

FIFTEENTH REPORT
PUBLIC ACCOUNTS COMMITTEE
(1991-92)

(TENTH LOK SABHA)

TRUNK AUTOMATIC EXCHANGES AT CALCUTTA

[Action taken on 146th Report (8th Lok Sabha)]

MINISTRY OF COMMUNICATIONS
(DEPARTMENT OF TELECOMMUNICATIONS)



सत्यमेव जयते

Presented to Lok Sabha on 6 April, 1992

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(1991-92)**

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(iii)

INTRODUCTION

I, the Chairman of the Public Accounts Committee as authorised by the Committee, do present on their behalf this Fifteenth Report on action taken by Government on the recommendations of the Public Accounts Committee contained in their Hundred and Forty-Sixth Report (Eighth Lok Sabha) on 'Trunk Automatic Exchanges at Calcutta'.

2. In their earlier Report, the Committee had expressed concern that while there was a quite high rate of failure of the STD calls, no parameter had been defined for the standard percentage of efficiency of the STD calls on SPC TAXs. Considering it as a serious lacuna, the Committee had desired that some suitable parameter be fixed for measuring the efficiency of STD system to ensure optimum efficiency as also to make revenue projections more realistic. According to the Department of Telecommunications as the overall success rate is dependent on the efficiency of each component of the network, it is not considered practicable to fix a single target for the country as a whole. The Committee have felt that a workable standard efficiency parameter has to be kept in view with reference to which the overall working of the units has to be kept in view with reference to which the overall working of the units has to be assessed/geared up. The Committee have, therefore reiterated their earlier recommendation that some suitable parameter may be fixed for the standard percentage of efficiency of the STD calls on the SPC TAXs as early as possible for measuring the efficiency of the STD systems ensure optimum efficiency of such systems and also to make revenue projections more realistic.

3. The Committee considered and adopted this Report at their sitting held on 17 March, 1992. Minutes of the sitting form Part II of the Report.

4. For facility of reference and convenience, the recommendations of the Committee have been printed in thick type in the body of the Report and have also been reproduced in a consolidated form in the Appendix to the Report.

5. The Committee place on record their appreciation of the assistance rendered to them in the matter by the Office of the Comptroller and Auditor General of India.

NEW DELHI;
March 23, 1992

Chaitra 3, 1914 (Saka)

ATAL BIHARI VAJPAYEE
Chairman,
Public Accounts Committee.

CHAPTER I

REPORT

1.1 This Report of the Committee deals with action taken by Government on the Committee's Recommendations/Observations contained in their 146th Report (8th Lok Sabha) on Para 32 of the Report of the Comptroller and Auditor General of India for the year ended 31 March, 1987, Union Government (P&T) relating to "Trunk Automatic Exchanges at Calcutta".

1.2 The 146th Report, which was presented to Lok Sabha on 10th April, 1989, contained 20 Recommendations/Observations. Action Taken Notes have been received on 7.5.90 and 23.7.90 in respect of all the recommendations. The replies received from the Department of Telecommunications have been broadly categorised as under :

- (i) Recommendations/Observations that have been accepted by Government :

Sl. Nos. 6-9, 12, 13, 15, 18 and 20.

- (ii) Recommendations/Observations which the Committee do not desire to pursue in view of the Government's reply :

Sl. Nos. 1-5, 10, 11, 14, 16 and 17.

- (iii) Recommendations/Observations in respect of which replies of Government have not been accepted by the Committee and which require reiteration :

Sl. No. 19.

- (iv) Recommendations/Observations to which Government have furnished interim replies :

NIL

1.3 The Committee will now deal with Action Taken by Government on some of their Recommendations/Observations.

Average failure of S.T.D. Calls

(S. No. 19—Para 4.20)

1.4 While dealing with the average failure of S.T.D. calls and non-achievement of anticipated traffic/revenue, the Committee had, in their earlier Report, observed. *inter-alia* :

"The Committee find that while the percentage of permissible failures in STD calls for 1984-85 was fixed at 40, the percentage

of actual call failures ranged between 86.23 and 87.73 during the 3 years 1984-87. The Department has not been able to offer any tenable explanation as to reasons for such high failure rate. The Department of Telecommunications have pointed out that the figure of 40 is the desirable MIS group target and this should not be interpreted as the maximum permissible call failure rate. However, in regard to the standard percentage of efficiency of STD calls on SPC TAXs, the Department have stated that no such parameter has been defined. The Committee feel concerned that while there is quite a high rate of failure of the STD calls, the Department has not determined a parameter for the standard efficiency. The Committee consider it as a serious lacuna as, in the absence of such a parameter, the Department can not possibly fix the optimum level of efficiency and utilisation and arrive at the anticipated projections to traffic and revenue. The Committee recommend that this lacuna be remedied and some suitable parameter fixed as early as possible with a view to measuring efficiency of STD systems and taking steps to ensure optimum efficiency of such systems as well as to ensure the projected revenue earning”.

1.5 In their action taken note the Department of Telecommunications have stated that :

“In order to determine the performance of STD network (which includes the subscriber instrument, subscriber’s local loop, junction network, local network, transmission network and the TAX network), an MIS indicator called “percentage failure of STD calls” has been prescribed. This parameter measures on a sample basis (two links as well as one link) the success rate of STD test calls from a free telephone to another free telephone through the TAX network. The overall success rate is dependent on the efficiency of each component of the network. For example, if each component has 90% efficiency, the total efficiency of a system containing seven units in tandem works out to 36%. In other words, the failure rate is 64%.

This figure is tightened up progressively to ensure optimum efficiency of the system for better customer satisfaction and maximum revenue. The targets for the units are fixed individually based on local factors such as type of equipment used the availability of trained personnel and the network conditions which varies considerably from place to place. It is not considered practicable to fix a single target for the country as a whole.”

1.6 The Committee had expressed concern that while there is quite a high rate failure of the STD calls, no parameter has been defined for the standard percentage of efficiency of the STD calls on SPC TAXs. The Committee had therefore, desired that some suitable parameter be fixed for measuring the efficiency of the STD system to ensure optimum efficiency as also to make revenue projections more realistic. In reply, the Department of Telecommunications have sought to explain that the overall success rate is

dependent on the efficiency of each component of the network; the targets for the units are fixed individually based on local factors such as type of equipment used, the availability of trained personnel and the network conditions which vary considerable from place to place; and it is not considered practicable to fix a single target for the country as a whole.

1.7 The reply of the Department that “the overall success rate is dependent on the efficiency of each component of the network” calls into question the operation of all the exchanges since system is only as efficient as its least efficient component. The Committee cannot appreciate how in the absence of a guiding parameter the projections for revenue are fixed or efficiency monitored. Even if there are certain marginal variations in the network conditions or the type of equipment etc. in some units, a workable standard efficiency parameter has to be kept in view with reference to which the overall working of the units has to be assessed/geared up. A suitable margin can always be provided for the comparatively weaker or less efficient network.

1.8 The Committee, therefore, reiterate their recommendation that some suitable parameter may be fixed for the standard percentage of efficiency of the STD calls on the SPC TAXs as early as possible with a view to measuring efficiency of the STD systems and taking steps to ensure optimum efficiency of such systems as well as to ensure the projected revenue earnings. It is all the more important that this be done at an early date taking into account the constant complaints of the Public in this regard.

CHAPTER II

OBSERVATIONS/RECOMMENDATIONS THAT HAVE BEEN ACCEPTED BY GOVERNMENT

Recommendation

The Committee would, therefore, hope that the Department will keep themselves abreast of the latest technological developments in the field of telecommunications and in future, introduce any new technology not only after detailed consideration of the relative merits of the available alternative technologies/systems but also of the prospective collaborators products so that our limited resources are put to best use and the speed of modernisation is not hampered.

[Sl. No.6 ← Para 1.29 of 146th Report of PAC (8th Lok Sabha)]

Action Taken

The department had set up a "System Selection Group" in 1971 to keep themselves abreast of the latest technological developments in the field of telecommunications, study the relative merits of the available alternative technologies/systems and recommend suitable switching system for the country.

In respect of switching system selection, only reputed and experienced manufacturers of switching systems are considered for setting up production facilities in the country in addition, the department has been making it a condition that at least one commercial exchange of roughly 5000 lines should be in public service and respect of each manufacturer whose system is considered for adoption in the country. In order to ensure smooth the effective transfer of technology, a task force was set up in the department. This task force was a multi-disciplinary group representing different areas like hardware, software, engineering, planning, operation and maintenance. This task force was in constant touch with the suppliers till the transfer of technology was completed and the initial problems of the trial exchanges have been satisfactorily sorted out. A model exchange of each type of all new switching systems has been installed to try out the solutions to problems faced in the field.

It has been vetted by Dir. of Audit P&T Delhi *vide* their UO No. DAP&T UO No. RR/Projects/2(d) 1086/327 dt. 15.12.89.

[Deptt. of Telecommunication File 262-4/88-TPL (XK)]

Recommendation

The Committee find that the proposal for installation of 4000 lines Penta Conta trunk automatic exchange was sanctioned in December 1966 and it was envisaged that the installation would be completed in about 15 months, subject to receipt of stores in time. The first phase of the TAX with 2000 lines was commissioned in June 1974 and the second phase with another 2000 lines was commissioned in March, 1980. Thus, it took more than 13 years for the Department to commission the TAX completely. The main explanation given for the long delay by the Department is that it could not be avoided as first hand experience of the new technology was not available in the country and the technical problems were not anticipated.

[Sl. No. 7—Para 2.17 of 146th Report of PAC (8th Lok Sabha)]

Action Taken

Comments and observations are noted.

This has been vetted by Director of Audit (P&T) Delhi *vide* their U.O. No. DAP&T U.O. No. RR Projects/2 (d) 3086/237 dated 15.12.1989.

[Deptt. of Telecom. File 262-4/88-TPL (XK)]

Recommendation

Similarly, there was huge cost escalation in supply of equipment by ITI from Rs. 99.80 lakhs to Rs. 385 lakhs and an amount of Rs. 22.96 lakhs was invested on provision of an engine alternator to meet power failure in Calcutta during the 1970s.

[Sl. No. 8—Para 2.18 of 146th Report of PAC (8th Lok Sabha)]

Action Taken

Comments and observations are noted.

This has been vetted by Director of Audit (P&T) Delhi *vide* their U.O. No. DAP&T U.O. No. RR/Projects/2 (d) 3086/327 dated 15.12.1989.

[Deptt. of Telecommunication File 262-4/88-TPL (XK)]

Recommendation

In the preceding chapter the Committee have incidentally referred to the delay in handling the project, mainly, on account of import of non-proven technology. Besides, the Committee find that Indian Telephone Industries who alone was to manufacture and supply the equipment, was not consulted while drawing up the time schedule for completion of the project, although, the ITI happens to be under the administrative control

of the department of Telecommunications themselves. The delay has also been attributed to delays in commencement of production of equipment by ITI due to innumerable modifications necessitated right from the beginning. The Committee are surprised to note that the Telecommunications Department being the repository of expertise in telecommunications could not foresee these problems altogether. The time schedule of 15 months was fixed without considering the problems likely to be encountered in introducing a new technology and manufacturing equipment for the same. Even ITI who were to be the sole manufacturer and supplier of the equipment was not consulted in drawing up the time schedule. The casual approach in fixing the time schedule of a costly project has resulted not only in considerable time overrun but has also necessitated payment of a large amount by way of escalation in costs. This is indicative of a serious deficiency in the project management by the Department. The Committee cannot but strongly disapprove such a casual approach on the part of the Department. The Committee hope that the Department shall take a more realistic view while drawing up such projects, take all possible factors into account and consult all concerned agencies in advance so that such long delays and heavy cost overruns can be avoided in future.

[Sl. No. 9—Para 2.19 of 146th Report of PAC (8th Lok Sabha)]

Action Taken

In order to prevent the time overrun of TAX projects, the following steps have already been initiated and implemented:—

(a) The PERT Chart for each project is prepared at the project formulation stage before the sanction of the project.

(b) The purchase order for the equipment from ITI is placed only after obtaining the delivery schedule for the supply of equipment.

(c) A package discipline has been prescribed for the supply of equipment to ensure that the equipment is received from the factory in the order in which it is required to be installed.

(d) Liquidated damages condition has been introduced in the agreement with the ITI to take care of slippages in the delivery schedule already agreed to.

(e) Regular co-ordination with the ITI is carried out to ensure smooth and orderly supply of equipment.

This has been vetted by Director of Audit (P&T) Delhi *vide* their U.O. No. DAP&T U.O. No. RR/Projects/2 (d) 3086/327 dated 15.12.89.

[Deptt. of Telecommunications File No. 262-4/88-TPL(XK)]

Recommendation

The Committee find that the PC TAX has been grossly under utilised during the seven years ending March 1987, inasmuch as the percentage utilisation of the TAX had ranged between 34.60 and 60.95 and that the PC TAX was not utilised fully on account of technical problems for which reason it was loaded only gradually. Further, the utilisation of a TAX is stated to depend *inter alia* upon the automatisation of the dependent stations, the availability of transmission media and the connecting equipments. Although at the planning stage the question of automatisation and simultaneous development of the dependent stations, provision of reliable media and trunk automatic exchanges is stated to have been given due importance, there have been shortcomings in the actual implementation. According to the Ministry, the shortcomings such as non-availability of funds, non-availability of equipment in time, non-availability physical possession of land, delay in completion of technical buildings in out of the way locations etc. were beyond the control of the department. It seems to the Committee that all relevant factors were not kept in view at the planning stage so as to avoid such gross under utilisation. The Committee cannot help reaching a conclusion that inadequacy in planning process, both from physical and financial angles, has been the contributory cause for substantial under utilisation of the facility.

[Sl. No. 12—Para 3.12 of 146th Report of PAC (8th Lok Sabha)]

Action Taken

The comments and observations are noted. Remedial action as given under para 3.13 may please be seen.

This has been vetted by Dir. of Audit (P&T) Delhi *vide* their UO No. DAP&T RR Projects/2 (d) 3086/327 dated 15.12.89.

[Deptt. of Telecommunication File 262-4/88-TPL (XK)]

Recommendation

The Committee desire that the Department should take a more realistic view of the requirement as well as the problems likely to be encountered in the execution of a project so that such under utilisation of capacity or wastage is avoided in future especially when fast technological changes are taking place in the field of telecommunications.

[Sl. No. 13—Para 3.13 of 146th Report of PAC (8th Lok Sabha)]

Action Taken

The following procedure is now being followed for the sanction of projects:—

(a) New TAX projects are taken up for sanction only if they could be loaded to atleast 50 per cent of the capacity at the time of commissioning.

(b) The automatisation of the local exchange and media availability of dependent stations are taken into account at the project formulation stage.

(c) The remunerativeness of the project is worked out on the basis of the loading of the exchange at the time of commissioning and not on its full capacity.

This has been vetted by the Director of Audit (P&T) Delhi *vide* their UO No. DAP&T U.O. N. RRP Projects/2(a) 3086/327 dated 15.12.89.

[Deptt. of Telecom. File 262-4/88-TPL(XK)]

Recommendation

The Department of Telecommunications have stated that when the Calcutta PC TAX project was formulated in 1965-66, the primary objective was to cater the Calcutta Telephone System and provision of connections to other Trunk Automatic Exchanges which were to come up at Bombay, Delhi, Madras and Kanpur and that inter-connection with other exchanges in the Eastern region was also envisaged. On the achievement side, it has been reported that the PC TAX Calcutta was connected with major cities as soon as it was commissioned and that connections with dependent stations in the region were provided as and when it became feasible. In regard to the lack of coordination for development of dependent stations and consequent non-utilisation of facilities to optimum level, the Department has accepted that in the initial years there was no specific monitoring. Since the system was being introduced for the first time at Calcutta, the Committee cannot over-emphasise the need for a proper monitoring system right from the inception of the project until its completion so that the bottlenecks could have been identified at appropriate level and remedial measures initiated avoiding wasteful expenditure and idle investment.

[Sl. No. 15—Para 3.15 of 146th Report of PAC (8th Lok Sabha)]

Action Taken

In order to ensure proper monitoring of the project, PERT chart approach for sanction and monitoring of projects has been adopted. The monitoring/execution of various activities of the project has been entrusted to the Head of Circle Incharge of Project. The Head of the Circles holds periodical coordination meetings with all the concerned units in order to ensure that bottlenecks are identified at appropriate level and remedial measures initiated avoiding wasteful expenditure and idle investment. The projects are being monitored at Directorate level.

This has been vetted by Director of Audit, P&T Delhi *vide* their U.O. No. RR. Projects/2(d) 3086/364 dated 30.1.90

[Deptt. of Telecom. File 262-4/88-TPL (XK)]

Recommendation

The Committee find that in November 1984 the P&T Board approved a proposal for the phasing out of the PC TAX due to poor performance of the system. It was proposed to be replaced by the SPC TAXs. After phasing out of the PC TAX, the equipment in good and serviceable

condition valued at Rs. 257.08 lakhs was proposed to be used as maintenance spares for other working PC TAXs. While the Committee do not wish to dilate on the question of phasing out of the PC TAXs to be replaced by the SPC TAXs in the metro cities, they hope that the equipment so released in good and serviceable condition would be properly stored & profitably utilised so that the available assets are put to best advantage of the department. The Committee consider it highly unfortunate that the PC TAX system though successfully operated in various foreign countries, was obtained from a country without any proven record and as a result a substantial investment is being written off quite prematurely.

[Sl. No. 18—Para 4.8 of 146th Report of PAC (8th Lok Sabha)]

Action Taken

The observation and comments are noted. After phasing out the PC TAX, the equipment in good and serviceable condition would be used as maintenance spares for other working PC TAXs. Instructions have been issued to the field units that the released equipment in good and serviceable condition would be used as maintenance spares.

This has been vetted by the Director of Audit (P&T) Delhi *vide* their U.O No. DAP&T U.O. NO. RR Projects/2(a) 3086/327 dated 15.12.89

[Deptt. of Telecom. No. 262-4/88-TPL (XK)]

Recommendation

The Committee are concerned to note that four out of five positions of Members in the Telecommunications Board are lying vacant and some of the vacancies have lasted more than 6 months, with the result that certain officers are given dual responsibility. The Committee feels strongly that to maintain continuity of policies and programmes of such an important organisation as the Telecommunication Board, the Government should ensure not only that top positions like that of Members, Telecommunication Board, should not remain vacant even for a single day, on the contrary it should further ensure that the next incumbent proposed is selected at least a couple of months in advance and seconded to the post to be assumed by him on retirement of the holding incumbent so that he can get himself fully conversant of not only the policies, the programmes and decisions but also various nuances of the departmental working and the changeover on the retirement of each top incumbent is smooth and does not cause any slowing down of the processes of decision-making or implementation of works.

[Sl. No. 20—Para 4.24 of 146th Report of PAC (8th Lok Sabha)]

Action Taken

Consequent on the constitution of the Telecom Commission, the erstwhile Telecom Board is no longer in existence. The Telecom Commission has started functioning with a Chairman and four full time Members dealing with Services, Production, Finance and Technology.

This has been vetted by the Director of Audit (P&T) Delhi *vide* their U.O.No.DAP&T U.O.No.RR./Projects/2(d) 3086/327 dated 15.12.89

[Deptt. of Telecom. No. 262-4/88-TPL (XK)]

CHAPTER III

OBSERVATIONS/RECOMMENDATIONS WHICH THE COMMITTEE DO NOT DESIRE TO PURSUE IN THE LIGHT OF THE REPLIES RECEIVED FROM GOVERNMENT

Recommendation

The Committee note that in the fifties India had the strowger type step-by-step direct switching type of equipment manufactured in India under a collaboration agreement with a British company. However this system suffered from a number of deficiencies, the most serious limitation being its inability to provide the subscriber trunk dialling on a nationwide scale based on universal numbering scheme. Therefore, in 1959, the Government of India set up the Telephone Switching Systems Committee to choose an appropriate switching system for the Country. After a detailed assessment of the switching equipment needs of the country, discussions with the international switching experts consultations with important telecommunications organisations & principal manufacturing concerns in Europe and Japan, the Telephone Switching Systems Committee recommended, and the Department introduced in India, the Penta Conta Switching system, a system which was in use since before 1960.

[Sl. No.1—Para 1.24 of 146th Report of PAC (8th Lok Sabha)]

Action Taken

Comments are not required.

This has been vetted by Director of Audit (P&T) Delhi *vide* their U.O No. DAP&T U.O. No. RR/Projects2(d) 3086/327 dated 15.12.89.

[Deptt. of Telecom. File 262-4/88-TPL(XK)]

Recommendation

The Committee find that the Penta Conta Cross Bar Technique was first installed in the world in Italy as early as 1954 and that the system became commercially available in 1960. The Penta Conta system was being manufactured in different countries and was working well in Europe, particularly France. But the Telecommunications Department obtained the Penta Conta System for Bell Telephone Company of Belgium who had manufactured the system for the first time in 1964 and had not tried their system in any other country before introduction in India.

[Sl. No. 2—Para 1.25 of 146th Report of PAC (8th Lok Sabha)]

Action Taken

The Penta Conta System was developed in France by CGCT which is a French Company. The system was marketed in France by CGCT. The production and sale of the system in the export market was entrusted to the BTM Company. Hence, Telephone Switching Systems Committee received the proposal only from BTM Company and not from CGCT of France. The equipment supplied to India was manufactured at the Antwerp Factory of BTM Company Both CGCT of France and BTM of Belgium were subsidiaries of the same multinational Company ITT.

This has been vetted by Director of Audit (P&T) Delhi *vide* their UO No. DAP & T UO No. RR/Projects/2(d) 3086/327 dated 15.12.89

[Deptt. of Telecom File 262-4/88-TPL (XK)]

Recommendation

The Committee also note that a number of deficiencies were noticed when the system was installed in India. It was not performing satisfactorily and required a lot of modifications. Because of this, even the production of the equipment by ITI was delayed. As admitted by the Secretary, Telecommunications, there was an error of judgement in placing too much emphasis on attractive conceptual features of PC tax against field proven criteria.

[Sl. No. 3—Para 1.26 of 146th Report of PAC (8th Lok Sabha)]

Action Taken

Comments are not required.

This has been vetted by Director of Audit (P&T) Delhi *vide* their UO No. DAP & T UO No. RR/Projects/2(d) 3086/327 dated 15.12.89

[Deptt. of Telecom. File No. 262-4/88—TPL(XK)]

Recommendation

The Committee feel disturbed that an untried and unproven system of the Company was imported though some similar proven systems manufactured by other companies were working satisfactorily in other countries in Europe and were also available. At this distant time the Committee cannot but regret that an important decision on choice of technology and manufacturer/collaborator was made with the result that what was to be a step forward in modernisation in the field of communications, proved deficient and defective after it was installed. This shows that the decision-making body was not fully abreast of the developments in the area and the lacunae to look for in the detailed working on field level while selecting the system and the manufacturer/collaborator.

[Sl. No. 4—Para 1.27 of 146th Report of PAC (8th Lok Sabha)]

Action Taken

The telephone switching systems committee consisted of experts in the field of switching. The members of the Committee held discussions with international switching experts before deciding on the requirements of and the desirable features in the switching systems for use in India. The members of the Committee paid visits to administrations and leading manufacturers in Europe and Japan to get first hand information on the different aspects of modern switching systems from the point of view of application and manufacture. The Committee studied extensively the proposals of the seven firms (2 firms from U.K., 1 from the Netherlands, 1 from West Germany, 1 from Belgium, 1 from Sweden and 1 from Japan) before recommending the Penta Conta system for the country.

This has been vetted by Director of Audit P&T Delhi *vide* UO. No. RR Projects/2(d) 3086/364 dated 30.1.90.

[Deptt. of Telecom. File No. 262-4/88—TPL (XK)]

Recommendation

The Committee also consider it unfortunate that even when alternatives in the form of electronic exchange became available in 1977, the Department did not foreclose the arrangement to set up the balance half of the proposed PC TAX and did not take steps to absorb available alternate technologies, as a result of which substantial additional investment made after 1975—77 also failed to give reasonable return.

[Sl. No. 5—Para 1.28 of 146th Report of PAC (8th Lok Sabha)]

Action Taken

The change of technology in 1977 would not have been possible on account of the enormous efforts, time and cost involved in absorbing yet another new technology. The department therefore decided to make the best use of the technology already available. With this end in view, Task Forces were set up which consisted of engineers from TRC and ITI to upgrade existing exchanges and implement remedial steps on equipment under manufacture in ITI. These efforts resulted in the design of Indian Crossbar system which has been working satisfactorily and is being manufactured in the country.

This has been vetted by Director of Audit (P&T) Delhi *vide* their U.O. No. DAP & T U.O. No. RR Projects/2(d) 3086/327 dated. 15.12.89.

[Deptt. of Telecom. File No. 262-4/88—TPL (XK)]

Recommendation

The Committee note that the project sanctioned at an estimated cost of Rs. 103.14 lakhs in 1966 was commissioned in 1980 and the revised estimate with reference to actual cost of Rs. 449.40 lakhs was sanctioned 8 years later in October 1988, after the Public Accounts Committee were seized of the Audit Paragraph. The Committee are surprised to note that against the sanctioned cost of Rs. 103.14 lakhs the Department went on

incurring expenditure to the tune of Rs. 449.4 lakhs without any sanction for the excess. The Committee would like to know how such excess drawals over sanctioned cost were permitted and recommended that responsibility may be fixed for the continued irregularity for several years.

[Sl. No. 10—Para 2.20 of 146th Report of PAC (8th Lok Sabha)]

Action Taken

Revised Project estimates were prepared on 20.6.88 for Rs. 110.64 lakhs, on 17.4.74 for Rs. 241.58 lakhs, on 7.12.78 for Rs. 434.85 lakhs and 31.3.83 for Rs. 453.25 lakhs. The first revised project estimate was not taken up because the cost variation was less than 10% of the original cost. Later Revised project estimates could not be sanctioned pending clarification on some of the Provisions made therein though the inevitable increases in cost were known. Revised project estimate was sanctioned by circle itself in October, 88 by which time powers to sanction projects upto Rs. 5. crores were delegated to Circles.

While orders were placed with ITI for TAX equipments at a number of stations at about the same time, supplies were made by ITI from purely local manufacture in some stations and from a mixture of imported equipments (with land cost being more than manufactured cost by 30% to 300%) and local manufactures in other stations including Calcutta. As a result, expenditure on A&P in Calcutta TAX Project was for higher than the budget provision.

Expenditure of Rs. 20 lakhs on a 400KVA Engine Alternator was incurred after taking specific approval for change of specification and financial approval. Additional Expenditure of Rs. 30 lakhs was incurred for adaptation to Satellite working and for purchase of ISD pulse generator to generate 1 second/1.2 second pulses.

This has been issued with the approval of Member (Finance)

This has been vetted by Director of Audit P&T Delhi vide their U.O. No. RR Projects/2(d) 3086 dated 24.1.90

[Deptt. of Telecom. File No. 15-1/88—CB (Part) Dated 28.4.90]

Recommendation

The Committee are also surprised to note that consistently for a period of 15 years (except for one year) the budget provision was falling far short of the actual expenditure with the result that against a budget provision of hardly Rs. 76.74 lakhs-for 15 years, the actual expenditure was as high as Rs. 406.78. The Committee would like to know the justification for the consistent under assessment of the actual requirements of funds as well as incurring of expenditure far in excess of the budget provision. The Committee would like to be enlightened how budgetary control is exercised so far as such large projects are concerned, reasons for such abnormal increase and failures to ensure adequate provisions

and action taken against those responsible for such serious lapses in budgetary control. The Committee would also like to know whether the provision in budget was related to sanctioned estimates only but the Department incurred excess expenditure without authority and if so, the Ministry may clarify how such excess expenditure was allowed to be incurred without provision year after year.

[Sl. No. 11—Para 2.21 of 146th Report of PAC (8th Lok Sabha)]

Action Taken

The circumstances attending the execution of this project were exceptional. The project was executed in two phases of 2000 lines, the first phase between March, 1970 and July, 1974 and the second phase thereafter. Following devaluation of the rupee the cost of imported equipments went up. Local costs also went up due to inflation. The equipment supply for Calcutta TAX contained equipment imported from BCM and also a mixture of imported and ITI manufactured items. The equipments were supplied over a period. M/s ITI themselves could not indicate any firm figure regarding equipment cost till about 1975 when the costs were placed at over four times the original anticipated cost. In the circumstances, it was difficult to estimate the equipment cost to be incurred from year to year, while the bills for actual supply had to be paid from time to time. Variation between the estimate and actuals were thus unavoidable.

It may however, be pointed out that over the same period of 15 years from 1967-68 to 1981-82, the total capital expenditure of the Department of Rs. 2,983.90 crores was well within the total sanctioned grant for all the years at Rs. 3285.08 crores. Since at any time there were a large number of projects under execution and since the total capital expenditure was within the budget provision in most of the years, it could not be ensured that the budget provision in all individual projects were not exceeded.

However instructions have been again issued (copy enclosed) to conduct a review of projects where expenditure has reached a level of 75% of the sanctioned cost for initiating revised projects, where needed.

This has been issued with the approval of Member (Finance).

This has been vetted by Director of Audit P&T Delhi vide their U.O. No. RR Projects/2(d) 3086/357 dated 24.1.90.

[Deptt. of Telecom. File No. 15 1/88—CB (Part) Dated 29.4.90]

No. 5-1/89-CB
Government of India
Ministry of Communication
Capital Budget Section

Dated: 12.9.89

To

Shri

Head of Circles (By Name)

Sub: Demands for funds for execution of projects beyond sanctioned cost.

It is noticed that in a number of cases, funds are demanded in BE/RE/FG for individual projects beyond the sanctioned cost, stating that Revised Project Estimates are under preparation or will be prepared. Orders of the Government are clear that funds cannot be allotted beyond sanctioned cost. While it is appreciated that projects should not be starved of funds during advanced stages of execution, it should be realised that remedy lies in timely anticipation of increased project costs and timely preparation and sanctioning of Revised Project estimates wherever necessary. To this end, it has been decided that as soon as the expenditure on a project reaches the level of 75% of the sanctioned cost, a review should be undertaken to examine if the project can be completed within the sanctioned cost. If it is anticipated that costs are likely to go beyond 10% of the sanctioned estimate immediate action should be taken to prepare a revised project estimate and have it sanctioned well ahead of the time when demands for funds beyond the original sanctioned cost have to be raised. It is requested that immediate arrangements to be made to have the expenditure on all projects constantly monitored against sanctioned cost and cases, where expenditure has reached a level of 75% of the sanctioned cost, are reviewed at appropriate level for initiating Review Project estimates where needed. This letter may please be acknowledged.

Sd/-

Chief General Manager (PF)

Copy to: IFA Receipt of the letter may please be acknowledged to AO (CB) of this Office.

Recommendation

The Committee also note that at the planning stage, the introduction of SPC TAX was justified on the basis of the anticipated demand for 6246 lines in 1983 and 7827 lines in 1985 as against the then available capacity of only 4000 lines in the PC TAX. At the same time when these projections were made, a proposal to phase out PC TAX and to replace it by SPC TAX was under examination. The decision to phase out the PC TAX was

taken in November 1984. It is hence evident that the planning process for installation of 4000 lines in SPC TAX was intended not to meet the additional demand but to replace the existing PC TAX equipment. Viewed in this context as also the actual realisation of 2900 to 5191 lines between 1983 and 1988, the Committee wonder how far the demand estimations were realistic & in tune with the trend. In the circumstances, the Committee are constrained to observe that the proposal for additional capital investment was not presented with full and correct data in respect of the trend of demand.

[Sl. No. 14—Para 3.14 of 146th Report of PAC (8th Lok Sabha)]

Action Taken

The observations and comments are noted.

Building up a traffic matrix for an integrated telecom network is a very complex operation involving a large number of assumptions. The forecasting methods are constantly under review and efforts are made to evolve new methods of forecasting in order to ensure that just the adequate number of circuits are provided for carrying the traffic. Very recently computer based regression analysis studies have been introduced to work out the traffic pattern for forecasting the traffic matrix for the 8th plan period. It is expected that these new methods would give realistic data in a few years' time.

This has been vetted by the Director of Audit (P&T) Delhi vide their U.O. No. DAP&T U.O. No. RR Projects/(d) 3086/327 dated 15.12.89

[Deptt. of Telecom File 262-4/88-TPL (XK)]

Recommendation

The Committee note that the revised project estimate envisaged a surplus of Rs. 14.90 lakhs per annum and on this basis the surplus for six years should have been Rs. 89.40 lakhs. On the other hand Audit has pointed that the working of PC TAX at Calcutta resulted in a deficit of Rs. 288.74 lakhs during the six years ending 1986-87. When this deficit of Rs. 288.74 lakhs was pointed out by Audit, neither the correctness of this figure nor the basis of its calculations was questioned by the Department. On the other hand when clarification was sought by the Committee on the working results of the PC TAX at Calcutta, the Department has come forward with a different basis of calculating revenue of a TAX and has contended that on the basis of this method of calculation the working of PC TAX at Calcutta during the six years ending 1986-87 showed a surplus of Rs. 465.22 lakhs which is more than five times the surplus envisaged in the revised project estimates. If these contentions are correct, the Committee wonder whether there was any justification from the angle of financial return atleast, to consider phasing out of PC TAX at all. However, a perusal of the statement furnished to the Committee indicated that the surplus has been arrived at with reference to a fixed expenditure

of Rs. 87.68 lakhs for each of the six years ending 1986-87. It is astonishing to note that the expenditure has not shown any increase or decrease for a period of six years and that the figure of Rs. 87.68 lakhs is the same as was assumed as the anticipated expenditure in the revised project estimate. It is unfortunate that the actual revenue assessed by the Department has been compared with the assumed figure of expenditure. It is not clear to what extent this assumed figure of expenditure is realistic and correct. The Committee are not able to believe that the expenditure has remained fixed for each of the six years and on this basis the conclusion is inescapable that the figure of surplus assessed by the Department is not correct. The Committee take strong exception for supply of such misleading data to them and recommend that appropriate action may be taken against those responsible for misleading the Committee with incorrect data.

[Sl. No. 16—Para 4.5 of 146th Report of PAC (8th Lok Sabha)]

Action Taken

The comments and observations are noted.

The profitability of TAX project is worked out by taking into account the revenue earned by the inter-tax traffic only. 1/12th of the revenue earned by the inter-tax traffic is apportioned to the TAX projects. This procedure of calculating the profitability of TAX project is in vogue since 1977 and all the TAX projects are evaluated under these guidelines. However in respect of RPE for Calcutta PC TAX the method adopted in calculation of STD revenue in the original P/E was followed instead of the new procedure.

The annual recurring expenditure for any project is calculated on the basis of average cost of establishment, interest on capital, depreciation on Capital invested for (i) A&P equipment (ii) electrical installation and (iii) building. To this amount a specified percentage for relating to control and audit is added. These percentages are fixed by the Department. The ARE, being a computed figure based on the percentages fixed by the Department is a fixed amount for the entire period.

The ARE for the period 1981 to 1987 has been computed on the basis of the norms in vogue and the figure of Rs. 87.68 lakhs has been shown in the computation submitted to the PAC. It may be seen that elements of interest on capital, depreciation of capital on the investment and a percentage for the maintenance charges calculated on the actuals incurred only form the bulk of total amount of Rs. 87.68 lakhs as shown in the ARE. The only element which would be varying from year to year is cost of maintenance and supervisory establishment, which is only Rs. 4.27 lakhs. The variation on this account from year to year would be insignificant and ARE was, therefore, taken as constant for seven years. From the computation submitted to the PAC it may be seen that the PC TAX started becoming uneconomical in 1985-86 and the P&T board rightly took the decision to phase out the PC TAX at Calcutta.

It is apparent that the audit had computed the profitability of the project taking into account only the revenue of the Calcutta local telephone system (Ref. KD 24). The revenue figures for 1983-84 and 1984-85 as given in KD 24 are Rs. 982 lakhs and Rs. 133.65 lakhs respectively, which accounts for the revenue from Calcutta Telephone system only.

The revenue figure given in the ATN for the year 1983-84 and 1984-85 (on the basis of the traffic in AB direction only) works out to Rs. 1349.49 lakhs and Rs. 425.65 respectively, which relates to the revenue earned by the total inter TAX traffic carried in AD direction only. The AB direction inter TAX traffic includes the contribution from other distant stations and other lower level TAXs in the Eastern Region in addition to the contribution from Calcutta local system.

The Calculation of revenue and its apportionment to TAX project has been done as per guidelines in vogue for the formulation of the projects. There has been no attempt to provide misleading information to the Audit/PAC.

This has been vetted by Director of Audit (P&T) Delhi vide their U.O. No. RR Projects/2(d) 3086/36 dated 17.5.90

Recommendation

The Committee also recommend that the operational revenue of PC TAX at Calcutta may be rechecked in the context of the prescribed guidelines on the subject and correct working results for the six years ending 1986-87 duly vetted by audit, furnished to the Committee.

[Sl. No. 17-Para 4.6 of 146th Report of PAC (8th Lok Sabha)]

Action Taken

The revenue of Calcutta PC TAX has been computed for the period 1981-87 on the basis of actual traffic carried and the details are enclosed.

This has been vetted by Director of Audit(P&T) Delhi vide their U.O.No.RR Projects/2(d)3086/36 dated 17.5.90.

[Deptt. of Telecom. No. 262-4/88-TPL (XK)]

Enclosure to ATN of para 4.6

Revenue Calculations of PC TAX Calcutta for the period 1981-87 on the basis of BH traffic carried.

1. Revenue Calculation method
2. Traffic Data
3. Actual Revenue Calculation
4. ARE Calculation
5. Summary

REVENUE CALCULATION FOR TAX PROJECTS

A Trunk Automatic Exchange carries a variety of STD traffic (from a local exchange, from a distant station and from a distant TAX) and there is no method of computing the revenue earned by a TAX with accuracy. Since 1977, the profitability of TAX project is worked out by considering notionally the revenue earned by the inter-TAX traffic only.

2. A long distance call passes through the local network, the TAX and the transmission medium before reaching the distance TAX and the distant end local network. The revenue earned by the inter-TAX traffic is therefore apportioned to the different parts of the network as per details gives below:

Local network	→ $\frac{1}{3}$ of the revenue ($\frac{1}{6}$ for each exchange)
Transmission medium	→ $\frac{1}{2}$ of the revenue
TAXs	→ $\frac{1}{6}$ of the revenue ($\frac{1}{12}$ for each TAX)

In actual practice a STD call goes through one, two, or more TAXs depending on the stations involved. For revenue purposes, a call is assumed to be going through *two* TAXs only and $\frac{1}{12}$ of the revenue is apportioned to each TAX. It may be seen that this procedure does not take into account the intra-TAX traffic.

3. CALCULATION OF ANNUAL REVENUE PER T.U. OF TRAFFIC:

The following assumptions are made in calculating the annual revenue per T.U. [TRAFFIC UNIT] of traffic carried.

Average holding time of a call	-60 seconds
Average paid time of calls	-84 seconds
Percentage of effective calls	-50 per cent
Day to Busy Hour ratio	-8
Ratio of calls during Day & Night	-3
Total number of days in a year (Sunday & Holidays excluded)	-300
Charge per local call (1981-87)	-40
Number of effective calls per year	-N

$$N = 300 \times (\text{Busy Hour Traffic in T.U.}) \times 8 \times 50 \times 60$$

$$\text{Revenue per year in Rupees} = \left[\frac{3N}{4} \left\{ 1 + \frac{84}{\text{DPR}} \right\} + \frac{N}{4} \left\{ 1 + \frac{84}{\text{NPR}} \right\} \right] \times \frac{40}{100}$$

DPR Day Pulse Rate; NPR -Night Pulse Rate.

4. The annual revenue per T.U. of Busy Hour traffic at 40 paise per call for different tariff pulses applicable to different routes is shown below:

Pulse Rate	Annual revenue per T.U. of B. Hr. traffic
$\frac{2}{4}$ seconds	Rs. 10,87,200
$\frac{3}{6}$ seconds	Rs. 7,34,400
$\frac{4}{8}$ seconds	Rs. 5,58,000
$\frac{9}{18}$ seconds	Rs. 2,64,000

CALCUTTA PC TAX
GROUP BUSY HOUR-INTER TAX TRAFFIC (in TUs)

Sl. No.	TAX Route	1981-82		1982-83		1983-84		1984-85		1985-86		1986-87	
		AB	BA AB	BA AB	BA AB	BA AB	BA AB	BA AB	BA AB	BA AB	BA AB	BA AB	BA
	Kampur	—	—	9.87	4.00	8.43	3.40	3.17	—	0.25	—	—	—
	Shillong	—	16.47	3.10	13.60	6.63	12.03	4.13	4.13	1.66	1.61	7.30	7.97
	Siliguri	—	—	—	—	5.43	15.13	3.70	9.07	2.83	1.40	3.27	7.93
	Patna	17.93	16.63	9.06	12.40	7.07	17.17	3.07	—	2.23	—	3.13	—
		17.93	33.10	12.16	26.00	19.13	44.33	10.90	13.20	6.72	3.01	13.70	15.90
	Assansol	5.50	18.23	7.27	16.40	6.97	21.57	3.07	12.90	2.13	7.13	1.67	18.33

CALCULATION OF TAX REVENUE FOR CALCUTTA PC TAX

1981-82

Pulse Rate	Busy Hour Traffic.		Total	Rs.	
	AB	BA			
2/4	74.60	170.47	245.07 ×	1087200 =	26,64,40,100
4/8	17.93	33.10	51.03 ×	558000 =	2,84,74,740
9/18	5.50	18.23	23.73 ×	264000 =	62,64,720
					Total = 30,11,79,560

1/12 of total Revenue as TAX share = 2,50,98,296

1982-83

2/4	107.86	145.32	253.18 ×	1087200 =	27,52,57,290
3/6	9.87	4.00	13.87 ×	734400 =	1,01,86,128
4/8	12.16	26.00	38.16 ×	558000 =	2,12,93,280
9/18	7.27	16.40	23.67 ×	264000 =	62,48,880
					Total: = 31,29,85,578

1/12th of total Revenue as TAX share = 2,60,82,131

1983-84

2/4	106.92	147.56	254.48 ×	1087200 =	27,66,70,650
3/6	8.43	3.40	11.83 ×	734400 =	86,87,952
4/8	19.13	44.33	63.46 ×	558000 =	3,54,10,680
9/18	6.97	21.57	28.54 ×	264000 =	75,34,560
					Total: = 32,83,03,842

1/12th of total Revenue as TAX share = 2,73,58,653

1984-85

2/4	30.67	74.8	105.47 ×	1087200 =	11,46,66,980
3/6	3.17	—	3.17 ×	734400 =	23,28,048
4/8	10.9	13.2	24.1 ×	558000 =	1,34,47,800
9/18	3.07	12.9	15.97 ×	264000 =	42,16,080
					Total: = 12,46,58,908

1/12th of total Revenue as TAX share = 1,03,88,242

1985-86

2/4	9.8	11.4	21.2 × 1087200 =	2,30,48,640
3/6	0.25	—	0.25 × 734400 =	1,83,600
4/8	5.06	3.01	8.07 × 558000 =	45,03,060
9/18	2.13	7.13	9.26 × 264000 =	24,44,640

Total: = 3,01,79,940

1/12th of total Revenue as TAX share = 25,14,995

1986-87

2/4	12.83	53.66	66.49 × 1087200 =	7,22,87,928
4/8	9.67	19.93	29.60 × 558000 =	1,65,16,800
9/18	1.67	18.33	20.00 × 264000 =	52,80,000

Total: = 9,40,84,728

1/12th of total Revenue as TAX share = 78,40,394

A.R.E. CALCULATION

1.	Interest @ 7% on Capital cost of Rs. 4,63,25,474	Rs. 32,42,783
2.	Cost of maintenance and Supervisory Establishment	Rs. 4,27,403
3.	<i>Technical Maintenance</i> 8% of A&P Rs. 4,39,81,258	Rs. 35,18,500
	3½% of electrical installations Rs. 23,39,624	Rs. 81,886
	1½% of Rs. 4,592 for building (excluding land)	Rs. 69
	Total	Rs. 36,00,455
	Deduct cost of maintenance and supervisory establishment	Rs. 4,27,400
	<i>Net Total</i>	
4.	<i>Depreciation</i> 4% on capital cost of A&P Rs. 4,39,81,258	Rs. 31,73,055
	1% on capital cost of building Rs. 4,592	Rs. 46
	4½% on capital cost of electrical installations Rs. 23,39,624	Rs. 1,05,283
	Total	Rs. 18,64,579
5.	Control and audit @ 14% of cost of maintenance and supervisory establishment	Rs. 59,836
6.	Grand total	Rs. 87,67,653

SUMMARY

[Rupees in lakhs]

YEAR	Total STD revenue as per Gp. Busy Hour traffic carried by PC TAX	Revenue attributable to PC TAX (1 / 12th of STD revenue)	Annual recurring expenditure in respect of PC TAX	Net Cash Flow
1981-82	3012	251	87.68	+163.32
1982-83	3130	260.8	87.68	+173.12
1983-84	3283	273.5	87.68	+185.82
1984-85	1246.5	103.5	87.68	+15.32
1985-86	301	25	87.68	-62.68
1986-87	940	78	87.68	-9.68
		NET SURPLUS		+465.22

CALCUTTA PC TAX
GROUP BUSY HOUR — INTER TAX TRAFFIC (in TUs)

Sl. No.	TAX Route	1981-82		1982-83		1983-84		1984-85		1985-86		1986-87		
		Pluse Rate	AB	BA	AB	BA	AB	BA	AB	BA	AB	BA	AB	BA
	New Delhi PC	2/4	12.87	37.50	10.30	31.63	8.83	35.83	2.93	22.53	1.33	6.70	0.97	6.03
	" SPC	"	—	—	—	—	—	—	—	—	—	—	0.87	1.37
	" ITI/OTT	"	7.37	12.63	30.20	11.43	32.50	13.30	9.43	9.27	3.92	2.40	4.13	6.87
	" ICAX	"	—	—	—	3.43	—	3.53	—	5.33	—	1.44	—	1.60
	" SPC(SAT)	"	—	—	—	—	—	—	—	—	—	—	—	0.50
	" GSS	"	—	—	—	4.93	—	4.70	—	—	—	—	—	—
	Bombay PC	"	25.23	55.40	13.36	41.60	4.63	26.33	1.57	21.97	0.10	—	0.13	7.93
	" SPC	"	—	—	—	—	—	—	—	—	—	—	2.17	19.70
	" ITT	"	—	—	26.43	—	26.33	—	6.97	—	1.34	—	2.53	—
	" ICAX	"	—	2.80	—	—	—	14.20	—	4.73	—	0.86	—	2.90
	Madras SPC	"	—	—	—	—	—	—	—	—	—	—	1.30	—
	" ITI/OTT	"	12.83	2.57	10.50	3.53	9.87	1.20	3.03	1.27	1.32	—	1.00	—
	" PC	"	5.77	29.10	5.20	20.20	7.50	16.57	3.07	5.10	0.40	—	—	—
	Bangalore	"	1.70	7.60	2.40	6.27	1.43	6.57	0.80	—	0.74	—	0.97	—
	Hyderabad	"	3.73	9.87	3.80	9.50	9.17	9.10	1.30	4.60	0.30	—	0.93	—
	Ernakulam	"	—	—	—	—	—	—	—	—	—	—	—	0.03
	Jaipur	"	—	—	—	—	—	—	—	—	—	—	—	0.70
	Ahmedabad	"	1.83	13.00	1.87	12.83	2.03	16.23	0.70	—	—	—	—	6.03
	" ITT	"	3.27	—	3.0	—	4.63	—	0.87	—	0.35	—	—	—
			74.60	170.47	107.86	145.30	106.92	147.56	30.67	74.80	9.80	11.4	15.00	53.66

CHAPTER IV

OBSERVATIONS/RECOMMENDATIONS REPLIES TO WHICH HAVE NOT BEEN ACCEPTED BY THE COMMITTEE AND WHICH REQUIRE REITERATION

Recommendation

The committee find that while the percentage of permissible failure in STD calls for 1984-85 was fixed at 40, the percentage of actual call failures ranged between 86.23 and 87.73 during the 3 years 1984-87. The department has not been able to offer any tenable explanation as to the reason for such high failure rate. The Department of Telecommunications have pointed out that the figure of 40 is the desirable MIS Group target and this should not be interpreted as the maximum permissible call failure rate. However, in regard to the standard percentage of efficiency of STD calls on SPC TAXs, the deptt. have stated that no such parameter has been defined. The committee feel concerned that while there is quite a high rate of failure of the STD calls, the department has not determined a parameter for the standard efficiency. The Committee considers it as a serious lacuna as in the absence of such a parameter, the Department cannot possible fix the optimum level of efficiency and utilisation and arrive at the anticipated projections of traffic and revenue. The Committee recommend that this lacuna be remedied and some suitable parameter fixed as early as possible with a view to measuring efficiency of STD systems and taking steps to ensure optimum efficiency of such systems as well as ensure the projected revenue earning.

[Sl. No. 19 — Para 4.20 of 146th Report of PAC (8th Lok Sabha)]

Action Taken

In order to determine the performance of STD network (which includes the subscriber instrument, subscriber's local loop, junction network, local network transmission network and the TAX network), an MIS indicator called "percentage failure of STD calls" has been prescribed. This parameter measures on a sample basis (two links as well as one link) the success rate of STD test calls from a free telephone to another free telephone through the TAX network. The overall success rate is dependent on the efficiency of each component of the network. For example, if each component has 90% efficiency, the total efficiency of a system containing seven units in tandem works out to 36%. In other words, the failure rate is 64%.

This figure is tightened up progressively to ensure optimum efficiency of the system for better customer satisfaction and maximum revenue. The targets for the units are fixed individually based on local factors such as

type of equipment used, the availability of trained personnel and the network conditions which varies considerably from place to place. It is not considered practicable to fix a single target for the country as a whole.

This has been vetted by the Director of Audit (P&T) Delhi vide their U.O.No.DA(P&T)U.O.No.RR/Projects/2(d) 3086/327 dated 15.12.89

[Deptt. of Telecom. No. 262-4/88-TPL(XK)]

CHAPTER V

**RECOMMENDATIONS AND OBSERVATIONS IN RESPECT OF
WHICH GOVERNMENT HAVE FURNISHED INTERIM REPLIES**

NIL

NEW DELHI;
23 March, 1992
Chaitra 3, 1914 (Saka)

ATAL BIHARI VAJPAYEE
Chairman,
Public Accounts Committee.

APPENDIX I

STATEMENT OF RECOMMENDATIONS/OBSERVATIONS

Sl. No.	Para No.	Ministry/ Deptt. Concerned	Recommendations/Observations
1.	1.6	Deptt. of Telecom.	The Committee had expressed concern that while there is quite a high rate of failure of the STD calls, no parameter has been defined for the standard percentage of efficiency of the STD calls on SPC TAXs. The Committee had therefore, desired that some suitable parameter be fixed for measuring the efficiency of the STD system to ensure optimum efficiency as also to make revenue projections more realistic. In reply, the Department of Telecommunications have sought to explain that the overall success rate is dependent on the efficiency of each component of the network; the targets for the units are fixed individually based on local factors such as type of equipment used, the availability of trained personnel and the network conditions which vary considerably from place to place; and it is not considered practicable to fix a single target for the country as a whole.
2.	1.7	-Do-	The reply of the Department that "the overall success rate is dependent on the efficiency of each component of the network" calls into question the operation of all the exchanges since any system is only as efficient as its least efficient component. The Committee cannot appreciate how in the absence of a guiding parameter the projections for revenue are fixed or efficiency monitored. Even if there are certain marginal variations in the network conditions or the type of equipment etc. in some units, a workable standard efficiency parameter has to be kept in view with reference to which the overall working of the units has to be assessed/geared up. A suitable margin can

Sl. No.	Para No.	Ministry/ Deptt. Concerned	Recommendations/Observations
			always be provided for the comparatively weaker of less efficient network.
3.	1.8	Deptt. of Telcom.	The Committee, therefore, reiterate their earlier recommendation that some suitable parameter may be fixed for the standard percentage of efficiency of the STD calls on the SPC TAXs as early as possible with a view to measuring efficiency of the STD systems and taking steps to ensure optimum efficiency of such systems as well as to ensure the projected revenue earnings. It is all the more important that this be done at an early date taking into account the constant complaints of the Public in this regard.

• PART II

MINUTES OF THE SITTING OF PAC HELD ON
17 MARCH, 1992

The Committee sat from 1600 hrs. to 1700 hrs. on 17 March, 1992.

PRESENT

CHAIRMAN

Shri Atal Bihari Vajpayee

MEMBERS

2. Shri Girdhari Lal Bhargava
3. Shri Arvind Netam
4. Shri R. Surender Reddy
5. Shri Pratap Singh
6. Prof. (Dr.) S.P. Yadav
7. Shri Dipen Ghosh
8. Shri Vishvjit P. Singh
9. Shri Ish Dutt Yadav

LOK SABHA SECRETARIAT

1. Shri S.C. Gupta — *Joint Secretary*
2. Smt. Ganga Murthy — *Deputy Secretary*
3. Shri K.C. Shekhar — *Under Secretary*

REPRESENTATIVES OF AUDIT

1. Shri N. Sivasubramanian — *Addl. Dy. C&AG (Reports)*
2. Shri A.K. Banerjee — *Pr. Director Reports (Central)*
3. Shri S.C. Anand — *Director General of Audit (P&T)*
4. Shri P.K. Lahiri — *Pr. Director (Direct Taxes)*
5. Shri P.K. Bandhopadhyay — *Pr. Director (Indirect Taxes)*
6. Shri Dharendra Swarup — *Pr. DACR (II)*
7. Shri K. Krishnan — *Director (Direct Taxes)-I*
8. Shri Kulvinder Singh — *Director (Direct Taxes)-II*
9. Shri K.C. Gupta — *Dy. Director*
10. Shri Birendra Kumar — *Dy. Director (P&T)*
11. Shri R. Parathasarthy — *Director (Railways)*

2. The Committee took up consideration of the following Draft Reports:

(v) Draft Report on the recommendations contained in the 146th Report of PAC (8th Lok Sabha) re: Trunk Automatic Exchange at Calcutta.

3. *** *** The Committee adopted the draft Report at (v) above subject to modifications/amendments shown in Annexure.

4. The Committee authorised the Chairman to present the Reports to the House after incorporating therein modifications/amendments arising out of factual verification by Audit.

The Committee then adjourned.

ANNEXURE

AMENDMENTS/MODIFICATIONS MADE BY THE PUBLIC ACCOUNTS COMMITTEE AT THEIR SITTING HELD ON 17.3.1992 IN THE DRAFT REPORT ON ACTION TAKEN ON 146TH REPORT (8TH LOK SABHA) OF PUBLIC ACCOUNTS COMMITTEE RELATING TO TRUNK AUTOMATIC EXCHANGES AT CALCUTTA.

PAGE	PARA	LINE	AMENDMENTS/MODIFICATIONS
4	1.7	1	Insert the following at the beginning of the paragraph: "The reply of the Department that 'the overall success rate is dependent on the efficiency of each component of the network' calls into question the operation of all the exchanges since any system can be considered only as efficient as its least efficient component."
4	1.8	8	Insert the following at the end of the paragraph: "It is all the more important that this be done at an early date taking into account the constant complaints of the public in this regard."