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STANDING COMMITTEE ON COMMUNICATIONS (1996-97)

ELEVENTH LOK SABHA

MINISTRY OF COMMUNICATIONS (DEPARTMENT OF TELECOMMUNICATIONS)

SELECTION OF MULTI ACCESS RELAY RADIO (MARR) TECHNOLOGY

NINTH REPORT

सत्यमेव जयते

LOK SABHA SECRETARIAT
NEW DELHI

March, 1997/Phalguna, 1918 (Saka)

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Presented to Lok Sabha on 21.3.1997

Laid in Rajya Sabha on 21.3.1997

LOK SABHA SECRETARIAT
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22. Shri R. Devadas

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* Appointed as Member *w.e.f.* 26.2.1997 in place of Shri M.P. Veerendra Kumar, who ceased to be Member of the Committee on his appointment as Minister *w.e.f.* 19 February, 1997.

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Shri J.P. Ratnesh	—	*Joint Secretary*
Shri Ram Autar Ram	—	*Director*
Shri S.K. Sharma	—	*Deputy Secretary*

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* Vacancy caused due to retirement of Shri R.K. Karanjia from Rajya Sabha *w.e.f.* 10 January, 1997.

INTRODUCTION

I, the Chairman of the Standing Committee on Communications (1996-97) having been authorised by the Committee to submit the Report on its behalf, present this Ninth Report on Multi Access Relay Radio (MARR) Technology relating to Ministry of Communications (Department of Telecommunications).

2. The Committee took oral evidence of the representatives of the Ministry of Communications (Department of Telecommunications) at its sittings held on 12.12.1996 and 13.1.1997.

3. The Committee wishes to express its thanks to the representatives of the Department of Telecommunications for appearing before the Committee and placing before it detailed information that the Committee desired in connection with the examination of the subject.

4. The Report was considered and adopted by the Committee at its sitting held on March 18, 1997.

5. For facility of reference and convenience, the observations and recommendations of the Committee have been printed in bold letters in the body of the Report.

NEW DELHI;
March 19, 1997
Phalguna 28, 1918 *(Saka)*

SOMNATH CHATTERJEE,
Chairman,
Standing Committee on Communications.

REPORT

I. Introductory

Expansion of Telecommunication facilities to the rural areas of the country has been one of the fore-most objectives of the Department of Telecommunications (DOT). To connect the Village subscribers, the available technologies with the Department prior to 1970s were only wired technologies such as over head (O/H) Wire and Under-Ground (U/G) cables using copper pair of wires. It resulted in enormous difficulties especially in remote, rural and hilly areas where access was difficult to instal and maintain the wired connections. Thus, it was not practically possible to connect a large number of population of the country to the Telecom Network.

2. The Department, therefore, started probing the possibilities of connecting the remote areas and villages of the country with the use of modern technologies such as wireless Radio Systems keeping pace with the improvement in electronic and radio equipments as well as the switching technologies. A Task Force was set up in 1979 by the Department to examine the possibilities of various technologies to be adopted for the rural network. This Task Force recommended Shared Radio System. On the basis of this recommendation efforts were made to develop indigenous Multi Access Relay Radio (MARR) system, which was subsequently inducted in the Indian Telecom Technology.

3. MARR Technology is used for rural communications where telephone traffic is very low. A base station is connected to a telephone exchange in 2/15 systems which has two radio channels. These channels are connected to 15 villages. Each village has a separate telephone connection. All the facilities available to telephone exchange subscriber are available to the village telephone. These systems are very economical as compared to single channel VHF systems. Roughly 2/15 MARR system would cost 60 per cent of 15 single channel VHF systems.

II. Task Force's Recommendations and Procurement of MARR Systems

4. The Committee has been informed that the Task Force which was constituted in 1979 submitted its Report in 1981 in which it

recommended that Multi Access Relay Radio (MARR) systems might be adopted as technology to establish Long Distance Public Telephones (LDPTs) for improving reliability and availability in hilly, coastal, forest and desert areas as well as tribal and scheduled areas and other regions where power induction makes the open-wire line unsuitable. On the basis of this recommendation of the Task Force, as the Department of Telecommunications has stated, M/s. Indian Telephone Industries was permitted to import the MARR equipments from countries like Italy, Japan, etc as there was no indigenous supplier then available and only a few foreign suppliers were there for such equipments. 15 Trial equipments were imported from M/s. Kokusahi, a Japanese Company at the cost of Rs. 156 lakhs (Rs. 69,454/- per system with spares and accessories). M/s. ITI selected M/s. Kokusahi of Japan after considering the topographical and logistic requirements and suitability of the equipments.

5. When asked about the composition of the M/s. ITI team which selected M/s Kokusahi of Japan, the Department replied that it was actually a joint team of DOT and ITI (two officials from DOT and as many from ITI) which was entrusted with the responsibility to do the performance testing of the system. The Department regretted the earlier incorrect statement that M/s. ITI was solely responsible for selecting M/s. Kokusahi.

6. Normal life of equipments imported from Kokusahi is stated to be 10-15 years. In reply to a query from the Committee as to the functioning of trial equipments imported from M/s. Kokusahi, it has been stated that out of the 15 systems imported from M/s. Kokusahi, 4 installed at Tura, Kohima and Shillong and Kailasaha became unoperational. While the first 3 systems have been replaced between October, 1993 and March 1995, the fourth one is still being used as 2/08. The remaining 11 systems are stated to be still in working condition serving about 220 Village Public Telephones (VPTs). These 11 systems will also be shut down eventually as and when they become non-maintainable.

7. It was supplemented that technically the life of the still functioning eleven systems was about to be over and in next two/ three years these would be phased out with new equipments.

8. The reason for non-functioning of the four equipments has been stated to be the non-availability of spare components, as the equipment had become obsolete and their manufacturing had been stopped.

9. To another specific query as to whether the Task Force recommended anything in regard to spares, it was replied that the Task Force did not discuss this matter in the Report. However, when the Committee asked whether it was not a lapse on the part of the Task Force that it did not give emphasis for procurement of sufficient spare components, it was stated in reply, country to the earlier statement, that the Task Force recommended for spares also. However, a perusal of the Task Force Report, a copy of which was submitted to the Committee, it is found that in the voluminous report of the Task Force only a very passing reference was made (at page 68) which reads as under :—

> "...The Task Force has followed the integrated network approach in determining the telecommunication network patterns for the selected secondary areas and for formulation of the projects which includes all apparatus and plan *i.e.*, switching, trunking, transmission, multiplexing, power plant, external plant, testing instruments for installation and maintenance and essential spares, land, buildings, antennas, towers/masts, cables, lines and wires etc."

III. First Order of Telecom Research Centre (TRC) for Eighty Systems

10. On seeing the performance of the equipments imported from Japan, the then Telecom Research Centre (TRC) (an autonomous body set up by Department of Telecommunications (DOT), and DOT desired to develop an indigenous system of similar Radio Based Systems and thus a Project for the development of indigenous MARR system was taken up. After the development of Prototype system, TRC devised the specifications for this system which was 2/15 VHF Analog MARR system. Taking this specification from TRC/M/s. Marine and Communications Electronics (MACE) Ltd. of Visakhapatnam (a State Government Undertaking) manufactured the first system 2/15 VHF MARR.

11. The first order for eighty numbers of MACE Mark-I system was placed on M/s. MACE by TRC *vide* their letter No. TRC/C/80-TRC dated 26 December, 1988. The price in the purchase order was fixed by the Price Negotiation Committee (PNC) at Rs. 317. 928 lakhs. Production clearance was given by TRC to these systems during December, 1989. Although the TEC specification N.TR 110 S'89 was

followed, some relaxations were also accorded. In reply to a query whether tendering process was followed to procure MARR equipments, the DOT in a note has stated that purchase of 80 nos. of systems by TRC was for vendor development as MACE was the only company which came forward to develop shared radio system.

12. During evidence the Committee wanted to know whether any field study or survey was made before the orders were placed by TRC with the MACE Ltd. In reply, the representative of DOT submitted that the eighty systems' specification was drawn by TRC after various discussions with the production units. A field trial was held at Ballabhgarh, Haryana during March-April, 1989 and some deficiences were noted. They were attended to and further upgraded. A second field trial was done at Tuni, Andhra Pradesh during July-September, 1989.

13. The Committee then equired why the orders were placed at all before any proper trial of the equipments was made. The Secretary, DOT replied that this would have to be looked into in greater depth and there seemed to have been some procedural delay in getting the feedback evaluated and then taking the decision. He assured that he would clarify the matter later on.

14. Subsequently, the representative of the Department clarified that the purchase order for 80 systems was issued on 2 February 1989. 26 December, 1988 was actually the date of issuing letter of intent. The Committee pointed out that even if the purchase order was placed on 2 February, 1989, the field trials were done only after that *i.e.* March-April, 1989 and July-September, 1989. Moreover, the production clearance was given ten months after the purchase order was placed and in that context the Committee desired to know how the purchase order was placed prior to the evaluation of field trial reports and at what level the decision was taken. The representative replied that it was done at the TRC level as a part of the vendor development and product development exercise.

15. Pointing out that TRC's job was to make research and find out appropriate products and technology, the Committee enquired whether it was within the authority of TRC to place orders worth rupees three crores and seventeen lakhs of its own. "TRC was an autonomous society and its DG had the authority to place orders", submitted the Secretary, DOT. The Committee further queried whether any clearance

was obtained in this regard from either DOT or Telecom Commission. The Secretary, DOT responded :—

> "Our understanding is that it was not necessary for TRC to have got this clearance. However, since this question has been specifically raised we will doubly confirm it."

16. Asked whether TRC was authorised to evolve its own procedure for purchase of valuable machinery or technology without the usual tendering process or without consulting the Ministry, the representative of the Ministry replied that they would furnish a copy of the order regarding the constitution of TRC.

17. After going through the copy of the order furnished by the Department it was observed that TRC was an autonomous scientific society with total authority and flexibility outside the Government norms. It was funded by the Department of Telecommunications. The power of purchases beyond certain limit which was required to be channelised through DGS&D was not made applicable to the TRC and TRC was authorised to make all purchases after following the usual formalities in consultation with Internal Financial Adviser (IFA).

18. The above mentioned 80 MARR systems produced by MACE Ltd. (MACE Mark-I) were inducted in the Department of Telecommunications network and based on the field feed-back of the equipment, production clearance for limited quantities was given by TRC during December, 1989. Though TRC specification No. TR 110 S 89 was followed yet the following relaxations were accorded :—

(i) Muli-Matering facility was dispersed with;

(ii) Dynamic Assignment of Channels was dispersed with; and

(iii) Spurt and Harmonic Emission measurements results to be recorded.

19. When asked under what circumstances these relaxations were allowed to M/s. MACE Ltd. by TRC, it was replied that based on field observations where equipments were giving satisfactory performance and the urgent requirement to meet the demand of Long Distance Public Telephone (LDPTs) in the country and the fact that the manufacturer had produced the equipments against the order from TRC, certain relaxations were recommended.

20. The Committee asked whether any price reduction was sought from the vendor in view of the deficiencies/departure noticed from the specifications and whether the value of the relaxations was quantified. It was replied that neither any price reduction was sought from the company nor any quantification of the relaxations was done.

IV. Procurement of MARR equipments by DOT

21. Based upon TRC order and field experience, the DOT placed 3 purchase orders as detailed below for 1000 equipments.

Details of 3 Purchase Orders are as under :—

Sl. No.	DOT P.O.No. & Date	No. of equipments to be supplied	Amount of order (Rs.)	Advance paid (Rs.)
1.	MMCT/1134/90-91 dated 17.5.90	100	781.45 lakhs	2,73,50,750
2.	MMCT/1162/90-91 dated 12.11.90	400	1593.24 lakhs	4,94,90,000
3.	MMCT/8131/91-92 dated 1.10.91	500	3852.85 lakhs	13,48,49,000

22. To a specific query it was replied that no tender was floated for first pruchase order, as in the case of 80 equipments procured by TRC. It was placed on the basis of Price Negotiation Committee (PNC) rates and the decision was taken at the level of Member (P) and Member (F) of Telecom Commission.

23. The Committee was informed that after the procurement of first 80 systems and after installation of the same by August, 1991. Some major faults like bad workmanship, bad designing/component selection, cumbersome design and ineffective quality control in the factory were identified as a result of the investigations conducted in the factory by the Quality Assurance Wing of the Department. Thereafter, a Design Review meeting was held with Engineers of MACE Ltd., Telecom Engineering Centre, C-DOT and Quality Assurance Engineers. The design review clearly brought out the mistakes in design and quality control problem and suggested solutions too for some of the problem areas. However, M/s. MACE Ltd. did not take effective

steps either to improve its products in the factory or to upgrade the same in the field due to lack of finances with the Company. Thus, in view of numerous complaints from the field, TEC revoked the earlier type approval for MACE on 30 June, 1992.

24. On being asked to elaborate the sequence of events, the Secretary, DOT during evidence submitted that a consolidated and authenticated analysis of the feed back was received from the field in August 1991 based upon which the General Manager, MACE was impressed upon the need to open service/repair centres at New Delhi and Hyderabad as well as to augment their Product Support Team. In response to this MACE recruited nine Technical Assistants. Then the General Manager MACE was pursued to conduct training courses in installation and maintenance of new technology to DOT field people. Between 19 and 21 August, 1991 the training was conducted. But there is no record maintained as to how many DOT employees were trained during that period.

25. However, based on the report given in August 1991, the General Manager, Component Approval Centre Telecom (CACT) wrote a letter to General Manager, MACE on 27.2.1992 in which he pointed out that the complaints which were received from the field units by way of feed back could be classified into the following two categories :—

(a) Incorrect/improper understanding of the installation/maintenance requirements and operational protocol of the 2/15 systems by DOT field personnel.

(b) Limitation in system design/technology leading to nonrobust design and system instability.

26. Accordingly, it was decided to use highly stable active devices, to do away with trimmers and potentiometers, the primary sources of instability and to investigate the instability of the 3.825 KHZ notch fitter. Then the General Manager MACE was requested by the Department to carry out an in-depth examination in February, 1992 and the Design Review Committee met during the same time. The response of MACE was not very satisfactory to the queries raised by the Department in the Design Review meeting and therefore, it was decided that the provisional type approval given in February 1991 be withdrawn. That decision was taken on 30 June, 1992.

27. The Committee asked as to how, without waiting for the factory evaluation report and only on provisional type approval, as much as four orders involving huge sums were placed with M/s MACE. In response, the representative submitted that the first orders of 80 and 100 systems could be taken as a part of experiment in product development, because when a country tries to evolve a new technology and indigenise it, some indulgence had to be shown. The orders for 400 units were placed in pursuance of the decision of the Government to provide telephone facility in several Gram Panchayats totalling 2,30,000. The target of providing telephone facilities to 15,000 Gram Panchayats during 1991 was set up accordingly. It was decided that this facility would be provided either through single channel VHF or by 2/15 MARR systems.

28. The Committee wanted to know the reason for which the Type Approval was not withdrawn right at the time of the first DOT order i.e. 100 systems. In reply, it was stated that the Type Approval certificate was not withdrawn as it was decided by the Department to accept the system with certain relaxations. But during the course of evidence the Secretary, DOT submitted that no relaxation was allowed for the 100 systems.

29. To another specific query as to what action was initiated against MACE Ltd. when it did not take effective steps to improve its product in the factory and upgrade the same in the field, it was replied that in addition to withdrawal of type approval, the third purchase order for 500 systems was short closed.

30. As regards inviting tender for placing the order, the Committee was informed that for 80 and 100 systems no tender was floated whereas for the 400 and 500 systems tender was invited in which 12 companies participated.

31. The Committee enquired as to why the tender of only M/s MACE was accepted. The representative replied that the others were given educational orders' for 20 equipments which they could not develop. On being asked to expand the term 'educational order' it was replied that the order is like a trial order in which a company is given a chance to find out whether it is capable of delivering the goods as per specifications. This is done with a view to encouraging competition and discouraging monoploy.

32. Being not satisfied with the reasoning, the Committee enquired how could there be a monoploy when several parties/campanies participated in the tender. In reply the representative of DOT submitted that although 12 companies had participated in the tender the process of going through their specifications etc. had not been completed at all. It was done only in respect of M/s MACE Ltd.

33. The Secretary, DOT also stated that many of the parties/ companies which participated in the tenders had later on become the regular supplier of equipments to DOT.

34. As mentioned earlier, with each Purchase order, the DOT paid to the vendor i.e. MACE Ltd., an advance of 35 percent of the Purchase Order which was Rs. 273.50 lakhs in the case of first purchase order for 100 systems, Rs. 494.90 lakhs for the second purchase per of 400 systems and Rs. 1348.50 lakhs for the third purchase of 500 systems. It has been stated that advance was approved or the prevalent practice of grant of advances to public sector and the same was approved at the level of Telecom Commission.

35. Asked how the criteria of public sector was applied in the case of MACE Ltd., which was a private company DOT in reply have stated that it was the practice not to give advance to private companies against the DOT purchases. However MACE was a joint sector company in which government of Andhra Pradesh was having its shares and that is why it was granted advance being the only indegenous firm manufacturing shared radio equipment.

36. To a specific query as to the rationale for giving advances to the suppliers, it was replied that the Department would desist from giving any advance to any manufacturer for purchase of equipment. In reply to a further query it has been stated that the Department has stopped payment advance to the Public Undertaking companies except M/s. HTL and M/s. ITI who are DOT PSUs. Payments are also released only when the supplies have been effected after being tested and accepted by the Quality Assurance wing of the Department.

37. While equipments against first and second Purchase Orders of 100 and 400 equipments were supplied by the vendor and accepted by the DOT, it did not supply even a single equipment against the

third Purchase Order No. MMCT/8131/91-92 dated 1 October, 1991 nor refunded the advance of Rs. 13.50 crores alongwith the interest which added upto Rs. 1161.2 crores upto September, 1996. The MACE Ltd. also owed to DOT Rs. 4.78 lakh on account of excess payment of Excise Duty and Central Sales Tax as per Audit Projection on Purchase Order No. MMCT/1134/90-91 dated 17.5.90. With failure of MARR equipment developed by MACE Ltd., the Company ran into financial difficulties and vide letter dated 15.10.1994, refused to return the dues it owed to DOT on the plea that they did not have any money to refund.

38. A performance Ban Guarantee for 5 per cent of the amount of Purchase order was furnished by MACE Ltd., from Indian Bank Vishakhapatnam. When the firm refused to refund the dues, DOT is stated to have lodged claim with the concerned Bank to encash the performance guarantees. However, the Bank refused to honour the claim due to admittedly delayed performance.

39. While releasing the advance, the DOT stipulated vide its letter No. 90-93/91-MMC dated 13 November, 1991 that in case the delivery was not completed within the stipulated delivery period, the unadjusted advance should be refunded immediately by the contractor to the Paying Authority. In case, the unadjusted advance was not refunded, interest at the current bank borrowing rate should be charged from the date of expiry of the delivery period, till the advance was fully adjusted. It further stipulated that action to encash the performance bank gurantee could be intiated as an alternative measure. The interest was to be computed on monthly basis.

40. A perusal of the files relating to purchase of 500 MARR equipments from M/s. MACE Ltd., which the Committee called from DOT reveals that at no point of time the DOT initiated any effective steps to recover the excess payment and advance money till local resident Auditor pointed out and raised Auditer objection on 19 September, 1994.

41. Thereafter, the DOT issued FAX messages on 9 December, 1994 & 20 December, 1994 and also issued a letter on 23 December, 1994 to the Indian Bank, Vishakhapatnam to honour their claims. The details of Bank Guarantees available with the DOT in respect of which

claims were lodged with the Indian Bank Vishakhapatnam under set off clause is as under :—

Sl. No.	P.O. No. and Date	BG NO. & Date		Amount	Valid upto	Extended upto	Date of demand placed with Bank
(1)	MMCT/1134/90-91 dt. 17-5-90	37/90 dt.	28-5-90	Rs. 39,07,250/-	23-5-93	—	13-4-93
(2)	MMCT/1162/90-91 dt. 12-11-90	183/91-92	21-11-91	Rs. 2,58,000/-	19-11-94	—	24-9-94
		185/91-91	25-11-91	Rs. 20,00,000/-	23-11-94	—	24-9-94
		95/90	24-5-93	Rs. 79,66,200/-	13-11-93	—	29-6-93
		72/93-94	28-9-93	Rs. 8,89,443/-	20-9-96	—	23-2-96
(3)	MMCT/8276/93-94 dt.	5/93-94	28-7-93	Rs. 6,52,050/-	28-2-94	20-3-96	14-6-95
		(BG available with DOT ND)					
(4)	MMCT/8131/91-92 dt. 1-10-91	62/91-92	18-9-91	Rs. 1,92,64,250/-	10-9-92	NIL	—

42. The Committee learnt that Bank Guarantee No. 5/93-94 dated 28 July, 1993 for Rs. 6,52,050 in respect of purchase order No. MMCT/8276/93-94 was held by the DOT headquarters. The Bank wanted the bank Guarantee duly discharged to be lodged with them in order to enable them to pay the money. The Director Telecom, Stores, Madras requested the DOT headquarters vide D.O. Letter No. P-Others/93-94/39/MACE dated 13.9.1995 to send the Bank Guarantee for lodgement with the Bank. It was followed by a reminder dated 13.11.1995 However the DOT did not send the Bank Guarantee either to the Director Stores, Madras nor to the Bank. Instead after a protracted correspondence, DOT took up the matter with the Ministry of Finance and Reserve Bank of India to issue Directives to Indian Bank to honour Bank Guarantees.

43. The Committee also learnt from the correspondence that claim for Bank Gurantee No. 62/91-92 dated 18.9.91 for Rs. 1,92,64,250 was not lodged with the Bank as it was held by the Directorate. The Bank Guarantee reported to have been sent by the Directorate to the Director, Telcom Stores, Madras Vide DOT letter No. 80-93/91-MMC (Pt.) dated 27 November, 1992 was not received in latter's office. The subsequent enquires made by the Director Stores, Madras also did not yield any result and the bank Gurantee was yet to be traced.

44. It will also be seen that this Bank Gurantee numbering 62/91-92 dated 18 September, 1991 was valid for one year upto 10 September,

1992 only whereas the other Bank Gurantees were valid for a period of 3 years and generally Bank Gurantees are accepted for a period not less than 3 years. The contractor was willing to extend the Bank Guarantee for another year in response to DOT's letter No. 80-93/91-MMC (Ptd.) dated 27 November, 1992 in which M/s MACE was requested to do so, but backed out subsequently when the Purchase Order was cancelled suddenly by the Department of Telecommunications.

45. When the Director, Sotres Madras pointed out this fact, the DOT replied vide their letter No. 90-93/91-MMC dated 18 June, 1993 that Performance Bank Guarantee was of 'very less amount' and that it was meant only for the safety against performance of the equipment ordered in the Purchase Order. So the Bank Guarantee lost all its importance.

46. The Committee was informed that the M/s MACE Ltd. has filed a petition under Order 39 Rule 1 & 2 read into Section 151 of CPC in the Court of the II Sub-Judge, Vishakhapatnam for a temporary injunction in a suit filed for restraining the Indian Bank, Vishakhapatnam from passing the Guaranteed amount of Rs. 39, 07, 250/- covered by Gurantee No. 39/90 dated 28 May, 1990 contending that it had already expired on 23 May, 1993 and that purchase order was not in vogue as performance of the contract was completed by September, 1991 itself and accounts were duly settled on 14 May, 1994.

47. To a specific querty as to the date on which the case was taken up with the RBI and Ministry of Finance as well as their response, it was replied that since the Bank had not honoured the claims, the matter was taken up with the RBI and Ministry of Finance on 10.10.1996. No response was received from Ministry of Finance. RBI, however, has intimated the Department that the Indian Bank has been apprised to take necessary action. Both Ministry of Finance and RBI have again been requested by DOT on 18.12.1996 and 2.1.97 to take suitable action for expeditious encashment of the Performance Bank guarantee.

48. During evidence the Committee expressed its surprise that for encashment of a bank guarantee the Department had to seek legal opinion and the views of RBI and Ministry of Finance and asked why the Bank was not forced to pay the amount even after the rejection of the application for stay filed by the Company. As regards the latest position on the matter, the Secretary, DOT apprised the Committee

that upon contacting the State Government of Andhra Pradesh, it was known that since DOT did not give the approval and orders to MACE,. The company ran into difficulties, became sick and was referred to the BIFR in March, 1995. Asked when the order of BIFR was given, the representative replied that *prima facie* opinion was given by BIFR on 18.6.1996. Then the A.P. Industrial Development Corporation and the State Government asked for time and filed an appeal against the BIFR to AIFR, an appellate body. The appeal was admitted on 26.12.1996.

49. The Committee enquired in case DOT became successful in encashing the Bank guarantee, how much of the amount outstanding against MACE would be recovered and if Performance Bank Guarantee was not encashed what further measures were contemplated to recover the amount. In reply it was stated that an amount of Rs. 1,67,14,303/- can be recovered from the Company in case DOT becomes successful in encashing the Bank Guarantee. However, if the Department fails to recover the amount against performance bank guarantees, the following steps are proposed :

(a) The amount pending payment with the field units shall be adjusted and pending performance Bank Guarantee shall be got encashed. For this purpose all the field units have been addressed to intimate the availability of valid Bank Guarantees and bill pending payment of M/s. MACE for encashment under set off clause of the Purchase Order so far. But no circle has yet reported that any bill or Performance Bank Guarantees are available with them.

(b) The legal opinion from Ministry of Law was sought whether to appoint an Arbitrator or to file a suit against the firm to recover the outstanding amount. The legal opinion has been obtained, and their recommendation is to go in for arbitration.

50. The Committee enquired whether the financial position of MACE was taken into account when the company was initially selected for supplying the MARR equipments. In reply it was stated that there was no practice of examining the financial aspects of the Companies/ Vendors. As regards the constraints foced by the Department in examining the financial aspect of a new company/vendor before placing a Purchase Order with it, it was stated that at present there exists a clause under the tender that the Bidder shall furnish the Documentary

evidence that he has the financial, technical and production capability necessary to perform the contract.

51. The Committee enquired whether DOT ever felt the necessity of holding an internal enquiry into the matter to find out as to how this critical situation surfaced. The Secretary, DOT responded :

"I am afraid, so far there has been no such move."

52. Expansion of rural telecommunication network has been one of the priorities of the Department of Telecommunications (DOT) since long. With this end in view, DOT started probing for suitable modern technologies such as Wireless Radio system to overcome the constraints of the conventional system. On the recommendation of the Task Force which was set up for this purpose, DOT selected Multi Access Relay Radio (MARR) system. Initially 15 MARR systems were imported and it was decided to indigenise the system based on field trials of imported equipments which could withstand Indian conditions. Committee's examination of development and procurement of the MARR systems has brought out glaring lapses of inaction and injudicious and premature actions to say the least, on the part of DOT, which have been summarised in the succeding paragraphs. In brief, there has been unjustified haste in placing orders for systems whose specifications/parameters were yet to be formalised on the basis of field trials; in choosing a vender of unknown credentials and obscure standing, of having a lack-lustre approach, evincing lack of responsibility, laxity in recovering government money amounting to crores of rupees, adhocism, and gross negligence, and failure to take required steps to protect its interest.

53. The Committee expresses its displeasure over the contradictory statements of the Department of Telecommunications that M/s. ITI was solely responsible in selecting M/s. Kokusahi of Japan for procurement of the MARR systems, whereas as a matter of fact the ITI Team which selected the Japanese company was actually a joint team of ITI and DOT. The Committee fails to understand why right at the beginning M/s. ITI which was one of the leading public sector companies was not entrusted or encouraged to manufacture the MARR systems, more so when it was owned by DOT.

54. The Committee deprecates that the exact date of commission of the fifteen MARR systems which were imported from

M/s. Kokusahi of Japan in late 1986 and installed by the middle of 1987 is not available with the Department. It displays grossly irresponsible action of the Department towards maintenance of records in such important matters. The Committee would like the Department to guard against such inexplicable conduct.

55. The Committee is concerned to note that out of the fifteen systems imported from Japan, three were replaced during, October, 1993, January, 1994 and March, 1995 respectively much before the completion of their normal life span and another is working with reduced capacity. Presuming that the systems were commissioned during 1987 itself, as the date of commissioning is not available, and taking into consideration the reply of the Department that the normal life span of these imported systems was 10 to 15 years, the Committee is inclined to believe that the three equipments were replaced much before the expiry of their normal life span at considerable cost to the exchequer. The factors responsible for break down of costly equipments much before the expected service period require to be investigated. The reason that spares were not available as the systems had gone out of service because of obsole-sence of technology is not acceptable.

56. The Committee is unhappy at the contradictory statements made by the Department that the Task Force did not recommend anything towards availability of spare components and later on correcting that at page 68 of the Task Force Report the matter has been discussed. But after a perusal of the Report, the Committee observes that the matter has been dealt with cursorily by the Task Force. Needless to mention, the Task Force which itself recommended the use of MARR technology neglected the vital aspect of availability of spare components for which the imported equipments became non-functional much before their normal life span was over. Therefore, the plea that the equipments could not be fully utilised because of non-availability of spares cannot be accepted.

57. The Telecom Research Centre (TRC) developed the prototype and devised specification 2/15 VHF Analog for MARR system and placed orders for eighty numbers of systems on M/s MACE Ltd. by issuing Letter of Intent on 26 December, 1988. Purchase order was however, issued on 2 February, 1989 at the negotiated price of Rs. 317.928 lakhs. Prescribed tendering process was given a go-bye on the consideration that this order was for vendor development

and that M/s MACE Ltd. was the only vendor which came forward to develop shared radio system. The Committee is unable to comprehend how TRC concluded without floating any tender enquiry or even making any market enquiry that there was only one vendor capable for developing the MARR system of prescribed specifications. It is also intriguing to note point how the negotiated price of Rs. 3,97,400 per system was arrived at when the imported cost including spares worked out to less than Rs. 70,000 per system. In the case of DOTs purchases also the price negotiated was Rs. 7.81 lakhs in the 1st order, Rs. 4 lakhs in the 2nd order and Rs. 7.70 lakhs in the 3rd order per system. The abnormally high price paid raises many queries. Thus one of the basic objective of indigenous development i.e. to economise on cost was conveniently ignored and inflated price was sanctioned, which had no relation to the actual cost.

58. The Committee is perturbed to note that orders for purchase of eighty systems were placed in December, 88/February, 89 much before the field trials of imported shared radio systems in March-April and July-September, 1989.

59. The Committee cannot but express its grave displeasure that TRC whose job was to develop suitable products and technology preferred to place orders for 80 systems worth rupees three crores and seventeen lakhs without obtaining any clearance from the Department of Telecommunications or Telecom Commission and at least without the usual tendering process. The reasoning of the Secretary, DOT that TRC being an Autonomous Body, need not get any clearance from the Department does not convince the Committee. In the opinion of the Committee, TRC should have sought clearance from the Department before placing purchase orders with M/s MACE, instead of itself doing so. In any event, purchase of eighty systems in one go without awaiting field trial reports about the functioning on imported systems was totally unwarranted and no acceptable reason has been offered to justify purchase of so many systems at one time.

60. The Committee is gravely disturbed to note that certain relaxations with regard to Multi Metering facility and Dynamic Assignment of channels etc. were given to M/s MACE by TRC on the ground that there was an urgent requirement to meet the demand of Long Distance Public Telephones (LDPTs) in the country and the Manufacturer had produced the equipments against the order from

TRC itself. Surprisingly, neither any quantification of the value of relaxation was done nor any price reduction was sought from the company is view of the relaxation/departure granted from the TRC specifications. The Committee considers it to be a serious lapse. It does not find any justification in favouring the MACE Ltd. at a cost so enormous to the Exchequer. The Committee will like to be assured in no ambiguous terms that no favour was granted to the vendor. It will also like the relaxations to be quantified for all the purchase orders executed by M/s MACE Ltd.

61. The Committee notes that three purchase orders were placed with M/s MACE Ltd. by DOT in quick succession i.e. for 100 MARR systems on 17.5.1990 worth Rs. 781.45 lakhs, for 400 MARR systems on 12.11.1990 worth Rs. 1593.24 lakhs, and for 500 systems on 1.10.1991 worth Rs. 3852.85 lakhs. Here it may be mentioned that a consolidated and authenticated analysis of the feedback as regards to the first 80 systems ordered by TRC was received from the field in August, 1991 which brought out some major faults like bad and cumbersome design, ineffective quality control etc. in the equipments supplied by MACE. Thus, it was highly objectionable that first two orders were placed with MACE much before getting any feedback from the fields on the performance of the first 80 systems. It is intriguing to note that another order was placed for the same systems from the same company two months after the detection of major deficiencies in their performance. Experiment in product development and compulsions to achieve targets in Village Public Telephones—the two reasons put forward by the Department for placing the orders of 80, 100, 400 and 500 systems belie the statement when the net result is seen at the end. Neither the experiment was successful nor the target to provide VPTs could be achieved. The action of the Department in placing Purchase Order of 500 systems knowing well the major faults in the MACE equipments is highly deplorable. Thus, after summing up the sequence of placement of all the orders the Committee feels that the failure to observe the norms with regard to DOT placing orders with MACE Ltd. smacks of grant of undue favour to the Company.

62. The Committee notes that major faults like bad workmanship, bad designing/component selection, cumbersome design and ineffective quality control in the factory were identified as a result of the investigations conducted in the factory by the Quality Assurance wing of the Department after procurement of first lot of

80 systems. Even though the mistakes in design and quality control problems were brought out in the notice of the vendor and solutions were also suggested to some of the problems, M/s MACE failed to take any effective steps either to improve its products in the factory or to upgrade the same in the field for lack of finances. This led TEC to revoke the type approval on 30 June, 1992. Had the financial standing of the company and its capabilities been adjudged before selecting the vendor, the DOT would not have suffered financially and in terms of missing of physical targets. The Committee will like to know why the Quality Assurance wing of the Ministry did not inspect the manufacturing processs of systems in factory premises of the vendor before supply of first lot.

63. The Committee deprecates that no tender was floated for the first 80 and 100 systems which were placed on M/s MACE Ltd. And when tendering process was followed for the 400 and 500 systems, M/s MACE was awarded the tender on the plea that other vendors/ parties who participated in the Tender had not gone through the process of type specifications. However, they were given 'educational order' of 20 systems. The Committee is of the opinion that this process of 'educational orders' should have been followed right at the initial stage to develop indigenous vendors and different sources of supply. The Committee, therefore, cannot but conclude that the subsequent tendering process failed to encourage competition and discourage monopoly, rather it turned out to be the other way round.

64. The Committee is shocked to note that with each Purchase Order, DOT advanced the sum equivalent to 35 percent of Purchase Order in utter violation of the prescribed procedure. As a result of it, entire advance of Rs. 1348.50 lakhs of the third Purchase Order of 500 systems which was subsequently cancelled and a sum of Rs. 4.78 lakh on account of excess payment of second Purchase Order are outstanding against the vending company. The Company ran into financial difficulties and refused to repay the money vide its letter dated 15 October, 1994. Curiously, DOT did not take any step to recover the amount of advance till Resident Auditor pointed out overpayment on 19 September, 1994. Only, thereafter, the DOT asked the Company to refund the advance. Meanwhile, the advance money of Rs. 1348.50 lakhs multiplied to Rs. 24.3 crores as on 31 May, 1996 at the concessional rate of interest of ten percent per annum. There appear to be bleak chance of recovering the Government dues as the Company has been referred BIFR. The Committee find a number

of lapses and instances of lack of foresight on the part of DOT as mentioned below which led to this sorry state of affairs.

(i) At no point of time, the Department took any effective step to recover the excess payment and advance money till the auditor raised audit objection on 19 September, 1994.

(ii) Even after protracted request of the Bank and Director, Telecom Stores, Madras to DOT for duly discharging and lodging the bank guarantee with them, DOT did not respond.

(iii) The matter was seriously pursued by DOT with the Ministry of Finance and RBI towards the end of 1996, only when the Committee took up this subject for examination.

(iv) Fourthly, the Bank Guarantee of Rs. 1,92,64,250 which was taken for the third advance of Rs. 1348.50 lakh was accepted though valid for only one year. Bank Guarantees are normally valid for a period of 3 years and more.

(v) Purchase Order was cancelled all of a sudden without realising its implications and getting the Bank Guarantee extended which the vendor was willing to do at that stage. Prudence required that Bank Guarantee should have been got extended prior to cancellation of Purchase Order.

(vi) Curiously, the Bank Guarantee of Rs. 1,92,64,250 alongwith another Bank Guarantee of Rs. 6,52,050 was kept by the DOT Directorate while all others were with the Director, Telecom Stores, Madras and were not sent to the latter despite repeated reminders.

The Bank was willing to accept the bank Guarantee for Rs. 6,52,050 and wanted it duly discharged which was not done.

(vii) The Department deliberately avoided encashing Bank Guarantee of Rs. 1,92,64,250 on the plea that this bank guarantee was of a 'very little amount' and was meant only for a safety against performance of the equipments.

65. The Committee is inclined to conclude that even if the Department becomes successful in encashing the performance bank

guarantee which under the circumstances seems to be a distant possibility, only a small fraction will be recovered leaving a staggering amount of more than Rs. 23 crores. Now that the company has been referred to BIFR and due to the procedural lapses on the part of the Department, it is nearly impossible that DOT would get back its outstanding dues.

66. The most serious aspect of this entire episode is that the Department did not feel it necessary to hold an enquiry into the matter. The Committee desires the Department to hold a proper enquiry into the matter immediately so that the delinquent officials do not go scot-free. The Committee also recommends the Department to discard its lackadaisical attitude and less than sincere approach for recovering its outstanding dues from M/s MACE Ltd.

67. The Committee, recommends that except in deserving cases, to be decided at the appropriate level in future the Department should desist from giving any advance to any vendor/company for purchase of equipments. The payments should ordinarily be released only after the supplies are duly made.

68. The Committee feels that a mere mentioning of the clause now existing under the Tender that the bidder shall furnish the documentary evidence in support of his financial capabilities to perform the contract would not serve the purpose. The Committee therefore, recommends the Department to find out suitable ways for examining the financial capability of a particular company whenever any contract is awarded to it.

69. Another interesting aspect of purchase of systems which came to notice is that one of the stipulations for release of advance of Rs. 1248.50 lakh was that if the delivery was not completed within the stipulated delivery period, the unadjusted advance shall be refunded immediately. In case the unadjusted advance was not refunded interest at the current bank borrowing rate shall be charged from the expiry of the delivery period till the advance was fully adjusted. However, the Committee find that this condition has been relaxed without any valid reason. The Committee will like to know reasons for showing special consideration to a defaulting vendor.

70. The Committee must express its anguish that in matters of vital public interest an important Department and/or its associate organisations, had taken an attitude totally lacking in transparency,

and had indulged in ad-hocism violating all known norms of official functioning, specially in case of making costly purchases.

71. In the circumstances, the Committee cannot but strongly recommend for an in-depth and thorough enquiry into the matter by a suitable agency, preferably, outside DOT.

NEW DELHI;
March 19, 1997
Phalguna 28, 1918 *(Saka)*

SOMNATH CHATTERJEE,
Chairman,
Standing Committee on Communications.

MINUTES OF THE EIGHTEENTH SITTING OF THE COMMITTEE ON COMMUNICATIONS (1996-97)

The Committee sat on Thursday, the 12 December, 1996 from 16.00 to 17.50 hrs. in Committee Room 'B', Parliament House Annexe, New Delhi.

PRESENT

Shri Somnath Chatterjee — *Chairman*

MEMBERS

Lok Sabha

2. Shri K.L. Sharma
3. Shri Harin Pathak
4. Smt. Sheela Gautam
5. Shri Th. Choaba Singh
6. Shri M.P. Veerendra Kumar
7. Shri R. Devadas
8. Dr. Shafiqur Rehman Barq
9. Shri V. P. Shanmuga Sundram
10. Shri Churchill Alemao

Rajya Sabha

11. Shrimati Veena Verma
12. Shri Govindram Miri
13. Shri Md. Salim
14. Shri Satish Pradhan

SECRETARIAT

Shri Ram Autar Ram — *Deputy Secretary*

Shri S.K. Sharma — *Under Secretary*

REPRESENTATIVES OF MINISTRY OF COMMUNICATIONS
(DEPARTMENT OF TELECOMMUNICATIONS)

1.	Shri A.V. Gokak	—	Secretary, DoT and Chairman, Telecom Commission
2.	Shri P. S. Saran	—	Member (Services), Telecom Commission
3.	Shri P. Khan	—	Member (Production), Telecom Commission
4.	Shri N.K. Sinha	—	Member (Technology), Telecom Commission
5.	Shri G.C. Iyer	—	Member (Finance), Telecom Commission

2. At the outset the Chairman welcomed the representatives of the Ministry of Communications (Department of Telecommunications) to the sitting of the Committee.

3. Then the Committee sought certain clarifications from the representatives of the Department of Telecommunications on the subject "Selection of Multi Access Relay Radio (MARR) system and other contemporary technologies".

4. The Committee expressed its displeasure over the fact that the representatives were not in a position to explain satisfactorily certain querries of the Members. The Committee, therefore, advised the representatives to come fully prepared in the next meeting.

5. A verbatim record of the sitting has been kept.

The Committee then adjourned to meet again on 13.1.1997.

ANNEXURE II

MINUTES OF THE TWENTIETH SITTING OF THE COMMITTEE ON COMMUNICATIONS (1996-97)

The Committee sat on Monday, the 13 January, 1997 from 11.00 to 13.15 hrs. in Committee Room 'C', Parliament House Annexe, New Delhi.

PRESENT

Shri Somnath Chatterjee — *Chairman*

MEMBERS

Lok Sabha

2. Shri K.L. Sharma
3. Smt. Sheela Gautam
4. Shri Mahesh Kanodia
5. Shri Pankaj Chaudhary
6. Shri Harpal Singh Sathi
7. Shri Th. Choaba Singh
8. Shri Girdhar Gamango
9. Shri Somjibhai Damor
10. Shri Thomas Hansda
11. Shri T. Veera Bhadram
12. Shri R. Devadas
13. Shri Kothapalli Subbarayudu
14. Smt. Geeta Mukherjee

Rajya Sabha

15. Shrimati Veena Verma
16. Shri Iqbal Singh
17. Shri Ahmed Patel
18. Shri Govindram Miri
19. Shri Shatrughan Prasad Sinha
20. Dr. Ramendra Kumar Yadav Ravi
21. Shri Md. Salim
22. Shri S. Austin
23. Shri Satish Pradhan

SECRETARIAT

Shri Ram Autar Ram	—	*Deputy Secretary*
Shri S.K. Sharma	—	*Under Secretary*

REPRESENTATIVES OF MINISTRY OF COMMUNICATIONS,
(DEPARTMENT OF TELECOMMUNICATIONS)

1.	Shri A.V. Gokak	—	Secretary, DoT and Chairman, Telecom Commission
2.	Shri P.S. Saran	—	Member (Services), Telecom Commission
3.	Shri N.K. Sinha	—	Member (Technology), Telecom Commission
4.	Shri G.C. Iyer	—	Member (Finance), Telecom Commission

2. The Chairman again welcomed the representatives of the Ministry of Communications (Department of Telecommunications) to the sitting and sought their assistance to conclude the unfinished deliberations of 12.12.1996 on the subject "Selection of Multi Access Relay Radio (MARR) system and other contemporary technologies."

3. The Committee sought certain clarifications from the representatives and at the end thanked them for furnishing information to the Committee as well as for expressing free and frank views on various points raised by the members.

4. A verbatim Record of the Proceedings of the sitting has been kept.

The Committee then adjourned.

ANNEXURE III

MINUTES OF THE TWENTY-SIXTH SITTING OF THE COMMITTEE ON COMMUNICATIONS (1996-97)

The Committee sat on Tuesday, the 18 March, 1997 from 15.00 to 16.00 hrs. in Committee Room 'C', Parliament House Annexe, New Delhi.

PRESENT

Shri Somnath Chatterjee — *Chairman*

MEMBERS

Lok Sabha

2. Shri K.L. Sharma
3. Prof. Rasa Singh Rawat
4. Smt. Sheela Gautam
5. Shri Th. Choaba Singh
6. Shri Mrutyunjaya Nayak
7. Shri Neil O' Brien
8. Shri R. Devadas
9. Shri V.P. Shanmuga Sundram
10. Shrimati Geeta Mukherjee
11. Shri Keshab Mahanta
12. Shri Joachim Baxla
13. Shri Churchill Alemao

Rajya Sabha

14. Shrimati Veena Verma
15. Shri Govindram Miri
16. Shri Satish Pradhan

SECRETARIAT

Dr. A.K. Pandey — *Additional Secretary*
Shri J.P. Ratnesh — *Joint Secretary*
Shri Ram Autar Ram — *Director*
Shri S.K. Sharma — *Deputy Secretary*

2. The Committee took up for consideration the draft Ninth Report on Selection of Multi-Access Relay Radio (MARR) Technology relating to the Ministry of Communications (Department of Telecommunications) and adopted the same without any modifications/ amendments.

3. Thereafter the Committee authorised the Chairman to finalise and present the Report to the Parliament.

The Committee then adjourned.