

CASE NO.:
Appeal (civil) 936 of 2006

PETITIONER:
Reliance Infocomm Ltd

RESPONDENT:
Bharat Sanchar Nigam Ltd. & Ors

DATE OF JUDGMENT: 30/04/2008

BENCH:
S. H. Kapadia & B. Sudershan Reddy

JUDGMENT:
J U D G M E N T
REPORTABLE

CIVIL APPEAL NO. 936 OF 2006

KAPADIA, J.

This civil appeal is filed under Section 18 of Telecom Regulatory Authority of India Act, 1997 ("1997 Act") by M/s Reliance Infocomm Ltd. against judgment and order delivered by Telecom Disputes Settlement and Appellate Tribunal ("TDSAT") dated 17.1.2006 dismissing petition No. 108 of 2005 challenging the directive dated 4.3.2005 by the Telecom Regulatory Authority of India ("TRAI"), circulars dated 23.3.2005 and 26.8.2005 issued by DoT and demands raised by BSNL for ADC for the period 14.11.2004 to 26.8.2005.

2. The short question which arises for determination in this civil appeal is whether "Unlimited Cordless" service ("the impugned service" for short) of the appellant is covered under the definition of WLL(M) service as defined in Regulation 2(xxviii) of the Telecommunication Interconnection Usage Charges Regulation, 2003 which defines WLL(M) as limited mobility service using WLL technology within Short Distance Charging Area ("SDCA"). According to TRAI and DoT, fixed wireless phones ("FWP")/fixed wireless service ("FWS") which operate beyond the subscriber's premises is classifiable as WLL(M) service for the purpose of payment of ADC to BSNL whereas, according to the appellant, FWS is limited to one base transceiver station ("BTS") within which the service operates and, consequently, this service is classifiable as WLL(F) and not as WLL(M).

Facts:

3. On 18.3.1997, appellant was granted licence by DoT for providing basic services in Gujarat which included fixed wireless services but which preferred wireless technology for the subscriber local loop. On 20.7.2001 appellant was granted licence by DoT for providing basic services in different service areas in the country which included fixed wireline service and limited mobile service. In November, 2003 appellant was permitted to migrate to the Unified Access Service Licence ("UASL") which categorized wireless services into 3 categories, viz., fixed wireless access ("FWA"), limited mobility [WLL(M)] and fully mobile service(s). Submissions of Shri K. K. Venugopal, learned senior counsel for the appellant:

4. According to the appellant, in November, 2003 appellant was permitted to migrate to UASL under which appellant was permitted to provide following services: (i) Fixed Wireless (ii) FWA (iii) WLL(M) (iv) Fully Mobile Service. According to the appellant, ever since its migration to the UASL, it has been operating fixed services including FWA and full

mobile services. The appellant was not operating WLL(M). According to the appellant, "limited mobile service" has been defined in UASL granted by DoT and in the IUC Regulation 2003 framed by TRAI under Section 11 of the 1997 Act as a service which enables operations throughout a SDCA. At this stage, it may be noted that the whole of Delhi is one single SDCA. That, appellant was, therefore, operating its FWA service within the area of one Base Transceiver Station (BTS).

5. According to the appellant a BTS is necessary wherever there is a congested area, like Chandni Chowk where digging for laying an optical fibre cable is not feasible and, in such a case, a BTS has to be set up where wireless link has to be established between the telephone exchange and the BTS which in turn could be accessed by telephone receiver set through Radio Frequency ("RF") signals. However, according to the appellant, in the case of full mobile cellular services, several BTSs. are required to be set up by each service provider in the entire service area for transmitting signals to the terminals (handsets). That, these handsets are required to be aligned electronically to a single BTS or the handset could access RF signals from other base stations BTSs. from any part of the SDCA. According to the appellant, in case of full mobility, the signals are available in the entire service area (a telecom circle equivalent to a State). Therefore, according to the appellant, fixed wireline service being a wireline service alone stood restricted to the subscriber's premises as is clearly understood even under the UASL whereas WLL(M) is defined specifically, both in the UASL as well as in the IUC Regulation 2003, as a service where mobility is restricted to the SDCA. That, in the IUC Regulation 2003, FWA [WLL(F)] service has been treated as part of the fixed services. Therefore, according to the appellant, its "unlimited cordless" service ("impugned service" for short) stood classified right from the inception as WLL(F). According to the appellant, FWA service is a wireless service, mobility is inherent in such services but that mobility is not meant for the entire SDCA as in that event such mobility would fall in the category of WLL(M) and, therefore, according to the appellant, FWA service logically stands between a fixed wireline service restricted to the subscriber premises and WLL(M) where mobility is within the SDCA.

6. According to the appellant, the said logical concept was known to DoT and TRAI right from inception, that the technical and statutory authority understood the said concept with regard to FWA clearly to mean as restricted to one BTS and that it is in this context that the mobility of the appellant's phone is available in the restricted area of one BTS and not within the entire SDCA. That, this is the reason why even the DoT specifically inquired from the appellant vide letter dated 31.1.2005 (in the context of alleged violation of licence condition on account of certain advertisements issued by the appellant) as to whether the mobility of the appellant's phone stood limited to one BTS area or whether it is available in the area outside one BTS. This letter of DoT is relied upon by the appellant to show that right from 1997 upto 31.1.2005, DoT and TRAI understood FWA services as having mobility limited to one BTS area alone. According to the appellant, it is in the above context that even the TRAI in its Consultation Paper dated 17.3.2005 categorically stated that its intention was to permit mobility only within the coverage of RF sector of one BTS, in the area where the subscriber is registered and not to the areas which are covered by other base stations. According to the appellant, throughout the period 2003 till 4.3.2005 its service was accepted as a fixed wireless access service ("FWA service") and that only because of the advertisement issued by the appellant in January, 2005 that BSNL complained to the TRAI and to the DoT. The said advertisement was regarding Unlimited Cordless. According to the appellant, TRAI called upon the appellant vide letter dated 6.1.2005 not to advertise its impugned FWA service as "unlimited cordless". That in the said letter dated 6.1.2005 TRAI did not call upon the appellant to answer the question as to whether impugned service is available within the entire SDCA or within one RF sector of BTS. According to the appellant, such a question was not even raised by DoT in its letter dated 31.1.2005 by which only a limited clarification on the "numbering scheme" for the impugned service was asked for. That query was as follows:
"Whether fixed wireless terminal could be authenticated

by BTS terminals other than by BTS serving the location of the subscriber as on 10.1.2005"

7. According to the appellant, the impugned letter of TRAI dated 4.3.2005 is an aberration for the simple reason that having accepted the impugned service as FWA as restricted to one BTS, it directs all access providers to strictly ensure that the terminal used for FWA confined to the subscriber's premises. That, having said so, TRAI thereafter hastened to refer to a question in the Consultation Paper of TRAI dated 17.3.2005 in which, after referring to the complaint of certain operators, TRAI stated that it had asked all service providers on 4.3.2005 that Fixed Wireless Terminals ("FWTs.") should provide services to the subscriber at the fixed address only, the intention being that these phones should not be in a position to offer mobility through other base stations located in other parts of the city and that the impugned service needs to be allocated to a particular RF sector of a single base station, otherwise issues of ADC and comparison with limited or full mobility may take place. According to the appellant, the above statement of TRAI itself suggests that FWA services are those which are limited to one BTS. According to the appellant, therefore, even as late as 4.3.2005 TRAI understood the concept of FWA service as limited to one base station within the SDCA. Therefore, according to the appellant, the decision of TRAI dated 4.3.2005 is an aberration. That the said decision was taken unilaterally and at the behest of BSNL without examining the merits of the contentions advanced by the access providers like Reliance Infocomm Ltd. According to the appellant, it was a unilateral decision to confine FWA services to the premises of the subscriber. According to the appellant, in any event, when the matter was a part of the Consultation Paper dated 17.3.2005 it was not open to TRAI to unilaterally issue such a direction restricting FWA services to the premises of the subscriber.

8. According to the appellant, BSNL could not have made demand on it for payment of ADC during the period 14.11.2004 to 26.8.2005 as it was admitted by TRAI and DoT that no ADC is payable on FWA services. In this connection, according to the appellant, one of the questions posed for consultation in Para 2.7 was "what criteria should be determined with regard to the range and portability/mobility of WLL(F)'s subscriber terminals". According to the appellant, the said query itself indicates that the issue as to the range of portability/mobility of WLL(F) was pending in the consultation process and, therefore, BSNL could not have raised a demand on the appellant for ADC when the matter was sub-judice. According to the appellant it is this demand of BSNL which made the appellant move TDSAT for settlement of dispute.

9. According to the appellant, circumstances mentioned above clearly indicates that in 2005 upto 4.3.2005 both DoT and TRAI understood FWA services as limited to one BTS and the decision dated 4.3.2005 given by TRAI is a unilateral decision imposing Premises Specific Restriction ("PSR") for the first time at the behest of BSNL. Further, according to the appellant, in the petition before TDSAT, the appellant has specifically posed a vital question for consideration, namely, whether the impugned service provided by the appellant should be restricted within one BTS and if so whether such service will fall in the category of WLL(F) or WLL(M) service. According to the appellant, TDSAT has not answered this question. Apart from the said question, appellant had also raised other questions such as whether the impugned directive of TRAI dated 4.3.2005 and the clarification dated 23.3.2005 by DoT for the first time introducing the concept of SPR would amount to amendment of the licence conditions without following the consultation process as stipulated under the 1997 Act. Similarly, one more question was also raised before TDSAT as to whether directive dated 4.3.2005 was legally valid. According to the appellant, none of the said important questions have been answered by the impugned decision of the TDSAT and, therefore, the said decision needs to be set aside. According to the appellant, the said questions ought to have been decided by a statutory body consisting of technical members, particularly to analyse the above mentioned various submissions raised by the appellant.

10. According to the appellant, nowhere in the pleadings of BSNL, the issue that a WLL(F) is a service where an antenna is fixed at the top of the house connected by the wire to the handset plugged into the wall has been raised. That the said technology has not been discussed even by TDSAT in its impugned judgment. According to the appellant, the literature on this point is confusing. That, there is no affidavit to support the claim of BSNL that FWA service is one where an antenna is fixed at the top of the house connected by wire to the handset plugged into the wall and, therefore, this aspect needs to be considered by a statutory body of technical members alone. In this connection, appellant alleges that even today the affidavit of BSNL do not answer the questions posed by the appellant as to how many of their fixed wireless terminals were with the roof-top antenna and what numbering plan was followed by BSNL for their FWT and LL(M). Appellant alleges that an inference may be drawn of admission on the part of BSNL that it had 16,00,000 fixed wireless terminals which are similar to the fixed wireless telephones of the appellant as there is no denial regarding allegation made in this connection by the appellant.

11. Lastly, it is the case of the appellant that the levy of ADC is a matter of tax policy and, therefore, any provision relating to a charge has to be strictly interpreted. According to the appellant different stands taken by the authorities show that the issue as to what is WLL(F) falls in a grey area and, therefore, no ADC can be charged from the appellant. That, the said question has not been decided even by TRAI. That, the IUC Regulation 2003 are statutory in nature; they have been enacted under Section 36 of the 1997 Act; that the regulations having been tabled before both the Houses of Parliament cannot be altered or modified by circulars/letters/administrative directions issued by the Authorities under the 1997 Act including the TRAI.

Contentions of Shri Gopal Subramaniam, learned senior counsel for BSNL

12. According to BSNL, the appellant's service under the name "unlimited cordless" is a WLL(M) (wireless local loop mobile service) as admittedly the said service is capable of being operated outside the subscriber's premises and within the SDCA. That the said service is squarely covered by the definition of WLL(M) as defined under clause 2(xxviii) of the IUC Regulation 2003. According to BSNL, appellant has attempted to evade its liability of paying ADC to BSNL despite providing WLL(M) services in the garb of WLL(F). With regard to payment of IUC charges including ADC by WLL service which contains a feature of "mobility", the TRAI issued clarification dated 4.3.2005 based on exclusive definition of WLL(M) in its IUC Regulation 2003. According to BSNL, any WLL service which gives the facility of mobility beyond the premises of the subscriber and within SDCA has to be treated as WLL(M) in respect of liability to pay the ADC in accordance with the provisions of the IUC Regulation 2003. According to BSNL, subsequent to the Consultation Paper dated 17.3.2005, the TRAI reiterated vide communications dated 24.3.2005 and 31.5.2005 addressed to the appellant herein that the WLL service operating beyond the premises of a subscriber and within the SDCA is to be treated as WLL(M) for all purposes including payment of IUC/ADC and numbering plan etc.

13. On the technology side, it is the case of BSNL that payment of IUC/ADC has nothing to do with the nature of the instrument and it is the nature of service which is relevant for that purpose. That "unlimited cordless" is the service which is provided through a handheld terminal.

14. On the point of reliance placed by the appellant upon para 2.26 of the Consultation Paper it is submitted by BSNL that the Consultation Paper was only a suggestive approach. That, in any case, the question falling in consultation process was whether ADC is payable to the fixed wireless terminals. What is WLL(F) and what is WLL(M) was not the question pending in the consultation process. According to BSNL, in any case the question whether ADC is payable to the fixed wireless terminals was part of

the explanatory memorandum to the IUC Regulation dated 6.1.2005 itself and, therefore, it is the case of BSNL that Para 2.26 of the Consultation Paper relied upon by the appellant was merely a suggestive approach for the future payment of ADC on WLL phones.

15. According to BSNL, there is no merit in the contention of the appellant that its impugned service is restricted to one BTS/RF centre as the same is not technologically possible. In this connection, it is submitted on behalf of BSNL that BTS has only a receiver and a transmitter. It has no Intelligent Network ("IN"). The function of the BTS is different from the functionality of Mobile Switching Centre ("MSC"). The utility of the BTS is that it receives the signals and forwards the same to the MSC. The MSC is the intelligent part of the network. BTS is not the intelligent part of the network. Registration of the numbers to be served by the service provider is an element of the intelligent network. Identification of the caller is done by the intelligent network. Therefore, according to BSNL, it would be incorrect to say that a BTS has some sort of mechanism to identify the caller and to further forward the call to the MSC. Therefore, MSC is the IN and BTS is only the transceiver (i.e. receiver and transmitter). That, the role of a base station vis-à-vis that of a MSC is, therefore, distinct and separate. According to BSNL, there is no plea even in the petition that appellant can restrict the mobility of its service to one RF of a base station and that the services of the appellant is operable only in 1/3 of one base station zone. According to BSNL, the mobility of the service impugned cannot be restricted to the premises of the subscriber and, therefore, it has to be treated as WLL(M). This is borne out, according to BSNL, from the opinion of the manufacturers of the equipment of the appellant which clearly imports an admission of the appellant that to restrict the impugned service to the premises of the subscriber would be impractical and if it is so restricted it would adversely impact its quality. That, in any event, the impugned service is actually found to be operable throughout the SDCA and, therefore, it is a WLL(M). Therefore, according to BSNL, appellant was liable to pay ADC as per the rates prescribed by TRAI in its regulations.

16. According to BSNL, the directive/communication dated 4.3.2005 issued by the TRAI only reemphasises the position mentioned in the IUC Regulation dated 29.10.2003, namely, that a fixed wireless terminal, if not confined to the premises of the customer, will invite mobility within SDCA which in turn would attract ADC charges on such services. Further, according to BSNL, under the terms and conditions of licence issued by DoT, the appellant had agreed to comply with the relevant International Telecom Union ("ITU") standards as also the TEC's specifications. That, even according to the generic requirements issued by TEC, the remote station of the subscriber had to be "fixed indoor wall mounted". That even as per the recommendations of the ITU, the FWA has to be a Wireless Access Application in which the location of end-user termination and the network access point to be connected to the end-user are fixed. According to BSNL, this technical information is well known and the appellant is fully aware of the concept of FWA. According to the appellant, the IUC Regulation 2003 provides for payment of IUC including ADC for telecommunications services. The definition of WLL(M) is provided for in clause 2(xxviii) which refers to limited mobility services using wireless in local loop technology within SDCA. That, Schedule III of IUC Regulation 2003 refers to service and not to instrument and makes ADC applicable for different types of calls and, therefore, the payability of ADC as per the regulations is directly related to the nature of the service and not to any kind of instrument.

17. According to BSNL, there is no merit in the submission of the appellant that DoT has reclassified the impugned service as WLL(M) as, according to BSNL, it has been made clear by the DoT on numerous occasions that if the impugned services cannot be restricted to the premises of the subscriber, it will be treated as WLL(M) for levy of ADC. That, what is clarified by TRAI and DoT is that those WLL services which operate beyond the premises of the subscriber and within the SDCA shall be treated as WLL(M) for all purposes including numbering plan, payment of IUC,

payment of ADC etc. Therefore, according to BSNL, the "unlimited cordless" service of the appellant is squarely covered by the definition of WLL(M) in clause 2(xxviii) of the IUC Regulation 2003 which defines WLL(M) phones as WLL(F) which operates within SDCA. Therefore, according to BSNL there is no merit in this civil appeal and the same deserves to be dismissed with costs.

Finding:

18. Regulatory regime includes methodology for calculating access deficit. Access deficit is to be funded through access deficit charge. Access deficit has to be calculated according to a formula which provides a reasonable return on the investment made, i.e., a return on capital employed. IUC/ADC is part of revenue regime. It is for TRAI to consider the framework used for calculating IUC/ADC. Costing is one of the important relevant factors to be kept in mind while calculating IUC/ADC. While doing so, the TRAI has also to keep in mind changes in technology and reduction in costs both of services as well as of equipment. ADC is a subsidy. It is given to BSNL to incur additional capital expenditure for rolling out telecom network in rural areas equivalent to approximately 10 lacs lines at the relevant time. (see: Explanatory Memorandum dated 24.1.2003). Access deficit essentially is to compensate the difference between costs and local calls revenue. In other words, when costs are more than the revenue, BSNL incurs a loss which needs to be compensated. It is the additional capital expenditure over local calls revenue for rolling out telecom network in rural areas which attracts ADC. From time to time, TRAI has issued IUC Regulations, particularly in the years 2003 and 2005. These regulations are accompanied by Explanatory Memorandums. ADC has been specified differently in these regulations for fixed, WLL(M) and cellular mobile calls. In doing so, the TRAI has kept in mind the fact that standard tariffs have been fixed for fixed line calls. (see: Table XI in Annexure A which is Explanatory Memorandum dated 24.1.2003). In the said Memorandum, basic principles underlying IUC/ADC regime has been laid down. One of the important principles laid down is that ADC shall be funded from all calls, except fixed to fixed, local etc. We have different types of calls, i.e., fixed to fixed, fixed to WLL(M), fixed to cellular, WLL(M) to fixed, WLL(M) to WLL(M) etc.

19. The purpose of the above discussion on ADC regime is to highlight the fact that ADC regime has evolved over a period of time, notified for the first time in the TRAI Regulation dated 24.1.2003 and reviewed on 29.10.2003 etc. The point to be noted is that ADC regime right from January, 2003 is a matter of policy framework initiated by TRAI to promote lower domestic prices, competition and to give rise to strong subscribers growth. It involves pricing of services like mobile service, fixed service, WLL(M) service etc.

20. The above discussion is to highlight the difference between concepts evolving in the technological field which may be relevant but not conclusive in pricing and costing or in matters of calculation of ADC which, as stated above, constitutes return on capital employed for BSNL. Therefore, categorization of services for levying a charge by way of IUC/ADC is a matter of policy and revenue recognition, which is the part of regulatory regime. If one examines the various regulations made by TRAI from time to time, including Telecommunication Interconnection (Charges and Revenue sharing) Regulation 2001, WLL(M) stood defined as far back as 14.12.2001 to mean limited mobility telephony service using wireless in local loop technology within a SDCA. In the matter of levy of ADC, the Explanatory Memorandums indicate that service providers are well aware of what is WLL(M), what is WLL(F) and what is cellular mobile service right from 2001. This point is to be emphasized as it has been vehemently urged on behalf of the appellant repeatedly that vide circular dated 4.3.2005, for the first time, unilaterally, the TRAI has prescribed PSR, which amounts to reclassification of WLL(F) service as WLL(M) service, which, according to the appellant, amounts to an aberration.

21. We do not find merit in this contention advanced on behalf of the appellant for two reasons. Firstly, as stated above, computation of ADC falls within policy framework which is a part of the IUC Regulations. Every service provider knew the difference between fixed wireline and three types of wireless services, namely, FWA, limited mobility and full mobility. Further, these three categories of wireless services constitute a condition of UAS licence. The categorization is done in the UAS Licence dated 20.7.2001. We find merit in the argument of BSNL that classification has taken place in the licence and the follow up regarding chargeability of IUC/ADC is under the Regulations made by TRAI. Therefore, we find no merit in the submission advanced on behalf of the appellant that by the said circular dated 4.3.2005 TRAI has classified/reclassified the impugned service as WLL(M). Secondly, in this judgment, we propose to examine several references in technological domain, which bring out the difference between WLL(F) service and WLL(M) service.

22. At the outset, in the context of technology, we may point out that licence does not use the word 'WLL(F)'. The said licence uses the words FWA, limited mobility and full mobility. Mobility is a service feature. This aspect needs to be kept in mind. In this case, we are not concerned with the type of instrument, we are concerned with the nature of the services provided by a given instrument, be it, a walky or a handset of the appellant.

23. The design of a wireless system does not only aim to optimise performance for specific applications, but also at reasonable cost. Therefore, economic factors impact the design for wireless system. When it comes to the design of wireless systems and services we have to distinguish between two different categories. "Systems" where the mobility is of value by itself e.g., in cellular telephony. Such services can charge a premium to the customers i.e., more expensive than wired systems. In cellular telephony, the per-minute price was higher than the landline telephony in the past. However, in the second category, we have "services" in contradistinction to system. In services, wireless access is intended as a cheap cable replacement, without additional features. The classic example of such service is FWA. Such system is cost-effective, as the infrastructure is cheaper than laying of new wired connection. The point to be emphasized is that FWA is a service where wireless access is intended as cheaper cable replacement without additional features. Mobility is an inherent feature of most wireless systems and has important consequences for system design. It is there in FWA, but if it exceeds the premises of the subscriber for ADC purpose it becomes classifiable as WLL(M).

24. In the light of the above discussion and in the context of technology, we must now understand what is FWA. This concept is mentioned as a service in the UAS Licence dated 20.7.2001. It is necessary to understand this concept as one of the main contentions advanced on behalf of the appellant is that FWA is the service which is restricted to one BTS alone. Therefore, it is necessary to know what is BTS, Exchange Numbering Plan and MSC in the context of their functionalities.

25. By way of introduction, it may be stated that in 1990 FWA and wireless local loop (WLL) came into the market to replace the copper lines to the premises of the users by wireless links but without the specific benefit of mobility, the original motivation for WLL was to give access to customers for alternative providers of phone services bypassing the copper lines. However, since 2003 several developments led to wireless revival as it gave broader range of products, data transmission with a higher rate for existing products and higher user densities.

26. Briefly, we may state that the wireless services consist of broadband, paging, cellular telephony, cordless telephony, FWA, satellite cellular communications etc. It may be noted that wireless systems, however, differ in the amount of mobility that they have to allow for the users. In cellular telephony, a mobile user communicates with a base station that has a good

radio connection with the user. The base stations, however, are connected to Mobile Switching Centre ("MSC") which in turn are connected to public telephone system. In the cellular principle, the area served by a network provider is divided into cells. In cellular telephony there is unlimited mobility. The user can be anywhere within the coverage area of the network (i.e., is not limited to a specific cell), in order to be able to communicate. He can move from one cell to the other during one call. The cellular network interfaces with Public Switched Telephone Network ("PSTN").

27. FWA is also one type of wireless service. It is a derivative of cordless phone, essentially replacing a cable connection between the user and the public landline system. In FWA there is no mobility of the user device. The purpose of FWA lies in providing users with telephone and data connections without having to lay cables from its central switching office to the office or premises of the subscriber. (see: page 14 of the book entitled "Wireless Communications" by Andreas F. Molisch). FWA has its market for covering rural areas which do not have wired infrastructure.

28. Mobility is an important requirement for wireless service. The ability to move around while communicating is one of the main attractions of wireless communications for the user. However, within that requirement of mobility, different grades exist:

Fixed Devices:

Fixed Devices are placed only once and thereafter they communicate with their BS or each other from the same location. The main reason for using wireless transmission is to avoid laying of cables. In the case of fixed devices, the devices are not mobile. FWA falls in the same category as wired communications (example, the PSTN)

Nomadic Devices:

These are devices that are placed at a certain location for a limited duration of time and then moved to a different location. Example of nomadic device is a laptop.

Low Mobility:

Many communication devices like cordless phones as well as cell phones are operated by walking human users. The effect of low mobility is a channel that changes rather slowly, and it operates in a system with multiple base stations and handover from one cell to other is the rare event.

High Mobility:

Cell phones operated by people in moving cars are one typical example.

Extremely High Mobility:

Extremely High Mobility is represented by high-speed trains and planes.

29. The above analyses indicates that there is no mobility of the user devices in FWA. Even as per ITU standards, TEC's specifications and generic requirements issued by TEC, remote station of the subscriber in FWA has to be "fixed indoor wall mounted" along with other equipments.

This is the basic TEC guidelines for fixed services. The remote station in FWA has to be wall mounted and fixed. FWA is Wireless Access Application in which the location of the end-user termination and the network access point to be connected to end-user are fixed. Therefore, what is WLL(F) was well known to the service providers both in terms of technology and also in terms of IUC Regulations.

30. As stated above, the UAS licence refers to three categories of wireless services, namely, FWA service, limited mobility service and full mobility service. The payability of the ADC as per the regulations is directly related to the nature of the service and not to the instrument. In case of FWA, the antenna in the instrument and the end-user termination point location-wise remains fixed. The network access point remains connected to the end-user in FWA. The test to be applied to distinguish WLL(F) from WLL(M) is that if the impugned service cannot be restricted to the place of the subscriber then such service has to be classified as WLL(M) for the purposes of ADC. In the present case, the impugned service cannot be technically confined to the premises of the subscriber. The impugned service cannot comply with PSR. Therefore, it has to be classified as WLL(M) service for ADC purposes.

31. To sum up, in WLL(F) the telephone is the access point if the antenna is in-built in the telephone. If the impugned service is operable throughout SDCA it is WLL(M). In WLL(F), location of end-user termination and the network access point to be connected to the end-user are fixed. If the impugned service cannot comply with PSR it is classifiable as WLL(M) for IUC, ADC, Numbering Plan etc. Lastly, the only difference between fixed wireline and WLL(F) is that WLL(F) is a cheap cable replacement without additional features. WLL(F) is limited to specific premises of the subscriber or permanent location.

32. One aspect on technology needs to be explained. BTS is different from MSC in terms of functionality. The function of BTS primarily is confined to transmission and communication. On the other hand, MSC is an exchange. Two databanks exist in the MSC, namely, Home Location Register ("HLR") and Visitor Location Register ("VLR"). HLR is a central data base that keeps track of the location a user is currently at; the VLR is a data base associated with a base station that knows all the users that are currently within the coverage area of a specific base station. If a mobile station moves across a cell boundary, a different base station becomes the serving BS. In other words, the MS is handed over from one base station to another without interrupting the call. This process is known as "Handover". (see: page 34 of the book entitled "Wireless Communications" by Andreas F. Molisch under the caption "User Mobility".) The important thing to be noted in this case is we are basically concerned with the levy of ADC charge on a given call. The identity of the call and the caller is checked not by the base station but by the MSC. The Numbering plan is also in MSC and not in the BTS. In this case, we are not concerned with the communication linkage between MSC and BTS. In this case, we are essentially concerned with the existing service in MSC on the basis of which a charge could be levied depending on the type of the originating call. If a walky call is to be classified as FWA service then the integrity of the Numbering plan would stand infringed. The Numbering plan is co-related to the Database in the MSC. It is for this reason that we have examined the differences in the services, namely, cellular, cordless, FWA etc. It is for this reason that we have analysed the types of devices, namely, fixed device, nomadic device, low mobility, high mobility etc. In our view, MSC is the intelligent network and BTS is only a receiver and transmitter. The function of BTS is to receive the signals and forward the same to the MSC. MSC is the intelligent part of the network. MSC has the registration of numbers to be served by the service provider, the mechanism to identify the caller is not with the BTS. HLR is the primary database for all subscriber information, VLR is a network entity whose main function is to provide service to subscribers who are served from a different HLR. The MSC communicates with the VLR to obtain subscriber information to support call processing. The VLR gets its

information about visiting roamers from HLR. (see: "Wireless Intelligent Networking" by Gerry Christensen, Paul G. Florack and Robert Duncan at p. 77). According to Wikipedia, Fixed Wireless Terminal ("FWT") units differ from conventional mobile terminal units operating within cellular networks - such as GSM - as FWT or desk phone is limited to a permanent location. Therefore, all the above literature and reference books indicate that FWA is a service which is limited to permanent location. The significance of FWA is that it dispenses with the last mile wireline connectivity and to that extent it is cost effective. The wireless access point is a device that connects wireless communication devices together to form a wireless network. Wireless Access Point ("WAP") usually connects to a wired network.(see: Wikipedia)

33. According to Whatis.com's 'Encyclopedia of Technology Terms' the term 'fixed wireless' refers to the operation of wireless devices or systems in fixed locations such as home and offices. They derive their electrical power from the utility mains, unlike mobile wireless or portable wireless which are battery-powered. Although mobile and portable system can be used in fixed locations, their efficiency is compromised when compared with fixed systems. One of the important assets of fixed wireless that subscribers in remote areas can be brought into a network without the need for new cables or optical fibres across the country side.

34. The difference in the functionalities of a base station and MSC is brought out in the book titled Location-Based Services-Fundamentals and Operations" by Axel Kupper. A network consists of several access networks, which include the radio equipment that is necessary to interconnect a terminal to the network. The access networks in turn are interconnected by the core network. In GSM network, the access network is different from the core network. In GSM, for example, the excess network consist of two components, namely, BTS and BSC (base station controller). Allocation and release of channels is done by BSC. It is BSC which is responsible for control of handover, a function which is needed to keep a circuit switched connection, particularly if the subscriber moves between base stations. Therefore, each BSC controls several BTSS., which are connected to the BSC via fixed lines or radio link systems. On the other hand, MSC connects a number of BSCs. to the network. It is responsible for serving a limited geographic region, which is given by all base stations connected to the MSC over their BSCs. In other words, MSC is part of the core network. It is not a part of access network. The intelligent network is in MSC.

35. In the book titled "From WPANs to Personal Networks-Technologies and Applications" by Ramjee Prasad and Luc Deneire, the main purpose of FWA is to provide network access to buildings through exterior antennas communicating with central radio base stations.

36. In our view, the above discussion indicates that both in terms of technology and in terms of policy framework, in the matter of ADC payability, the classification of wireless services into three categories, namely, FWA, limited mobility and full mobility was well known to service providers both under IUC Regulation, generic requirements, TEC's recommendations and even under telecommunication technology. Therefore, there is no merit in the contention advanced on behalf of the appellant that the impugned decision of TRAI dated 4.3.2005 and the impugned decisions of DoT dated 23.3.2005 and 26.8.2005 respectively are unilateral decisions regarding classification. In our view, circular dated 4.3.2005 issued by TRAI is clarificatory and not amendatory. There is no merit in the contention of the appellant that ADC cannot be charged retrospectively. There is no retrospectivity involved in the present case. The classification of services was done under the UAS licence and the chargeability/payability was fixed under the IUC as far back as 2003. The reasons given hereinabove, both in terms of technology and also policy framework are in addition to the reasons given by TDSAT in its impugned judgment. We find no infirmity in the impugned judgment of TDSAT.

37. Before concluding on this topic, we may state that, in the light of our above discussion we find no merit in the argument of the appellant that mobility within one BTS is a category by itself. It that argument is to be accepted we are carving out one more category of service which is impermissible. In any event, it is technically not possible as it would deteriorate the quality of service. Under the UAS Licence, the three services are Fixed Wireless/WLL(F), WLL(M) and Cellular Mobile.

38. One of the contentions raised on behalf of the appellant is that of abandonment of the theory/test of PSR by TRAI. According to the appellant, the above test formulated by TRAI in its directive dated 4.3.2005 stood later on abandoned by TRAI and in that connection appellant has placed reliance on para 2.26 of the Consultation Paper. As stated above, PSR stands for Premises Specific Restrictions.

39. We find no merit in this argument. For the sake of convenience, we quote hereinbelow para 2.26 of the Consultation Paper on Interconnection Usage Charge Review, which reads as follows:

"C. Whether ADC should be Admissible for Wireless Access?

2.26 For ADC purpose, presently calls to/ from WLL(F) are being treated similar to calls to/from fixed lines. TRAI received complaint from a certain Operator Association which stated that 'Fixed wireless services being provided by the FSPs./UASL's are classified as fixed services and thus entitled to ADC. However these services are for all intents and purposes tantamount to full cellular services and can be offered seamlessly throughout the service area. This creates a non-level playing field and competitively disadvantages the cellular operator vis-à-vis the fixed wireless service provider.' The Authority has very recently asked all Service Providers that FWTs should provide services to the subscriber at the fixed address only, the intention being that these phones should not be in a position to offer mobility through other Base Stations located in other parts of the city. Service needs to be locked to a particular RF Sector of a base station, otherwise issues of ADC and comparison with Limited or full mobility takes places."

The said para 2.26 is in two parts. Firstly, it refers to a complaint from certain cellular Operator Association, which stated that, in many cases fixed wireless services are being provided by fixed service phones (operators) which services for all practical purposes tantamount to full cellular services and thereby they create a non-level playing field vis-à-vis the cellular operators. This was the complaint from the cellular operators against fixed wireless service providers. Under the consultation process, whenever such complaints are received by TRAI they are required to be addressed to. Therefore, a response was sought by TRAI from fixed wireless service providers to the above complaint. The Consultation Paper is dated 17.3.2005. By that time, the impugned directive dated 4.3.2005 had been issued by TRAI. Referring to the said directive, in para 2.26, the TRAI had stated, in the first instance, that all fixed wireless service providers have been informed by the said directive that fixed wireless terminals should provide services to the subscribers at the fixed address only so that the said fixed wireless terminals/phones should not be in a position to offer mobility through other base stations located in other parts of the city. This underlined portion is emphasized by the appellant to support its contention that TRAI has in its consultation paper dated 17.3.2005 accepted the stand of the appellant that FWA services should be restricted to one base station and not

to the subscriber's premises. The appellant has placed heavy reliance on this underlined portion in support of its contention that vide Consultation Paper dated 17.3.2005, the TRAI has abandoned the premises theory mentioned in directive dated 4.3.2005. According to the appellant, the next sentence in para 2.26 is equally important. That sentence reads as follows:

"Service needs to be locked to a particular RF Sector of a base station, otherwise issues of ADC and comparison with limited or full mobility takes place."

40. According to the appellant, reading the above two sentences in para 2.26 of the Consultation Paper, it is clear that TRAI gave up the premises theory on 17.3.2005 and has accepted the contention of the appellant that FWA services stand restricted to one base station and not to the premises of subscriber.

41. As stated above, we find no merit in these arguments on abandonment. Firstly, in our view, para 2.26, quoted above, has a headnote. That headnote, quoted above, indicates the question raised before TRAI during the consultation process. The question was whether ADC was admissible for wireless access? In this connection it may be stated that at one point of time, the idea mooted was that all fixed service providers, including BSNL, were entitled to ADC. This was one of the items on the Agenda on TRAI. It is in this context that para 2.26 has to be read. If ADC was to be made admissible for Fixed Wireless services provided by all fixed service phones then the pricing of the product would become an item of dispute not only between cellular/mobile operators and fixed service providers but also inter se amongst fixed service providers, i.e., between those who complied with PSR and those who did not. In fact, but for PSR, the difference between WLL(F) and WLL(M) would stand obliterated. Therefore, TRAI thereafter referring to its directive dated 4.3.2005 invited response from service providers to the suggestion of the appellant that services need to be located to a particular RF Sector of a base station. Inviting such response cannot be construed as abandonment. Moreover, the later correspondence indicates that even foreign experts nominated by the appellant have certified that linkage to a particular RF Sector of the base station would result in deterioration in the quality of the services provided by the appellant. In our view, the true test to differentiate between WLL(F) and WLL(M) services is: whether the impugned service of the appellant is capable of being confined as far as its mobility is concerned to the subscriber's premises. If not, the impugned service is WLL(M) for levy of ADC. There is no dispute that the impugned service, as far as its mobility is concerned, cannot be confined to the premises of the subscriber. In other words, since the impugned service is not capable of complying with PSR test it is WLL(M).

42. We reiterate that we have examined the policy framework and the technology to demonstrate that right from inception and, particularly after migration to UAS licence, the appellant as a service provider knew the distinction between WLL(F) and WLL(M) and, therefore, the impugned directive dated 4.3.2005 issued by TRAI was clarificatory in nature and, therefore, that decision cannot be termed as unilateral decision, as submitted on behalf of the appellant.

43. One more fact needs to be mentioned that the impugned directive dated 4.3.2005 came to be issued by TRAI after giving show cause notice to the appellant as far back as 15.1.2005. It is true that the show cause notice was given in the context of certain advertisements given in the newspaper by Tata Teleservices Ltd. and by Reliance Infocomm Ltd.. However, vide the said show cause notice(s) the appellant was called upon to explain why the impugned service is not WLL(M). In fact, a reply was given to the show cause notice by the appellant on 24.1.2005 which indicates that the appellant clearly understood the show cause notice and, therefore, gave its explanation as to why the impugned service should be treated as WLL(F) and why the impugned service should not be categorized as WLL(M). We may mention that, keeping in mind the technology, the policy framework and the thrust of

the entire correspondence between TRAI, DoT and the appellant herein, it is very clear that the concept of FWA was well known in the market and in the business right from 2003 and in that light we hold that the impugned circular dated 4.3.2005 of TRAI was clarificatory in nature and, therefore, the demand made by BSNL for the period 14.11.2004 to 26.8.2005 is valid in law and justified in terms of the UAS licence.

44. As stated in our judgment pronounced earlier in Civil Appeal No. 5850 of 2005 etc. in the case of Tata Teleservices Ltd. v. BSNL & Ors., we are not required to decide in this case quantification of the amount in question as the claim and counterclaim made by the appellant herein against BSNL and vice-versa is not the subject matter of this appeal. Those questions are left open to be decided in accordance with law at the appropriate stage by the competent authority under the 1997 Act. Suffice it to state that, the impugned circular dated 4.3.2005 issued by TRAI falls under Section 13 of the 1997 Act as clarification. The reasons given hereinabove are in addition to the reasons given by TDSAT in its impugned order dated 17.1.2006. We find no infirmity in the reasons given by TDSAT in its impugned order.

45. Accordingly, the civil appeal is dismissed with no order as to costs.