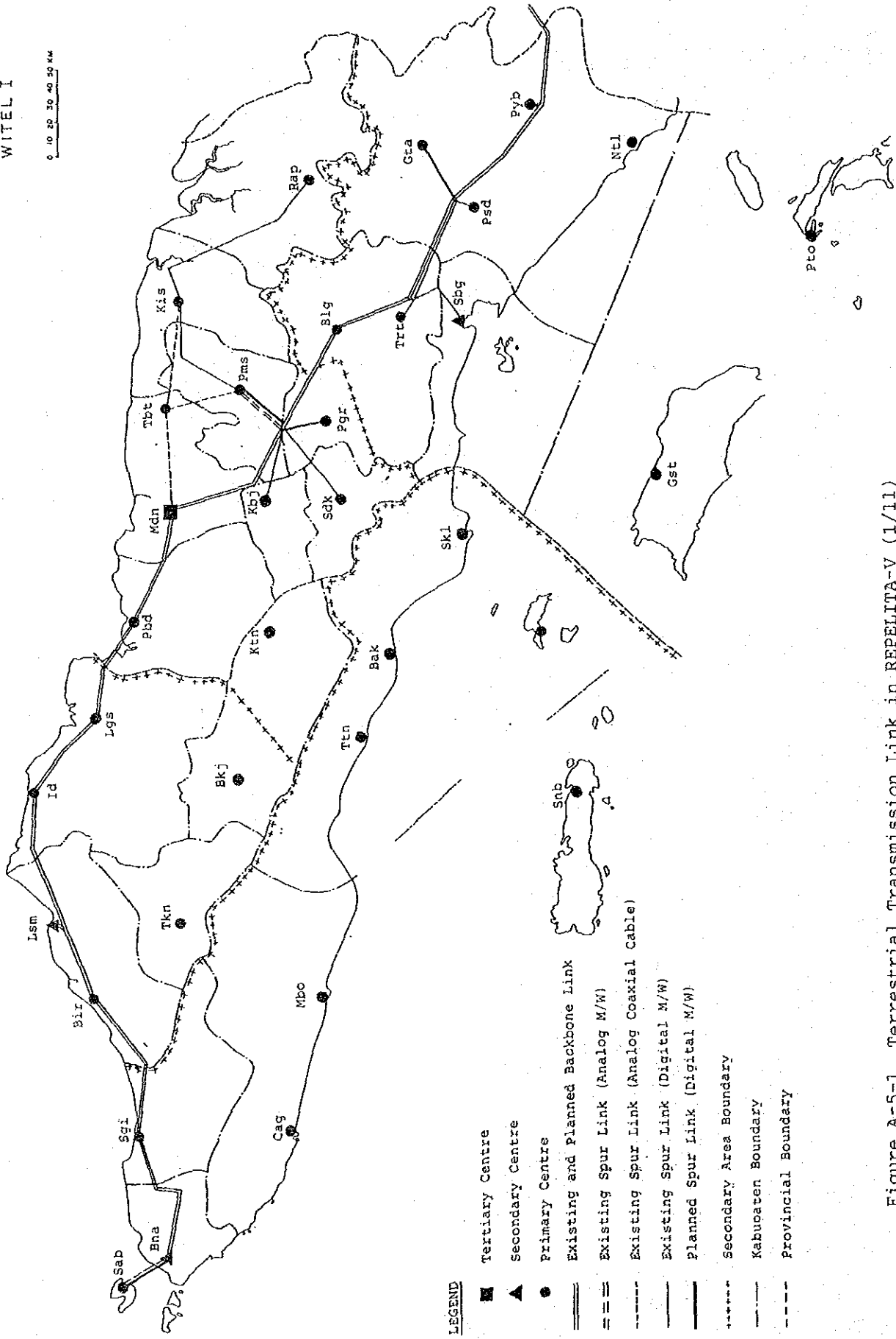


Figure A-5-1 Terrestrial Transmission Link in REPILITA-V (1/11)

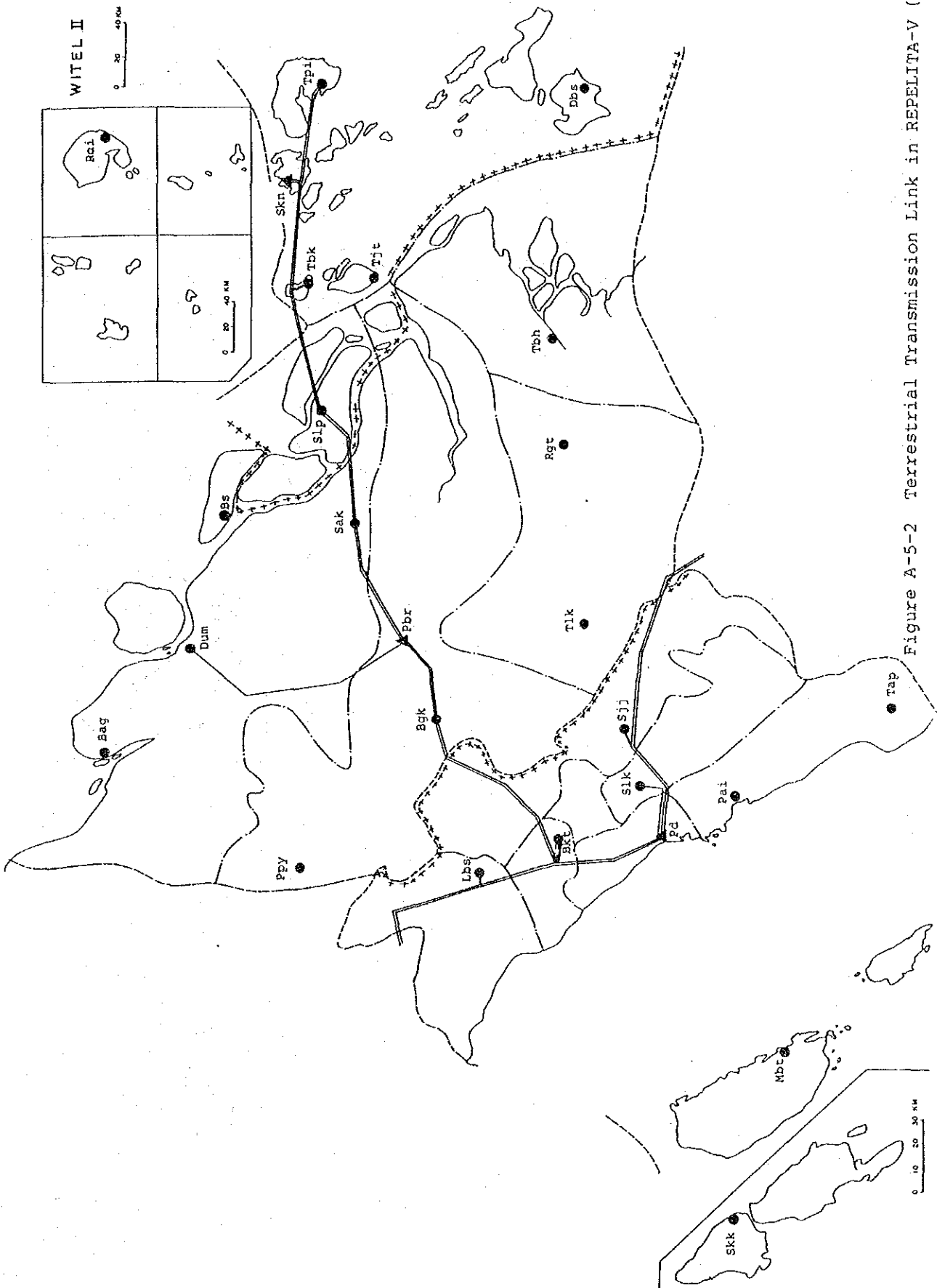


Figure A-5-2 Terrestrial Transmission Link in REPILITA-V (2/11)

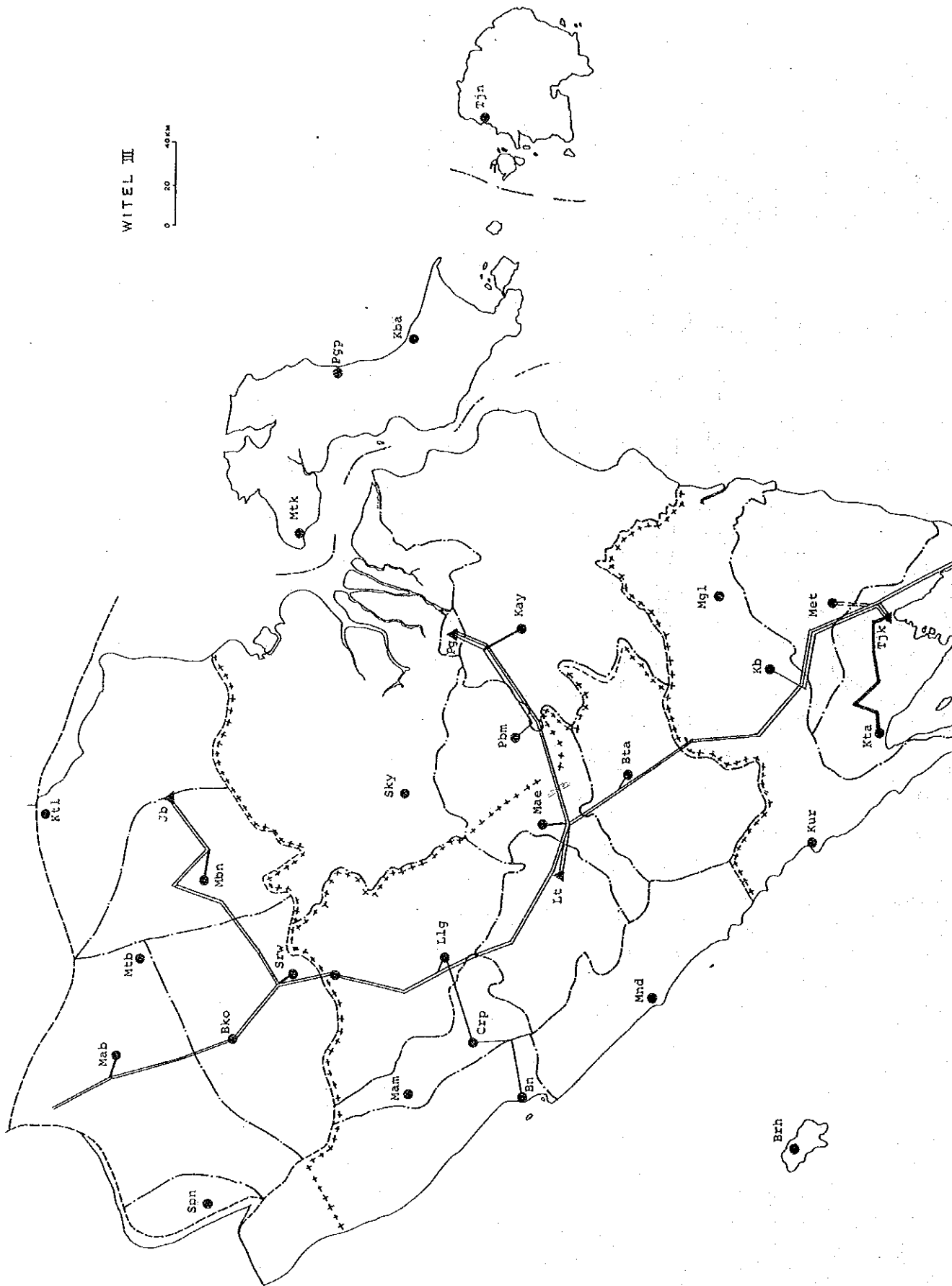


Figure A-5-3 Terrestrial Transmission Link in REPELITA-V (3/11)

WITEL IV,V

0 10 20 KM

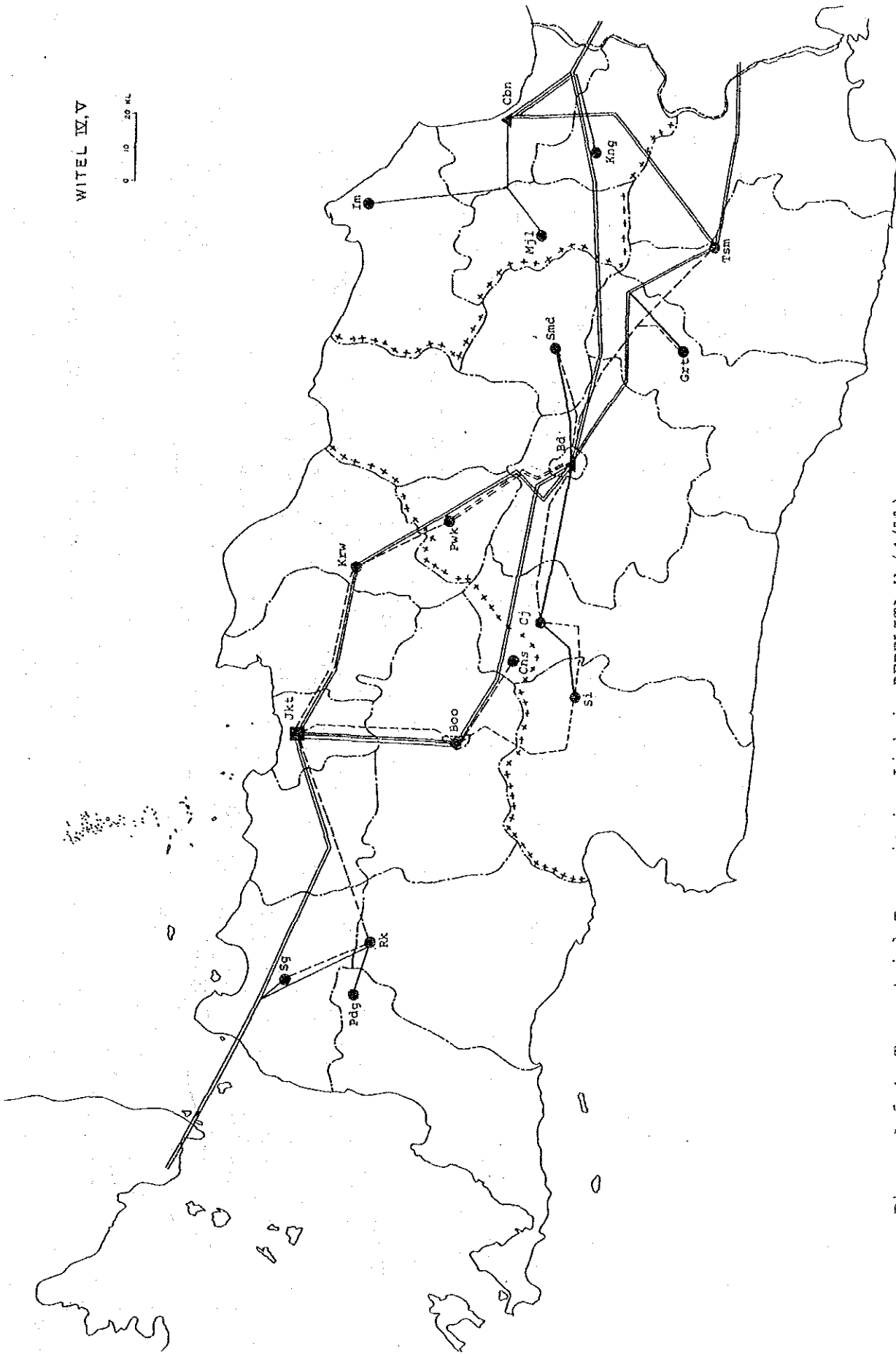


Figure A-5-4 Terrestrial Transmission Link in REPALITA-V (4/11)

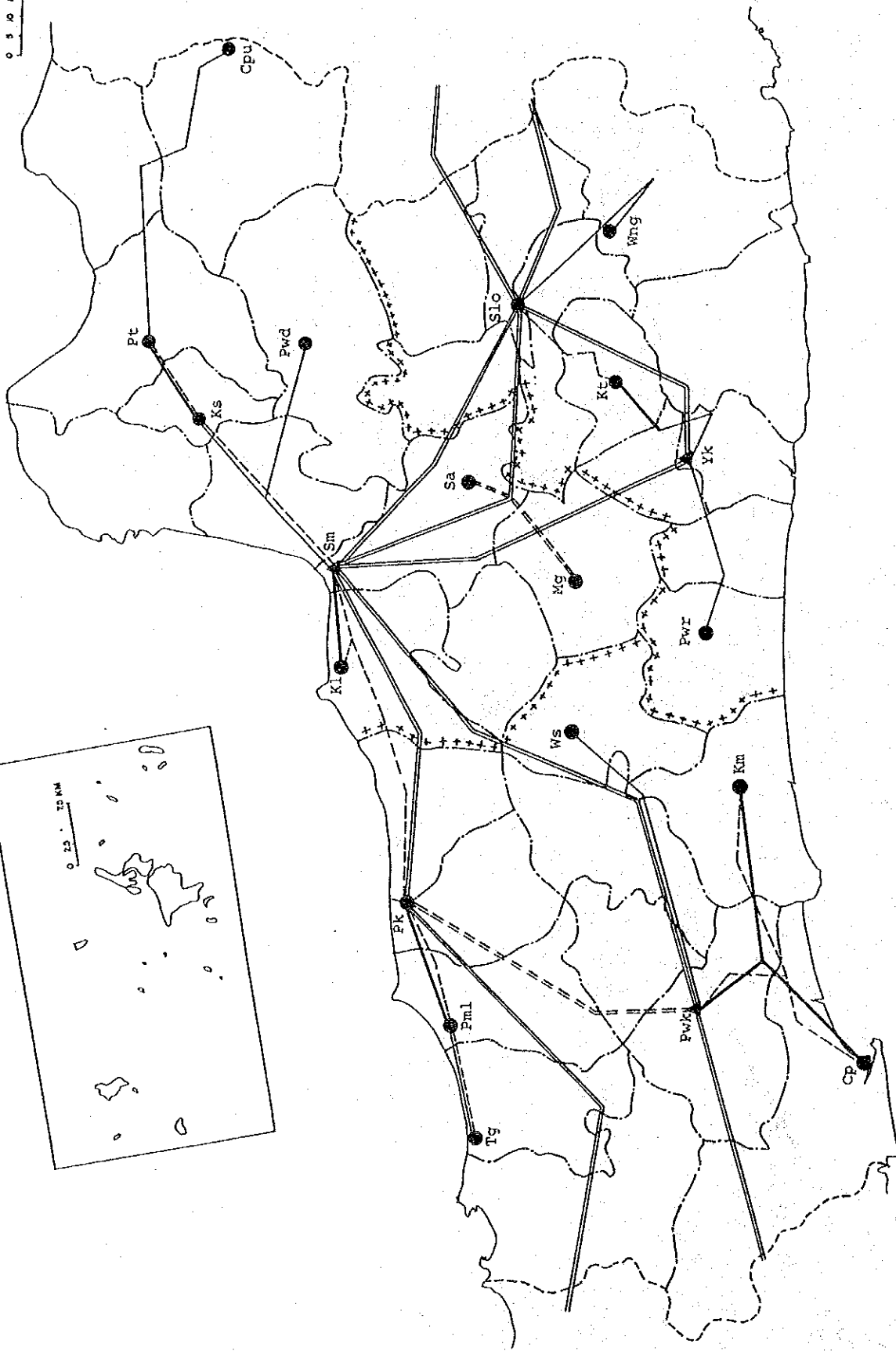
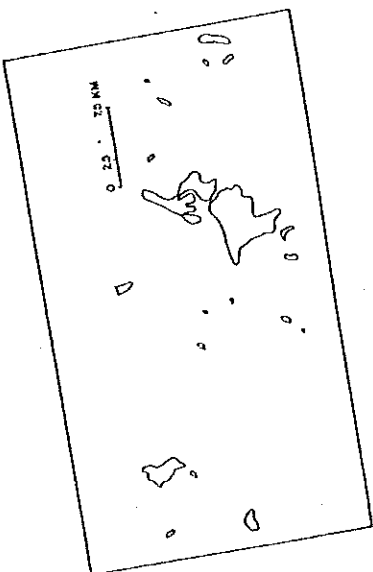
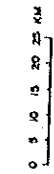


Figure A-5-5 Terrestrial Transmission Link in REPELITA-V (5/11)

WITEL VII

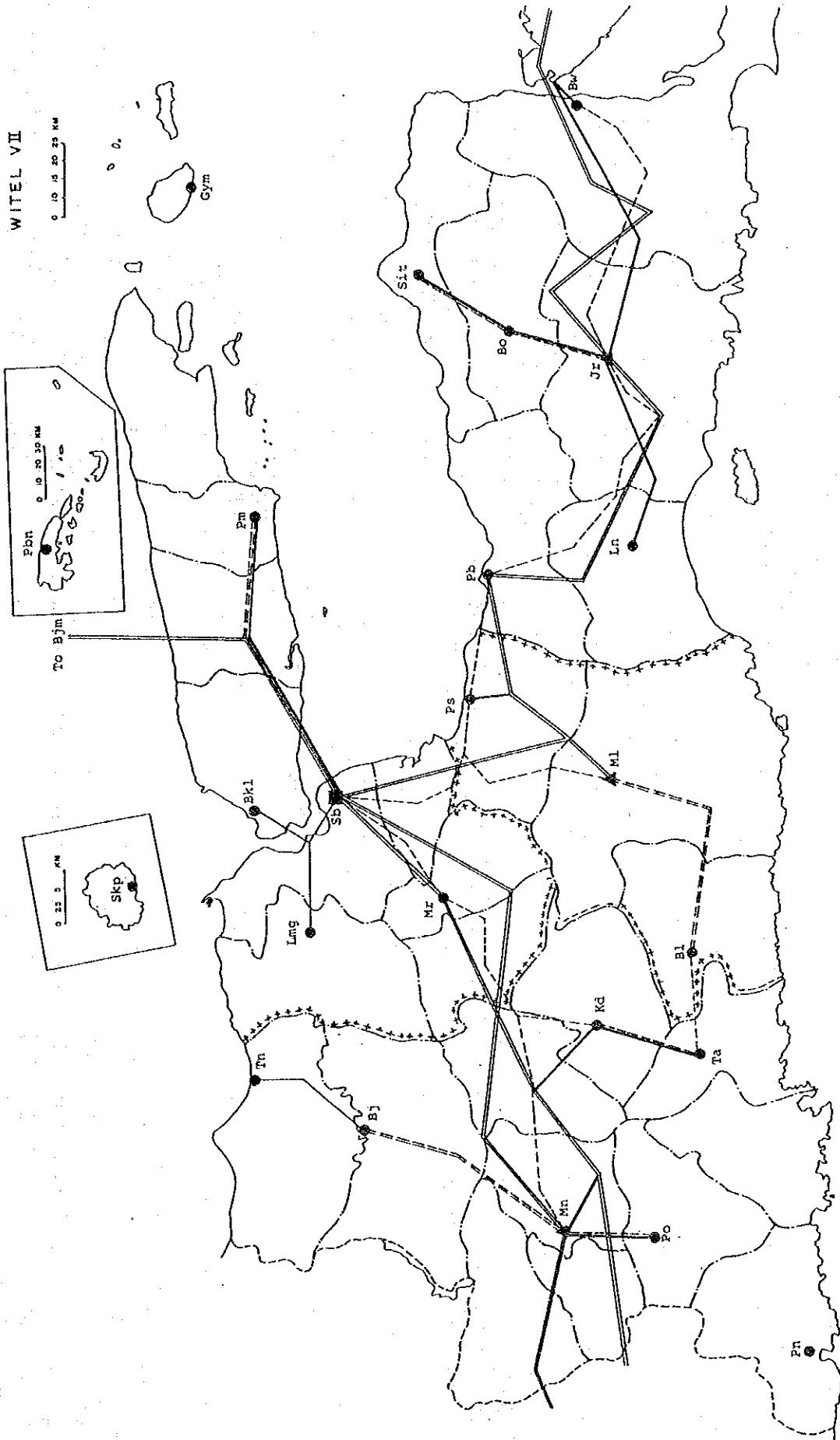


Figure A-5-6 Terrestrial Transmission Link in REPELITA-V (6/11)

WITEL IX

0 20 40 60 80 100 KM

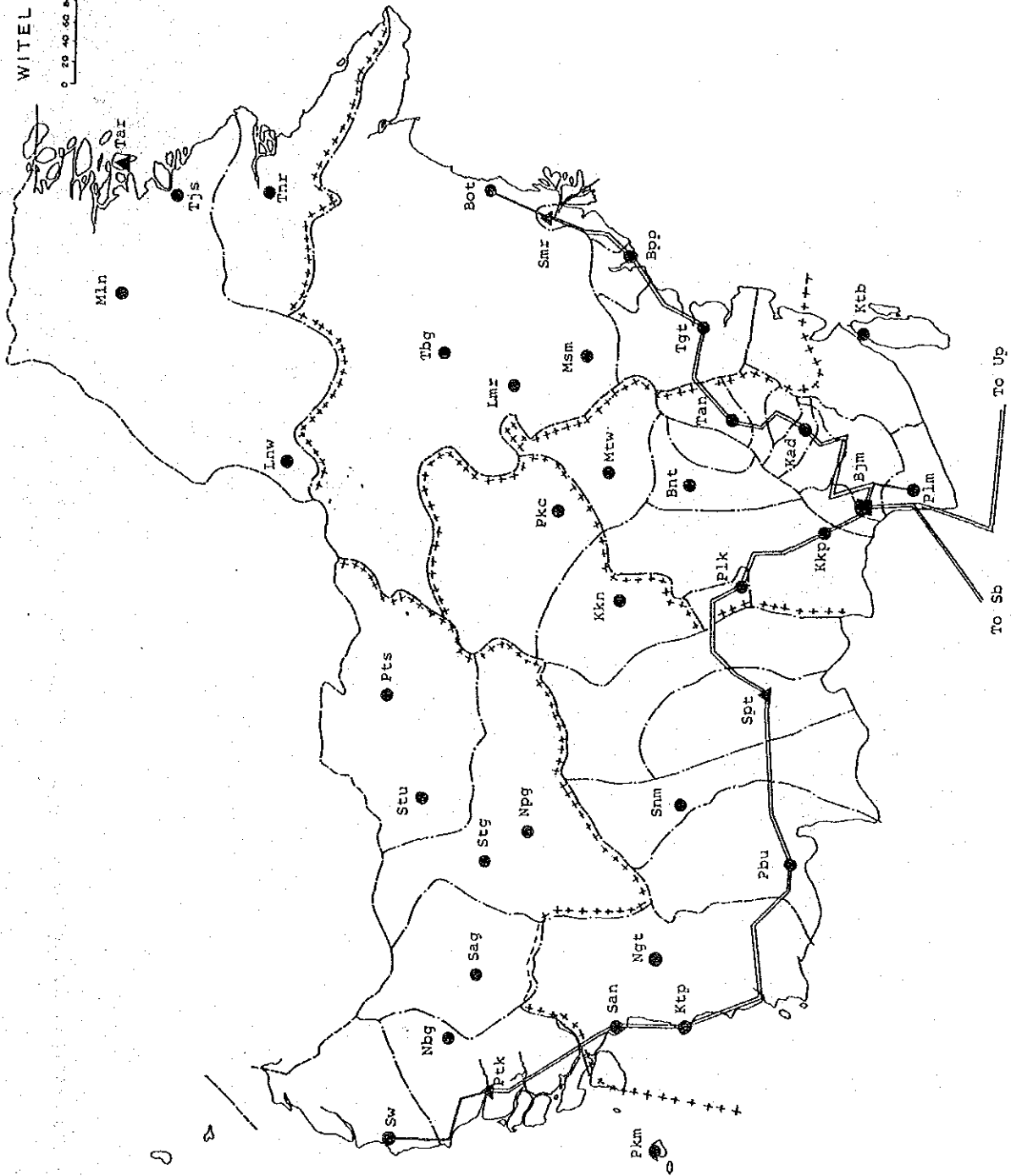


Figure A-5-8 Terrestrial Transmission Link in REPELITA-V (8/11)

WITEL X

0 50 KM

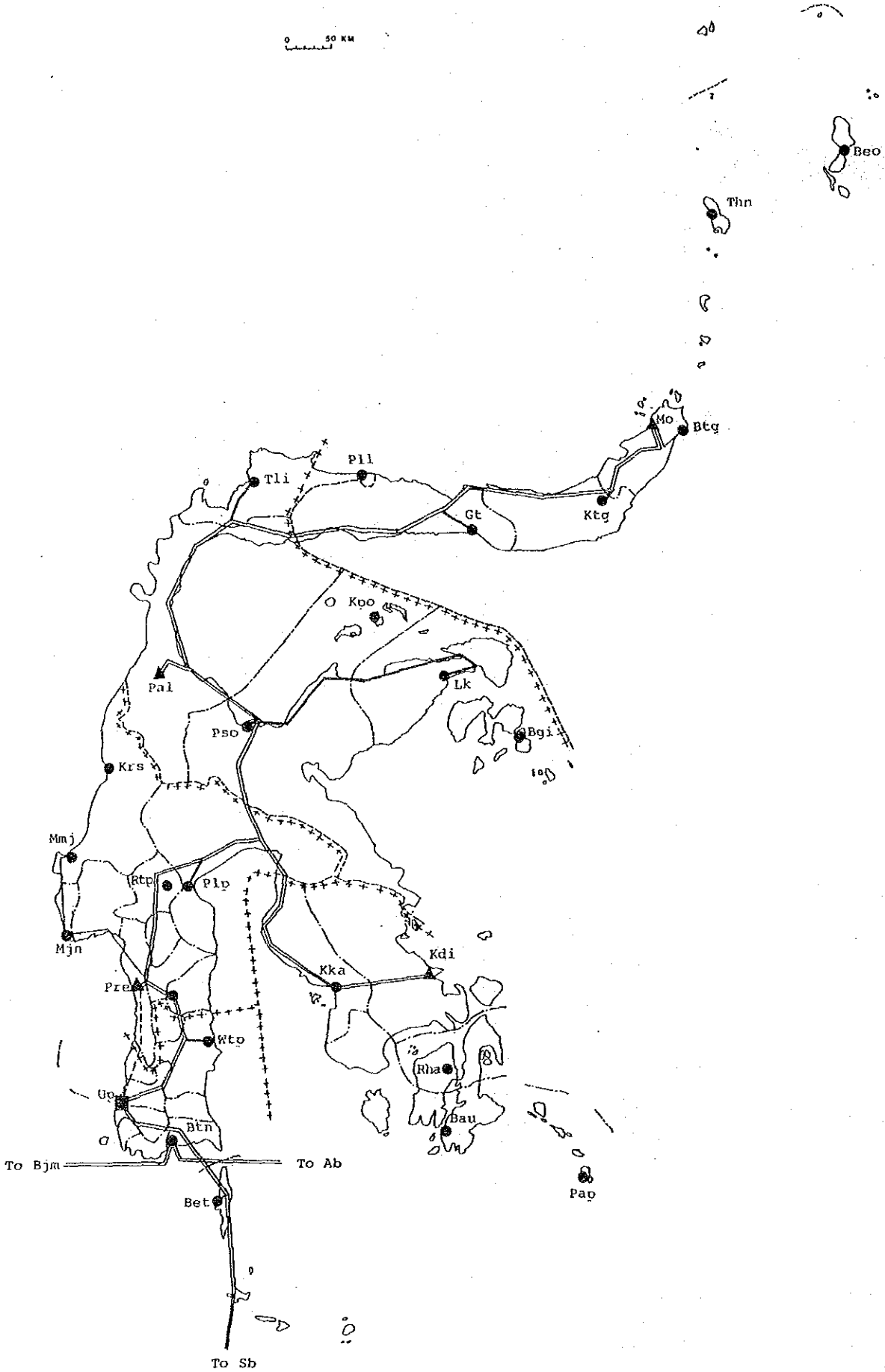


Figure A-5-9 Terrestrial Transmission Link in REPELITA-V (9/11)

WITEL XI

0 25 50 75 100 125 KM

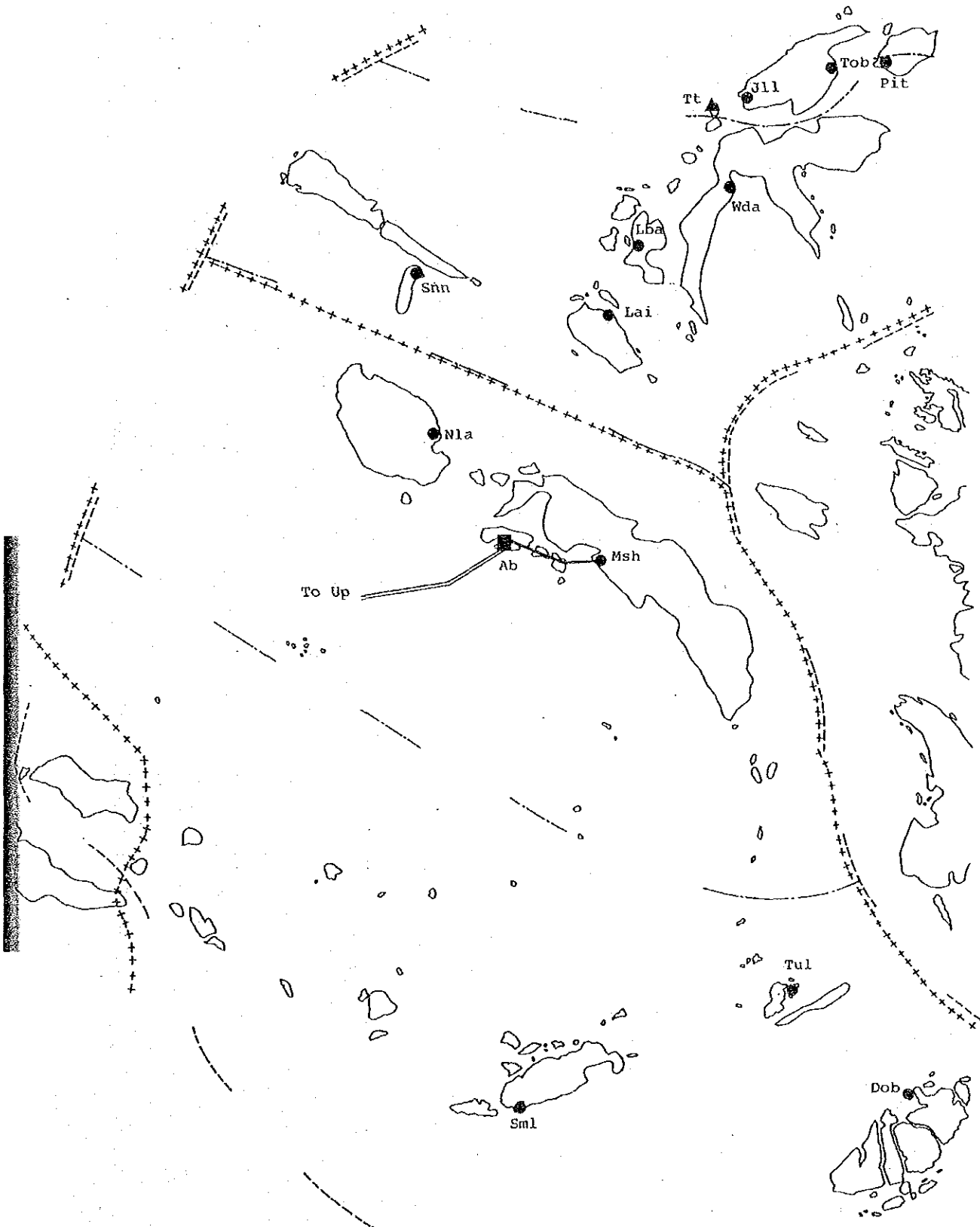


Figure A-5-10 Terrestrial Transmission Link in REPELITA-V (10/11)

WITEL XII

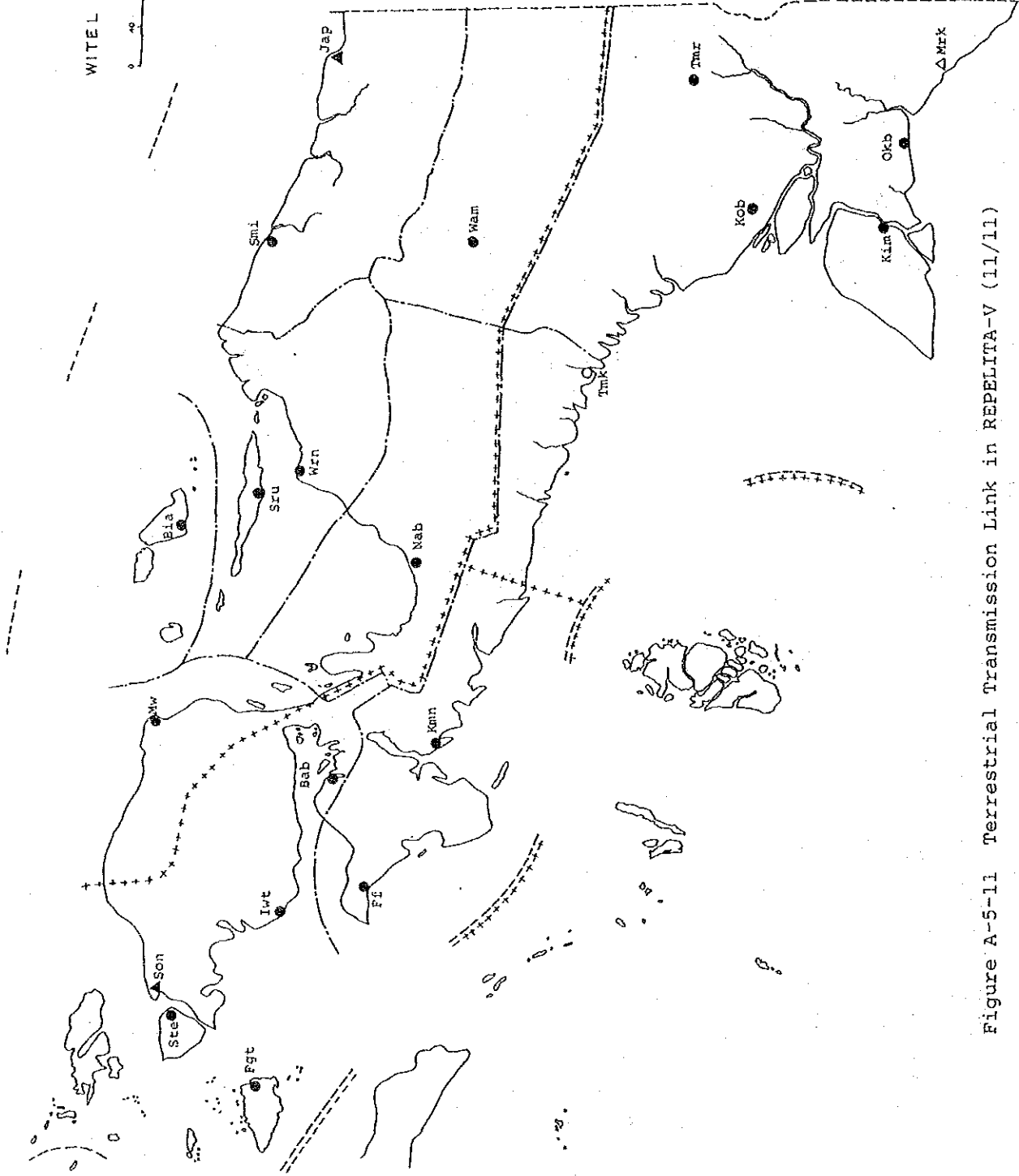


Figure A-5-11 Terrestrial Transmission Link in REPELITA-V (11/11)

**付録6 プロジェクト・ダイジェスト
(REPELITA-V)**

付録 6 プロジェクト・ダイジェスト (REPELITA-V)

REPELITA-Vで実施する主要プロジェクトの概要を次頁以降に示す。

Project Digest (1)

1. Project Code : V-1
2. Project Title : Jakarta Local Switching System Expansion Project (Phase 1)
3. Location : WITEL-IV (Kotamadya)
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Accommodation of the existing waiting applicants.
 - 2) Reduction of waiting period for new subscription.
 - 3) Improvement of service grade.
 - 4) Promoting regional economic activities.
 - 5) Promoting national development program.
 - 6) Modernization of telecommunication facilities.
5. Project Type : Separate project by technical field
6. Project Description: Provision of telephone service facilities with 150,000 L.U. including the following:
 - 1) Digital switching system (for local and toll switching systems)
 - 2) Power plant
 - 3) Building and land
7. Implementation Time: 1989 - 1992 (3 years)
8. Priority : First
9. Remarks :

Project Digest (2)

1. Project Code : V-2
2. Project Title : Jakarta Local Switching System Expansion Project (Phase 2)
3. Location : WITEL-IV (Kotamadya and Kabupaten)
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Accommodation of the existing waiting applicants.
 - 2) Reduction of waiting period for new subscription.
 - 3) Improvement of service grade.
 - 4) Promoting regional economic activities.
 - 5) Promoting national development program.
 - 6) Modernization of telecommunication facilities.
5. Project Type : Separate project by technical field
6. Project Description: Provision of telephone service facilities with 175,000 L.U. including the following:

165,000 L.U. in Kotamadya
10,000 L.U. in Kabupaten
 - 1) Digital switching system (for local and toll switching systems)
 - 2) Power plant
 - 3) Building and land
7. Implementation Time: 1991 - 1994 (3 years)
8. Priority : Second
9. Remarks :

Project Digest (3)

1. Project Code : V-3
2. Project Title : Jakarta Local Cable Network Expansion Project (Phase 1)
3. Location : WITEL IV (Kotamadya)
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Accommodation of the existing waiting applicants.
 - 2) Reduction of waiting period for new subscription.
 - 3) Improvement of service grade.
 - 4) Promoting regional economic activities.
 - 5) Promoting national development program.
 - 6) Modernization of telecommunication facilities.
5. Project Type : Separate project by technical field
6. Project Description: Provision of the local cable network for 150,000 L.U. new subscribers.
7. Implementation Time: 1989 - 1992 (3 years)
8. Priority : First
9. Remarks :

Project Digest (4)

1. Project Code : V-4
2. Project Title : Jakarta Local Cable Network Expansion Project (Phase 2)
3. Location : WITEL-IV (Kotamadya and Kabupaten)
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Accommodation of the existing waiting applicants.
 - 2) Reduction of waiting period for new subscription.
 - 3) Improvement of service grade.
 - 4) Promoting regional economic activities.
 - 5) Promoting national development program.
 - 6) Modernization of telecommunication facilities.
5. Project Type : Separate project by technical field
6. Project Description: Provision of the local cable network for 175,000 L.U. new subscribers.

165,000 L.U. in Kotamadya
10,000 L.U. in Kabupaten
7. Implementation Time: 1991 - 1994 (3 years)
8. Priority : Second
9. Remarks :

Project Digest (5)

1. Project Code : V-5
2. Project Title : Jakarta Junction Network Expansion Project
3. Location : WITEL-IV (Kotamadya and Kabupaten)
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Accommodation of the existing waiting applicants.
 - 2) Reduction of waiting period for new subscription.
 - 3) Improvement of service grade.
 - 4) Promoting regional economic activities.
 - 5) Promoting national development program.
 - 6) Modernization of telecommunication facilities.
5. Project Type : Separate project by technical field
6. Project Description: Provision of the junction network (PC-LE and LE-LE) for telephone service facilities including the following:
 - Optical fiber cable system
 - Microwave system
 - Cable PCM system
7. Implementation Time: 1989 - 1992 (3 years)
8. Priority : First
9. Remarks :

Project Digest (6)

1. Project Code : V-6
2. Project Title : Sumatera Kotamadya Local Telephone Network Expansion Project (I)
3. Location : WITEL I (Kotamadya)
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Accommodation of the existing waiting applicants.
 - 2) Reduction of waiting period for new subscription.
 - 3) Improvement of service grade.
 - 4) Promoting regional economic activities.
 - 5) Promoting national development program.
 - 6) Modernization of telecommunication facilities.
5. Project Type : Package project by area
6. Project Description: Provision of telephone service facilities with 71,000 L.U. including the following:
 - 1) Digital switching system
(for local and toll switching systems)
 - 2) Local cable network
 - 3) Transmission system (PC-LE and LE-LE)
 - 4) Power plant
 - 5) Building and land
7. Implementation Time: 1989 - 1994 (5 years)
8. Priority : First
9. Remarks :

Project Digest (7)

1. Project Code : V-7
2. Project Title : Sumatera Kotamadya Local Telephone Network Expansion Project (II)
3. Location : WITEL II, III (Kotamadya)
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Accommodation of the existing waiting applicants.
 - 2) Reduction of waiting period for new subscription.
 - 3) Improvement of service grade.
 - 4) Promoting regional economic activities.
 - 5) Promoting national development program.
 - 6) Modernization of telecommunication facilities.
5. Project Type : Package project by area
6. Project Description: Provision of telephone service facilities with 55,000 L.U. including the following:
 - 1) Digital switching system
(for local and toll switching systems)
 - 2) Local cable network
 - 3) Transmission system (PC-LE and LE-LE)
 - 4) Power plant
 - 5) Building and land
7. Implementation Time: 1989 - 1994 (5 years)
8. Priority : Second
9. Remarks :

Project Digest (8)

1. Project Code : V-8
2. Project Title : Sumatera Kabupaten Local Telephone Network Expansion Project
3. Location : WITEL I, II, III (Kabupaten)
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Accommodation of the existing waiting applicants.
 - 2) Reduction of waiting period for new subscription.
 - 3) Improvement of service grade.
 - 4) Promoting regional economic activities.
 - 5) Promoting national development program.
 - 6) Expansion of the telephone network to all Kabupaten capitals and principal Kecamatan capitals.
 - 7) Modernization of telecommunication facilities.
5. Project Type : Package project by area
6. Project Description: Provision of telephone service facilities with 43,000 L.U. including the following:
 - 1) Digital switching system
(for local and toll switching systems)
 - 2) Local cable network
 - 3) Transmission system (PC-LE and LE-LE)
 - 4) Power plant
 - 5) Building and land
7. Implementation Time: 1989 - 1994 (5 years)
8. Priority : Third
9. Remarks :

Project Digest (9)

1. Project Code : V-9
2. Project Title : Jawa Kotamadya Local Telephone Network Expansion Project (I)
3. Location : WITEL V (Kotamadya)
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Accommodation of the existing waiting applicants.
 - 2) Reduction of waiting period for new subscription.
 - 3) Improvement of service grade.
 - 4) Promoting regional economic activities.
 - 5) Promoting national development program.
 - 6) Modernization of telecommunication facilities.
5. Project Type : Package project by area
6. Project Description: Provision of telephone service facilities with 77,000 L.U. including the following:
 - 1) Digital switching system (for local and toll switching systems)
 - 2) Local cable network
 - 3) Transmission system (PC-LE and LE-LE)
 - 4) Power plant
 - 5) Building and land
7. Implementation Time: 1989 - 1994 (5 years)
8. Priority : First
9. Remarks :

Project Digest (10)

1. Project Code : V-10
2. Project Title : Jawa Kotamadya Local Telephone Network Expansion Project (II)
3. Location : WITEL VI (Kotamadya)
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Accommodation of the existing waiting applicants.
 - 2) Reduction of waiting period for new subscription.
 - 3) Improvement of service grade.
 - 4) Promoting regional economic activities.
 - 5) Promoting national development program.
 - 6) Modernization of telecommunication facilities.
5. Project Type : Package project by area
6. Project Description: Provision of telephone service facilities with 63,000 L.U. including the following:
 - 1) Digital switching system
(for local and toll switching systems)
 - 2) Local cable network
 - 3) Transmission system (PC-LE and LE-LE)
 - 4) Power plant
 - 5) Building and land
7. Implementation Time: 1989 - 1994 (5 years)
8. Priority : Second
9. Remarks :

Project Digest (11)

1. Project Code : V-11
2. Project Title : Jawa Kotamadya Local Telephone Network Expansion Project (III)
3. Location : WITEL VII (Kotamadya)
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Accommodation of the existing waiting applicants.
 - 2) Reduction of waiting period for new subscription.
 - 3) Improvement of service grade.
 - 4) Promoting regional economic activities.
 - 5) Promoting national development program.
 - 6) Modernization of telecommunication facilities.
5. Project Type : Package project by area
6. Project Description: Provision of telephone service facilities with 122,000 L.U. including the following:
 - 1) Digital switching system (for local and toll switching systems)
 - 2) Local cable network
 - 3) Transmission system (PC-LE and LE-LE)
 - 4) Power plant
 - 5) Building and land
7. Implementation Time: 1989 - 1994 (5 years)
8. Priority : First
9. Remarks :

Project Digest (12)

1. Project Code : V-12
2. Project Title : Jawa Kabupaten Local Telephone Network Expansion Project
3. Location : WITEL V, VI, VII (Kabupaten)
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Accommodation of the existing waiting applicants.
 - 2) Reduction of waiting period for new subscription.
 - 3) Improvement of service grade.
 - 4) Promoting regional economic activities.
 - 5) Promoting national development program.
 - 6) Expansion of the telephone network to principal Kecamatan capitals.
 - 7) Modernization of telecommunication facilities.
5. Project Type : Package project by area
6. Project Description: Provision of telephone service facilities with 87,000 L.U. including the following:
 - 1) Digital switching system
(for local and toll switching systems)
 - 2) Local cable network
 - 3) Transmission system (PC-LE and LE-LE)
 - 4) Power plant
 - 5) Building and land
7. Implementation Time: 1989 - 1994 (5 years)
8. Priority : Second
9. Remarks :

Project Digest (13)

1. Project Code : V-13
2. Project Title : Bali/Nusa Tenggara/Timor Timur Local Telephone Network Expansion Project
3. Location : WITEL VIII (Kabupaten)
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Accommodation of the existing waiting applicants.
 - 2) Reduction of waiting period for new subscription.
 - 3) Improvement of service grade.
 - 4) Promoting regional economic activities.
 - 5) Promoting national development program.
 - 6) Expansion of the telephone network to all Kabupaten capitals and principal Kecamatan capitals.
 - 7) Modernization of telecommunication facilities.
5. Project Type : Package project by area
6. Project Description: Provision of telephone service facilities with 41,000 L.U. including the following:
 - 1) Digital switching system
(for local and toll switching systems)
 - 2) Local cable network
 - 3) Transmission system (PC-LE and LE-LE)
 - 4) Power plant
 - 5) Building and land
7. Implementation Time: 1989 - 1994 (5 years)
8. Priority : Third
9. Remarks :

Project Digest (14)

1. Project Code : V-14
2. Project Title : Kalimantan/Sulawesi Kotamadya Local Telephone Network Expansion Project
3. Location : WITEL IX, X (Kotamadya)
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Accommodation of the existing waiting applicants.
 - 2) Reduction of waiting period for new subscription.
 - 3) Improvement of service grade.
 - 4) Promoting regional economic activities.
 - 5) Promoting national development program.
 - 6) Expansion of the telephone network up to principal Kecamatan capitals.
 - 7) Modernization of telecommunication facilities.
5. Project Type : Package project by area
6. Project Description: Provision of telephone service facilities with 71,000 L.U. including the following:
 - 1) Digital switching system
(for local and toll switching systems)
 - 2) Local cable network
 - 3) Transmission system (PC-LE and LE-LE)
 - 4) Power plant
 - 5) Building and land
7. Implementation Time: 1989 - 1994 (5 years)
8. Priority : Second
9. Remarks :

Project Digest (15)

1. Project Code : V-15
2. Project Title : Kalimantan/Sulawesi Kabupaten Local Telephone Network Expansion Project
3. Location : WITEL IX, X (Kabupaten)
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Accommodation of the existing waiting applicants.
 - 2) Reduction of waiting period for new subscription.
 - 3) Improvement of service grade.
 - 4) Promoting regional economic activities.
 - 5) Promoting national development program.
 - 6) Expansion of the telephone network to all Kabupaten capitals and principal Kecamatan capitals.
 - 7) Modernization of telecommunication facilities.
5. Project Type : Package project by area
6. Project Description: Provision of telephone service facilities with 30,000 L.U. including the following:
 - 1) Digital switching system (for local and toll switching systems)
 - 2) Local cable network
 - 3) Transmission system (PC-LE and LE-LE)
 - 4) Power plant
 - 5) Building and land
7. Implementation Time: 1989 - 1994 (5 years)
8. Priority : Third
9. Remarks :

Project Digest (16)

1. Project Code : V-16
2. Project Title : Maluku/Irian Jaya Local Telephone Expansion Network Expansion Project
3. Location : WITEL XI, XII (Kotamadya and Kabupaten)
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Accommodation of the existing waiting applicants.
 - 2) Reduction of waiting period for new subscription.
 - 3) Improvement of service grade.
 - 4) Promoting regional economic activities.
 - 5) Promoting national development program.
 - 6) Expansion of the telephone network up to principal Kecamatan capitals.
 - 7) Modernization of telecommunication facilities.
5. Project Type : Package project by area
6. Project Description: Provision of telephone service facilities with 15,000 L.U. including the following:
 - 1) Digital switching system (for local and toll switching systems)
 - 2) Local cable network
 - 3) Transmission system (PC-LE and LE-LE)
 - 4) Power plant
 - 5) Building and land
7. Implementation Time: 1989 - 1994 (5 years)
8. Priority : Third
9. Remarks :

Project Digest (17)

1. Project Code : V-17
2. Project Title : Digital Toll Switching System Expansion Project
3. Location : 36 cities throughout Indonesia
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Expansion of SLDD service areas.
 - 2) Improvement of the completion call rate.
5. Project Type : Separate project by technical field
6. Project Description: Expansion of toll switching capacity with approx. 30,000 circuits at most of TCs and SCs (36 centers).
7. Implementation Time: 1989 - 1994 (5 years)
8. Priority : First
9. Remarks : In the following SCs, the toll switching capacities planned for PELITA-IV will satisfy the requirement for REPELITA-V:
 - Jakarta
 - Cirebon
 - Medan
 - Padan

Project Digest (18)

1. Project Code : V-18
2. Project Title : Trans Sulawesi Digital Microwave System Project
3. Location : Throughout Sulawesi (Ujung Pandan, Pare Pare, Kendari, Palu, Mando, etc.)
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Expansion of SLDD service areas
 - 2) Improvement of the completion call rate
 - 3) TV program transmission by terrestrial system
5. Project Type : Separate project by technical field
6. Project Description: Provision of digital microwave system including the following:
 - 1) Transmission system
 - 2) Power plant
 - 3) Building and land
 - Backbone transmission link: 1,800 km
 - Spur transmission link : 500 km
7. Implementation Time: 1989 - 1994 (5 years)
8. Priority : First
9. Remarks :

Project Digest (19)

1. Project Code : V-19
2. Project Title : Banjarmasin - Ujung Pandang Optical Fiber Submarine Cable System Project
3. Location : Kalimantan - Sulawesi
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Expansion of SLDD service areas.
 - 2) Improvement of the completion call rate.
 - 3) TV program transmission by terrestrial system.
5. Project Type : Separate project by technical field
6. Project Description: Provision of optical fiber submarine cable system including the following:
 - 1) Transmission system
 - 2) Power plant
 - 3) Building and land
 - Expansion of existing digital microwave system (Banjarmasin - Tasking, 70 km)
 - New construction of optical fiber submarine cable system (Tasking - Bantaeng, 700 km)
 - New installation of digital microwave system (Bantaeng - Ujung Pandang, 80 km)
7. Implementation Time: 1989 - 1992 (3 years)
8. Priority : First
9. Remarks :

Project Digest (20)

1. Project Code : V-20
2. Project Title : Trans Kalimantan Digital Microwave System Project
3. Location : South Kalimantan (Banjarmasin, Palangkanaya, Sampit, etc.)
West Kalimantan (Pontianak, etc.)
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Expansion of SLDD service areas.
 - 2) Improvement of the completion call rate.
 - 3) TV program transmission by terrestrial system.
5. Project Type : Separate project by technical field
6. Project Description: Provision of digital microwave system including the following:
 - 1) Transmission system
 - 2) Power plant
 - 3) Building and land
 - Backbone transmission link: 900 km
 - Spur transmission link : 150 km
7. Implementation Time: 1989 - 1993 (4 years)
8. Priority : Second
9. Remarks :

Project Digest (21)

1. Project Code : V-21
2. Project Title : East Indonesia Digital Microwave System Project
3. Location : Bali (Denpasar, etc.)
Nusa Tenggara (Sumbawa Besar, Ende, Kupang, etc.)
Timor Timur (Dili, etc.)
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Expansion of SLDD service areas
 - 2) Improvement of the completion call rate
 - 3) TV program transmission by terrestrial system
5. Project Type : Separate project by technical field
6. Project Description: Provision of digital microwave system including the following:
 - 1) Transmission system
 - 2) Power plant
 - 3) Building and land
 - Backbone transmission link: 1,500 km
 - Spur transmission link : 400 km
7. Implementation Time: 1989 - 1993 (4 years)
8. Priority : Second
9. Remarks :

Project Digest (22)

1. Project Code : V-22
2. Project Title : Medan - Banda Aceh Digital Microwave System Project
3. Location : North Sumatera (Medan, Lhokseumawe, Banda Aceh, etc.)
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Expansion of SLDD service areas.
 - 2) Improvement of the completion call rate.
 - 3) TV program transmission by terrestrial system.
5. Project Type : Separate project by technical field
6. Project Description: Provision of digital microwave system including the following:
 - 1) Transmission system
 - 2) Power plant
 - 3) Building and land
 - Backbone transmission link: 500 km
 - Spur transmission link : 50 km
7. Implementation Time: 1990 - 1993 (3 years)
8. Priority : Second
9. Remarks :

Project Digest (23)

1. Project Code : V-23
2. Project Title : Balikpapan - Samarinda Digital Microwave System Expansion Project
3. Location : East Kalimantan (Balikpapan, Samarinda, etc.)
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Expansion of SLDD service areas.
 - 2) Improvement of the completion call rate.
 - 3) TV program transmission by terrestrial system.
5. Project Type : Separate project by technical field
6. Project Description: Provision of digital microwave system including the following:
 - 1) Transmission system
 - 2) Power plant
 - 3) Building and land
 - Backbone transmission link: 100 km
 - Spur transmission link : 100 km
7. Implementation Time: 1992 - 1994 (2 years)
8. Priority : Third
9. Remarks :

Project Digest (24)

1. Project Code : V-24
2. Project Title : Ujung Pandang - Ambon Optical Fiber Submarine Cable System Project
3. Location : Sulawesi - Maluku
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Expansion of SLDD service areas.
 - 2) Improvement of the completion call rate.
 - 3) TV program transmission by terrestrial system.
5. Project Type : Separate project by technical field
6. Project Description: Provision of optical fiber submarine cable system including the following:
 - 1) Transmission system
 - 2) Power plant
 - 3) Building and land
 - Expansion of digital microwave system (Ujung Pandang - Bantaeng, 70 km)
 - New installation of optical fiber submarine cable system (Bantaeng - Ambon, 1,100 km)
 - New installation of digital microwave system (Ambon - Masohi, 130 km)
7. Implementation Time: 1991 - 1994 (3 years)
8. Priority : Third
9. Remarks :

Project Digest (25)

1. Project Code : V-25
2. Project Title : Jawa Digital Spur Microwave System Project
3. Location : Throughout Jawa
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Expansion of SLDD service areas
 - 2) Improvement of the completion call rate
 - 3) TV program transmission by terrestrial system
5. Project Type : Separate project by technical field
6. Project Description: Provision of digital microwave system including the following:
 - 1) Transmission system
 - 2) Power plant
 - 3) Building and land

- Spur transmission link: 750 km
7. Implementation Time: 1989 - 1993 (4 years)
8. Priority : First
9. Remarks :

Project Digest (26)

1. Project Code : V-26
2. Project Title : Sumatera Digital Spur Microwave System Project
3. Location : Throughout Sumatera (excluding North Sumatera)
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Expansion of SLDD service areas
 - 2) Improvement of the completion call rate
 - 3) TV program transmission by terrestrial system
5. Project Type : Separate project by technical field
6. Project Description: Provision of digital microwave system including the following:
 - 1) Transmission system
 - 2) Power plant
 - 3) Building and land

- Spur transmission link: 350 km
7. Implementation Time: 1990 - 1994 (4 years)
8. Priority : Second
9. Remarks :

Project Digest (27)

1. Project Code : V-27
2. Project Title : Subscriber Radio System Project (Phase 1)
3. Location : Throughout Indonesia (first priority Kecamatan)
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Development of the rural area
 - 2) Promoting regional economic activities.
 - 3) Promoting national development program.
 - 4) Provision of telephone service to principal Kecamatan capitals
 - 5) Modernization of telecommunication facilities.
5. Project Type : Separate project by technical field
6. Project Description: Provision of TDMA subscriber radio system with 5,000 L.U. including the following:
 - 1) Radio system
 - 2) Power plant
 - 3) Building and land
 - 4) Drop wires to subscribers
 - 5) Telephone sets
7. Implementation Time: 1989 - 1993 (4 years)
8. Priority : Second
9. Remarks :

Project Digest (28)

1. Project Code : V-28
2. Project Title : Subscriber Radio System Project (Phase 2)
3. Location : Throughout Indonesia (second priority Kecamatan)
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Development of the rural area
 - 2) Promoting regional economic activities.
 - 3) Promoting national development program.
 - 4) Provision of telephone service to principal Kecamatan capitals
 - 5) Modernization of telecommunication facilities.
5. Project Type : Separate project by technical field
6. Project Description: Provision of TDMA subscriber radio system with 5,000 L.U. including the following:
 - 1) Radio system
 - 2) Power plant
 - 3) Building and land
 - 4) Drop wires to subscribers
 - 5) Telephone sets
7. Implementation Time: 1990 - 1994 (4 years)
8. Priority : Third
9. Remarks :

Project Digest (29)

1. Project Code : V-29
2. Project Title : PALAPA C1 Launching Project
3. Location : -
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Promoting national development program.
 - 2) Provision of telephone service to all Kabupaten capitals and principal Kecamatan capitals.
 - 3) Modernization of telecommunication facilities.
 - 4) Promoting the dedicated telecommunication system development of transponder users in Indonesia.
 - 5) Promoting telecommunication development in ASEAN countries.
5. Project Type : Separate project by technical field
6. Project Description: - Production of PALAPA C1 and C2
- Launching of PALAPA C1
7. Implementation Time: 1989 - 1994 (5 years)
8. Priority : First
9. Remarks : PALAPA C1 will be launched in 1991.

Project Digest (30)

1. Project Code : V-30
2. Project Title : TDMA Satellite Link Expansion Project
3. Location : Throughout Indonesia
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Expansion of SLDD service areas
 - 2) Improvement of the completion call rate
5. Project Type : Separate project by technical field
6. Project Description: Expansion of TDMA satellite links up to 4,800 channel capacities.
7. Implementation Time: 1989 - 1994 (5 years)
8. Priority : Second
9. Remarks :

Project Digest (31)

1. Project Code : V-31
2. Project Title : 50 Small Earth Stations Provision Project
3. Location : Throughout Indonesia
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
- 1) Improvement of service grade.
 - 2) Promoting regional economic activities.
 - 3) Promoting national development program.
 - 4) Provision of telephone service to all Kabupaten capitals and principal Kecamatan.
 - 5) Modernization of telecommunication facilities.
5. Project Type : Separate project by technical field
6. Project Description: - New installation of small earth stations (SBK):
- | | |
|-------------|--------|
| Sumatera | 10 SBK |
| Jawa | 2 SBK |
| Timor Timur | 1 SBK |
| Kalimantan | 14 SBK |
| Sulawesi | 9 SBK |
| Maluku | 5 SBK |
| Irian Jaya | 9 SBK |
| <hr/> | |
| Total | 50 SBK |
- Expansion of MODEM: 800 channels
7. Implementation Time: 1989 - 1994 (5 years)
8. Priority : Third
9. Remarks :

Project Digest (32)

1. Project Code : V-32
2. Project Title : 31 Small Earth Stations Relocation Expansion Project
3. Location : Throughout Indonesia
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
- 1) Improvement of service grade.
 - 2) Promoting regional economic activities.
 - 3) Promoting national development program.
 - 4) Provision of telephone service to all Kabupaten capitals and principal Kecamatan.
 - 5) Modernization of telecommunication facilities.
5. Project Type : Separate project by technical field
6. Project Description: Relocation of small earth stations (SBK)
- | | |
|-------------------------------|--------|
| Sumatera | 13 SBK |
| Bali/Nusatenggara/Timor Timur | 8 SBK |
| Kalimantan | 5 SBK |
| Sulawesi | 5 SBK |
| <hr/> | |
| Total | 31 SBK |
7. Implementation Time: 1989 - 1994 (5 years)
8. Priority : Third
9. Remarks :

Project Digest (33)

1. Project Code : V-33
2. Project Title : Packet Data Communication System (SKDP) Expansion Project
3. Location : Medan, Palembang, Jakarta, Bandung, Semarang, Surabaya, Denpasar and Batam Island
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Reduction of waiting period for new subscription.
 - 2) Improvement of service grade.
 - 3) Promoting regional economic activities.
5. Project Type : Separate project by service categories
6. Project Description: Expansion of SKDP up to the following capacities:

Name of city	Total capacity (L.U.)
Medan	200
Palembang	100
Jakarta	900
Bandung	200
Semarang	200
Surabaya	300
Denpasar	100
Batam Island	100
Total	2,100

7. Implementation Time: 1989 - 1992 (3 years)
8. Priority : First
9. Remarks :

Project Digest (34)

1. Project Code : V-34
2. Project Title : Radio Paging System Expansion Project
3. Location : 6 cities throughout Indonesia
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
- 1) Accommodation of the existing waiting applicants.
 - 2) Reduction of waiting period for new subscription.
 - 3) Promoting regional economic activities.

5. Project Type : Separate project by service categories

6. Project Description: Expansion of the radio paging system up to the following capacities:

Name of city	Paging L.U.
Jakarta	26,000
Surabaya	7,000
Bandung	4,000
Medan	4,000
Semarang	2,000
Ujung Pandang	2,000
Total	45,000

7. Implementation Time: 1989 - 1994 (5 years)

8. Priority : Second

9. Remarks :

Project Digest (35)

1. Project Code : V-35
2. Project Title : Land-Mobile Radiotelephone System Expansion Project
3. Location : Jakarta, Bandung, Semarang and Surabaya
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
- 1) Accommodation of the existing waiting applicants.
 - 2) Reduction of waiting period for new subscription.
 - 3) Promoting regional economic activities.

5. Project Type : Separate project by service categories

6. Project Description: Expansion of the land-mobile radiotelephone system up to the following capacities:

Name of city	Total Capacity (L.U.)
Jakarta	3,500
Bandung	1,500
Semarang	1,000
Surabaya	2,000
Total	8,000

7. Implementation Time: 1991 - 1994 (3 years)

8. Priority : Third

9. Remarks :

Project Digest (36)

1. Project Code : V-36
2. Project Title : ISDN Pilot Project
3. Location : Jakarta
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Improvement of service grade.
 - 2) Promoting regional economic activities.
 - 3) Creation of the standard for ISDN new services.
 - 4) Investigation of the requirement from ISDN users.
5. Project Type : Separate project by service categories
6. Project Description: Provision of the narrow band ISDN model system.
7. Implementation Time: 1990 - 1993 (3 years)
8. Priority : Second
9. Remarks :

Project Digest (37)

1. Project Code : V-37
2. Project Title : Coin Telephone Sets Provision Project
3. Location : Principal cities throughout Indonesia
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Improvement of accessibility to telephone service.
 - 2) Promoting regional economic activities.
 - 3) Promoting national development program.
5. Project Type : Separate project by service categories
6. Project Description: Provision of 47,000 coin telephone sets as the following:

Zone	Booth Type	In-house Type
Sumatera	5,000	2,500
Jakarta	9,500	7,000
Jawa	9,000	7,000
Others	3,500	3,500
Total	27,000	20,000

7. Implementation Time: 1989 - 1992 (3 years)
8. Priority : First
9. Remarks :

Project Digest (38)

1. Project Code : V-38
2. Project Title : Local Cable Maintenance Center Project
3. Location : Jakarta
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Improvement utilization efficiency of the existing facilities.
 - 2) Improvement of repair capability for the local cable network.
 - 3) Accommodation of the existing waiting applicants.
 - 4) Reduction of waiting period for new subscription.
5. Project Type : Separate project by technical field
6. Project Description: Provision of local cable maintenance centers at the following locations in Jakarta:
 - Kota Area
 - Cempaka Putih Area
 - Jatinegara Area
 - Slipi Area
 - Kebayoran Area
7. Implementation Time: 1989 - 1993 (4 years)
8. Priority : First
9. Remarks :

Project Digest (39)

1. Project Code : V-39
2. Project Title : Local Cable Network Management Center Project
3. Location : Central cities in all WITELs
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Improvement utilization efficiency of the existing facilities.
 - 2) Improvement of repair capability for the local cable network.
 - 3) Accommodation of the existing waiting applicants.
 - 4) Reduction of waiting period for new subscription.
5. Project Type : Separate project by technical field
6. Project Description: Provision of 12 local cable network management centers to execute following works:
 - 1) Existing facility data management for each exchange
 - 2) Planning and execution of failure cable repair
 - 3) Storing of spare cables and materials
 - 4) PERUMTEL's construction for small cable network
 - 5) Guidance of facility maintenance to each exchange
7. Implementation Time: 1989 - 1993 (4 years)
8. Priority : First
9. Remarks :

Project Digest (40)

1. Project Code : V-40
2. Project Title : Education & Training Center Expansion Project
3. Location : 9 cities throughout Indonesia
4. Objectives : To fulfill and support the following requirements for the telephone and non-telephone services:
 - 1) Development of man power in PERUMTEL.
 - 2) Improvement of operating and maintenance capability in PERUMTEL
5. Project Type : Separate project
6. Project Description: Capacity expansion of the existing education and training facilities at the following locations:

- Bandung	- Medan
- Jakarta	- Padang
- Semarang	- Palembang
- Surabaya	- Ujung Pandang
- Denpasar	
7. Implementation Time: 1989 - 1992 (3 years)
8. Priority : First
9. Remarks :

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