CHAPTER-I

REPORT

This Report of the Standing Committee on Information Technology deals with action taken by the Government on the recommendations contained in the Eighteenth Report (Thirteenth Lok Sabha) on 'Working of Centre for Development of Telematics" relating to Department of Telecommunications.

2. The Eighteenth Report was presented to Lok Sabha on 21.3.2001 and was laid on the table of Rajya Sabha on the same day. It contained 20 recommendations.

3. Action Taken Notes in respect of all the Observations/Recommendations contained in the Report have been received and categorised as under:

(i) Recommendations/Observations which have been accepted by the Government:

Paragraph Nos. 29, 30, 31, 71, 73, 83, 84 & 85

Total : 8

Chapter-II

(ii) Recommendations/Observations which the Committee does not desire to pursue in view of the reply of the Government:

Paragraph Nos. 18, 19, 20, 21, 72

Total : 5

Chapter-III

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

Paragraph Nos. NIL

Chapter-IV

(iv) Recommendations/Observations in respect of which replies are of interim nature:-

Paragraph Nos. 37,38,67-70,74 Total: 7

Chapter-V

4. The Committee trusts that utmost importance would be given to the implementation of the recommendations accepted by the Government. In cases, where it is not possible for the Department to implement the recommendations in

letter and spirit for any reason, the matter should be reported to the Committee with reasons for non-implementation. The Committee further desires that Action Taken Notes on the Recommendations/Observations contained in Chapter-I of this Report should be furnished to it at an early date.

5. The Committee will now deal with the action taken by Government on some of the recommendations.

Upgradation of C-DOT Technologies and Switches

(Recommendation paragraph Nos. 18 and 19)

6. The Committee in its Report on "Working of C-DOT" had noted that switching system based on C-DOT technology accounted for over 40% of the total lines of the network and in terms of exchanges, the share had been 90%. Further, low capacity rugged digital switching system developed by C-DOT, with features like ISDN were capable of operating in non air-conditioned and harsh environment. Besides, C-DOT had developed low capacity digital radio system for interconnecting rural and urban exchanges; the cost effective integrated switching and transmission solution by employing Time Division Multiple Access-Point-to-Multi-Point (TDMP-PMP) technique.

7. However, according to DoT, C-DOT switches with 16,000 ports capacity as compared to 64,000 ports of New Technology (NT) could support only 40,000 lines with 13.5% & junctions as against 1,00,000 line capacity of NT switches with 30% junctions and also C-DOT switches occupy more space, consume higher power and require more air conditioning compared to NT switches for same number of exchange line capacity thus affecting cost and infrastructure availability. The Committee desired DoT to clarify the ambiguity in the two statements. It further desired that C-DOT should concentrate on quality enhancement of its products/technologies in view of competitive environment.

8. The Department of Telecommunications in its action taken note has stated that C-DOT had planned to upgrade the hardware and software of the switch to an ultimate capacity of 1,00,000 lines and the development was still in progress. With this upgradation, C-DOT switch would have 1,00,000 lines with 18.2 percent trunks and the issues like low operation and maintenance cost would also be addressed. Development to incorporate X.25 feature in C-DOT switch was also in progress. There is stated to be renewed focus on this area and as a result of discussion held in the Steering Committee of C-DOT, higher priorities have been assigned to SBM-4K and High Exchange Capacity Switch projects which are expected to be completed this year.

9. It has further been stated that as on October, 2000, the maximum capacity of C-DOT switch was 40,000 lines with 13.5 percent trunks. The switch was available with 300K as well as 800K Busy Hour Call Attempts(BHCA) capacities, both of which had been approved by TEC. The Telecom Engineering Centre (TEC) specifications being generic in nature do not mention space and power requirements of the switch. So C-DOT exchanges implicitly met the TEC specifications in these respects. However, for an operator, space requirement, power consumption and air conditioning requirements are important parameters, which have significant bearing on the operation and maintenance cost. The contemporary MNC switches have lower operation and maintenance cost verses C-DOT switches. It has been clarified that the ambiguities referred to in the Report arose because of mixing up of the current status of the product, development in progress and certain comments on the relevance of the requirement in the C-DOT's original response and that ambiguities have since been resolved.

10. The Committee notes that C-DOT has been working on the upgradation of the hardware and software of the switch to an ultimate capacity of 1,00,000 lines and the development is in progress. Further, high priorities had been assigned to SBM-4K and High Exchange Capacity Switch projects which were expected to be completed by 2001. The Committee trusts that by now C-DOT switches might have been upgraded thereby resolving issues like low operation and maintenance cost. The Committee will like to be apprised of the latest position in this regard. It further desires that DoT will deal with C-DOT at par with MNCs' switches in placing orders in the tenders for the subsequent years.

Review of C-DOT Bye-laws

(Recommendation Paragraph Nos. 20 and 21)

11. The Committee in its earlier Report had noted that though C-DOT received a communication in June, 1990 from Telecom Commission directing it to amend its by-laws, in such a way that all the appointments which carried pay in the pre-revised scale of Rs.5,300 and above be made with the approval of the Central Government and not the Governing council, yet these bye-laws were amended only in July, 1999. The Committee further observed that DoT had been considering to review C-DOT bye-laws in totality ostensibly with a view to reflect the "changing times" and Government instructions to make the organisation more vibrant and a Centre of Excellence to meet the challenges of the rapidly changing technologies in the telecom sector. The Committee was of the view that nothing should be done which would impinge the functional autonomy of C-DOT.

12. Department of Telecommunications in its action taken note has stated that the report of the "Bye-laws Review Committee" has just been received and is under examination.

13. The Committee regrets that long time has been and is being taken to deal with important matters and the unexplained delays are hampering the proper functioning of C-DOT. The Committee notes that the Department of Telecommunications(DoT) has received the report of the "Bye-laws Review Committee" and the Report was being examined. The Committee trusts that by now DoT might have examined the Report of the Bye-laws Committee and that steps would have been taken to maintain and enhance the functional autonomy of C-DOT. If the exercise is not yet complete, the Committee would like to be informed of the reasons for the delay, at an early date.

C-DOT Campus at Delhi

(Recommendation paragraph No. 37)

14. In its earlier Report, the Committee had appreciated that C-DOT had been constructing a state of art campus at Delhi, designed for fully integrated services conducive to R&D work and round-the-clock computer connectivity. However, Committee observed that there was avoidable delay of more than two years in the commencement of construction which started in June, 1999. The Committee was not impressed by the explanation given by the Department of Telecommunications and hoped that as anticipated, the campus building would be completed by December, 2001. The Committee further found that there was not only cost and time overruns but C-DOT was paying rental to the tune of Rs.2.95 crore per annum as C-DOT facilities were housed in rented buildings. The Committee has concluded that the whole process of construction of campus building needed investigation because of tardy progress.

15. Department of Telecommunications in its action taken note has stated that the "investigation" is still in progress and is being expedited.

16. The Committee is totally dissatisfied with the casual answer. It notes that the investigation in respect of delay in commencement and completion of C-DOT Campus project is in progress. The Committee would like to be informed of the current status of C-DOT Campus Project. Once the investigation is over, the Committee would like to be apprised within two weeks of the submission of this report of the reasons for such abnormal delays in completion of the Project and the action taken against those found responsible for such delays.

ESTABLISHMENT OF FOUNDRY AND BASIC RESEARCH CENTRE
(PARAGRAPH NOs. 67, 68, 69 & 70)

17. The Committee in its earlier Report on 'Working of C-DOT' had found that the Centre for Development of Telematics, had been facing considerable difficulties to design and develop various critical equipments because it had no backup facilities like a research centre to support its activities. On occasions, when it had designed certain break-through equipments, they had to go abroad for development of prototypes as such facilities available in the country were not of the required standard. This had retarded growth of indigenous design and development in the Telecommunications. Even though Semi Conductors Ltd. at Mohali near Chandigarh has facilities for development of integrated circuits, yet the technology used was comparatively obsolete and not of the required standard.

18. The Committee had further noted that C-DOT had to depend on outside sources for electronic infrastructure both in hardware and software though there was no dearth of talent in the country. Further, there were roughly 30 per cent Indian engineers and scientists in the premier research institutions all over the world. All the technologically leading countries viz. USA, France, UK, Germany, Japan and Sweden had set up their own foundries. The basic design and basic tools for equipment design, the materials, the foundries for state-of-the-art microelectronics circuits, photonics components etc, are not built in the country as they would require huge investments. As setting up of the infrastructure involved considerable investments in foundry and research facilities, the Committee had recommended that a percentage of turnover of telecom and electronics industries should be earmarked to facilitate early establishments of these facilities. DoT should also devise means to invest required amount from the budget in new and upcoming research.

19. The Committee also noted that Photonics, Reliability Studies, Materials for Telecom Devices and Customer Equipments, Microelectronics, Electromagnetic Interference, Radio Frequency(RF) Propogation and Electronic Packaging &

Miniaturisation were some of the important areas for basic research development in Telecommunications. Some other fields like Tele-Traffic Engineering, Artificial Intelligence, Virtual Reality and Simulation, Audio, Video & multimedia, Innovations in New Services and Application, Software Development Tools and Techniques, Encryption, Security, Privacy and Identification and Energy Sources for Telecom were other important research areas. Some research although was already going on in some of these fields in various academic institutions and R & D organisations, yet their research was not specific towards telecom application and embraced only a part of the listed areas for electronic equipments and some of the defence classified applications. The Committee, therefore, strongly recommended that the Government should take a lead for providing appropriate modern infrastructure in the fields mentioned above with a view to playing a leading role in the emerging technologies in telecom all over the world and providing state-of-the-art facilities. As in the emerging scenario the country cannot afford to lag behind and be dependent upon others in critical areas of technology, the Committee, had recommended DoT to initiate immediate steps to set up a Research Centre/Foundry in the country to cater to the needs of telecommunications/microelectronics. Such Centre would provide the much needed opportunities to young talents in the country.

20. Department of Telecommunications in its action taken note has stated that the process of consultation with Ministry of Information Technology and Department of Science and Technology has been initiated. In the areas of Very Large Scale Integration(VLSI), comments have been received from Ministry of information Technology. ITI was also being approached for their views. In order to crystalize views on establishment of foundry and basic research centre, it was felt necessary to further interact with various academic institutions and R & D organisations and this process was being expedited.

21. The Committee is disappointed with the reply. It finds that Department of Telecommunications is in the midst of interminable consultation with the Ministry of Information Technology and Department of Science and Technology

for setting up of the Research Centre/Foundry in the country to cater to the needs of telecom/microelectronics. Also in the areas of Very Large Scale Integration (VLSI), comments have been received from Ministry of Information Technology. DoT has stated that in order to crystallize views on establishment of Foundry and basic research Centre, it is necessary to further interact with various academic institutions and R & D organisations and the process has been initiated.

22. The Committee wishes to impress upon DOT of the need to appreciate that national interest is affected due to the absence of necessary infrastructural facilities and of the importance of early decisions. The Committee desires that the matter should be pursued vigorously with the Ministries/Departments concerned and concrete action be taken expeditiously in setting up of the research Centre/Foundry in the country as in the emerging scenario of telecom technologies, the country should not remain dependent on outside resources for the required standard. The Committee would like to be informed of the progress made in this regard within two weeks of the submission of this Report.

Remuneration of C-DOT personnel

(Recommendation at paragraph No. 74)

23. The Committee in its Report on working of C-DOT had noted that C-DOT had appointed a consultant to go through the Industry remuneration pattern and suggest possible improvements in remuneration paid to the technical personnel in C-DOT so that the same could be at par with other IT organisations in the country. The Committee desired that as consultant had submitted a report, its recommendations should be processed and implemented expeditiously and the Committee be apprised of the same.

24. Department of Telecommunications in its action taken note has stated that based on the report of the consultant, C-DOT Board had submitted a proposal to the Steering Committee. A sub-group has been constituted by the Steering Committee to examine the proposal and the same is being expedited.

25. The Committee notes that the Consultant who has been appointed to go through the Industry remuneration paid in C-DOT, has submitted his Report. Based on the same, C-DOT Board had submitted a proposal to the Steering Committee and a Sub-Group constituted by the Steering Committee is examining the same. The Committee regrets that on most of the important issues inordinate time is taken for taking decisions. The Committee desires the matter to be expedited and would like to be apprised of the improvements made in remunerations paid to C-DOT technical personnel to deal with the problems of brain drain.

New Delhi;
8 August, 2002
17 Sravana, 1924(Saka)

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