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STANDING COMMITTEE ON INFORMATION TECHNOLOGY (2006-2007)

FOURTEENTH LOK SABHA

MINISTRY OF COMMUNICATIONS AND INFORMATION TECHNOLOGY (DEPARTMENT OF TELECOMMUNICATIONS)

[Action taken by Government on the Recommendations/Observations of the Committee contained in their Twenty-Eighth Report (Fourteenth Lok Sabha) on 'Spectrum Management']

THIRTY-SIXTH REPORT

LOK SABHA SECRETARIAT
NEW DELHI
December, 2006/*Agrahayana,* 1928 *(Saka)*

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INTRODUCTION

I, the Chairman Standing Committee on Information Technology (2006-07) having been authorised by the Committee to submit the Report on their behalf, present this Thirty-Sixth Report on Action Taken by Government on the Recommendations/ Observations of the Committee contained in their Twenty-Eighth Report (Fourteenth Lok Sabha) on 'Spectrum Management' relating to the Ministry of Communications and Information Technology (Department of Telecommunications).

2. The Twenty-Eighth Report was presented to the Lok Sabha on 23 December, 2005 and laid on the Table of Rajya Sabha on the same day. The Department furnished Action Taken Notes on the Recommendations/Observations contained in the Report on 31 March, 2006.

3. The Report was considered and adopted by the Committee at their sitting held on 6 December, 2006.

4. For facility of reference and convenience, the Recommendations/Observations of the Committee have been printed in bold letters in the body of the Report.

5. An analysis of Action Taken by Government on the Recommendations/ Observations contained in the Twenty-Eighth Report (Fourteenth Lok Sabha) of the Committee is given at Annexure-II.

NEW DELHI;
8 *December*, 2006
17 *Agrahayana*, 1928 *(Saka)*

NIKHIL KUMAR,
Chairman,
Standing Committee on
Information Technology.

CHAPTER I

REPORT

This Report of the Standing Committee on Information Technology deals with the action taken by Government on the recommendations/observations of the Committee contained in their Twenty-Eighth Report (Fourteenth Lok Sabha) on 'Spectrum Management' pertaining to the Department of Telecommunications (DoT).

2. The Twenty-Eighth Report was presented to Lok Sabha on 23rd December, 2005 and was laid on the Table of Rajya Sabha the same day. It contained 18 recommendations/observations.

3. Action Taken Notes in respect of all the recommendations/observations have been received and categorised as under:—

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

Paragraph Nos. : 1,4,5,8,9,10,11,12,15,17 & 18 — Total: 11 Chapter-II

(ii) Recommendations/Observations which the Committee do not desire to pursue in view of the replies of the Government:—

Paragraph Nos. : 3 & 14 — Total: 02 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. : 2,6,7 & 16 — Total : 04 Chapter-IV

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

Paragraph Nos. : 13 — Total : 01 Chapter-V

4. The Committee trust that utmost importance would be given to the implementation of the recommendations/observations 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-implementations. The Committee further desire that action taken notes on the recommendations/observations contained in Chapter-I and final action taken notes on the recommendations/observations

contained in Chapter-V of this Report should be furnished to them at an early date.

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

A. Formulation of a Comprehensive Spectrum Policy

6. In wireless communications, the signal is transmitted from one point to another without any wire and it requires use of Radio Frequency Spectrum. In other words, telecom operators send and receive signals at various frequencies to enable communication, through what is known as radio spectrum frequencies which are electromagnetic waves and are natural phenomena governed by the laws of physics. Spectrum is a limited natural resource which can only be shared amongst various countries, services, users, technologies etc., thus making spectrum management a critical issue. Against this backdrop, the Committee took up the subject 'Spectrum Management' for examination and after obtaining background notes/written replies/write ups from the Department of Telecommunications (DoT), the Ministry of Defence, Cellular Operators Association of India (COAI), Association of Unified Service Providers (AUSPI) and individual Global System for Mobile (GSM) and Code Division Multiple Access (CDMA) service providers, the Committee heard their views also. Taking into account the views/suggestions of all, the Committee gave their recommendations/ observations in the Twenty-Eighth Report which was presented to the House on 22nd December, 2005.

7. In their Report, the Committee had *inter alia* recommended the Government to come out with a comprehensive and transparent spectrum policy commensurate with the requirement of both Defence and non-Defence sectors; to ensure timely release of spectrum to Defence in order to enable them to counter the adversary; to appropriately take up the matter of according spectral and financial compensation to Defence for release of additional spectrum; to consider formulating an exclusive 'Defence Band' and 'Defence Interest Zone'; to incorporate suitable clauses in the licence agreement and relevant legislation to ensure optimal utilization and prevention of hoarding of spectrum to release spectrum in a balanced manner to both GSM and CDMA service providers for adequate expansion of both the services; to realize adequate revenue from the allocation of spectrum; to provide simultaneous opportunities to both GSM and CDMA operators for roll out of 3G service and to facilitate noticeable penetration of mobile services in rural and remote areas.

8. The action taken by Government on the various recommendations of the Committee have been included in the respective Chapters of the Report. In their action taken note the DoT *inter alia* have stated that a comprehensive spectrum policy is under consideration taking into account all relevant aspects.

9. The Committee note that in pursuance of their recommendations, the Government are now contemplating to formulate a comprehensive Spectrum Policy

taking into account all relevant aspects. Keeping in view the imperative need for a sustained growth in the telecom sector, the Committee desire that the Spectrum Policy be finalised and announced without any further delay.

B. Timely Release of Spectrum to Defence

(Paragraph No. 2)

10. In their 28th Report, the Committee had taken note of the statement of the Ministry of Defence that in the process of assignment of spectrum to the Defence, Wireless Planning and Co-ordination (WPC) took almost two to three years to give its clearance which resulted in a lot of inconvenience for the Defence Forces. Expressing their concern over the delay in assignment of spectrum to Defence and its consequential adverse implications, the Committee had impressed upon the Department of Telecommunications (DoT) to ensure timely release of spectrum to Defence to counter the adversary.

11. The Department in their Action Taken Note have stated that generally the spectrum requirements of defence are quite large, spread over large area. Coordination of such large requirements with the existing usages takes time and it may not be possible to meet their entire requirement in all cases. Still a large part of such requirements are met within a reasonable time. The remaining unmet requirement is indicated by Defence as pending for long time.

12. The Committee are aware that the spectrum requirements of Defence are quite large and it is obvious in light of the responsibility bestowed upon them with respect to the security of the country. They do appreciate that a large part of Defence's spectrum requirements are met within a reasonable time. However, they desire that the remaining unmet requirement should not be kept pending for long as it adversely impacts the Defence preparedness of the country.

C. Release of additional spectrum

(Paragraph No. 5)

13. In their earlier Report, the Committee had observed that pursuant to the suggestions of the Group of Ministers in 2003, the Department of Telecommunications had been meeting and interacting with the Defence Ministry to examine various aspects of Defence Communication Network and resultant vacation of spectrum by Defence. Finding that even after a lapse of considerable time, the Department had not arrived at any final view on the requirement of Defence and the vacation of spectrum, the Committee urged upon the DoT to make their decision making process quicker for making additional spectrum available to the telecom operators commensurate with their requirement.

14. The Department in their Action Taken Note have stated that the Ministry of Defence had been requested since May, 2003, to consider replacing some of their wireless links between fixed locations, with alternate physical media like Optical Fiber Cable (OFC), etc. which would release the spectrum. This would also provide higher capacity as well as better signal quality for their systems, besides freeing some additional spectrum

for mobile services. MOD agreed, in principle, in September, 2005 to this suggestion. Towards this objective, a Project Definition Team (PDT) has been constituted with representative of both the Ministries, under the chairmanship of Ministry of Defence with the objective of examining various aspects of Defence Communication Network and to explore alternatives, so as to enable the Defence Services to release additional spectrum. The PDT has deliberated the issue and their report has now been received.

Elsewhere, the Department have further stated that the available spectrum is being allotted in a timely manner, to both the GSM and CDMA telecom operators, based on the prescribed criteria, for growth of these services. Once additional spectrum is vacated by defence services, the same would also be allotted to telecom operators for growth/expansion of their networks & services, as per the prescribed criteria.

15. The Committee note that subsequent to the presentation of their earlier Report, an inter-Ministerial Project Detention Team (PDT) comprising representatives of the Ministry of Defence and the Department of Telecommunications has examined various aspects of Defence Communication Network and to explore alternatives, so as to enable the Defence Services to release additional spectrum. The Committee desire that the process should be expedited and taken to its logical end without any further delay. The Committee would like to be apprised of the detailed findings/suggestions of the PDT and the action taken by the Department of Telecommunications and Defence Ministry since March, 2006 for release of additional spectrum in favour of both GSM and CDMA operators.

D. Financial and Spectral Compensation/Support to Defence

(Paragraph No. 6)

16. In their Twenty-Eighth Report, the Committee had observed that the Defence were promised financial and spectral compensation including an additional support of Rs. 900 crore to enable them to switch over to new and spectrum efficient equipment. But as on December, 2005, neither financial compensation/support nor spectral refarming had been accorded to the Defence. Observing that Defence were prepared to share with and vacate additional spectrum for the telecom service providers in the event of getting the promised compensation, the Committee urged DoT to take up the matter urgently at the appropriate level for granting financial and spectral compensation to Defence.

17. The Department in their Action Taken Note have stated that no charges were paid by Central Government Departments including Defence, for the spectrum usage, up to 31.5.2004 (they are yet to pay for spectrum usage from 1.6.2004 also). Accordingly, frequency assignments to Defence were made, taking into account the requirement of redundancy and security, etc., in consultation with them. It has been observed that Defence requirements and consequently their frequency assignments have been quite large.

The spectrum requirements for growth of mobile services were conveyed to Ministry of Defence (MoD) for coordination with their usages through relocation and/

or possible change over to other media like OFC etc. Most of the Defence assignments in the frequency bands required for mobile telecom services, are more than 20 years old.

It has further been stated that funds to MoD for modernisation/replacement of their old equipment has to be provided by the Ministry of Finance. Hence, it has to be viewed as a support for modernisation of defence networks rather than compensation, especially considering that Defence has not been paying for the spectrum usage till 31.5.2004.

18. The Committee are not satisfied with the reply of the Department of Telecommunications. The point for discussion is not whether the funds to be provided to the Defence should be viewed as 'compensation' or 'support'. The issue continues to remain that, as also observed in the Twenty-Eighth Report, without a major reworking of the Defence Communication Network and exploring alternatives for which they need financial and spectral aid, Defence would not be able to release additional spectrum in favour of the commercial service providers. The Committee are well aware that any funds to Defence for modernisation/ replacement of their old equipment have to be provided by the Ministry of Finance. However, it is for the Department of Telecommunications, being the nodal Department for all spectrum issues, to play a greater role in ensuring that the Defence requirements are appropriately catered to for vacation of additional spectrum. It will be not out of context to mention that it is the Department's own Spectrum Management Committee which recommended financial compensation of Rs. 345 crore and refarming for the portion of spectrum that Defence would coordinate as has been highlighted in the Twenty-Eighth Report. The Committee, therefore, reiterate their earlier recommendation and urge upon DoT to take up the matter at the appropriate forum, instead of pondering over the issue of 'compensation' or 'support', so that Defence are soon able to vacate additional spectrum for further expansion of GSM and CDMA cellular services.

E. Defence Band and Defence Interest Zone

(Paragraph No. 7)

19. In their earlier Report, the Committee had observed that prior to 1999, Defence had exclusive rights over its spectrum since the allocated spectrum was categorized as the 'Defence Band'. In the year 1999, the telecom industry was allowed to establish its communication infrastructure in the country in a big way and in order to achieve that, a need was felt to reallocate the entire spectrum from the concept of major and general users to the concept of 'types of services' which resulted in sharing a common band by both the Defence and the Telecom Industry and necessitated the requirement of shedding certain spectrum from the erstwhile Defence Based for the industry, As this arrangement had resulted in some operational inconvenience for the Defence, they had suggested that a 'Defence Band' as was in vogue prior to 1999, should be formed on the pattern of USA, UK, France, Germany, etc. According to them, the formation of such a

band would enable provision of adequate spectrum for the service providers and for the Defence as well besides having additional benefits of better planning for procurement and development of equipment by both Defence and the Industry. The representatives of the Industry in their deposition before the Committee had welcomed the formation of a Defence Band and the Secretary, DoT had also assured the Committee to look into the matter in consultation with the Defence Authorities. Since there was unanimity of opinion, the Committee desired that the Government should create conditions for the formulation of a Defence Band. The Committee further opined that once such a band was formed, besides other benefits, the waiting period for assignment of frequencies would reduce considerably as there would be no need for continuous coordination, vacation and migration which is obviously time consuming. The Committee also impressed upon the Department to act upon the suggestion of the Defence and the recommendation of the Spectrum Management Committee by taking up the issue of formalization of a Defence Interest Zone (DIZ).

20. In their Action Taken Note the Department have stated that there has never been any concept of 'Defence Band', giving defence exclusive rights over any part of the spectrum. The Department have further stated that 'Major User' concept was defined in the NFAP-81 for different frequency sub-bands in the national frequency allocations, to facilitate advance planning of networks by the concerned 'Major User' organisation. However, the concept of 'Major User' did not imply any exclusive rights of the Department/user on the particular frequency band or its use. All the 'Major Users' were to seek specific frequency assignments from WPC Wing for their operations. Also, the WPC Wing could consider the requirement of other users in the relevant frequency band(s), in coordination with the concerned 'Major User'. Even at that time, the defence have been requesting for frequency assignments in other bands, which were provided, as practical.

Similarly, the defence services have themselves stated that the modern defence operations are not confined to country's borders only and are spread throughout the country.

In most cases, it is possible to use/share the same spectrum for civil use in a geographical area(s) and for defence or other Govt. use in other area(s), leading to more efficient use of the RF spectrum. The concept of 'Defence Band' and 'Defence Interest Zone' would reduce the reuse of this scarce resource and thus, may not be in the best interest of national economical development.

The proposal regarding Defence Band and Defence Interest Zone, which is under preparation in the Ministry of Defence, would be considered appropriately.

21. The Committee are unhappy to note the Department's statement that there has never been any concept of 'Defence Band' giving Defence exclusive rights over any part of the spectrum. While examining the subject 'Spectrum Management' in the year 2005, the Committee were never informed of this fact by the Department, whereas the Defence have categorically submitted that

prior to 1999, Defence had exclusive rights over its spectrum, since the allocated spectrum was categorised as 'Defence Band'. The Committee desire that such divergent views have to be reconciled suitably leaving no room for any other interpretation.

22. The Committee are also not inclined to buy the Department's theory that the concept of 'Defence Band' and 'Defence Interest Zone' would reduce the reuse of spectrum and may not be in the best interest of national economic development. The Committee rather feel that once such a Band is formed, the waiting period for allotment of frequencies would reduce considerably as there would be no need for continuous coordination, vacation and migration which as the experience has shown are obviously time consuming propositions. The Committee are of the opinion that it would be ideal and in the national interest to have a secured and dedicated spectrum allocation for the Defence, should they, over a period of next few years, vacate the required spectrum for the benefit of the commercial needs of the nation. The Committee therefore, desire that the Government should consider formation of an exclusive 'Defence Band' and 'Defence Interest Zone' in the right earnest.

F. Rural Telephony

(Paragraph No. 16)

23. The Committee, in their Twenty-Eighth Report had observed that although there had been no constraint of spectrum for the operators in rural areas, yet the mobile coverage in such areas was meagre. However, observing the assurance of the GSM and CDMA operators to set up 5000 and 5700 cell sites respectively in the rural areas, the Committee desired to see the fruits of such efforts in the near future. They also recommended that the Department should structure their policies in such a way that noticeable penetration of mobile services in rural and remote areas was facilitated and operators penalised for intentionally neglecting such areas.

24. The Department in their Action Taken Note have stated that comments of Association of the GSM Service providers as well as CDMA service providers have been obtained on the valuable recommendations and observations of the Hon'ble Committee. They have stated that in view of high cost of network infrastructure in rural areas, coupled with low tariffs, they need Government subsidy support for roll out of their services in rural areas.

The Department have further stated that obligations to provide rural telecommunications on the part of service providers were withdrawn with the migration of the licensees from Basic Services to Unified Access Service License (UASL) regime in November, 2003. The Cellular Mobile Telephone Service (CMTS) & UAS License Agreements do not provide for mandatory coverage of rural areas. As there is no obligation in the present licences to provide rural communications, the operators cannot be penalized on this account. However, a proposal is under consideration of the

Government to provide support for shareable infrastructure for providing cellular mobile services in rural and remote areas of the country. In order to enable such support, suitable amendments to the Indian Telegraph Act, 1885 is under consideration.

25. The Committee are highly perturbed to note that the private operators cannot be penalised for not providing rural telephony as the Cellular Mobile Telephone Service (CMTS) and Universal Access Service (UAS) License Agreements do not provide for mandatory coverage of rural areas. The Committee further note that in view of the high cost of network infrastructure in rural areas coupled with low tariffs, the GSM and CDMA service providers need Government Subsidy support for roll out of their services in rural areas. It is pertinent to mention here that, as has also been highlighted in the Committee's Thirty-Fourth Report, the rural teledensity of the country stood around 1.86 as on 30th April, 2006 against the urban teledensity of 40.65, largely spearheaded by mobile telephones. In such a paradoxical situation, where the private service providers are reluctant to go in for rural telephony because of its economic unviability and the Government cannot take any action against them because of the licensing terms and conditions, the Committee wonder how rural teledensity would be increased. The solution perhaps lies in providing support from the USO Fund to the service providers for provision of cost effective cellular mobile services in rural and remote areas, which has been reportedly under consideration of the Government. In their Thirty-Fourth Report on 'Indian Telegraph (Amendment) Bill, 2006', the Committee have already fully endorsed the proposal for extension of support from the USO Fund for provision of cellular mobile services in rural, remote and inaccessible areas. The Committee reiterate their recommendation and desire that the Department should suitably structure their policies for facilitation of telecommunication services in the hitherto neglected rural and remote areas.

CHAPTER II

RECOMMENDATIONS/OBSERVATIONS WHICH HAVE BEEN ACCEPTED BY THE GOVERNMENT

Recommendation (Para 1)

The Committee observe that the growth of telecom services is synonymous with the growth of wireless services. In wireless communication, the signal is transmitted from one point to another without any wire and it requires use of Radio Frequency Spectrum. This Radio Frequency Spectrum is a limited natural resource available in one form only and it can only be shared amongst various countries, services, users, technologies, etc. in India, Spectrum is shared amongst Defence, Railways, ONGC, etc. and the two streams of Cellular Mobile Service Providers i.e. Global System of Mobile (GSM) and Code Division Multiple Access (CDMA). Another technology, namely, Digital Enhanced Cordless Telecommunications (Cor-DECT) also shares spectrum, but as its reach is less, it is basically not substitutable for GSM & CDMA technologies. Amongst all the users of spectrum in India, Defence occupies a large portion because initially it was the sole major user. Assignment of Spectrum in India is governed by the National Frequency Allocation Plan (NFAP), 2002 and the international radio regulations of the international Telecommunications Union (ITU). The Committee find that in India, historically, apart from Defence, spectrum was allocated on need base, in bits, mostly to Government Organisations. However, due to the unprecedented growth of the telecommunication sector, especially mobile services in the non-Defence areas, requirement of spectrum by the telecom sector has increased manifold making spectrum management a critical issue. The position is no better with the Defence either, whose requirement has also grown enormously due to a substantial increase in the number of radio users all along the international border, hopping and network centric operations. There was basically no policy envisaging a higher requirement and use of the scarce commodity for the future. The Committee feel that the lack of foresighted planning on the part of the Department has led to *ad hoc* and injudicious allocation of spectrum which in turn has caused non-availability of this scarce resource to the telecom operators when they need it the most for faster expansion of telecom services throughout the country. Needless to say, lack of anticipated demand for spectrum and haphazard planning over a period of time has given birth to a horde of problems. The Committee feel that it is very important to move ahead, in a coordinated and planned manner, rather than in an *ad hoc* way, and there is a dire need to have a clear cut road map for the country in order to cater to the short term spectrum requirements upto 2007 to meet the Government objectives in addition to the long term requirements beyond 2007. It is, therefore,

imperative that the Department come out with a comprehensive and transparent spectrum policy, dispensing with all earlier loopholes and keeping in mind the requirement of both Defence and non-Defence sectors.

Action Taken by Government

The National Frequency Allocation Plan (NFAP) was developed way back in 1981 based on the international frequency allocations and taking into account, among others, national spectrum requirements as well as technologies available during that time. The NFAP-81 was a classified document as it contained several security related details. Subsequently, pursuant to New Telecom Policy, 1999 (NTP-99), the National Frequency Allocation Plan was reviewed in a transparent manner with participation of all stakeholders and a revised NFAP was formulated, known as NFAP-2000, which was made a public document without containing security related informations. The NFAP-2000 was again reviewed in view of changes in the international Radio Regulations and taking into account fast growing national spectrum requirements/ priorities, in a transparent manner with participation of all stakeholders, and the NFAP-2002 was also published as a public document, which is effective from 1st January, 2002. The NFAP has been evolved/ reviewed from time to time, taking into account changes in international allocations as well as national spectrum requirements and emerging technologies.

While there is a shortage of adequate spectrum for public mobile services, this is not due to lack of foresighted spectrum planning or *ad hoc* and injudicious allocation of spectrum but mainly because of the following reasons:

(i) The Defence spectrum requirement have been large in view of procurement of radio equipment by Defence from different global sources requiring spectrum in different frequency bands.

(ii) Public Mobile Telecom Services came on the horizon in early 90's. Their spectrum requirements for growth were known only in late 90's.

(iii) These telecom technologies have been developed in other countries taking into account spectrum availability in those countries. Implementation of such technologies in other countries often necessitates coordination with and/ or relocation of existing operations in the concerned bands.

The spectrum requirements for mobile services upto 2007 as well as beyond, have been assessed and conveyed to Ministry of Defence for coordination with their usages and release of spectrum. These have been taken into account by the Project Definition Team, referred in the ATN for para 6 of these Recommendations.

Nevertheless, a comprehensive **spectrum policy** is under consideration of the Government taking into account all relevant aspects, including those recommended by the Hon'ble Standing Committee on Information Technology, appropriately.

[Ministry of Communications, Department of Telecommunications
O.M. No. H-14016/2/2003-LR dated 29th March, 2006]

Comments of the Committee

Please *see* Paragraph No. 9 of Chapter I

Recommendation (Para 4)

It is true that commercial norms to measure spectrum efficiency cannot be applied to Defence forces as they look for thousand hops on different frequencies on the same band, the electromagnetic interference and compatibility as well at the time of planning. It is also true that today, Defence possess generations of Soviet equipment in their inventory which are not spectrally as efficient as equipment on NATO pattern and the migration to that pattern, as explained by Defence is a 15 year Plan. The Committee were further informed that the Defence always tries to look into more spectrum efficient technology at the time it is inducted. However, because of the financial limitations, Defence was looking forward to using equipment till it becomes functionally obsolete and not technologically obsolete. Keeping in view the need for Defence preparedness of the nation, the Committee consider it important for the Defence to keep pace with the State-of-the-art technology and hence, those old technologies should be phased out. In doing so, not only will the country be better prepared for any eventuality but it would also have a lot of spectrum in its hands for utilization for other non-Defence purposes. The Committee, therefore, desire that a detailed study be carried out by the Defence to evaluate the exact requirement of funds to phase out the technologically obsolete equipments within a reasonable time frame. The Committee would like to be apprised of the findings of the study.

Action Taken by Government

The recommendations of the Hon'ble Committee have been conveyed to the Ministry of Defence for appropriate action. Ministry of Defence have stated that they are in the process of working out the details of their technologically obsolete equipment to be phased out in the near future and also the financial implication for the same. A Project Definition Team comprising of members from Ministry of Defence and Ministry of Communications and IT was formed to examine various aspects of Defence Communication Network in certain frequency bands and to explore alternatives, so as to enable the Defence Services to release additional spectrum.

[Ministry of Communications, Department of Telecommunications
O.M. No. H-14016/2/2003-LR dated 29th March, 2006]

Recommendation (Para 5)

So far as vacation of spectrum by Defence is concerned, the Committee find that in 2003, the Group of Ministers were of the opinion that Defence should be given full freedom to map their changeover and wherever they find that their equipment have become obsolete or inefficient they should replace it immediately and vacate spectrum. Pursuant to that, the DOT, as reported by them in February 2005, meet and interact

every month with the Defence Ministry. However, the Committee note that even after 10 months, the Department has not arrived at any final view on the requirement of Defence and the vacation of spectrum including IMT-2000 band. Not only that, several recommendations of TRAI relating to the spectrum issues are still under consideration of the Department. The Committee agree that decisions on spectrum related issues, being very critical and sensitive in nature are to be handled very carefully and decision taken judiciously, but they feel that such issues cannot be kept pending for ever. The Committee, therefore, would urge DOT to make their decision making process quicker and in keeping with the technologicai developments and the immediate requirement of the industry.

Action Taken by Government

The Ministry of Defence had been requested since May 2003, to consider replacing some of their wireless links between fixed locations, with alternate physical media like Optical Fiber Cable (OFC), etc, which would release the spectrum. This would also provide higher capacity as well as better signal quality for their systems, besides freeing some additional spectrum for mobile services. MOD agreed, in principle, in September 2005 to this suggestion. Towards this objective, a Project Definition Team (PDT) has been constituted with representative of both the Ministries, under the chairmanship of Ministry of Defence with the objective of examining various aspects of Defence Communication Network and to explore alternatives, so as to enable the Defence Services to release additional spectrum. The PDT has deliberated the issue and their report has now been received.

[Ministry of Communications, Department of Telecommunications
O.M. No H-14016/2/2003-LR dated 29th March 2006]

Comments of the Committee

Please *see* Paragraph No. 15 of Chapter I

Recommendation (Para 8)

The Committee observe that at present wireless telecommunication services in India are mainly provided through Global System of Mobile (GSM) and Code Division Multiple Access (CDMA) technologies, the former coming from Europe and the latter from America and both of them competing in India. GSM operates in India in 900 & 1800 MHz band and CDMA in 800 MHz band. The frequency bands that are available to be allocated to GSM 900 & 1800 are 890-915 MHz paired with 935-960 MHz and 1710-1785 paired with 1805-1850 MHz. Similarly, 824-844 MHz paired with 869-88S MHz has been allocated to CDMA operators in the 800 MHz band. Thus, in the case of GSM, 100 MHz of spectrum is available whereas in the case of CDMA it is only 20MHz. The task before the Government is, therefore, to satisfy four GSM operators with 100 MHz of spectrum and three CDMA operators with 20 MHz. The Committee find that against the availability, the Indian GSM operators have been allotted only 2x4.4 to

2x10 MHz and CDMA operators only 2x2.5 to 2x5 MHz whereas the international averages for GSM & CDMA spectrum allocation are 2x20 MHz and 2x14 MHz respectively, as revealed by TRAI in their Recommendations on Spectrum related issues. In other words, India's highest allocation of spectrum for GSM operators is 2x10 MHz and for CDMA operators it is 2x5 MHz against an international average of 2x20 MHz and 2x14 MHz respectively. Keeping in view the immediate and short term requirements, which will provide relief to the operators in meeting the Government objectives set for them, the Committee recommend that whatever spectrum is currently available or which will become available after vacation by Defence, may be provided in a time bound manner to the GSM and CDMA operators. The Committee desire that this exercise should be completed within a definite time frame. All efforts should be mads to allot as much spectrum as the Government can in the 800/1900 MHz for the CDMA operators and the 900/1800 MHz for the GSM operators for the expansion of the telecom services.

Action Taken by Government

The available spectrum is being allotted in a timely manner, to both the GSM and CDMA telecom operators, based on the prescribed criteria, for growth of these services, Once additional spectrum is vacated by defence services, the same would also be allotted to telecom operators for growth/ expansion of their networks & services, as per the prescribed criteria.

[Ministry of Communications, Department of Telecommunications
O.M. No H-14016/2/2003-LR dated 29th March 2006]

Recommendation (Para 9)

The Committee find that one issue that is a cause of concern to the operators, irrespective of the usage of any particular technology, is the methodology of allocations of spectrum to them. The Committee recommend that subject to availability of adequate spectrum, efforts should be made to address the concern with respect to the quantum of spectrum allocation in such a manner that the interest of the consumers, operators and the overall national interest is subserved keeping in view the imperatives of technological choices. The Government may consider incorporating suitable clauses in the licence agreement and the relevant legislation to ensure the optimal utilization and prevention of hoarding of spectrum.

Action Taken by Government

The Department of Telecom (DOT) has been following a technology neutral policy with regard to provision of telecom services by licensed operators. Further, in order to ensure efficient and optimal utilisation of allotted RF spectrum by telecom operators, as envisaged in their respective license agreements, appropriate criteria have been evolved, taking into account the national objective of growth & affordability of telecom services as well as various relevant factors like technology,

categories of service areas based on their demography, average traffic per subscriber, number of Base Trans-receiving Stations (BTS) in specified area, etc.

[Ministry of Communications, Department of Telecommunications
O.M. No H-14016/2/2003-LR dated 29th March 2006]

Recommendation (Para 10)

The Committee note that under the Unified Access Services Licence (UASL), there is benchmarking for the allocation of additional spectrum to CDMA operators who require spectrum beyond 2.5 MHz. This benchmarking refers to ensuring optimal and efficient utilization of the already allocated spectrum taking into account all types of traffic and guidelines/ criteria prescribed from time to time. However, additional spectrum beyond 4.4 MHz upto 10 MHz is allocated to the GSM operators on fulfilling the subscriber criteria. The Committee also observe that there are competing claims regarding the efficiency of utilization of spectrum by GSM and CDMA operators. Each in its anxiety for getting more spectrum has put up various contentions to establish their claim to additional spectrum. By way of illustration, the GSM operators maintain that the efficiency of CDMA operators is five times that of GSM for the same allocated spectrum. On the other hand, the CDMA operators feel that the GSM operators have a larger infrastructure and handset vendors which give advantage in terms of prices and certain other commercial aspects. The Committee are informed that the exact scope of efficiency factor of one technology over the other in relation to the number of subscribers for an allotted spectrum is yet to be worked out finally by DoT. The Committee, therefore, recommend that in the light of the DoT's comprehensive evaluation of the above, Spectrum may be released keeping in view the need for eventual harmonization of the spectrum allocation policy in accordance with the international norms.

Action Taken by Government

The Department of Telecom (DOT) has been following a technology neutral policy with regard to provision of telecom services by licensed operators. Appropriate criteria have been evolved, taking into account the national objective of growth & affordability of telecom services as well as various relevant factors like technology, categories of service areas based on their demography, average traffic per subscriber, number of Base Trans-receiving Stations (BTS) in specified areas etc.

The spectrum allotment methodology for different services/ applications varies from country to country, depending on their respective national objectives and requirements. In India, the available spectrum is allotted as per laid down criteria, which takes into account the national objectives.

[Ministry of Communications, Department of Telecommunications
O.M. No H-14016/2/2003-LR dated 29th March 2006]

Recommendation (Para 11)

The Committee are particular about the achievement of the target of 200 million mobile customers by 2007, especially in these trying situations when spectrum is so scare that each and every MHz has to be eked out of a finite resource. The Committee observe that the DoT has estimated a requirement of an allocation of 10-25 MHz to each operator in the Metro Cities and 15-40 MHz to each operator in the other cities. On the other hand, TRAI in their recommendations have estimated a minimum requirement of 28.1 MHz to 64.60 MHz in Delhi circle, 20.2 MHz to 45.80 MHz in Mumbai, 7.76 MHz to 8.40 MHz in Chennai and 15.7 MHz to 26.6 MHz in Kolkata for the GSM services and 3.75 to 17.50 MHz, 1.25 to 10 MHz, 1.25 to 5.00 MHz and 1.25 to 12.50 MHz respectively in the CDMA services. However, according to the operators, additional spectrum of over 20 MHz in the major cities would essentially be required in the GSM services and around 10 MHz in the CDMA services. Thus, the Committee find that there is a substantial variation in the estimate of requirement of additional spectrum in urban areas. The Committee, therefore, desire that the DoT along with the Defence take immediate steps to identify the available spectrum towards a coordinated release thereof to the operators to meet the growing demand in urban area, particularly the Metros. The Committee also desire that while releasing the spectrum adequate opportunity should be given to both the technologies to expand in a balanced manner.

Action Taken by Government

Pursuant to the discussions between the Defence Secretary, and the Secretary, Department of Telecommunications, a Project Definition Team (PDT), under the Chairmanship of Ministry of Defence and comprising of suitable officers of Defence services and Department of Telecommunications, has been established. The PDT has examined the aspect of alternate media like Optical Fiber Cable (OFC) for some of the Defence radio networks in the frequency bands required for mobile telecom services, with the objective to release additional spectrum for proper growth of telecom services in the country.

The spectrum for both the technologies — GSM and CDMA, is being allotted in an equitable manner, as per the criteria prescribed for such allotment and subject to availability of the spectrum.

[Ministry of Communications, Department of Telecommunications
O.M. No H-14016/2/2003-LR dated 29th March 2006]

Recommendation (Para 12)

As pointed out by the Defence, the Committee also recognize that the optimum utilization of spectrum is hampered due to a higher number of operators as a buffer band has to be made available between the allocation of spectrum to each of these operators. This, however, should not be factor for restricting the entry of new operators. Eventually, consolidation of operators may happen depending on the market forces.

While accepting the principle and the logic of encouraging competition and thereby offering multiple choices to the consumer, the Committee recommend that Government should take into consideration the legitimate spectrum needs of the existing operators.

Action Taken by Government

The guidelines for Cellular Mobile Telephone Service and Unified Access Services provide for merger and acquisition of licensee companies subject to the condition that competition is not compromised and also subject to statutory requirements and other conditions prescribed in the license agreement and amendments thereof. In the case of merger/ acquisition of licensee companies, the applicable guidelines in this regard, for allotment of frequency spectrum would be applied.

The justified/ legitimate spectrum needs of the existing operators are being met, as per the laid down criteria and subject to availability of spectrum.

[Ministry of Communications, Department of Telecommunications
O.M. No H-14016/2/2003-LR dated 29th March 2006]

Recommendation (Para 15)

The Committee learn that one of the key objectives of selecting the IMT-2000 band was inter-operability of various mobile systems through use of such frequency bands that help in achieving international roaming and inter-operability. The Committee have been informed that in the next three years 3G services will be widely available. The Committee feel that DoT should take all necessary steps to allocate the spectrum in this band fairly, judiciously and in a planned framework so that the experiences of the 2G allocation are not repeated. The Committee desire that they may be kept informed of the road map to the allocation of IMT-2000 band.

Action Taken by Government

The spectrum for 3G services in the 2 GHz band is being coordinated with existing usages, including the defence usages. The Project Definition Team has made good progress in this regard. Thereafter, while formulating the guidelines for allotment of spectrum for 3G services, all relevant aspects will be taken into account, including the valuable recommendations and observations of the Hon'ble Committee.

[Ministry of Communications, Department of Telecommunications
O.M. No H-14016/2/2003-LR dated 29th March 2006]

Recommendation (Para 17)

The Committee's attention has been drawn to a report about a new technology being developed whereby telephone exchanges could be set up for interconnecting mobile telephone operations. Under this technology an operator could route calls

from and to mobile networks within a building to a fixed network. It has been reported that since about that 60 per cent of mobile calls originate and terminate within a building and if, for the "last mile" the call could travel on fixed line, it would relieve a lot of scarce spectrum. The Committee feel that the Department of Telecommunications should examine this issue in detail and formulate a long term policy keeping in view the above mentioned developments. The Committee may be kept informed.

Action Taken by Government

Comments of Associations of the GSM Service providers (COAI) as well as CDMA service providers (AUSPI) have been obtained on the valuable recommendations and observations of the Hon'ble Committee. While COAI has supported the concept, the AUSPI have stated that such technologies are in development mode and these would be useful once the technological issues on deployment are sorted out.

The Department of Telecom (DOT) has been following a technology neutral policy with regard to provision of telecom services by licensed operators. Accordingly, there is no bar on CMTS/ UAS licensees to use any appropriate technology for provision of permitted service. However, as per conditions of the license agreement, the operators are required to take prior approval of the DOT before providing any new Value Added Service to their customers. The DOT has also been encouraging the use of spectrum efficient technology(ies) by all wireless users, including mobile telecom service providers.

[Ministry of Communications, Department of Telecommunications
O.M. No. H-14016/2/2003-LR dated 29th March 2006]

Recommendation (Para 18)

To sum up, the Committee find that spectrum requirement for both GSM and CDMA operators is urgent especially in urban areas and Metros; portions of spectrum is to be vacated from Defence without compromising the national security and by compensating them adequately; Defence Band and Defence Interest Zone (DIZ) need to be formalized; spectrum efficient equipment need to be deployed by Defence as well as the operators; rural areas require to be given due attention; penal provision for inefficient utilization of spectrum as well as for neglecting rural areas; best returns for spectrum allocation to be ensured; early allocation of spectrum to be made for commencement of 3G services, spectrum should not be kept idle and has to be used in an efficient, optimum and rational manner, both GSM and CDMA technologies have to co-exist, and a long term planning to identify new cellular bands (2500 MHz/ 2600 MHz) that are aligned to global developments needs to be framed. Taking all the above factors into account, the Department of Telecommunications (DoT) should come out with a comprehensive and transparent spectrum policy at the earliest catering to the requirement of both Defence and non-Defence sectors.

Action Taken by Government

A comprehensive spectrum policy is under consideration of the Government taking into account all relevant aspects, including these observations & recommendations of the Hon'ble Standing Committee, appropriately.

[Ministry of Communications, Department of Telecommunications
O.M No H-14016/2/2003-LR dated 29th March 2006]

Comments of the Committee

Please *see* Paragraph No. 9 of Chapter I

CHAPTER III

RECOMMENDAITONS/OBSERVATIONS WHICH THE COMMITTEE DO NOT DESIRE TO PURSUE IN VIEW OF THE REPLIES OF THE GOVERNMENT

Recommendation (Para 3)

The Committee find that the Defence at present is holding 4.8+4.8 MHz spectrum in 890-915/ 935-960 MHz band, 60+60 MHz in Metros and 65+65 MHz in other areas in 1710-1785/1805-1880 MHz band and 60+60 MHz in 1920-1980/ 2110-2170 MHz band. So far, 20+20 MHz in 800 MHz band for the CDMA operators and 25+25 MHz in 900 MHz band for the GSM operators have already been coordinated by the Defence. Similarly, 25+25 MHz in the 1800 MHz band has been partly coordinated in favour of the GSM operators. The Committee also find that for coordination of IMT-2000 band for 3G services consultations are going on between Defence and the Ministry of Communications and Information Technology. The Defence has advocated optimal utilization of spectrum and deployment of spectrum efficient technology to improve quality of service and availability of spectrum in India where the spectrum efficiency, according to them, is one of the lowest in the world. The Committee agree with the views/suggestions of the Defence, but would simultaneously emphasize that optimal utilization of spectrum and deployment of spectrum efficient equipment is applicable to Defence also.

Action Taken by Government

Spectrum allotted per operator in India is less than the average spectrum assigned to operators in other countries, which leads to lesser efficiency of spectrum usage. Also, the service providers have rolled out their networks mostly in Urban areas and the additional spectrum requirements are also mostly in these areas.

The initial spectrum is being allotted to the mobile telecom operators in accordance with the relevant provisions of the Service License Agreement. To ensure optimal and efficient use of allotted spectrum, necessary subscriber based criteria for allotment of additional spectrum, beyond the initial allotment, had been worked out after technical analysis, keeping in mind the inherent spectrum utilization efficiency of different technologies, categories of service area based on its demography, average traffic per subscriber, number of Base Transreceiving Stations (BTS) in specified area, need for utilisation of allotted spectrum to service providers in a multi-layer RF structure, etc.

Frequency assignments to Defence are made through active consultation with them, taking into account the redundancy and security, etc. required by them. Further the recommendations of the Hon'ble Committee have been conveyed to the Ministry of, Defence for appropriate action.

[Ministry of Communications, Department of Telecommunications
O.M. No H-14016/2/2003-LR dated 29th March 2006]

Recommendation (Para 14)

In the course of the discussions on spectrum management and in the detailed study, the Committee have come to learn that whereas efforts are being made for the coordination of the 2.1 GHz band to enable the introduction of 3G services *i.e.* voice, data and data transmission by the GSM and the CDMA operators in India, the 3G services are already available through the EDGE and the EVDO platforms of the GSM and the CDMA operators respectively. The Committee also learn that the EDGE and the EVDO platforms have been internationally recognized and identified by the International Telecommunication Union (ITU) as 3G services. Until such time the 2.1 GHz band is coordinated and spectrum and equipment made available in that band, the Committee feel that the nation and the users should not be denied access to the 3G and emerging services. In view of the fact that 3G and other emerging services can be provided in the 800 MHz and the 900 MHz bands, the Committee desire that the Government should create conditions and provide simultaneous opportunities to both GSM and CDMA operators for roll out of 3G services.

Action Taken by Government

The EDGE and EVDO technologies can be provided by concerned telecom service providers, without compromising the quality of existing voice and other data services, within the allocated spectrum to them in relevant frequency bands. Allotment of additional spectrum exclusively for EDGE and EVDO platforms may not be feasible, at present, due to shortage of spectrum in 800 MHz and 900 MHz bands, more so, when requirement for existing voice and data is increasing continuously.

[Ministry of Communications, Department of Telecommunications
O.M. No H-14016/2/2003-LR dated 29th March 2006]

CHAPTER IV

RECOMMENDATIONS/OBSERVATIONS IN RESPECT OF WHICH REPLIES OF THE GOVERNMENT HAVE NOT BEEN ACCEPTED BY THE COMMITTEE AND WHICH REQUIRE REITERATION

Recommendation (Para 2)

The Committee note that Defence has always been amongst the largest users of spectrum in India and all Defence requirements of spectrum go through the process of vetting and technical analysis by the Wireless Planning and Coordination (WPC) Wing of the Department of Telecommunications (DoT) before assignment. But the Committee are deeply concerned to hear the statement of the Defence Ministry that in the process of the assignment of spectrum to the Defence, WPC takes almost two to three years to give its clearance which obviously results in a lot of inconvenience for the Defence forces. While the responsibility of defending the nation is bestowed upon the Defence, the Committee feel that any delay in assigning the spectrum to them will certainly have numerous adverse implications. In order to avoid that, the Committee impress upon the Department to ensure timely release of spectrum to Defence to counter the adversary and there should not be slightest scope for any aberrations in this regard.

Action Taken by Government

Generally the spectrum requirements of defence are quite large, spread over large area. Coordination of such large requirements with the existing usages takes time and it may not be possible to meet their entire requirement in all cases. Still a large part of such requirements are met within a reasonable time. The remaining unmet requirement is indicated by Defence as pending for long time.

[Ministry of Communications, Department of Telecommunications O.M. No H-14016/2/2003-LR dated 29th March 2006]

Comments of the Committee

Please *see* Paragraph No. 12 of Chapter I

Recommendation (Para 6)

The Committee note that as per the recommendations made by the Spectrum Management Committee, the Defence were promised refarming for the portion of spectrum that they would coordinate. They were also promised a financial compensation estimated at Rs. 345 crore in 1998-1999 for migration. Till date, neither has the refarming

been carried out nor have they been paid any amount as compensation for migration. The Committee further note that an amount of Rs. 900 crore has been earmarked for Defence to enable them to switch over to new and spectrum efficient equipment which has not yet been disbursed to them. The Committee appreciate the views of the Defence that they are prepared to share and vacate additional spectrum with the telecom service providers, if the compensation promised is awarded to them. The Committee feel that without a major reworking of the Defence networks and applications involving major spectral and financial compensation and alternate spectrum, it maybe very difficult on the part of Defence to release additional spectrum. The Committee, therefore, urge the DoT to take up the matter at the appropriate level with a sense of utmost urgency for giving financial and spectral compensation to Defence.

Action Taken by Government

No charges were paid by Central Government Departments including Defence, for the spectrum usage, up to 31.5.2004 (they are yet to pay for spectrum usage from 1.6.2004 also). Accordingly, frequency assignments to Defence were made, taking into account the requirement of redundancy and security, etc., in consultation with them. It has been observed that Defence requirements and consequently their frequency assignments have been quite large.

The spectrum requirements for growth of mobile services were conveyed to Ministry of Defence (MoD) for coordination with their usages through relocation and / or possible changeover to other media like OFC etc. Most of the Defence assignments in the frequency bands required for mobile telecom services, are more than 20 years old.

Any funds to MoD for modernization/ replacement of their old equipment has to be provided by the Ministry of Finance. Hence, it has to be viewed as a support for modernization of defence networks rather than compensation, especially considering that Defence has not been paying for the spectrum usage till 31.5.2004.

[Ministry of Communications, Department of Telecommunications
O.M. No H-14016/2/2003-LR dated 29th March 2006]

Comments of the Committee

Please *see* Paragraph No. 18 of Chapter I

Recommendation (Para 7)

The Committee observe that prior to 1999, Defence had exclusive rights over its spectrum since the allocated spectrum was categorized as the 'Defence Band'. In the year 1999, the telecom industry was allowed to establish its communication infrastructure in the country in a big way and in order to achieve that, a need was felt to reallocate the entire spectrum from the concept of major and general users to the concept of 'types of services' which resulted in sharing a common band by both the Defence and the Telecom Industry and necessitated the requirement of shedding certain spectrum from the erstwhile

Defence Based for the industry. As this arrangement has resulted in some operational inconvenience for the Defence, they have suggested that a 'Defence Band' as was in vogue prior to 1999, should be formed on the pattern of USA, UK, France, Germany, etc. According to them, the formation of such a band will enable provision of adequate spectrum for the service providers and for the Defence as well besides having additional benefits of better planning for procurement and development of equipment by both Defence and the Industry. The representatives of the Industry in their deposition before the Committee have welcomed the formation of a Defence Band and the Secretary, DoT has also assured the Committee to look into the matter in consultation with the Defence Authorities. Since there is unanimity of opinion, Government should create conditions for the formulation of a Defence Band. The Committee are of the opinion that once such a band is formed, besides other benefits, the waiting period for assignment of frequencies will reduce considerably as there will be no need for continuous coordination, vacation and migration which is obviously time consuming. The Committee would also like the Department to act upon the suggestion of the Defence and the recommendation of the Spectrum Management Committee by taking up the issue of formalization of a Defence Interest Zone (DIZ).

Action Taken by Government

There has never been any concept of 'Defence Band', giving defence exclusive rights over any part of the spectrum. In this context, it is stated that 'Major User' concept was defined in the NFAP-81 for different frequency sub-bands in the national frequency allocations, to facilitate advance planning of networks by the concerned 'Major User' organisation. However, the concept of 'Major User' did not imply any exclusive rights of the Department/user on the particular frequency band or its use. All the 'Major Users' were to seek specific frequency assignments from WPG Wing for their operations. Also, the WPC Wing could consider the requirement of other users in the relevant frequency band(s), in coordination with the concerned 'Major User'. Even at that time, the defence have been requesting for frequency assignments in other bands, which were provided, as practical.

Similarly, the defence services have themselves stated that the modern defence operations are not confined to country's borders only and are spread throughout the country.

In most cases, it is possible to use/share the same spectrum for civil use in a geographical area(s) and for defence or other Govt. use in other area(s), leading to more efficient use of the RF spectrum. The concept of 'Defence Band' and 'Defence Interest Zone' would reduce the reuse of this scarce resource and thus, may not be in the best interest of national economical development.

The proposal regarding Defence Band and Defence Interest Zone, which is under preparation in the Ministry of Defence, would be considered appropriately.

[Ministry of Communications, Department of Telecommunications
O.M. No H-14016/2/2003-LR dated 29th March 2006]

Comments of the Committee

Please *see* Paragraph No. 21 & 22 of Chapter I

Recommendation (Para 16)

The Committee are pained to observe that whereas there has been no constraint of spectrum for the operators in rural areas, the mobile coverage in such areas is very small and almost incidental. This fact has been admitted by the operators themselves and the Secretary, DoT also. However, the Committee are comforted by the assurance given by the GSM operators that they will establish 5000 cell sites this year in the rural areas. The CDMA Association also has promised to cover the semi-urban and rural areas when they expand their network on the Highways by setting up cell sites at 5700 locations. The Committee would like to see the fruits of such efforts in the very near future. They also desire that in the long run much more will be done in such areas to boost the teledensity in the country. The Committee feel that the Department on its part should structure their policies in such a way that noticeable penetration of mobile services in rural and remote areas is facilitated and operators penalized for deliberately neglecting such areas on flimsy grounds.

Action Taken by Government

Comments of Associations of the GSM service providers as well as CDMA service providers have been obtained on the valuable recommendations and observations of the Hon'ble Committee. They have stated that in view of high cost of network infrastructure in rural areas, coupled with low tariffs, they need Government subsidy support for roll out of their services in rural areas.

Obligations to provide rural telecommunications on the part of service providers were withdrawn with the migration of the licensees from Basic Services to Unified Access Service License (UASL) regime in November 2003. The Cellular Mobile Telephone Service (CMTS) & UAS License Agreements do not provide for mandatory coverage of rural areas. As there is no obligation in the present licences to provide rural communications, the operators cannot be penalized on this account. However, a proposal is under consideration of the Government to provide support for shareable infrastructure for providing cellular mobile services in rural and remote areas of the country. In order to enable such support, suitable amendments to the Indian Telegraph Act, 1885 is under consideration.

[Ministry of Communications, Department of Telecommunications
O.M. No H-14016/2/2003-LR dated 29th March 2006]

Comments of the Committee

Please *see* Paragraph No. 25 of Chapter I

CHAPTER V

RECOMMENDATIONS/OBSERVATIONS IN RESPECT OF WHICH REPLIES ARE OF INTERIM NATURE

Recommendation (Para 13)

The Committee have been informed that the existing provisions contain the payment of an entry fee which includes a one time spectrum charge and an annual spectrum charge in terms of percentage of the Annual Gross Revenue (AGR) by operators who get and operate a licence for mobile operations. Recognising the scarce and invaluable nature of spectrum, the Committee feel that the Government should be able to realize adequate revenue from the allocation of spectrum. The Government should also consider creating suitable conditions for entry of small and local players.

Action Taken by Government

At present, there is no separate entry fee for spectrum or one time spectrum charge. Only spectrum usage charge is levied. A comprehensive spectrum policy is under consideration of the Government taking into account all relevant aspects.

[Ministry of Communications, Department of Telecommunications O.M. No H-14016/2/2003-LR dated 29th March 2006]

NEW DELHI;
8 *December*, 2006
17 *Agrahayana*, 1928 *(Saka)*

NIKHIL KUMAR
Chairman,
Standing Committee on
Information Technology.

ANNEXURE I

MINUTES OF THE FOURTH SITTING OF THE STANDING COMMITTEE ON INFORMATION TECHNOLOGY (2006-2007)

The Committee sat on Wednesday, the 6th December, 2006 in Committee Room No. '62', Parliament House, New Delhi.

PRESENT

Shri Nikhil Kumar — *Chairman*

MEMBERS

Lok Sabha

2. Shri Nikhil Kumar Choudhary
3. Shri Sanjay Shamrao Dhotre
4. Shir Bhubneshwar Prasad Mehta
5. Shri Lalmani Prasad
6. Shri Narahari Mahato

Rajya Sabha

7. Shri Vijay J. Darda
8. Shri Praveen Rashtrapal
9. Shri Motiur Rahman
10. Shri Eknath K. Thakur
11. Shri Shyam Benegal

SECRETARIAT

1.	Shri P. Sreedharan	—	*Joint Secretary*
2.	Shri Raj Shekhar Sharma	—	*Director*
3.	Shri Cyril John	—	*Under Secretary*

WITNESS

Smt. Aruna Sundararajan	—	Chief Executive Officer (Community Service Centre) Infrastructure Leasing & Financial Services Limited.

2. ** ** ** ** **

3. ** ** ** ** **

4. ** ** ** ** **

A verbatim record of the proceedings has been kept.

The witness, then, withdraw.

5. Thereafter, the Committee took up the following Draft Reports for consideration and adopted the same :—

(i) ** ** ** ** **

(ii) Draft Report on Action Taken by the Government on the Recommendations/Observations of the Committee contained in their Twenty-Eighth Report (Fourteenth Lok Sabha) on 'Spectrum Management'.

6. The Committee, then, authorised the Chairman to finalise and present the above mentioned Reports to the House on a date and time convenient to him.

The Committee, then, adjourned.

ANNEXURE II

ANALYSIS OF ACTION TAKEN BY GOVERNMENT ON THE TWENTY-EIGHTH REPORT (FOURTEENTH LOK SABHA)

[*Vide* Paragraph No. 5 of Introduction]

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

Paragraph Nos.: 1,4,5,8,9,10,11,12,15,17 & 18

Total : 11
Percentage : 61.11%

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

Paragraph Nos.: 3 & 14

Total : 02
Percentage : 11.11%

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

Paragraph Nos.: 2,6,7 & 16

Total : 04
Percentage : 22.22%

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

Paragraph No.: 13

Total : 01
Percentage : 5.56%