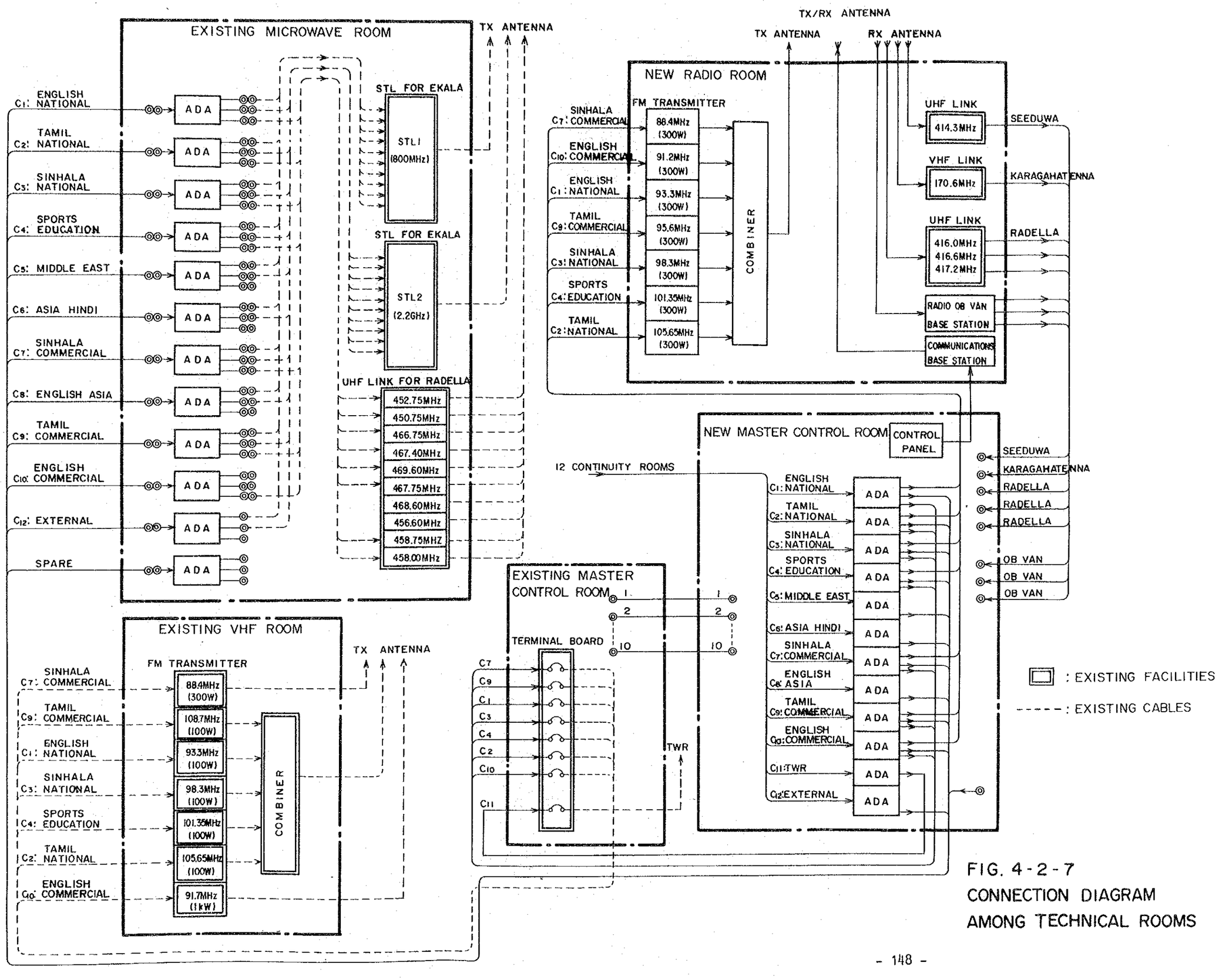


FIG. 4-2-7
CONNECTION DIAGRAM
AMONG TECHNICAL ROOMS

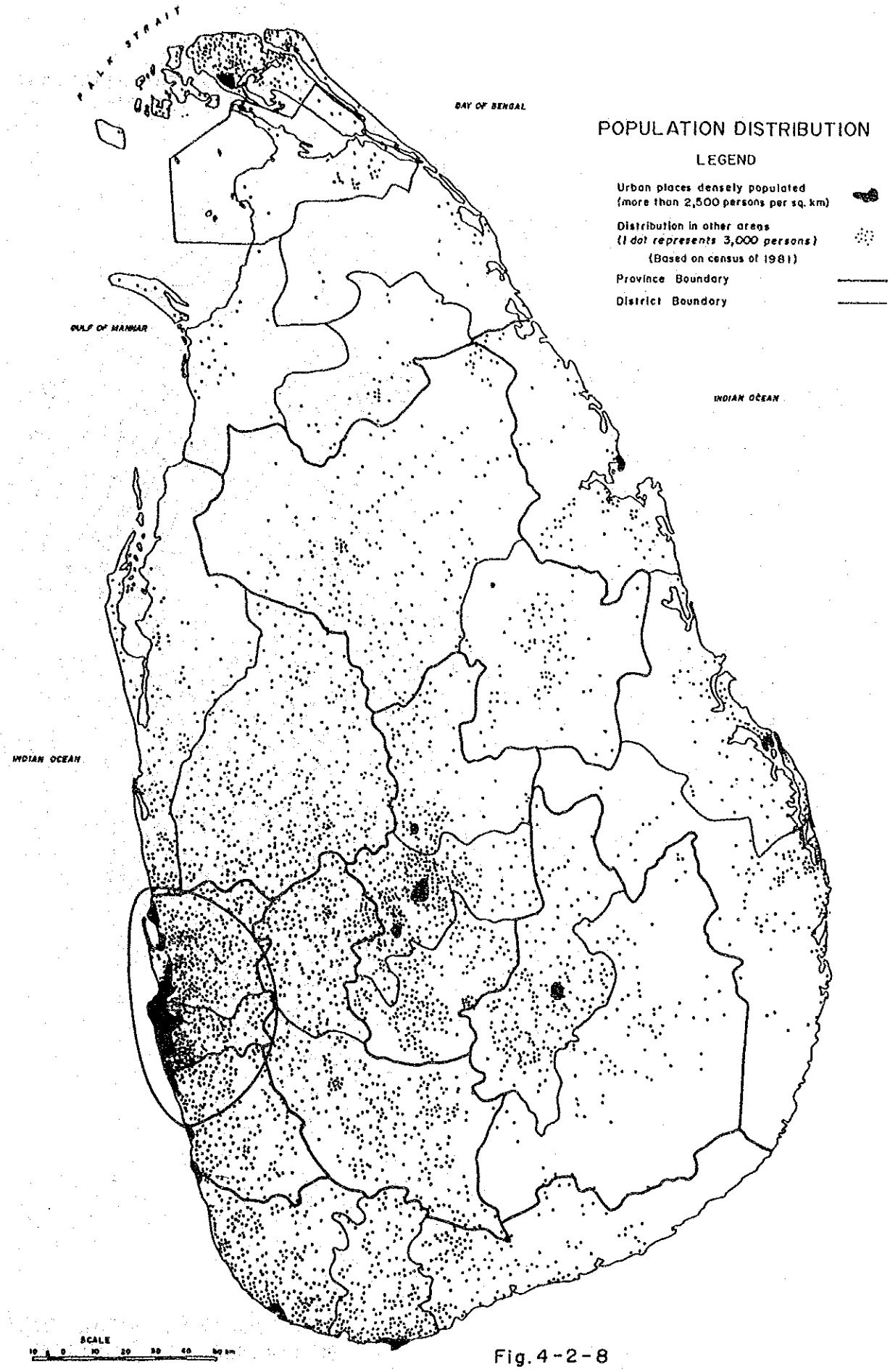


Fig. 4-2-8
ESTIMATED FM SERVICE AREA AND
ITS POPULATION DISTRIBUTION

2 DIPOLE VERTICAL STYLE ANT
(f = 100 MHz)

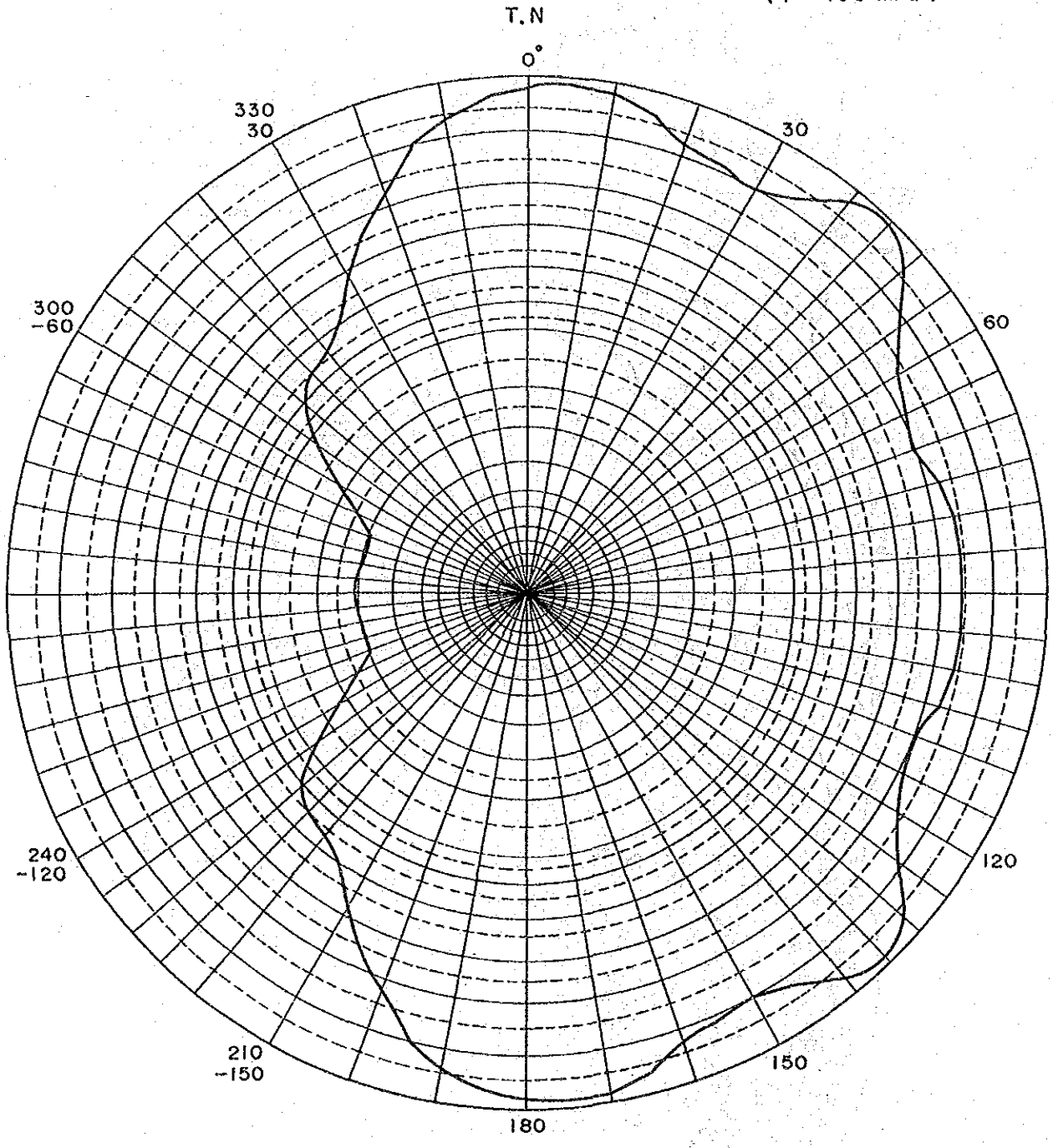


Fig. 4-2-9
ANTENNA HORIZONTAL DIRECTIVIT
OF COLOMBO FM STATION

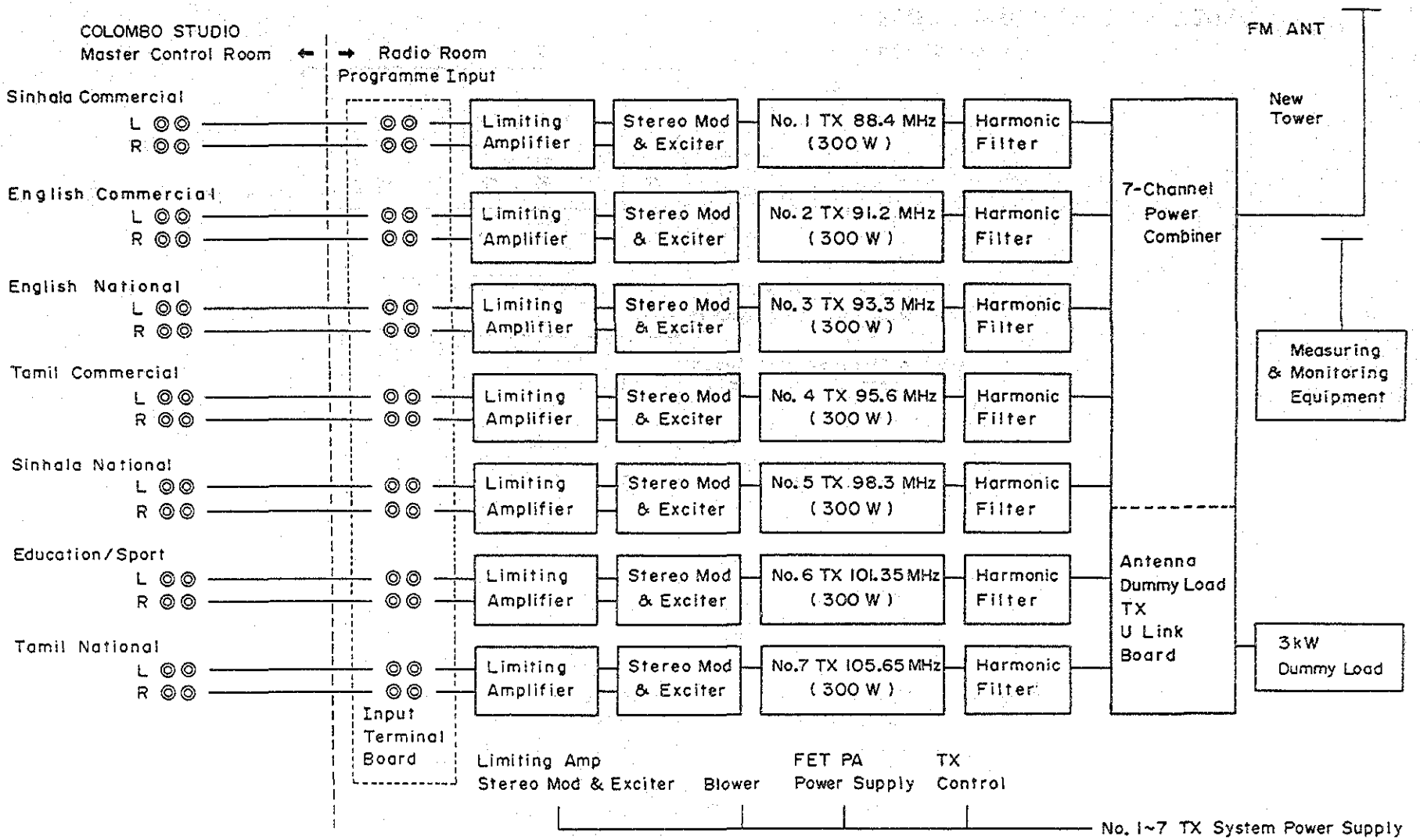


Fig. 4-2-10
BLOCK DIAGRAM OF FM TRANSMITTING SYSTEM

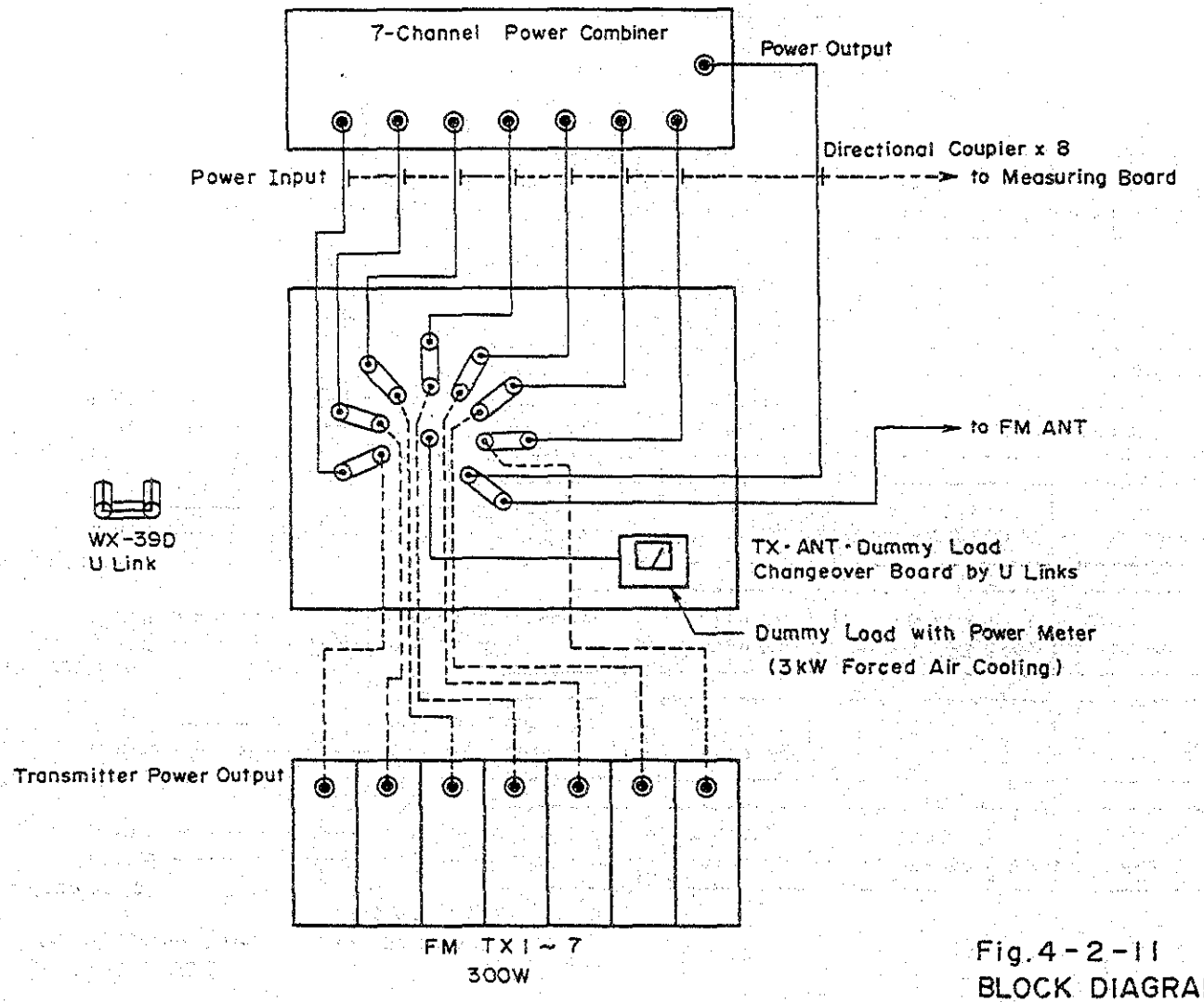


Fig.4-2-11
BLOCK DIAGRAM OF ANTENNA
OUTPUT SYSTEM

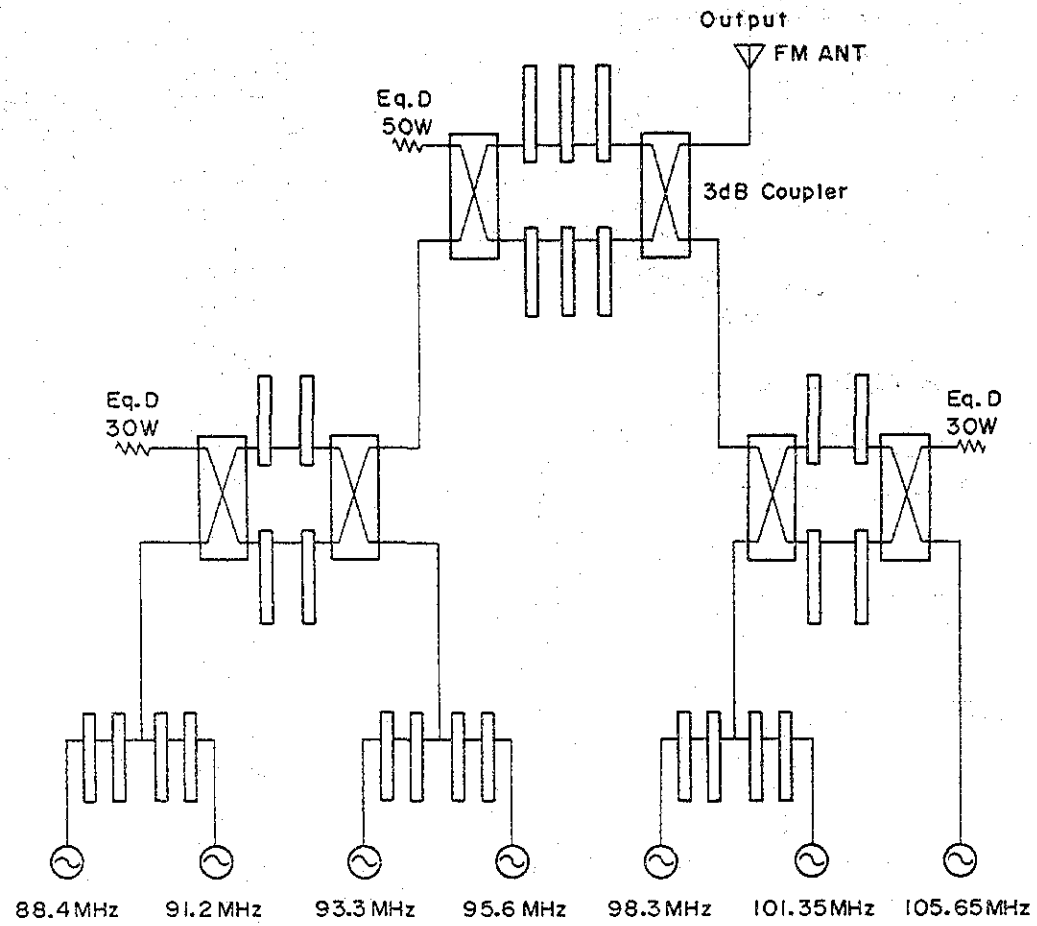


Fig. 4-2-12
BLOCK DIAGRAM OF FM 7-CHANNEL POWER COMBINER FOR COLOMBO STATION

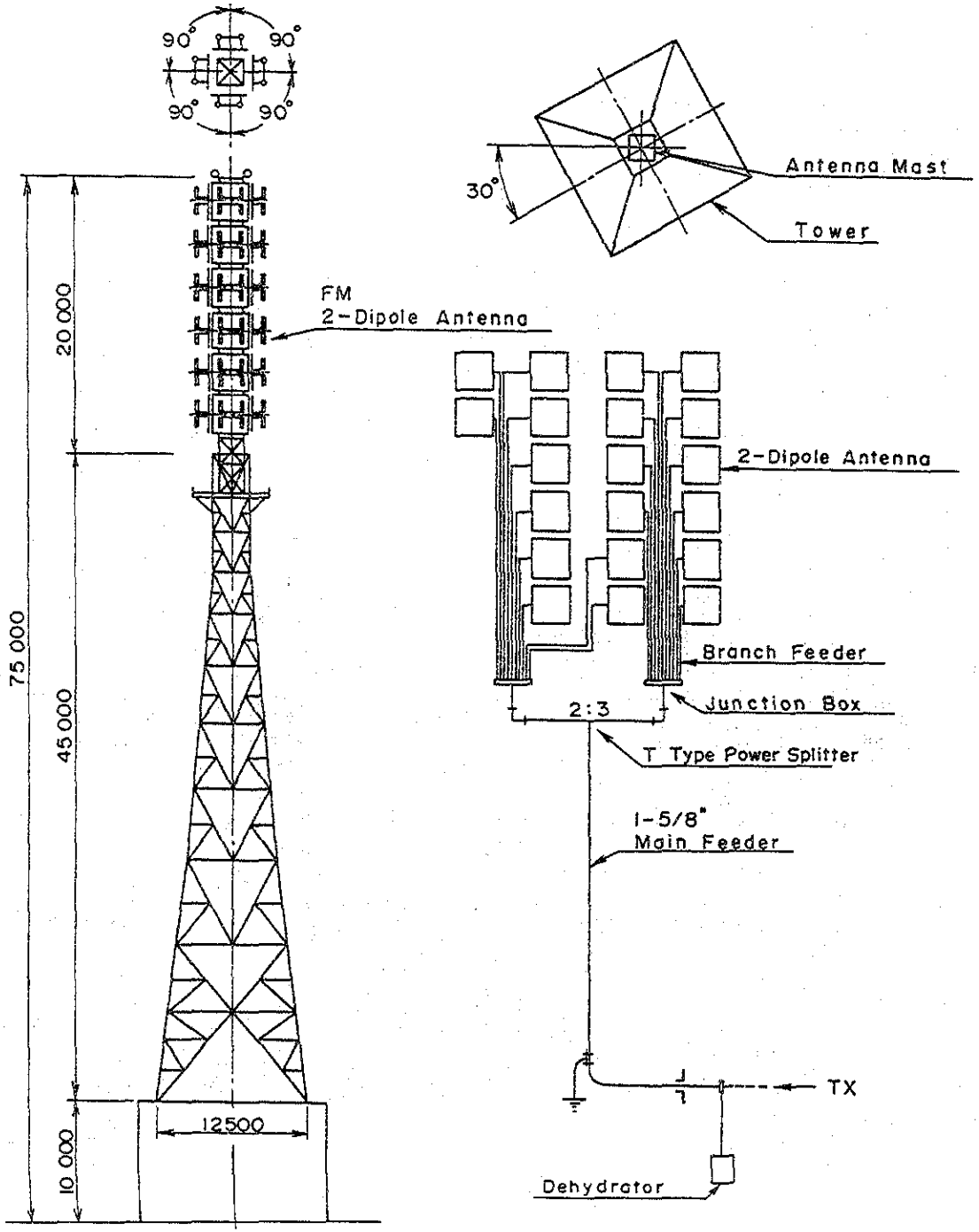


Fig.4-2-13
ANTENNA TOWER &
ANTENNA SYSTEM
OF COLOMBO STUDIO

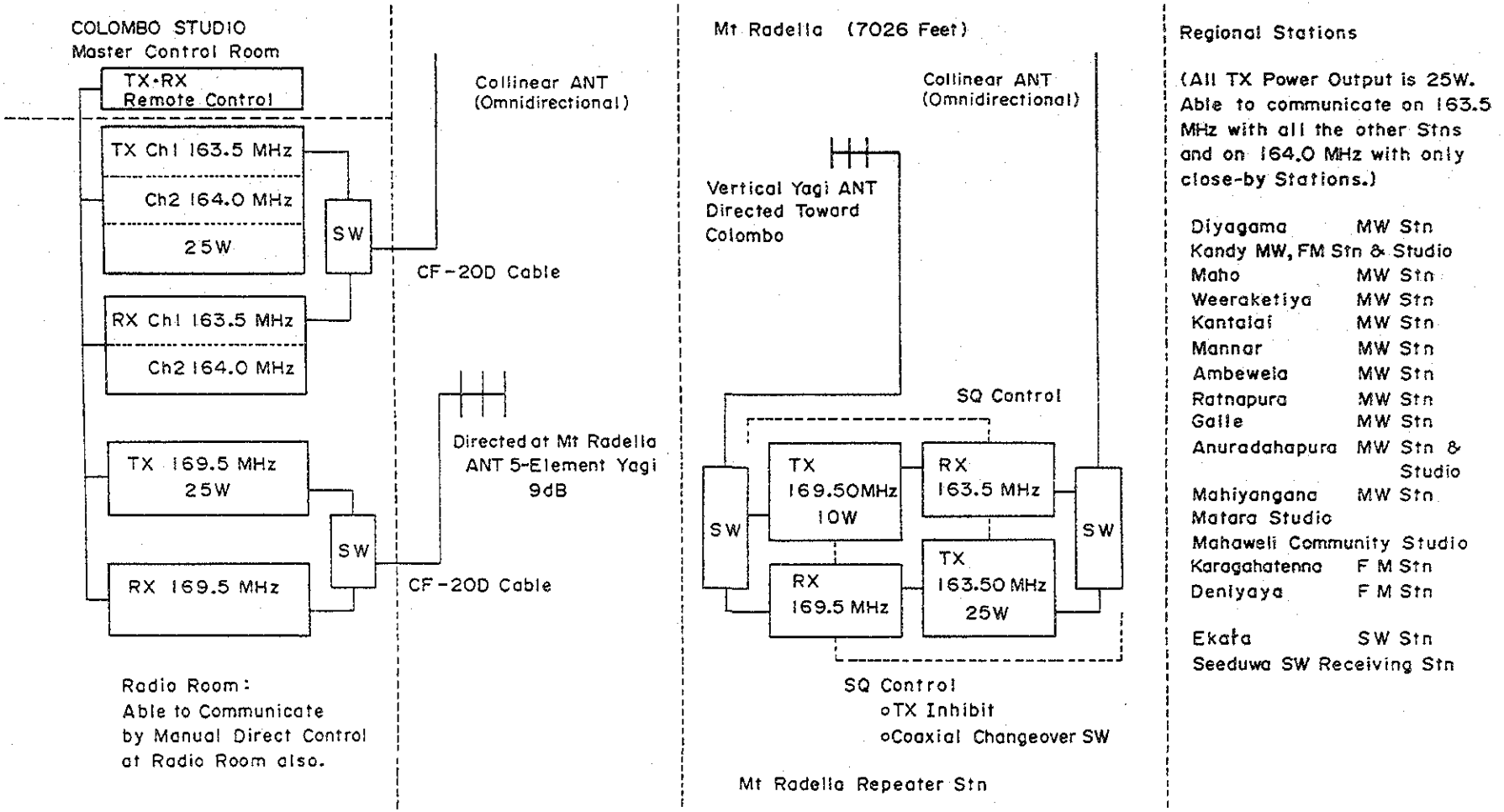
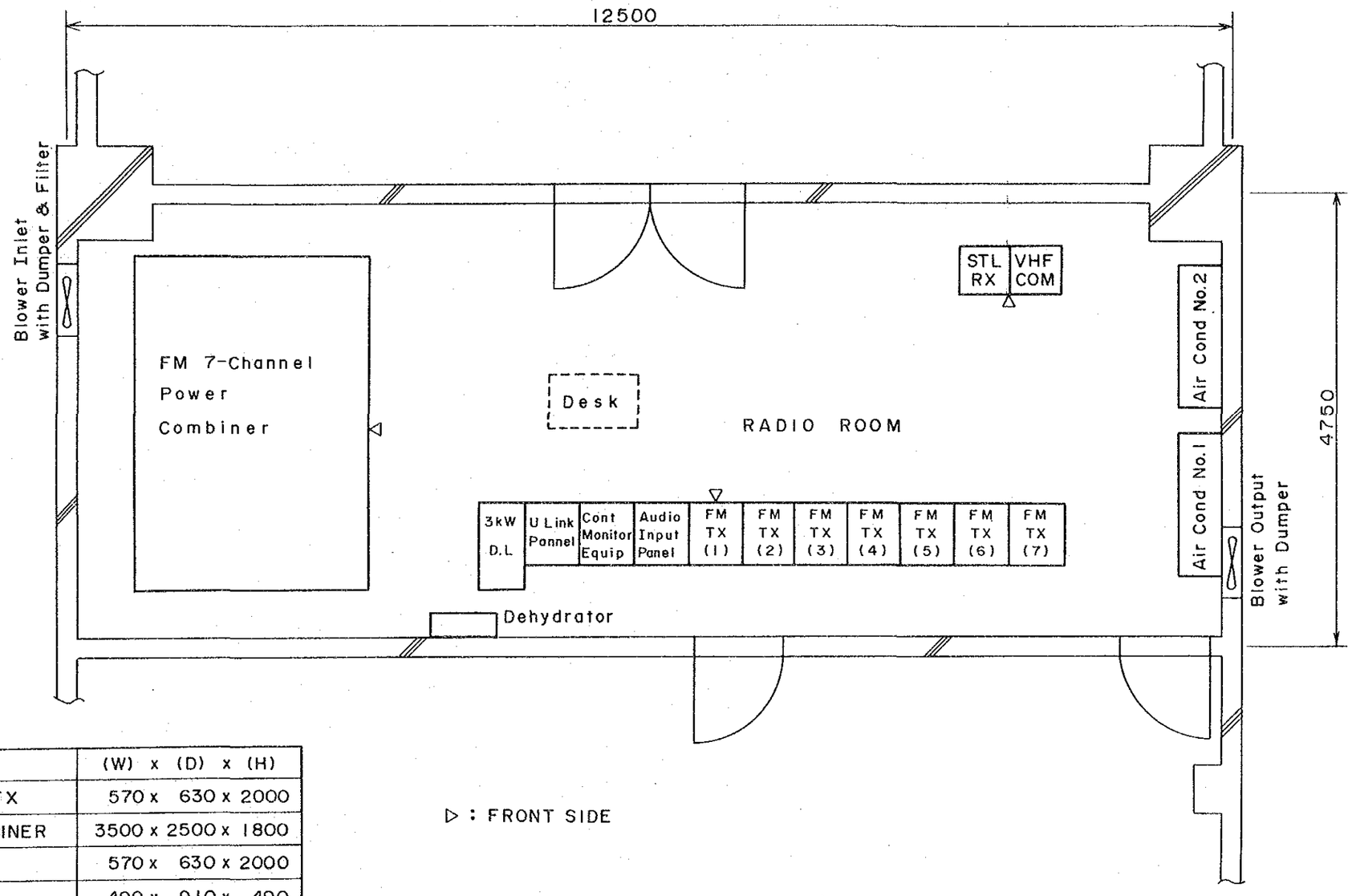


Fig.4-2-14
BLOCK DIAGRAM OF THE VHF COMMUNICATION SYSTEM-1



	(W) x (D) x (H)
300W FM TX	570 x 630 x 2000
POWER COMBINER	3500 x 2500 x 1800
U LINK	570 x 630 x 2000
3kW D L	490 x 910 x 490
CONT & MON EQUIP	570 x 630 x 2000

▷ : FRONT SIDE

SCALE 1/50

Fig. 4-2-15
LAYOUT PLAN
OF RADIO ROOM

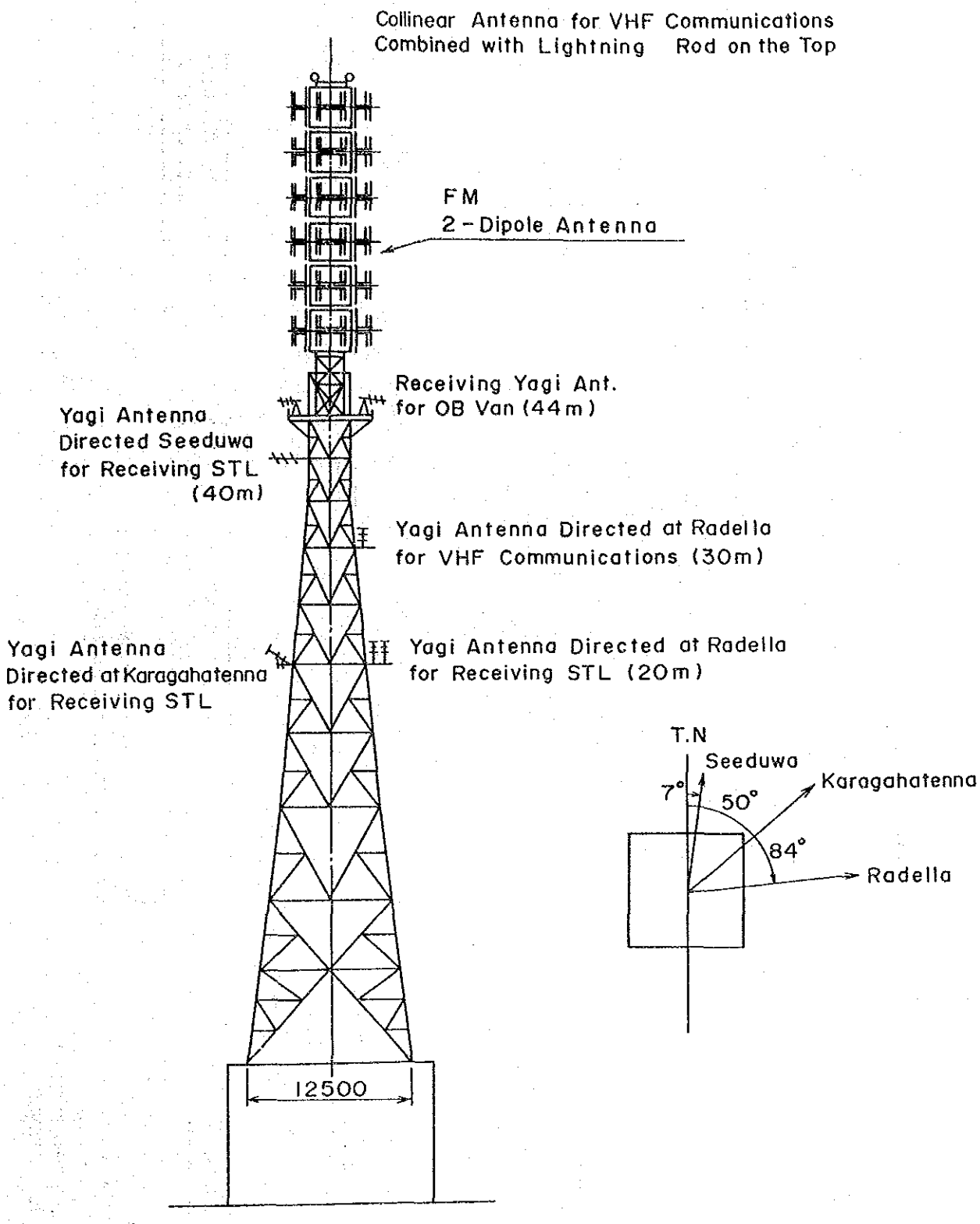
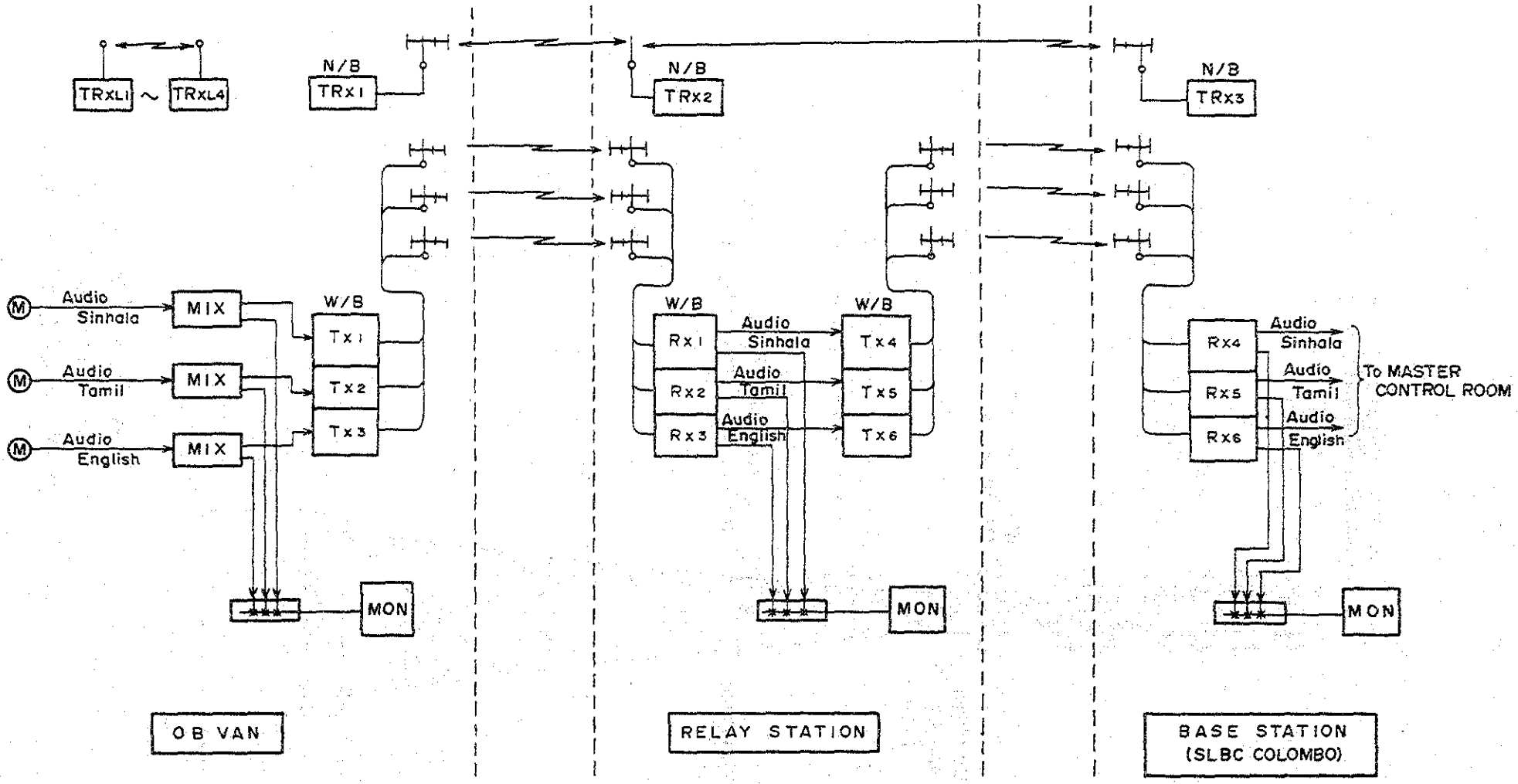


Fig. 4-2-16
LAYOUT PLAN OF ANTENNA
IN COLOMBO STUDIO



Ⓜ : MICROPHONE
MIX : PORTABLE MIXER
MON : MONITOR SPEAKER
Tx1~6 : WIDE BAND TRANSMITTER
Rx1~6 : WIDE BAND RECIEVER

TRx1~3 : NARROW BAND COMMUNICATIONS
TRxL1~4 : LOCAL COMMUNICATIONS

FIG. 4-2-17 SYSTEM DIAGRAM OF RADIO OB VAN

4-3 Execution Plan

4-3-1 Construction Industry

(1) Construction Industry in Sri Lanka

The contribution of construction to GDP was at its highest at 8.6% in 1983. Statistics on construction output are compiled under three broad categories, residential, nonresidential and other construction. Residential construction has traditionally accounted for the largest share, on average around 50% of gross output of the sector, while nonresidential and other construction take 30% and 20% respectively.

The construction sector has shown considerable dynamism during the decade 1977-1986. During this period construction has more than doubled in real terms (based on 1975 prices). The index of construction output in current values has recorded a gradual rise from 100 in 1975 to 241 in 1986. The most dynamic subsector is residential construction, which grew by 350%. Growth in nonresidential construction, viz., industrial, commercial, educational buildings etc., was, by comparison, more modest, at 150%. The remainder of the construction sector grew at approximately the same rate as the average for the overall sector, that is, by 240%.

This part of the construction sector has benefited a great deal from government investment in roads, highways, the Katunayake Airport, telecommunication lines, water supply construction and dam construction under the Accelerated Mahaweli Development Programme.

The main reason for the dynamism of the construction sector during the last decade is the increase in the level of aggregate investment and gross domestic fixed capital formation, of which construction accounts for approximately 50% - 60%. Aggregate investment in the economy, which stood at around 16% of GDP in 1977, rose to 33% in 1980. However, the average for the period 1977 to 1987 worked out to around 23% of GDP. This high rate of investment was made possible by the increased flow of foreign aid which accounted for much of the difference between the pre-1977 investment rate and the post-1988 average.

Most of the foreign aid was channeled to large infrastructure projects such as the Accelerated Mahaweli Programme, irrigation, power and energy and water supply and road rehabilitation, all of which had very high construction components. Public sector investment, including investment undertaken by key public corporations, remained at more than half the total investment.

However, since 1982 planned investment by the government has been continuously scaled down due to problems of mobilizing adequate domestic resources to meet growing budgetary expenditures. This has been especially acute since 1983 in view of the increased defense spending. If public investment was kept at earlier planned levels, the rate of increase in construction activity would have been much higher than what has actually taken place.

In Sri Lanka the construction sector employed approximately 236,100 persons in 1986. Employment in the construction sector grew by a massive 11.8% per annum over the period 1981-1986, a considerably higher rate than that registered by any other sector of the economy. Employment in the agriculture, industry and services sectors, by comparison, grew at 2.5%, 7.9% and 0.6% respectively. Today the number of construction workers is estimated to exceed 300,000.

The high rate of growth of employment in Sri Lanka's construction industry is a result of the dynamism of the residential construction sector which grew rapidly under the Million Houses Programme. As also mentioned above, residential construction accounted for over 50% of value added in construction. The technology employed in this sector has been basically labour intensive.

The Construction Industry labour force is made up of technical management and supervisory personnel [about 2.5%] who are mostly graduate engineers or have had full-time vocational training, skilled workers [18%] who have learned by long apprenticeship, equipment operators and mechanics [4%] and unskilled or semiskilled workers [75%]. About one half of Sri Lanka's emigrants to the Middle East have been construction workers, particularly equipment operators, carpenters and masons. Remittances from emigrant construction workers is an important source of foreign exchange.

Indirect employment generated by the construction sector is perhaps even more impressive. Construction has very strong backward linkage. It is a significant purchaser of goods and services from other sectors of the economy. As a result, any increase in construction activity leads to an increase in output and employment in those industries which produce basic inputs for the construction sector.

There are 6 state sector major contractors and over 1000 private local contractors operating today. In 1985 about 5 of these private sector contractors had an annual output of over Rs. 80 million and another 5 had turnovers between Rs. 25 million and Rs. 80 million. Generally about 25 local contractors are competing for jobs which are over Rs. 15 million. The majority [about 60%] are operating in the range of Rs. 1 million to 5 million as small-scale contractors. Another 30% are operating below Rs. 1 million and are designated as minor contractors.

In 1984 foreign contractors were involved in nearly 55% of the expenditures, mostly as main contractors. But with completion of the Mahaweli Projects the participation of foreign contractors has been reduced. The number of foreign contractors employed in Sri Lanka in recent years exceeded 30.

——The above description with reference to the construction industry in Sri Lanka is based on the data from I.C.T.A.D. (Institute for Construction, Training and Development).——————————————

The state of the construction industry in Sri Lanka differs vastly between the public sector and private sector. In the case of the former, there are many instances where the departments and authorities concerned, as well as the corporations concerned, handle the entire process of the construction of public buildings, from planning and designing to procurement of materials and equipment and even to the conducting of the construction work itself. As a result, such departments, authorities and corporations possess a certain level of mechanical capacity and are capable of undertaking considerably large-scale works. They do not, however, normally take part in construction work in the private sector. On the other hand, nine of the private construction companies are actually engaged in considerably large-scale construction work including public works. However, most of them scarcely possess mechanical capacity and therefore are actually conducting extremely inefficient work. For that reason, many of the local construction companies are apparently

degenerating themselves into the position of subcontractors who simply supply labourers to the foreign-capital firms or foreign firms which possess mechanical capacity and technology. Incidentally, in Sri Lanka, a recipient of extremely large amounts of financial aid from other countries, there can be many cases where construction work, especially large-scale works, are undertaken by foreign-capital firms. As to the installation firms, there are a good many firms specializing in installation work, but most of them lack experience and good ones are very few.

From a technical point of view, the construction industry in Sri Lanka has many problems because of unfavourable circumstances there, such as the shortage of experienced engineers and skilled workers, the lack of mechanization and the restricted availability of usable materials

As data giving an indication of what the construction expenses in Sri Lanka are like, an excerpt from the report of The Statistics Unit of The Programming Division, Ministry of Housing and Construction, is included in the Appendices at the end of this Report. This is a part of the results of a survey made on the past fluctuations of construction cost indices and the prices of construction materials.

Unit costs of major materials and labour wages as of the end of 1989 are shown in Table 4-3-1 and Table 4-3-2 respectively.

1) Unit Costs of Major Materials

Table 4-3-1

Items	Description	Unit	Unit cost (Rs)
Cement	normal Portland cement 50kg / bag	bag	240
Ready-mixed concrete	25N-15-20 210kg 15m-15-20 130kg	m^3	3,200
Sand			2,400
Gravel	crushed stone 25m/m crushed stone 50m/m		635 425
Rubble	150~200		320
Reinforcing-bar	small size	t	24.500
Common brick		1000 Nos	650
Concrete block	200 x 200 x 400mm 150 x 200 x 400mm	Nos Nos	15 10.5
Grille block	cement 300 x 300 x 50	1000 Nos	18.000
Terrazzo tile		m^2	400
Floor porcelain tile	25 x 25	m^2	435
Ceramic tile	200 x 200	Nos	14
Wall ceramic tile	colour	Nos	3.5
Timber : structure		m^2	22.650
Timber : fixture	teak	m^2	42.500
Corrugated asbestos Cement sheet	long pitch	m^2	130
Clean glass	5mm	m^2	320
Oil paint		ℓ	130
Polyvinyl chloride emulsion paint		ℓ	115
Acrylic emulsion paint		ℓ	125
Enamel paint		ℓ	140
Clear lacquer		ℓ	200
Oil stain		ℓ	190
Plywood (teak)	6mm	ℓ	585

2) Labour Wages

Table 4-3-2

Trade	Wages (Rs/day)
Normal labourer	150
Earth worker	150
Concretor	200
Reinforcing-bar placer	200
Carpenter (form work)	240
Carpenter (common work)	240
Carpenter (fixture work)	250

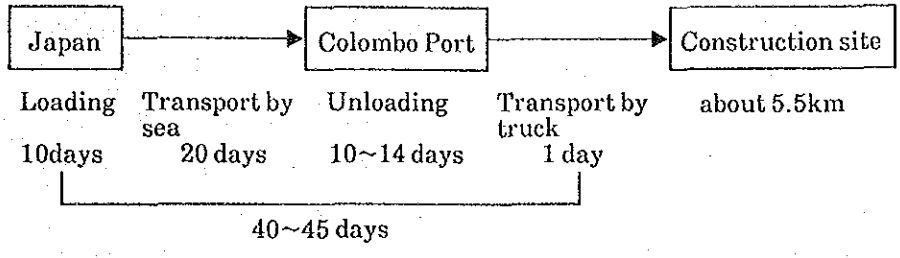
Trade	Wages (Rs/day)
Brick layer	200
Block layer	200
Mason	250
Tile layer	250
Plasterer	240
Tinsmith	230
Painter	240

(2) Matters to Which Special Attention Must be Paid in Conducting the Construction Work (including Procurement of Materials)

The construction sector in Sri Lanka is currently depressed because of the influence of such trends as economic depression and the social unrest seen in some parts of the country. So, in implementing this Project, it is necessary to bear in mind that, as a result of such circumstances as mentioned above, the nation's ability to supply construction materials at present is quite low. It is also essential to take note of the fact that Sri Lanka has over the years been depending to a considerable extent on imports for the supply of cement, reinforcement materials and structural steel, all of which are key items of construction materials.

Since one cannot always expect a substantial volume of such materials to be in stock, it is advisable that measures be taken at the earliest possible stage to procure these construction materials. In scheduling the construction work, it is necessary to take into account the time required in the manufacture of the materials and, if the materials are to be imported from Japan, the time required for transport and other procedures as well. The following is a chart showing the route for the transportation of construction materials from Japan to the construction site.

Although there seems to be no particular problem regarding this route itself, it is still necessary to have a full grasp of the latest information concerning the stability and safety of unloading cargoes at the port of Colombo and also of transportation by truck, in view of the political uncertainties in Sri Lanka.



To start construction work in Sri Lanka, it is necessary to take procedures to apply for government authorization of the construction under the UDA Planning and Building Regulations.

Since this would normally take about one month, it is necessary to take this period into account as an essential factor prior to the start of construction work.

In and around Colombo, there normally is a considerable amount of rainfall in April-May and October-November. Consequently it is necessary to draw up the construction plan in such a way that outdoor work and the transport of large amounts of materials are avoided during the above-mentioned two periods. Among the various types of construction work, special attention is needed in conducting the work relating to the acoustic treatment of the studio. Such work includes the laying of concrete blocks, mortaring, installing of soundproof doors and viewing windows, handling of airconditioning ducts, and so forth.

For such a unique type of construction work as mentioned above, it is most essential to select a contractor with especially wide experience. Furthermore, every care should be taken so that the adjustments between the construction work and broadcast-installation work are made without fail and with maximum smoothness.

In a similar sense, equally essential is supervision by a team of consultants who are specialists with much experience and a high calibre of expertise in the fields of construction and broadcasting.

4-3-2 Execution Policy

With regard to the construction of facilities and the provision of equipment under this Project, the Japanese consultants will conduct the planning and designing work and as a proxy, the work relating to the tender and the subsequent conclusion of contracts, as well as the work of supervising the construction work, all based on the Japanese system of grant aid financial assistance.

The construction of the facilities and the supplying and installation of equipment will be carried out by one or more Japanese specialist contractors who will have been selected by tender from among those who have ample experience in construction work overseas, have the ability to complete the work within the designated construction period and who thoroughly understand the system of grant aid financial assistance. As for the materials and the construction methods to be used, every effort will be made to make effective use of locally produced materials and to adopt construction methods suited to local conditions as far as possible, taking into consideration such factors as the conditions and location of the construction site, the quality of the locally produced materials, their availability and the facility of their maintenance after the completion of construction.

The basic execution policies for implementation of this Project are as follows:

1) In conducting the construction work, all necessary measures shall be taken to ensure that the work in no way hinders the day-to-day operation of the existing installations.
2) The construction shall be entirely completed within the scheduled construction period and sufficient measures shall be taken to ensure safety throughout the period of construction.
3) Close contact shall be maintained with the client and a cooperative system shall be established for smooth progress of the construction work.
4) Sri Lankan laws or regulations governing such matters as construction, power source and wireless equipment shall be observed and the local customs and manners and labour conditions shall be respected.

5) All necessary measures shall be taken to ensure satisfactory storage and management of materials and equipment.

4-3-3 Allotment of the Scope of the Work

(1) The construction work

The following table shows the scope of work covered by Japanese grant aid financial assistance and the range of work which is required to be carried out by the Sri Lankan side at its own expense.

	Construction Work to be Undertaken by the Japanese Side	Construction Work to be Undertaken by the Sri Lankan Side
1) Site for construction of new facilities		Shall offer, for construction purposes, a part of the adjacent vacant land, as the need arises, free of charge.
2) Site preparation		Shall remove all obstructive objects on the grounds including all trees except the designated Bo tree, and shall level the ground so that it conforms with the level of the existing site.
3) Fences and gardening		Shall remodel, as the need arises, the fences on the site for the construction of new facilities and shall conduct gardening work.
4) Drive within the site	Shall undertake the construction work.	
5) The building	Shall undertake the entire work of construction	
6) Remodelling of the existing portions		The existing portions shall be remodelled in such a way as to match the new building. For that purpose, remodelling shall be done of: 1) the doorway to the corridor of the new Master Control Room, and 2) the waiting room, etc., nearby the sound lock of the multipurpose studio.

	Construction Work to be Undertaken by the Japanese Side	Construction Work to be Undertaken by the Sri Lankan Side
7) Building equipment a) Electrical Installation	Shall conduct electrical installation work on the site and within the building, with regard to the secondary (low voltage) side and further, of the power transformer as mentioned in the right-hand column.	Shall construct a substation at an appropriate location on the site, install a power transformer of appropriate capacity and a main switch, connect to them a city power line from outside the site so as to enable the use of the power, and, concerning the above-mentioned construction work, shall take necessary steps, including negotiations with the Ceylon Electricity Board (CEB).
b) Water supply	Shall conduct installation work on the site and within the building.	Shall draw into the site the city water-supply main pipe for the new building.
c) Drainage	Shall conduct the installation work up to the final pit on the site where facilities are to be newly built.	Shall conduct the construction of the drainage facilities from the final pit to the main pipe of the public drainage.
d) Telephone	Shall install the MDF at an appropriate place near to the existing building and shall conduct the laying of the conduit from the MDF to the locations where the telephone sets are to be installed, and the installation of the terminal box and the outlet box.	Shall install the telephone cables, provide the telephone exchange and telephone sets, and shall conduct the wiring and connecting work.
8) Furniture and fixtures		Shall procure, as the need arises, furniture and fixtures (including carpets, desks and chairs, etc.) except those which are built-in.
9) New Tower	Shall design and erect a new tower.	Shall confirm that the new tower does not interrupt a clear line-of-sight of existing links.

Of the above-mentioned work to be carried out by the Sri Lankan side, the work of preparing the ground for the construction of facilities must be completed before the Japanese side starts its construction work. The work to draw in the lines and pipes for electricity, water-supply, drainage and telephones must be carried out in accordance with the execution schedule of the Project, while the work to construct the fences and gardens needs to be completed after the completion of the construction work by the Japanese side and before the start of use of the newly-constructed facilities.

(2) Installation of Broadcast Facilities

The table below shows the scope of work to be undertaken by both parties in terms of broadcast facilities.

Item	Work to be Undertaken by the Japanese Side	Work to be Undertaken by the Sri Lankan Side
1) Frequency allocation for FM transmitters, OB van link and VHF communication		Shall obtain frequency allocation from the proper authority in due course of time.
2) Existing STL	Shall wire the existing STL from the new Master Control Room.	Shall use the existing STLs for Ekala and Radella as they are.
3) Existing ring main	Shall supply 10 signals with 0dBm in 75ohms to the existing ring main.	Shall use the existing ring main as it is.
4) Existing clock	Shall provide a new slave clock in each of three news studios.	Shall use the existing clock system as it is.
5) Wiring route and cable laying a) Cable laying between buildings	Shall supply cables.	Shall provide cable routes and lay down cables between the two places.
b) Cable laying between the new and old Master Control Rooms	Shall supply cables.	Shall provide cable routes and lay down cables between the two Master Control Rooms.
6) Existing news studios	Shall provide cables for main power, clock pulse, interphone, and studio outputs.	Shall maintain use of the three existing news studios (A_1, A_2, B) as they are. Shall provide cable routes and lay down cables between the new M.C.R. and the news studios.
7) Broadcast equipment	Shall design, manufacture, install and wire broadcast equipment.	
8) FM transmitting antenna	Shall design, manufacture, install and wire antennas.	

(3) In addition, the Sri Lankan side shall undertake the following items:

1) To provide data and information necessary for detailed design.
2) To provide the land and space necessary for implementing the Project.
3) To provide facilities for distribution of electricity, drainage, communication and security.
4) To provide necessary permissions, licences and other authorizations for carrying out the Project.
5) To ensure prompt unloading, tax exemption and customs clearance at ports of disembarkation in Sri Lanka and prompt internal transportation therein of products purchased under the Grant.
6) To exempt from customs duties, internal taxes and other fiscal levies which may be imposed in Sri Lanka with respect to the supply of products and services under the verified contracts.
7) To accord without delay to Japanese nationals whose services may be required in connection with the supply of the products and services under the verified contract such facilities as may be necessary for their entry into Sri Lanka and stay therein for the performance of their work.
8) To bear advising commissions of Authorization to Pay (A/P) and payment commission to the Japanese foreign exchange bank for the Banking Arrangement.
9) To secure and bear all the expenses, other than those to be borne by the Grant, necessary for construction of facilities as well as for the transportation and installation of the equipment.
10) To maintain and use properly and effectively all the facilities including newly introduced system and materials provided under the Grant.

4-3-4 Construction Supervision Plan

In order to ensure the smooth progress of this Project, it is most important that well-coordinated contacts are maintained among the various Japanese government organizations, Sri Lankan government organizations, the consultants and the contractors. Furthermore, prior to the start of the construction work, the consultants and the contractors must consider the following points and draw up the construction plan accordingly.

Points to be carefully considered include the natural conditions, labour conditions, technical capacities, the scope of work to be undertaken by each of the two countries, procurement of materials and equipment, transport of materials and equipment to the construction site, the methods of construction and the arrangements for test-runs of the new installations.

The consultants shall arrange to send a supervisor with an appropriate technical expertise and shall, at the same time, send to the construction site a project manager and specialist engineers at appropriate stages in accordance with the progress of the construction work.

Under this Project, it is expected that the products, materials and equipment to be procured in Japan will reach a considerable amount. So, with regard to such matters as the inspection and approval of blueprints and specifications, and the inspection of the products, every effort shall be made to ensure the smooth progress of the procurement work by having supervisors sent to Sri Lanka and by having those in charge of designing the equipment and materials closely cooperate with one another under the project manager who is responsible for the entire design process.

Based on the construction supervision policy as described above, the following work shall be carried out by the consultants:

(1) Construction Contracts

Selection of the contractors to be invited to the tenders, preparation of such documents as construction contracts, preparation for the tenders, being present at the tenders, examination of the detailed statements giving the breakdowns of the expenses of the construction work, and being present at the signing of construction contracts.

(2) Inspection and Approval of the Construction Drawings

Inspection and approval of the construction drawings, specifications, samples of materials, and the equipment and materials to be submitted by the contractor.

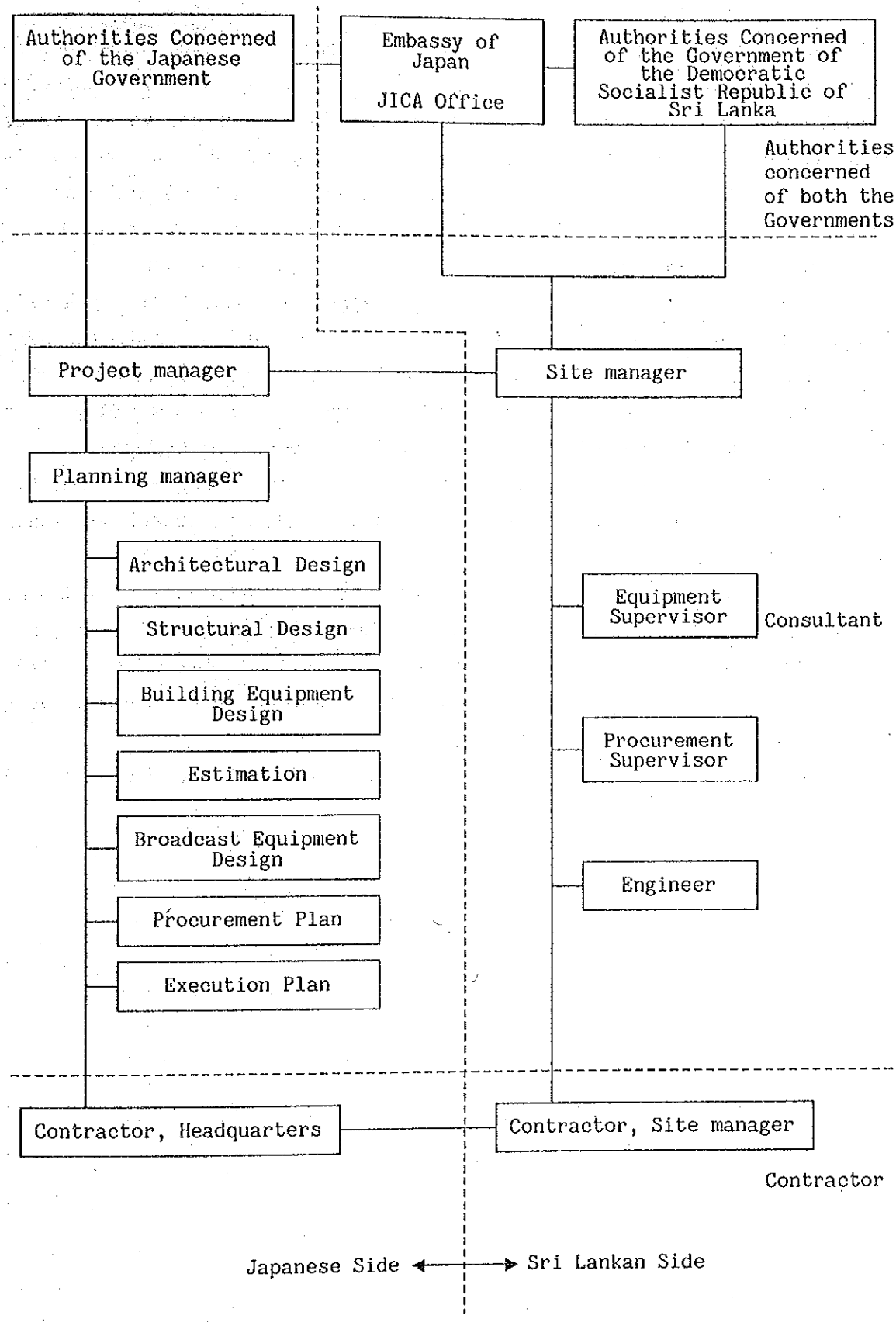
(3) Guidance on and Inspection of the Construction Work

Examination of construction plans, schedule, etc., giving guidance on the construction work, inspections at the time of completion of construction work, and other supervisory work.

(4) Reporting to the Client and Cooperating with the Client in the Client's Work of Approving Payments

Reporting to the client about the progress of the construction work, cooperating with the client in the latter's procedures to approve payments. Reporting to Japanese government related agencies on the progress of the construction work.

Organization Chart of Execution Plan and Execution Supervising Plan



4-3-5 Procurement Plan for Materials and Equipment

As to the materials and equipment necessary for the construction work, the policy to be adopted is to procure them locally (including products of third countries) as much as possible. However, as for those that cannot be procured locally, or those for which the supply is unstable, or those whose quality and performance are markedly inferior, or those that can be procured locally but at a disadvantage in terms of price, such materials or equipment shall be imported from Japan.

Especially, such items as cement, aggregate (sand and gravel), bricks, concrete blocks, roof tiles, wooden doors and windows, terrazzo tiles and paints shall be locally procured, while such products as metal soundproof doors, viewing windows, and equipment for electricity, air conditioning and water-supply/drainage shall be imported from Japan.

As to the procurement of manpower, too, all the personnel, with the exception of engineers and those with special skills and expertise, shall be employed locally.

As regards the materials and equipment to be transported from Japan, careful attention shall be paid to the methods of packing and transport. Since the materials and equipment are destined for a high-temperature and high-humidity tropical region, some of the equipment and materials will require strict moisture-proof packing.

The procurement plans for materials and equipment are shown in the following tables.

1) Building materials

Name of Material	Sri Lanka	Japan	Remarks
Sand	○	—	Gathered from the upstream area of the Mahaweli River, but it is difficult to obtain in large amounts at a single time because the work is done manually.
Gravel	○	—	Produced at small factories either in the central mountain district or in the suburbs of Kandy. It is difficult to procure a large amount at one time.
Cement	○	—	Although there are cement factories in Sri Lanka, outputs are small. So cement has to be imported from other countries, because of limitations of the implementation schedule.
Reinforcing-bar	—	○	Although produced at home as well, this item is mostly imported from such countries as India and Taiwan. Quality is poor and processability is particularly inferior.
Structural steel	—	○	Almost all of the structural steel is imported. The processors' ability is poor.
Form Materials	○	—	Imported products are available on the market.
Concrete blocks	○	—	As there are many manufacturers operating in the city of Colombo, there is no problem either in terms of quality or amount of supply.
Bricks	○	—	There are many manufacturers in Colombo and Kandy, so there is no problem about the amount of supply. But because of unevenness in the quality or finish of the products, there is a problem about using those products for decorative purposes.

Name of Material	Sri Lanka	Japan	Remarks
Terrazzo tiles	○	—	Terrazzo tiles are generally used in Sri Lanka as finishing material for the floors and there is no problem about the local products both in quality and amount of supply.
Ceramic tiles	○	—	Manufactured at the factory of a public corporation. Both output and variety are small.
Paints for floors	○	—	Manufactured locally.
Plywood	○	—	There is some problem about quality and amount of supply. The perforated boards shall be products of Japan.
Rock-wool sound-absorbent boards	—	○	Scarce both in quantity and variety.
Asbestos boards	—	○	Scarce both in quantity and variety.
Timber	○	—	Most of the local trees are hard, tropical trees, which are fit for making furniture and fixtures but are unsuitable as structural material
Glass	○	—	Most of the products on the market are those imported from Indonesia, Australia, Europe and other regions of the world. Their smoothness is inferior. As for plate glass, Japanese products shall be used.
Metal doors & windows	—	○	Aluminum sashes are processed and assembled locally through the process of importing the materials. However, the quality is not good.
Wooden doors & windows	○	—	Imported products are available.

Name of Material	Sri Lanka	Japan	Remarks
Hardware	○	○	Although there are some problems about the quality and variety available, the locally produced goods will be used, depending on the purpose of use.
Corrugated asbestos-cement sheets for roofs	○	—	No problem, both in quality and in the amount of supply.
Roof tiles	○	—	The locally produced roof-tiles are a traditional material, even though they are fragile because of low baking temperature.

2) Building equipment and materials

Name of Material	Sri Lanka	Japan	Remarks
P.V.C. pipes	—	○	Not manufactured locally. Those available in Sri Lanka are of small thickness.
Steel pipes	—	○	There are quality problems
Metal fittings for piping	—	○	There are quality problems
Pump	—	○	There are quality problems
Sanitary fixtures	—	○	There are quality problems
Air conditioning equipment	—	○	Not manufactured locally
Transformers	—	○	Not manufactured locally
Switchboards	—	○	Not manufactured locally
Telephone exchange	—	○	Not manufactured locally
Wires and cables	—	○	Not manufactured locally
Wiring devices	—	○	Not manufactured locally. However, socket-outlets with local standards will be used.
Lighting fixtures	—	○	Not manufactured locally. However, as for the incandescent lamps, local products will be used.
Fire alarm system	—	○	Not manufactured locally
Fire-fighting fixtures	—	○	Not manufactured locally.

4-3-6 Execution Schedule

The necessary procedures to be taken for the implementation of the Project are:

- After the conclusion of the Exchange of Notes between the Government of the Democratic Socialist Republic of Sri Lanka and the Government of Japan, a consultant agreement for the implementation of the Project will be made;

- after that, the detailed design and preparation of Tender Documents are carried out by the consultant and the Tender takes place;

- after the evaluation of the Tender proposal, a contract for the execution of the Project will be made between the Government of the Democratic Socialist Republic of Sri Lanka and the Japanese contractor. The construction work will be started.

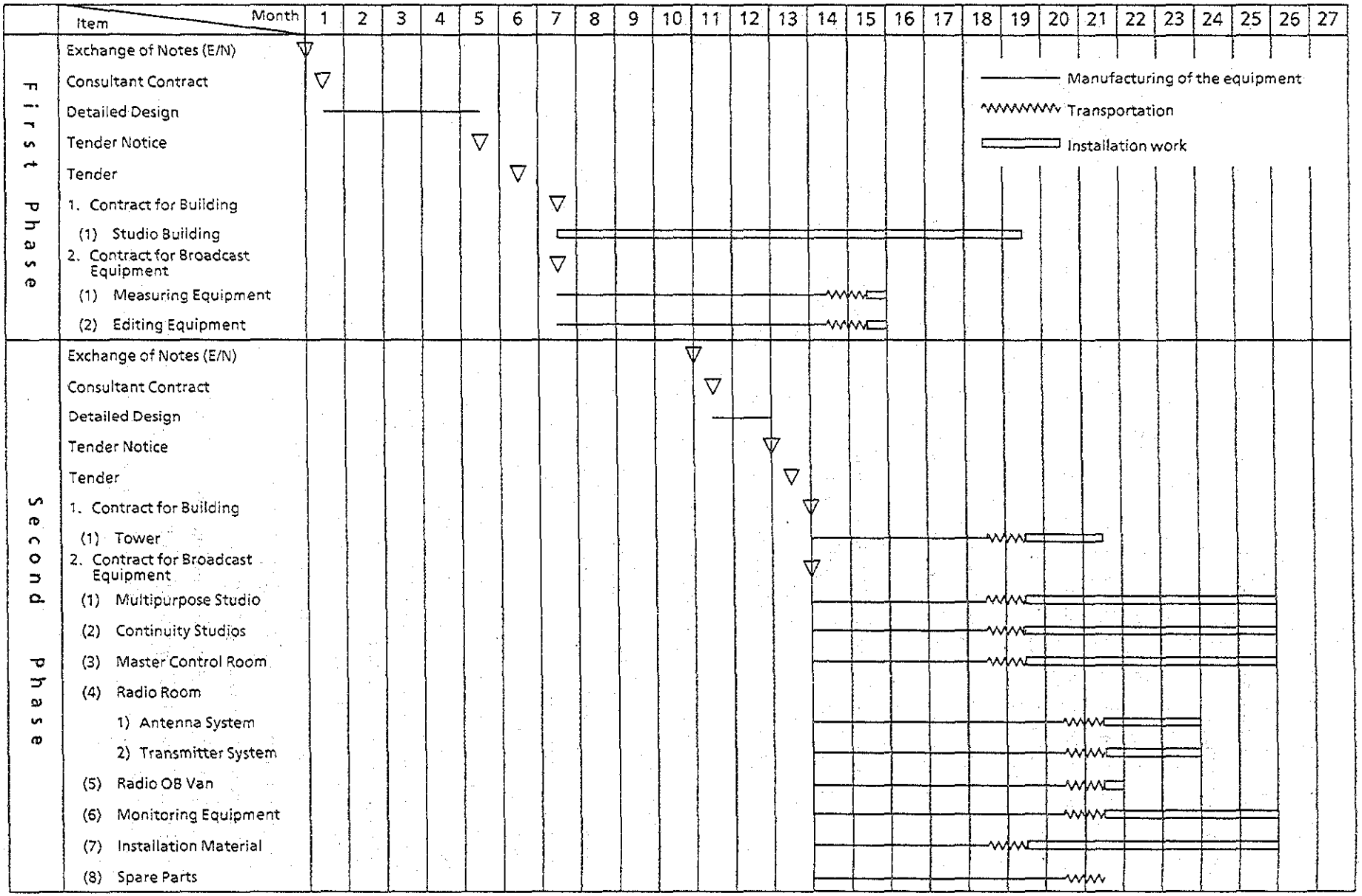
The term of the execution of the Project will be divided into two phases.

During the first phase, the new studio building is to be constructed, and in the meantime, measuring equipment and editing equipment for the urgent reinforcement of the existing broadcasting system, which are superannuated and scarce, will be supplied.

In the second phase, the new broadcast equipment of the multipurpose studio, 12 continuity studios, the new Master Control Room, Radio Room (including FM transmitters), the Radio OB Van system, etc., are to be manufactured. Meanwhile, the steel frames of the tower are also to be made in Japan, then the shipment of this equipment will be conducted. After that, the installation work in the new studio building will be carried out. And finally the tower will be built on top of the newly constructed building.

The total term including the first and second phases will be about 25 months from the Exchange of Notes of the first phase. The tentative execution schedule is shown in Table 4-3-3 on the next page.

Table 4-3-3 Execution Schedule of the Project



4-3-7 Estimate of the Approximate Project Cost

Approximate project cost to be covered by the Sri Lankan side is estimated at about 4.22 million Rupees.

The amount includes the following expenses.

1)	Soil test	Rs. 70,000
2)	Site preparation	Rs. 400,000
3)	Fencing	Rs. 200,000
4)	Access road	Rs. 200,000
5)	Water supply, drainage and sewerage	Rs. 150,000
6)	Lead-in of power supply	Rs. 800,000
7)	Lead-in of telephone line	Rs. 250,000
8)	Restorotion of administrative buildings including old studios and necessary remodelling	Rs. 1,500,000
9)	Modification and clearance of existing buildings and facilities	Rs. 250,000
10)	Furniture and fittings	Rs. 400,000
	Total	Rs. 4,220,000

CHAPTER 5 Effects of the Project and Conclusion

CHAPTER 5 Effects of the Project and Conclusion

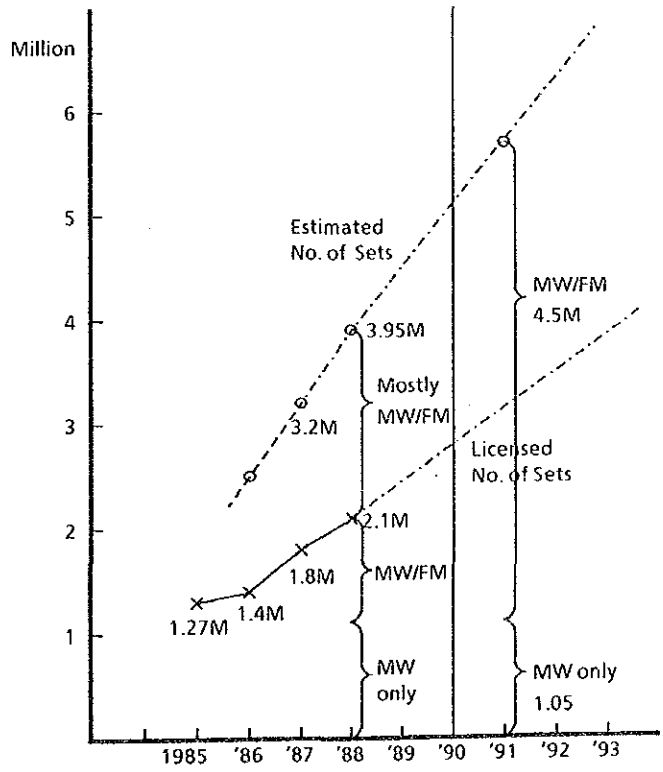
5-1 Expansion of the Broadcasting Service Coverage

(1) Expansion of FM service coverage in Colombo city area.

The present FM service area with a radius of about 10km (covered population, 200,000) is expanded to the area with a radius of 40km (covered population, 3,000,000 or about 20% of total population of Sri Lanka). A uniform reception sound quality can be obtained for all the FM service channels.

(Although the present FM/MW receivers account for about 50% of total receivers, according to the last several years' increase curves as shown below, the figure will be 80% in 1991.) (Note 1)

(Note 1) Year shift increase of FM receivers in Sri Lanka



In 1988, 50% of the licensed receiver sets were both MW and FM.

The unlicensed sets number almost the same as the licensed sets, most of which are:

① MW/FM two-way receivers from the newly industrialized countries.

② Imported cars with MW/FM radio sets.

In 1991, the estimated number of MW/FM receivers will be about 4.5M, while MW only sets are 1.05M: therefore, the percentage of MW/FM sets is:

$$\frac{450}{4.5 + 1.05} \approx 81\%$$

(2) Measures against MW interference (by overseas waves) at nighttime. Approximately 2.8 million people around the Colombo city area from the radius of 10km to 40km can newly enjoy a good FM broadcast service without any interference even at nighttime.

(3) Restoration of Tamil Commercial Service which has now ceases its operation.

5-2 Improvement of Broadcast Programme Quality (For the whole Sri Lankan nation, 16.36 million people plus about 100,000 Sri Lankans working abroad in the Middle East and East Asia)

(1) New programme production (so far not yet possible) by providing a new Multipurpose Studio.

1) Production of social, cultural and enlightening programmes such as lectures by intellectuals, discussions on various topics, audience participation programmes, etc.

2) Newly planned drama programmes for education with stereo sound effects

3) Production of traditional and modern music with stereo sound effects.

As envisaged above, by the introduction of the multipurpose studio, SLBC's programmes will gain the attention of the people, thus it can prove itself an important tool for the promotion of social education.

(2) Recovery and expansion of broadcasting programme hours

With restoration of the Tamil Commercial Service, the SLBC Colombo Headquarters will transmit about 80 hours of programmes on 7 channels daily.

Furthermore, the reinforcement of production as well as transmission capabilities establishes the foundation for expanding 100 hours to a maximum of 130 hours of on-air programmes daily.

(3) Ensuring studio working time for programme production

The construction of 12 new continuity studios makes the existing 10 continuity studios available for production studios. The working time of production studios will eventually become 950 hours with totaling the working time of existing 14 production studios, the new multipurpose production studio and the existing 10 continuity studios (after completion of new continuity studios).

The 950 hours of the total studio working time enable the production of 200 hours (34 hrs × 6 days) of packaged programmes required for weekly transmission time of 560 hours (80 hrs × 7 days) on 7 channels.

(4) Changing over from the old acrylic disc cutter to the normal tape recording and editing system

The disc cutter method is an obsolete method of recording from when magnetic tape recorders had not been developed yet. It is about 40 years old and the reproduced sound quality is not good in terms of disc scratch noise and frequency characteristics in comparison with the currently used 6mm magnetic tape recording method. In fact, the sound quality(Note 2) is normally 2 ranks lower than that of 6mm tape in terms of subjective quality value. Besides that, since cut discs are no longer available for reuse after recording by erasing like 6mm tape recordings, the operational cost is also higher.

(Note 2) Subjective quality value:

5 = Excellent 4 = Good 3 = Fair 2 = Poor 1 = Barely Audible

By the implementation of the Project, conversion from acrylic discs to the magnetic tape system with stereo capability is realized, which upgrades quality of SLBC transmission programmes. In addition, more economical operation is expected because recorded tapes can be erased and recorded again, if recorded sounds become unnecessary.

(5) Promotion of mutual understanding among the people by introduction of the new OB Van

Providing a radio OB van system will enable a quick response to an outside event and mobility will be greatly improved so that programme plans and covered areas will be expanded.

The OB van will also enable the simultaneous broadcasting of various national events held in various regions such as festivals, social gatherings, music concerts, sports and street-corner reporting in addition to the dissemination of governmental and public notices and reflection of public opinions. Furthermore, information can be quickly disseminated in times of emergency.

On-air programmes can be produced not only in the Colombo Headquarters but in about 60 percent of the Sri Lankan territory as a live coverage, which contributes to mutual understanding among the people having different opinions and traditional customs.

5-3 Contribution to the National Development and Social Infrastructure of Sri Lanka

In Sri Lanka, there are about 500,000 TV sets (as of 1987) receiving the nationwide network service, whereas the viewer number per TV set, which are as yet expensive, is 33 persons. Transistor radio sets are cheaper and handy, with a total of 3,200,000 sets (estimated no. as of 1987 by SLBC), which means 5 persons per radio set. Therefore radio broadcasting in Sri Lanka has quite an important role for information dissemination.

Sri Lanka has been growing 5% annually in terms of the nation's actual economic development ratio. However, due to the drop in price of agricultural products in the international market, and at the same time due to the reduction of foreign tourists caused by the domestic unrest, the GNP for each person has remained at US$400 (1987), nor is it easy to manage the economy while 10% inflation has continued annually.

At the same time, Sri Lanka has many internal problems such as the need for more promotion of education, agricultural development, provision of health care and promotion of mutual understanding among the peoples living in different areas and having different customs and ways of

thinking. Therefore, in order to solve those problems, the role of radio broadcasting is important.

It is obvious that radio broadcasts can be effectively used for enlightenment of the people including provision of adult education, spreading of various kinds of techniques and knowledge such as those for agriculture, spreading of knowledge about hygiene, etc. Radio is also an indispensable media for the nation's daily life with its world news, local news, weather forecasts and also for emergency information as well.

Besides that, radio broadcasts give recreation to people who are tired from their daily work and vitality for tomorrow through entertainment programmes.

As stated in 5-1, 5-2, the expansion of the service coverage and the great improvement of the SLBC's broadcast programme quality can bring the SLBC itself closer to the people's daily lives and welfare. Thus, it can contribute greatly to the development of the social infrastructural foundation of Sri Lanka.

5-4 Conclusion

After completion of the Project, the additional amount of operational expenditures will be 1.44MRs/year for the additional 40 new staff personnel, 0.21MRs/year for the additional tape consumption and 0.5MRs/year for the new facility maintenance, for a total of 2.15MRs/year. These expenditures are quite easy for SLBC to manage since its revenue is on the scale of 140~190MRs annually; therefore, no administrative problems are expected.

With regard to the technical skill level of the SLBC, it has already had over 60 years experience in radio broadcasting and also, now, they are broadcasting 700 hours/week of domestic programmes and 250 hours/week for overseas listeners. A total of 950 hours/week of programmes are produced and broadcast by SLBC. Therefore, in this regard, no problems are expected at all.

By the implementation of this Project, SLBC will be free from the difficult daily maintenance problems caused by the superannuated equipment and lack of spare parts. And SLBC can devote itself to producing much better programmes with stable broadcast transmissions which is its original mission.

In that sense, the implementation of this Project can remarkably contribute to the SLBC's administration as well as the daily operation and maintenance, with enough enthusiasm on the part of SLBC's staff for the realization of the Project. In conclusion, the necessity and justification of this Project are fully recognized.

APPENDICES

1. Member List of the Study Team

1. Member List of the Study Team

(1) Basic Design Study

Name	Assignment	Present Post	Period
Mr. Taku KIYASU	Leader	Deputy Director Frequency Planning Division Radio Department Telecommunications Bureau Ministry of Posts and Telecommunications	Jan. 16 to 27, 1990
Mr. Koji MORISHITA	Project Coordinator	Planning Division Grant Aid Project Management Department Japan International Cooperation Agency	Jan. 16 to 27, 1990
Mr. Toshinori MIURA	Survey Leader Broadcasting plan	Managing Director International Department All Japan Radio & Television Engineering Services Co., Ltd. (AJTS)	Jan. 16 to Feb. 3, 1990
Mr. Toru ENDO	Studio plan	Chief Engineer (AJTS)	Jan. 16 to Feb. 3, 1990
Mr. Isamu OKADA	Production facilities	Chief Engineer (AJTS)	Jan. 16 to Feb. 3, 1990
Mr. Toshio FURUHATA	FM transmitting facilities (Cost Estimation)	Chief Engineer (AJTS)	Jan. 16 to Feb. 3, 1990
Mr. Hogara CHIBA	Building plan (Cost Estimation)	Chief Engineer (Registered Architect, AJTS)	Jan. 16 to Feb. 3, 1990
Mr. Hiroshi TAKATOH	Building design	Chief Engineer (AJTS)	Jan. 16 to Feb. 3, 1990
Mr. Yoshishige NAGANO	Building facilities (Cost Estimation)	Chief Engineer for building equipment Nippon Sogo Architects & Engineers (NSK)	Jan. 16 to Feb. 3, 1990

(2) Explanation and Discussion on the Draft Final Report

Name	Assignment	Present Post	Period
Mr. Junichi AOKI	Leader	Special Adviser For International Cooperation Ministry of Posts & Telecommunications	April 17 to 28, 1990
Mr. Toshinori MIURA	Survey Leader Broadcasting plan	Managing Director International Department All Japan Radio & Television Engineering Services Co., Ltd. (AJTS)	April 17 to 28, 1990
Mr. Hogara CHIBA	Building plan (Cost Estimation)	Chief Engineer (Registered Architect, AJTS)	April 17 to 28, 1990
Mr. Toru ENDO	Studio plan	Chief Engineer (AJTS)	April 17 to 28, 1990

2. Itinerary of the Study

2. Itinerary of the Study

(1) Basic Design Study

Study Schedule (January 16 to February 3, 1990)

Jan. 16 (Tue.)	Lv. Narita at 10:30	Ar. Bangkok at 15:25 (TG 641)
Jan. 17 (Wed.)	Lv. Bangkok at 10:40	Ar. Colombo at 12:25 (TG 307)
	• Meeting at Embassy of Japan and JICA Office	
Jan. 18 (Thu.)		
	am • Courtesy call to Economic Planning Agency and	
	• Courtesy call to Sri Lanka Broadcasting Corporation (SLBC)	
	pm • Courtesy call to Ministry of Cultural Affairs and Information	
	• Survey on the existing facilities of SLBC	
	• Survey on the proposed site.	
Jan. 19 (Fri.)	• Meeting with SLBC	
Jan. 20 (Sat.)	• Meeting with SLBC	
	• Survey on the existing facilities of SLBC	
Jan. 21 (Sun.)	• Internal meeting of the survey team	
Jan. 22 (Mon.)	• Meeting with SLBC	
Jan. 23 (Tue.)	• Meeting with SLBC	
Jan. 24 (Wed.)	• Discussions on the minutes of meeting	
	• Signing of the minutes	
	• Reporting and courtesy call to the State for Information	
Jan. 25 (Thu.)		
	am • Courtesy call to SLBC	
	pm • Reporting to the Embassy of Japan	
	• Reporting to JICA office	
Jan. 26 (Fri.)	• Mr. T. Kiyasu, leader, and Mr. K. Morishita left for Japan via Bangkok	
	am • Meeting with SLBC	
	pm • Data collection	

Jan. 27 (Sat.)

am
- Meeting with SLBC
- Data collection

pm
- Data analysis

Jan. 28 (Sun.)
- Field survey on the reception of radio broadcasting

Jan. 29 (Mon.)
- Meeting with SLBC
- Data collection

Jan. 30 (Tue.)
- Meeting with SLBC
- Measurement of the site

Jan. 31 (Wed.)
- Meeting with SLBC
- Acoustic measurement of existing SLBC studios

Feb. 1 (Thu.)

am
- Reporting to JICA office

pm
- Meeting with SLBC
- Reporting to the Embassy of Japan

Feb. 2 (Fri.)
- Preparation for Leaving
  Lv. Colombo at 13:25 Ar. Bangkok at 18:10 (TG 308)

Feb. 3 (Sat.)
- Lv. Bangkok at 11:15 Ar. Narita at 19:00 (TG 640)

(2) Explanation Discussion on Draft Final Report

Discussion Schedule (April 17 to 28, 1990)

April 17 (Tue.)
- Lv. Narita at 10:30 Ar. Bangkok at 15:25 (TG 641)

April 18 (Wed.)
- Lv. Bangkok at 10:40 Ar. Colombo at 12:25 (TG 307)
- Meeting with JICA office
- Meeting with the Embassy of Japan

April 19 (Thu.)
- Courtesy call to Economic Planning Agency
- Courtesy call to Ministry of Cultural Affairs and Information
- Discussion on itinerary with SLBC

April 20 (Fri.)
- Explanation the draft final report to SLBC

April 21 (Sat.)
- Explanation the draft final report to SLBC

April 22 (Sun.)
- Data filing

April 23 (Mon.)	• Discussion on the draft final report with SLBC (Additional survey)
April 24 (Tue.)	• Discussion on the draft final report with SLBC (Additional survey)
April 25 (Wed.)	• Preparation for a draft of the Minutes of Discussion
April 26 (Thu.)	• Signing the Minutes of Discussion • Reporting to the Embassy of Japan and JICA office • Courtesy call to Economic Planning Agency and to Ministry of Cultural Affairs and Information
April 27 (Fri.)	• Preparation for Leaving Lv. Colombo at 13:25 Ar. Bangkok at 18:10 (TG 308)
April 28 (Sat.)	• Lv. Bangkok at 11:15 Ar. Narita at 19:00 (TG 640)

3. List of Interviewees

3. List of Interviewees

1) Ministry of Cultural Affairs and Information

Secretary ..... Mr. V. S. Kudaligama

2) State for Information

Minister of State for Information ..... Mr. A. J. Ranasinghe

Secretary ..... Mr. S. J. Sumanasekera Banda

Senior Assistant Secretary ..... Mr. W. A. S. Perera

3) Ministry of Finance and Planning

Assistant Secretary ..... Mr. S. Weerapana

Department of External Resources

4) SLBC — Sri Lanka Broadcasting Corporation

Chairman and Director General ..... Mr. Hudson Samarasinghe

Working Director ..... Mr. W. C. Berlin

Deputy Director General (Engineering) ..... Lt. Cdr. H. P. A. L. Pinto

Deputy Director General (Programmes, Finance and Administration)

..... Mr. Asaka Colombage

Director of Finance ..... Mr. A. Amaratunga

Director Engineering ..... Mr. T. D. Padmasiri

Superintendent Engineer ..... Mr. K. E. M. C. Fernando

Superintendent Engineer (Power and Antenna) ..... Mr. P. B. H. Dias

Superintendent Engineer (VHF) ..... Ms. A. Wimalasuriya

Engineer (Studio) ..... Mr. R. A. J. Amarasekara

Engineer (VHF) ..... Mr. Nimal de Silva

Engineer (Outside Broadcasting) ..... Mr. Gunatilake Perera

Engineer (Operations/Laboratory) ..... Mr. H. M. D. M. Gunaratna

Technical Assistant ..... Mr. M. S. N. Fernando

Civil Engineer ..... Mr. Titus Wijesinghe

Assistant Civil Engineer ..... Mr. Viyani Fernando

Civil Engineering Section ..... Mr. K. D. Weerasinghe

Engineer, Power and Airconditioning ..... Mr. S. Kathiravel

Senior Technical Assistant, Operational and Maintenance, Power Section

..... Mr. Wijenayake

Technical Assistant, Generators ..... Mr. Sriskanthan

Technical Assistant, Airconditioning ..... Mr. Muhuntanne

Director, Tamil Service and Director, Foreign Affairs

..... Mr. Thirugnanasunderam

Director, English Service ..... Ms. Merle Williams

Director, Muslim Service ..... Mr. M. Kudhoos

Director, Sinhala Service ..... Mr. Cyril Rajapaksa

Director, Education Service ..... Mr. Arasa Iyadurai

Music Producer ..... Mr. Amerasria Perera

Producer (Sinhala) ..... Mr. Sunanda Dharmapala

Producer (Tamil) ..... Mr. S. G. N. Pushparathan

Controller (Sinhala), Spoken Word Programmes ..... Mr. Palitha Perera

Controller (Sinhala), Music ..... Mr. Stanley Fernando

Controller, Education Service ..... Mr. Tilak Jayaratne

Controller, Music (English) ..... Mr. Shanthilal Silva

Chief Librarian ..... Ms. D. A. P. H. J. Tennakoon

Librarian, Sinhala ..... Mr. A. M. Chandradasa

Librarian, English ..... Mr. K. P. L. S. de Silva Gunaratne

Library Assistant, Tamil ..... Ms. Y. Shanmugasundaran

Acting Organizer ..... Mr. G. M. G. Gajanayaka

5) SLTD (Sri Lanka Telecommunication Department)

DDT (R & E) ..... Mr. H. L. M. de Silva

Engineer (Radio Monitoring) ..... Mr. N. E. Ranasinghe

Engineer (Spectrum Management) ..... Ms. S. Fernando

6) Department Meteorology

Deputy Director ..... Mr. T. K. Fernando

7) Embassy of Japan

Second Secretary ..... Ei Kubota

8) JICA Sri Lanka Office

Resident Representative ..... Hideo Yasuki

Hiroshi Niino

4. Minutes of Discussions

THE MINUTES OF DISCUSSIONS
ON
THE BASIC DESIGN STUDY
ON
THE ESTABLISHMENT PROJECT OF RADIO STUDIO FACILITIES
IN
THE SRI LANKA BROADCASTING CORPORATION

In response to the request of the Government of the Democratic Socialist Republic of Sri Lanka, the Government of Japan decided to conduct a basic design study on the Establishment Project of Radio Studio Facilities (hereinafter referred to as the "Project"),and entrusted the study to the Japan International Cooperation Agency(hereinafter referred to as "JICA").

JICA sent the Basic Design Study Team headed by Mr. Taku Kiyasu, Deputy Director, Frequency Planning Division, Radio Department, Posts and Telecommunications to carry out the study from January 17th to February 2nd,1990.

The team had a series of discussions on the Project with the officials concerned of the Democratic Socialist Republic of Sri Lanka, and conducted the study in Colombo city area.

As a result of the study, both parties agreed to recommend to their respective Government authorities that the major points of understanding reached between them, attached herewith, should be examined towards the realization of the Project.

Colombo,January 25th,1990

Mr. Taku Kiyasu
Leader,
Basic Design Study Team

Mr.S.J.Sumanasekera Banda
Secretary,
State Ministry of Information

Mr. Hudson Samarasinghe
Chairman/Director General
Sri Lanka Broadcasting
Corporation(SLBC)

ATTACHMENT

1. Objective of the Project

The objective of the Project is to establish a Radio Studio Centre of the Sri Lanka Broadcasting Corporation (SLBC) in order to achieve modernized programme production capabilities to cope with growing and diversified nation's expectations.

2. Organizations

Responsible Organization; State Ministry of Information
Executing Organization ; Sri Lanka Broadcasting Corporation (SLBC)

3. Project Site

Colombo City Area and SLBC Headquarters

4. The Japanese Study Team will convey to the Government of Japan, the intention of the Government of the Democratic Socialist Republic of Sri Lanka that the former takes the necessary measures to cooperate in implementing the Project and provide the facilities and equipment listed in Annex 1 for the Establishment of the Radio Studio Centre under the Japan's Grant Aid programme.

5. The Government of the Democratic Socialist Republic of Sri Lanka will take the necessary measures listed in Annex 2 on condition that the Grant Aid by the Government of Japan is extended to the Project.

6. The Sri Lanka side has understood the Japan's Grant Aid system explained by the Team, which includes a principle of the use of a Japanese consulting firm and Japanese general contractor for their execution of the Project.

ANNEX 1

1. Building for Radio Studio Centre with Building Facilities and FM Transmitting Tower — approx. 1800m²

2. Radio Studio Centre Facilities and Equipment

1) Multipurpose Studio	1 set
2) Continuity Studio 1~12	12 sets
3) Master Control Room	1 set
4) Radio Room including 300W FM Transmitting System and VHF Communication System	1 set
5) Measuring Equipment	1 set
6) Outside Broadcasting Van System	1 set
7) Editing & Monitoring Equipment	1 set
8) Installation Materials	1 set
9) Spare Parts	1 set

A N N E X 2

1. To provide data and information necessary for detailed design.

2. To provide the land and space necessary for implementing the Project.

3. To provide facilities for distribution of electricity, drainage, communication and security.

4. To provide necessary permissions, licences and other authorizations for carrying out the Project.

5. to ensure prompt unloading, tax exemption and customs clearance at ports of disembarkation in Sri Lanka and prompt internal transportation therein of products purchased under the Grant.

6. To exempt from customs duties, internal taxes and other fiscal levies which may be imposed in Sri Lanka with respect to the supply of products and services under the verified contracts.

7. To accord without delay to Japanese nationals whose services may be required in connection with the supply of the products and services under the verified contract such facilities as may be necessary for their entry into Sri Lanka and stay therein for the performance of their work.

8. To bear advising commissions of Authorization to Pay (A/P) and payment commission to the Japanese foreign exchange bank for the Banking Arrangement.

9. To secure and bear all the expenses, other than those to be borne by the Grant, necessary for construction of facilities as well as for the transportation and installation of the equipment.

10. To maintain and use properly and effectively all the facilities including newly introduced system and materials provided under the Grant.

MINUTES OF DISCUSSIONS
ON
THE DRAFT FINAL REPORT OF THE BASIC DESIGN STUDY
ON
THE ESTABLISHMENT PROJECT OF RADIO STUDIO FACILITIES
IN
THE SRI LANKA BROADCASTING CORPORATION

In response to the request of the Government of Sri Lanka for the Establishment Project of Radio Studio Facilities (hereinafter referred to as the "Project"), the Government of Japan decided to conduct a basic design study on the Project and entrusted the study to the Japan International Cooperation Agency (JICA). JICA sent to Sri Lanka the study team headed by Mr. Taku KIYASU, Deputy Director, Frequency Planning Division, Radio Department, Telecommunications Bureau, Ministry of Posts and Telecommunications, from January 16th to February 3rd, 1990.

As a result of the study, JICA prepared a draft final report and dispatched a team headed by Mr. Junichi AOKI, Special Advisor for International Cooperation, Ministry of Posts and Telecommunications to explain and discuss it from April 17th to 28th, 1990.

Both parties had a series of discussions on the report and agreed to recommend to their respective Governments that the major points of understanding reached between them, attached herewith, should be examined towards the realization of the Project.

Colombo, April 26th, 1990

青木純一

Mr. Junichi AOKI
Leader,
Draft Final Report
Explanation Team,
JICA

Mr. S. J. Sumanasekera Banda
Secretary,
State Ministry of Information

Mr. Hudson Samarasinghe
Chairman/Director General,
Sri Lanka Broadcasting
Corporation (SLBC)

ATTACHMENT

1. The Sri Lanka side has agreed in principle on the basic design proposed in the draft final report.

2. The Sri Lanka side has understood Japan's Grant Aid System and confirmed that the necessary measures will be taken by the Sri Lanka side as shown in ANNEX 2 of the Minutes of Discussions on the Project signed on January 25th,1990 on condition that the Grant Aid by the Government of Japan be extended to the Project.

3. SLBC should carry out a clearance of the site,remodeling of the existing building,provision of CEB power source and other necessary civil works as described in the item 4-3-3 of the draft final report,prior to the commencement of the construction work.

4. SLBC should ensure the frequencies to be allocated by SLTD for the necessary VHF equipment as shown below and then SLBC should inform the JICA Team of the frequencies through the JICA Colombo Office by the middle of May 1990.

   1) 91.2 MHz for FM broadcasting of City FM Service

   2) 95.6 MHz for FM broadcasting of Tamil Commercial Service

   3) Eight specified frequencies for Radio OB Van (165 MHz~169MHz)

   4) One frequency in 140 to 142 MHz band for communication at OB point

5. The Final Report (10 copies in English) on the Project will be submitted to the Sri Lanka side by the end of July,1990.