

A TATA TELESERVICES LTD.

v.

BHARAT SANCHAR NIGAM LTD. AND ORS.

(Civil Appeal No. 5850 of 2005 etc.)

APRIL 30, 2008

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[S.H. KAPADIA AND B. SUDERSHAN REDDY, JJ.]

Telecommunication Interconnection Usage Charges Regulation 2003– Access Deficit Charges (ADC)– Levy of –

C *On the services which fall in the category of WLL(M) – Levy on the services provided under 'Walky' treating the same as WLL(M) – Pursuant to Circular by TRAI directing service providers to comply with Premises Specific Restrictions (PSR) and the directives issued by Department of Telecommunication (DoT) – Challenged on the ground that the service in question has been reclassified by the Circular of TRAI, altering the terms and conditions of the Licence under which the service was taken; and that classification was without authority and unilateral – Held: The services under 'Walky' having limited mobility falls in the category of WLL(M) service –The service providers were providing WLL(M) services during the relevant period in the garb of FWA WLL(F)– Hence, Access Deficit Charges (ADC) is leviable for the relevant period– The Circular issued by TRAI is clarificatory and not amendatory– It has not reclassified 'Walky' as WLL(M) for the first time and thus does not alter the terms and conditions of the Unified Access Service (UAS) Licence– It was issued in accordance with law – In view of the technology aspect and policy framework for levy of ADC, there is no unilateralism– Telecom Regulatory Authority of India Act, 1997– ss. 11 and 13.*

G *Respondent (BSNL) demanded Access Deficit Charges (ADC) from the appellant for the period 14.11.2004 to 26.8.05 in respect of its service provided under its brand name 'Walky'. Appellant opposed the*

demand on the ground that 'Walky' is a fixed wireless phone WWL(F), having portability as its feature and hence could not be classified as WWL(M). Appellant raised the dispute before Telecom Disputes Settlement and Appellate Tribunal wherein it was held that 'Walky' calls attracted ADC under the regulatory regime. Hence the present appeal. A B

Appellant contended *inter alia* that the respondent had no authority to impose ADC liability unilaterally on the appellants by classifying the instrument as a mobile phone; that the demand was misconceived as the dispute regarding its classification was subjudice before the authority; that 'Walky' as an instrument is portable, not mobile and therefore could not be classified as WWL(M); that Telecom Regulatory Authority of India (TRAI) by the Circular dated 4.3.2003 has reclassified 'Walky' as WLL(M) and thereby has amended the terms and conditions of UAS Licence and Telecommunication Interconnection Usage Charges Regulation 2003 (IUC Regulations). C D

Respondent-BSNL contended *inter alia* that there was no unilateralism in the demand made by BSNL, as the same was made only after the TRAI and the Department of Technology (DoT) had issued the Circular dated 4.3.2003 and Directives dated 23.3.2005 and 26.8.2005, respectively; that compliance of the Order/ Directive of DoT dated 26.8.2005 by the appellant, indicates that even according to the appellants, ADC was payable in respect of the service, i.e., WLL(M) and, therefore, it was not correct to say that ADC could not be charged without change in the conditions of licence or 2003 Regulations. E F G

Dismissing the appeals, the Court

HELD 1.1 The services of the appellants vide the instrument 'Walky' falls in the category of WLL(M) service and, accordingly, the appellants would be liable to pay H

A Access Deficit Charges (ADC) in that regard during the relevant period ie. 14.11.2004 to 26.8.2005. [Para 49] [364-A, B]

1.2 Directive dated 4.3.2005 by Telecom Regulatory Authority of India (TRAI) was issued to all access providers. The said directive came to be issued as it was brought to the notice of TRAI that new terminals were being deployed by access providers which terminals do not have any fixed network access point physically located at the address of the subscriber. In the said Circular, TRAI noted that fixed wireless services were required to be provided through fixed wireless terminals with the location of the network access point being fixed and with the end-user terminal being connected to it. That, it had been brought to the notice of TRAI that new terminals were being deployed by certain access providers which did not possess fixed network access point physically located in the premises of the subscriber. Therefore, by the said Circular, TRAI directed the service providers to strictly ensure that the terminal used for fixed wireless services should strictly comply with premises specification restriction, i.e., to the premises of the subscriber. The Circular dated 4.3.2005 stood followed by letters from DoT dated 23.3.2005 and 26.8.2005. [Para 38] [356-F, G; 357-A-D]

1.3 The Circular dated 4.3.2005 issued by TRAI is clarificatory and not amendatory. In the Circular, TRAI has used certain technological terms generally used in telecommunications like 'network access point', 'end-user terminal' and 'fixed network access point'. These terms find place in the generic requirement formulated as far back as 1996. They also find place in the Principles of Wireless Access formulated by ITU-RCA. Keeping in mind the definitions given both in the technical references as well as in the principles of wireless access formulated by ITU-RCA, it is clear that Premises Specific Restriction H ("PSR") is not something new which stood evolved for

the first time by Circular dated 4.3.2005. In substance, PSR emanates from concepts, which are well known in telecommunications, both in technological references as well as in terms of generic requirements and in terms of principles of wireless access. [Paras 39 and 40] [357-D-H; 358-A, B]

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1.4 Broadly FWA is called WLL(F). The UAS Licence refers to three types of wireless services, namely, full mobility, limited mobility and FWA. As stated, in FWA, the location of the end-user (Walky) and the network access point (antenna connected to the end-user) are both fixed whereas in the case of mobile wireless access, the location of the end-user is mobile. WLL(M) is a hybrid between FWA and MWA. Wireless access may be considered from many perspectives. [Para 40] [358-B, C]

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1.5 The main purpose of FWA [WLL(F)] is to provide network access to buildings through exterior antennas communicating with Central Radio Base Stations. In FWA, users in a building are allowed to connect to the network with conventional in-built networks. FWA is a service. It is intended as a cheap cable replacement, without additional features. Wireless systems differ depending upon the amount of mobility that they allow for the users. FWA system is a derivative of cordless phones. In FWA there is no mobility of the user devices. This is where the concept/principle of PSR emerges. There is a difference between mobility and portability. A terminal may be portable but every portable device is not mobile. The concepts mentioned in Circular dated 4.3.2005 issued by TRAI exist in telecommunications right from 2001. The said Circular merely clarifies and brings out the concept Premises Specific Restriction (PSR). [Para 40] [358-D, E, F, G]

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1.6 Classification is done by UAS Licence followed by chargeability under Telecommunication Interconnection Usage Charges Regulation 2003 (IUC Regulations). Therefore, it would be wrong to say that vide

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- A Circular dated 4.3.2005 'Walky' has been reclassified as WLL(M) for the first time by TRAI. If the concept of FWA [WLL(F)] embodies PSR and that too from 2003 then it is clear that the said Circular dated 4.3.2005 is clarificatory. It does not alter the terms and conditions of the licence.
- B FWA is one of the wireless services contemplated by UAS Licence which is dated July, 2003, therefore, much prior to circular dated 4.3.2005 these concepts were known to all access providers right from 2003. [Para 42] [359-C, D, E]
- C 1.7 ADC is a levy. Its levy depends on mobility as a service feature. The numbering plan, radio frequency etc. are all important elements of a network. The numbering levels for fixed wireless services and for WLL(M) services are different. So also the numbering levels for fixed
- D wireless service, limited mobility service and full mobility service are different. The identification of the call whether originating from mobile or from 'Walky' or FWA has a correlation with the numbering plan which is an important element of the network of the appellant in its MSC. For
- E levy of ADC, integrity of numbering plan is very important. [Para 43] [359-F-H; 360-A]

- 1.8 In the present case, TRAI has detected that the appellant is providing WLL(M) service in the garb of fixed wireless phone service (FWA) which disturbs the integrity
- F of the numbering plan. In the case of full mobility, the rate is different as compared to the rate in the case of limited mobility as compared to the rate in fixed wireless service. This difference in the rates is spelt out in IUC Regulation, 2003. It is for this reason that even in the clarification
- G issued by DoT on 23.3.2005, the access providers were warned by pointing out that the issue of mobility has implication with respect to the applicability of ADC. It was further clarified that if it is not possible for the access provider to comply with the requirement of PSR then the
- H 'Walky' services shall be treated as WLL(M) service for all

purposes including numbering plan, interconnection usage charges, ADC etc. This is because a separate level with allocated short distance charging area based link numbering is to be used for wireline and fixed wireless services. [Para 43] [360-A, B, C, D] A

1.9 The record indicates that right from 2003, when UAS Licence stood issued, the classification was contemplated by the licensor-DoT when it categorized wireless service into full mobility, limited mobility and FWA. ADC, interconnection usage charges etc. follow that classification. IUC Regulation, 2003 imposes the statutory charges based on the classification in the licence. What is important in this case is that besides technological data, even as a matter of policy if there is a contract between DoT and the access provider in terms of UAS Licence which provides for three categories, then the levy of ADC would depend upon the service which is rendered to the user by the access provider. In the circumstances, apart from technology, this case is more on tax policy which levies ADC on services which fall in the category of WLL(M). [Para 43] [360-D, E, F, G] B C D E

1.10 Wireless systems differ in the amount of mobility that they have to allow for the users. The ability to move around while communicating is one of the main features of wireless communication for the user. However, within that requirement of mobility, different grades exist; i.e. Fixed Devices; Nomadic Devices; and Low Mobility.[Para 44] [360-G; 361-A] F

1.11 In the licence there are three types of wireless services, namely, limited mobility, full mobility and FWA. IUC levies the charge based on this classification. ADC is a part of IUC. ADC is also levied under IUC Regulation, 2003. In the case of 'Walky', the instrument can be put in the car, it can be carried throughout SDCA and 'Walky' calls can originate not only from the subscriber's premises G H

- A but it can also originate from any point in the SDCA. Because of this mobility, it is classifiable in the category of limited mobility. In the case of FWA [WLL(F)], there is no mobility of the user device. When there is no such mobility of the user device, it is similar to all wired
- B communications. Therefore, FWA is categorized as WLL(F). All wired communications can also fall in WLL(F) for the purposes of levy of ADC. However, since the user device in the case in hand is mobile throughout SDCA, the services which the instrument 'Walky' offers has to
- C be categorized as WLL(M) service. In the present case, the appellants were providing WLL(M) services during the above period in the garb of FWA or fixed wireless phone services and thereby they have infringed the integrity of the numbering plan. Therefore, ADC is payable by the
- D appellants for the aforesaid period, namely, 14.11.2004 to 26.8.2005. [Para 45] [361-D-H, 362-A, B]

- 1.12 Classification of services stood effected under UAS Licence 2003. Under the terms and conditions of that licence, the access providers were required to maintain
- E the integrity of the numbering plan. This was one of the conditions of the licence. Similarly, classification/ categorization of wireless services was done under the licence. The categorization constituted the term of the licence. As a matter of follow-up for the purposes of levy
- F of certain charges, including ADC, IUC Regulation 2003 stood enacted. Under Section 11(1)(b) of Telecom Regulatory Authority of India Act, 1997, the TRAI is empowered to ensure compliance of terms and conditions of licence and to fix the terms and conditions of inter-connectivity between the service providers. Similarly, under Section 11(1)(c), TRAI is also authorized to levy fees and other charges at such rates and in respect of such services as may be determined by regulations. In the present case, the IUC Regulation, 2003 indicates by way
- H of schedule the rate chargeable for a call originating from

mobile to fixed, fixed to mobile, fixed to mobile etc. Under A Section 13 of the 1997 Act, TRAI is empowered to issue directions from time to time to the service providers for the discharge of its functions under Section 11(1) of the 1997 Act. The classification of the three wireless services was done under the licence. The clarification issued by B TRAI on 4.3.2005 was under Section 13 of the 1997 Act. In the circumstances, the said clarification dated 4.3.2005 was issued by TRAI in accordance with law. [Para 46] [362-B-G]

2. It is not correct to say that when the question C whether portable WLL(F) Phones should be treated alike as WLL(M) phones was pending before TRAI pursuant to complaints from BSNL dated 4.1.2005, it was not open to TRAI to issue a directive as is done in this case on 4.3.2005 without waiting for a determination by the competent D authority. The directive dated 4.3.2005 is clarificatory and not amendatory. In any event, in view of the technology aspect and policy framework for levy of ADC, there is no unilateralism as alleged by the appellant. [Para 48] [363-A-D]

CIVIL APPEAL JURISDICTION : Civil Appeal No. E 5850 of 2005.

From the final Judgment and Order dated 9.9.2005 of the F Telecom Disputes Settlement and Appellate Tribunal, New Delhi in Petition No. 45 of 2005.

WITH

Civil Appeal No. 5871 of 2005.

Gopal Subramanium, Vikas Singh, ASGs, Arun Jaitley, Romji Srinivasan, K.K. Venugopal, J.J. Bhatt, P.P. Tripathi, Rakesh Dwivedi, Dr. A.M. Singhvi, Ruby Singh Ahuja, Manu Aggrawal, Simran Brar, Jai Singh Brar, Manik Karanjawala, Anjali Chandiyal, Manali Singhal, K. Raj, Gopal Sankar Narayan, Abhijat P. Medh, Maninder Singh, Prathibha M. Singh, Gaurav Sharma, Summeet Bhatia, Surabhi Mehta, Yoginder H

A Handoo, Tejveer Bhatia, S.W.A. Qadri, Anil Katiyar, Sanjay Kapur, Shubhra Kapur, Rajiv Kapur, Arti Singh, Navin Chawla, Manjul Bajpai, Ritika Chawla, Arun Dhillon, for the appearing parties.

B The Judgment of the Court was delivered by
KAPADIA, J. The controversy in these civil appeals is: whether appellant is liable to pay Access Deficit Charges ("ADC") to BSNL for the period commencing from 14.11.2004 to 26.8.2005 in respect of its service provided under its brand name "WALKY".

C **Introduction:**
2. ADC is a levy imposed by TRAI (Regulator) on the operators (service providers) to support roll out of telephones in rural areas. Since BSNL owns 99% of the rural phones, ADC constitutes a levy for the appellant and a subsidy for BSNL. The said ADC has two parts: (i) the component of the payment to be made by the domestic service provider, and (ii) the component of the payment to be made by international long-distance service providers. The ADC regime was introduced in 2004.

D E 3. In March, 1997, Telecom Regulatory Authority of India ("TRAI") Act stood enacted. The Government introduced New Telecommunication Policy ("NTP") in 1999 and proceeded to implement the said policy. By TRAI (Amendment) Act, 2000 a key change came to be effected as a result of NTP, 1999. The said amendment segregated the Regulatory and Dispute Settlement norms of the original TRAI. Under the new regime, all disputes involving consumer and service provider(s) had to go to TDSAT. The said regime excluded civil courts from ruling on disputes arising out of TRAI decisions. TDSAT was conferred F with original and appellate jurisdictions. The TRAI (Amendment) Act, 2000 defines precisely the regulatory powers of the TRAI. The said Regulator became responsible for introduction of new G service providers, technical improvements, quality standards and fixing the terms and conditions of licences. One more event H needs to be mentioned. In order to separate policy making and

service provision roles of the DoT, the Government created A Department of Telecom Services ("DTS"), which was later turned into the corporate entity known as BSNL on 1.10.2000.

4. Under the NTP, 1999, all new cellular mobile service providers had to pay a fixed fees upon entry, and then pay a portion of their revenues to the Government. However, after August, 1999 the revenue-sharing arrangement came into effect. B

5. Given an ambitious target to achieve a tele-density of 7%, the NTP 1999 sought to bring private players into basic service which is the minimum facility and in which mobility as feature of a telecom service was not a part of basic service. The permissibility to provide a service is determined by the terms and conditions of a licence granted by DoT whereas obligation to pay interconnection usage charges/ADC is determined by TRAI through its regulations framed under section 36 of the 1997 Act in conformity with the licence conditions. C D

6. By a policy decision of Government of India in 2001, basic service operators having the licence for providing fixed service were allowed to provide Wireless Local Loop Mobile [WLL(M)] service within the purview of their basic service licence. E

7. During 1997 – April, 2003, there was no liability to pay ADC (a concept introduced by TRAI in 2003). F

8. On 1.11.2003, DoT introduced a Unified Access Service ("UAS") licence which allowed its holder to provide wire-line as well as wireless services in a service area. However, **wireless services included full mobile, limited mobile and fixed wireless services under the UAS licence.** The existing service providers were given the option to stay on their original licence or change to the UAS licence to facilitate communications convergence by allowing value-added services on the same licence. However, all telecom operators had to pay IUC including ADC in accordance with IUC Regulations framed by TRAI. G H

A **WLL Technology:**

9. Before considering the contentions advanced on behalf of the appellants and BSNL (respondent no. 1), it would be necessary to consider certain terms used in the WLL technology.

B **i) Cellular Telephony**

Cellular telephone is a type of short-wave analog or digital transmission in which a subscriber has a wireless connection from a mobile (terminal) to a nearby transmitter. The transmitter's area of coverage is called as **a cell**. In wireless telephony, a cell

C is the geographical area covered by a cellular telephone transmitter. The transmitter facility is called the **cell site**. When a subscriber enters into an agreement with a cellular telephone service provider, he is given access to the cell system of that provider, which is local. When travelling out of the range of the D said cell system, the cell system can enable him to be transferred to a neighbouring company's cell system without the subscriber being aware of it. This is called **roaming service**. A cellular telephone is not to be confused with a cordless telephone, which is simply a phone with a very short wireless connection to a E local phone outlet.

High mobility of the users is one of the important properties of cellular telephone. The location of a user can change significantly during a call which can originate from the user or from the network. In cellular telephony a mobile user

F communicates with a base station. The base stations are connected to MSC, which is connected to the public telephone system. The most important aspect of cellular telephony is the unlimited mobility. The user can be anywhere within the G **coverage area of the network (i.e., it is not limited to a specific cell)**. The user can move from one cell to another even during one call.

Cellular telephony is different from cordless telephone. In cordless telephone, there is a wireless link between a handset and a base station which in turn is directly connected to the H public telephone system.

It is important to note that economic factors impact the A design of wireless communication systems and services. Those systems where the mobility is of value *per se* – e.g., in cellular telephony, the same is more expensive than wired system. For example, the per minute price in the case of cellular telephony system is higher than the landline telephone. It is competition B which may bring down the price per unit. Since 1990 many consumers and even companies have opted for cellular telephony alone cancelling in some cases wired services. On the other hand, services where wireless access is only intended as a cheap cable replacement, without additional features – e.g., Fixed Wireless Access, the systems have to be cost effective, as the infrastructure is comparatively cheaper as compared to the infrastructure needed for wired connections. C

ii) Examples of Wireless Equipments:

Wireless is a term used to describe telecommunications D in which electromagnetic waves carry the signal over the communication path. The first wireless transmitter went on the air in the early 20th Century using Morse code. Later, as technology improved it became possible to transmit voices and music via wireless, the medium came to be called “radio”. With the advent of television, fax, data communication and the effective use of the spectrum, the term “wireless” has been revived. The common examples of wireless equipments in use today include cellular phones, pagers, global positioning system (“GPS”), cordless telephone sets, satellite television, wireless LANs (Local Area Networks), global system for mobile communication (“GSM”), **fixed wireless application, mobile wireless and portable wireless**. Correspondingly, services are broadcasting, paging, fixed wireless access (FWA), limited mobility and full mobility etc. E F G

In the case of fixed wireless, the operation of wireless systems is confined to homes and offices, in particular, fixed wireless refers to equipment connected to the internet via specialized modems. In FWA, the location of the end-user terminal and network access point to be connected to end-user H

A are fixed.

In the case of **mobile wireless**, there is the use of wireless systems or devices aboard motorized, moving vehicles like, PCS. It also includes automotive cell phones. Unlike FWAs, in the case of mobiles the instrument is not fixed, it can be moved.

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As regards **portable wireless**, it is battery-powered wireless device or system which operates outside the office, home or vehicle. Its operation is autonomous. The examples of portable wireless are handheld cell phones and PCS units.

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All the above examples are common examples of wireless equipments in use today.

iii) Wireless Mobile Communication:

There are a variety of wireless communication systems

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for transmitting voice, video and data in local or wide areas. Mobile wireless technologies provide voice and data communication services to mobile users to use cell phones, internet terminals and related computing devices.

iv) Wireless Communications Service (WCS):

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WCS is radio communications that may provide fixed, mobile, radio location or satellite communication services to individuals and businesses within their assigned spectrum block and geographical areas. WCS is today capable of providing

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more advanced Wireless Phone Services that would be able to pinpoint a subscriber in a given locality. WCS is today used to provide a wide variety of mobile services, including an entire family of new communication devices utilizing small, light weight; multifunctional Portable Phones and advanced devices with two-way data capabilities. It may be noted that every mobile is portable but every portable phone need not be a mobile. It may also be noted that we are concerned with "service" to the individual business and not with the nature of the instrument.

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v) Wireless Broadband Access Technologies

H (WBAT):

Wireless access systems are owned by service providers A that operate within a metro areas.

The cellular telephone system, as covered under “wireless mobile communications” allows users to move about, not only within the range of the Local Base Station but to other cells within the same system and even to systems of other service providers. B

The “Fixed” wireless systems do not support the extended roaming features of Mobile Cellular Systems.

The advantage of wireless systems are: no need to install cable or rely on copper infrastructure. C

vi) Wireless Communications (WC):

It involves transmitting signals through air and space using radio waves. Examples blue tooth, CDMA.

vii) Wireless Technologies (WT):

A wireless network is a radio, microwave, infrared network. Most wireless networks have multiple BTSs. (base stations).

viii) Cellular Systems and Topology:

A cell in a cellular system is a circular area with a central transmitter/receiver base station. BTS is raised up on a tower or top of a building. BTS has a 360-degree antenna which is tuned to create a cellular area. When a user turns a phone on, its phone number and serial number are broadcast within the local cell. The BTS picks up the signals and informs the Switching Office that a particular device is located within its area. This information is recorded in the switching office for reference. An actual call takes place when the user enters a phone number and hits the Send button. The cellular system selects a channel for the user to use during the duration of the call. As users travel, they may move from one cell to another, necessitating a handoff and the selection of a new channel. While in the vicinity of a cell, mobile phone users are under the control of the transmitter/receiver in that cell. A handoff takes place when the base station

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- A in one cell transfers control for a user's call to a base station in another cell. When a base station begins to lose a user's signal, it notifies base stations in all the surrounding cells that the user may be moving into their cells. As the user moves into a new cell, the base station in that cell takes over the call. The frequency
- B of the call is changed to a frequency used in the new cell during the transition. This is because adjoining cells cannot use the same frequencies.

ix) Wireless Local Loop (WLL):

- C Today, technologies provide WLL services, i.e., wireless access for home and business users to carriers and service provider network.

According to *Encyclopedia of Networking & Telecommunications* by Tom Sheldon, wireless local loop

- D ("WLL") refers to a variety of technologies for connecting subscribers to the public-switched telephone network ("PSTN") using wireless links, rather than copper wire. WLL is a practical solution for connecting subscribers in countries/areas that do not have the wired infrastructure. It is also practical in rural areas
- E as an alternative to laying cable. **WLL is primarily a fixed wireless service (the subscriber generally stays in one place), while cellular systems offer mobile communication and roaming among different systems.**

x) Basics of Wireless Communications:

- F Today's wireless communications would not be possible without radio signals which are generated and emitted from a sender. They propagate through the atmosphere, and are **received and interpreted by a receiver**. There are two applications for radio signals. First, they are needed for wireless communication between a mobile terminal and a fixed network, which is achieved by manipulating the parameters of the signal which process is known as modulation. Secondly, radio signals provide the basis for positioning, that is to say for locating the target.
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In wired network, the transmission media are copper A twisted pair, copper cable and optical fibre whereas the transmission medium for wireless communication is always the atmosphere, the space or water. Some wired systems like **Ethernet** make use of voltage pulses to transmit data. Signals in wireless communications are electromagnetic waves which B are analog.

Electromagnetic waves are produced and received by C **antennas**. The **receiving antenna** converts radio signals from the surrounding environment into alternating current and delivers it to electronic equipment connected to the **antenna**, known as the **receiver**. Conversely, the **transmitting antenna**, on the other hand, radiates alternating current delivered by a transmitter into the surrounding environment in the form of radio or micro wave signals.

The point to be noted is that there is a dichotomy between D receiving antenna and transmitting antenna. The antenna inside the instrument is the receiving antenna whereas the antenna on the BTS is the transmitting antenna.

In short, there exists major differences between wired and E wireless media. In wired communications, signals pass through a solid or guided medium whereas in wireless communications the technology is based on unguided media like atmosphere, space or water and, therefore, in wireless communications signals are exposed to several sources of interference on their way from the transmitting to the receiving antenna. Broadly, we F may call this process of transmission to the **receiving antenna** as "**transmission technology**" which is a part of what is called as access network in contradistinction to what is called as core G network of which the **numbering plan** is one of the important components. This dichotomy needs to be kept in mind for deciding the present matter. In other words, the receiving antenna in the subscriber's premises and the **transmitting antenna** located in the BTS are aligned and they constitute access network whereas MSC is the exchange in which there is core H

- A network consisting of BSC, numbering plan, softwares etc. which are essential to identify the source from which the call originates, the movement of the subscriber from one cell to the other and the identification of the call for billing purposes. The Intelligent Network is in MSC.
- B Generally, radio signals are emitted from an antenna omnidirectionally and they can pass several hundreds of kilometers without being affected by obstacles (what is known as seamless), which makes radio signals very attractive for radio and television broadcast.
- C In wireless communications, different types of antennas are used which differ from each other in respect of directivity of signals propagation. When signals travel away from a **transmitting antenna** in a BTS, they are exposed to a reduction in their strength. The degree of attenuation depends upon the distance between the transmitting antenna and the receiving antenna, the wavelength of the signals and the surrounding environment (e.g., indoor, outdoor, rural, urban etc.).
- D In wireless communications, the air interface (medium) must be shared between different applications (e.g., radio, T.V., mobile, cellular systems etc.) and within a certain application between different users (radio and T.V. stations, subscribers). This is in contrast to wired infrastructures. In wireless communications, the resources of the air interface are given by space, frequency, time and code and thus classified as space, frequency, time and Code Division. The point to be noted is that all channels transmit simultaneously in the same frequency range and in the same space, thereby interfering with each other to a large extent. This means that the signals of different channels are summed up during transmission and, therefore, must be separated after reception at the receiver. One of the methods to do so is called as CDMA (Code Division Multiple Access). Under this method, different channels are separated by a code. During transmission, the signals from different senders arrived in the form of a composed signal at the receiver. In
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order to reconstruct the data of different senders, the receiver has to apply the chipping sequence of the respective sender. Accordingly, the resulting signal reaches the receiver. In the present case, "Walky" is based on CDMA technology. So also the "Handset" of Reliance Infocomm Ltd. is based on the same technology. It may be stressed that CDMA is the very complex technique requiring sophisticated hardwares both in the centres and the receivers. As all senders transmit in the same frequency range simultaneously, the radiating power must be carefully aligned between them in order to guarantee that all senders can be heard at the receiver.

The fundamentals explained hereinabove are relevant to the **transmissioning** of data for each kind of mobile service as well as for positioning. Transmissioning of data as a concept is different from positioning. Transmissioning relies on manipulation of radio signals whereas positioning is based on measurement of radio signals especially their travelling time or their attenuation

xi) Principles of Cellular Networks:

Mobile communications reached the market in 1980. Even at that time the major challenge was to implement advanced **mobility features** such as handover, roaming and **localization of subscribers** which required additional control channels between terminal and serving base station.

A cellular network consists of a number of **radio cells** where the term "cell" refers to geographic coverage area of a BTS. The size of the coverage area depends on the signal strength of the base station and the degree of attenuation. Each BTS is assigned a certain number of channels for transmitting and receiving data which is called as **cell allocation** ("CA"). To avoid interference between cells, it needs to be guaranteed that the neighbouring base stations are also assigned cell allocations of different channels. There are no sharp borders between neighbouring cells. Most of the time they overlap. In urban areas, a mobile device can hear a set of around 10 base stations

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- A simultaneously, and then it selects from this set of base station within the strongest signal. The number of cells a network is made up of is basically a function of the size of area to be covered and the user penetration. When building up a new network, operators first concentrate on establishing a coverage
- B in congested urban areas before establishing base stations in rural areas. If a network runs the risk of becoming overloaded in a certain region, the operators can increase the capacity by increasing the base stations density.

A cellular network not only consists of base stations

- C **but also comprises a network infrastructure for interconnecting base stations, mobility support, service provisioning and connection to other networks like internet. Therefore, a cellular network consists of several access networks, which include the radio equipment**
- D **which is necessary to interconnect a terminal to the network.** The access networks are interconnected by the core network. For example, in GSM, the access network is referred to as Base Station Subsystem ("BSS") whereas the core network is denoted as Mobile Switching and Management Subsystem ("SMSS"). BSS is responsible for monitoring and controlling the air interface. BSS consists of two different components, namely Base Transceiver Station ("BTS") and Base Station Controller ("BSC"). BTS stands for "base station". It contains transmitter and receiver equipment as well as an antenna. *The base station is equipped with very limited capabilities for signalling a protocol processing. The bulk of the work, for example, allocation and release of channels is done by the BSC.* The BSC is mainly responsible for control and execution of handover, a function which is needed to keep a circuit-switched connection if the subscriber moves between base
- G **stations. Therefore, each BSC controls several base stations, which are connected to the BSC via fixed lines or radio link systems.** On the other hand, mobile Switching and Management System is a fixed network of switching nodes and databases for establishing connections from and to the mobile subscriber. HLR and VLR are two important databases which are the foundation

of the Numbering Plan in MSC. The switching components are the Mobile Switching Centre ("MSC") and the Gateway MSC ("GMSC"). The MSC connects a number of BSCs. to the network for the purposes of localization and handover. Thus, it is the MSC which is responsible for serving a limited geographic region governed by all base stations connected to the MSC over their BSCs. In a mobile network, when a connection is to be established it is the MSC which determines another switch depending on the current location of the mobile subscriber. For this purpose, MSC is also connected to local network for each subscriber so as to implement the numbering plan. The area from which the call emanates, the identification of the nature of the call whether from mobile or fixed wireline is all done by the computer having the requisite software in MSC.

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xii) Fixed Wireless Access WLL(F):

Fixed wireless access ("FWA") also known as WLL(F) has coverage between Wireless Local Area Networks ("WLANs") and cellular communication systems. **The main purpose of FWA is to provide network access to buildings** through exterior antennas communicating with central radio base stations. In this way, users in a building are allowed to connect to the network with conventional in-building networks.

FWA is a service in which wireless access is intended as a cheap cable replacement without additional features.

FWA replaces copper lines to the homes of the users by wireless links, but without the specific benefit of mobility. The original intent was to give access to customers for basic phone services bypassing the copper lines.

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Fixed wireless access system is one type of service. FWA system can also be considered as a **derivative of cordless phones** or wireless local area networks. FWA system essentially replaces a dedicated cable connection between the user and the public landline system. The important difference to be noted is that FWA system is not the same as cordless phones. The

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- A main difference from cordless system is that in FWA system there is no mobility of the user devices. There is a difference between mobility and portability. A mobile device can be portable but every portable device is not mobile. The purpose of FWA lies in providing users with telephone and data
- B connections without having to lay cables from a central switching office to the premises of the user. It is, therefore, cost effective as compared to wireline basic phone.

xiii) Identification of a Mobile Subscriber:

- C In analog wireless network every mobile station ("MS") is identified by a single number that is permanently associated with it. All connections that are established from this MS are billed to its registered owner. However, in the case of GSM, the subscriber is identified by a SIM, which is a plug-in chip card. In
- D the case of GSM, MS can only make and receive calls when such a SIM is plugged in and active. All calls that are made from the MS are billed to the subscriber whose SIM is plugged in. Furthermore, the MS only receives calls going to the number of the SIM owner. Therefore, SIM is a fundamental importance for billing procedure. It may be noted that even in "Walky" there is
- E plug-in chip card which is inbuilt in the instrument.

Mobility is an inherent feature of most wireless systems. If there is an incoming call from MS (user), the network has to know in which cell the user is located. The first requirement is

- F that a MS emits a signal at regular intervals, **informing nearby base stations** in the neighbourhood. Two databanks then employ this information: the Home Location Register ("HLR") and the Visitor Location Register ("VLR"). The HLR is the central data base that keeps track of the location a user is currently at;
- G the VLR is a data base associated with a certain base station that notes all the users that are currently within the coverage area of a specific base station. If a MS moves across a cell boundary, a different base station becomes the serving base station. In other words, the MS is handed over from one BS to another. Such a handover has to be performed without
- H

interrupting the call. A

The HLR contains all the numbers of the mobile subscribers associated with one MSC and information about the location of each of these subscribers. In the event of an incoming call, the location of the desired subscriber is checked in the HLR and only thereafter the call is forwarded to the location. The call is forwarded to the BSC in whose area the subscriber is routing to and selection of one BTS is the responsibility of the BSC. Therefore, one can conclude that from time to time a controlling MS (user) has to send updates of its location to its HLR. At the same time, the VLR and the MSC contains all the information about mobile subscribers from other networks that are in the area of this MSC and are allowed to roam in the network of this MSC. The Authentication Centre verifies the identity of each MS requesting a connection. B C

The above discussion indicates the functionality of MSC, BSC and BTS. The data base is in MSC. It further indicates the functionality of BTS. BTS is, essentially concerned with transmission. The entire data base and the function of identifying the user and the call is in MSC. The numbering plan is one of the important elements of the network with MSC. The switching system is with MSC. The network and switching system includes the above two databases.. D E

The main component of network and switching subsystem ("NSS") is MSC, which controls the traffic between different BSCs. One function of the MSC is mobility management. Other functions are paging and location update. All interactions between networks – especially the landline public switched telephone network ("PSTN") – are performed by the MSC. Therefore, the numbering plan, radio frequency ("RF"), BTS, BSC, MSC, databases etc. form elements of the network of the service providers. F G

The BTSSs. and BSCs. are important components of base station subsystem ("BSS"). The components of BSS are different from the components of network and switching H

- A subsystem (“NSS”). The component of NSS is MSC whereas the component of BSS consists of base transceiver stations (“BTSs.”) and base station controllers (“BSCs.”). The BTS establishes and maintains the connection to the mobile stations (“MSs.”) within its cell. The interface between the MS and the
- B BTS is the air interface. The BTS hosts the antennas and the radio frequency hardware of a base station, as well as the software for multiple access. Several BTSs. are connected to one BSC; they are either co-located, or connected via landline, microwave radio links, or similar connections.
- C The BSC has a control functionality. It is responsible for Hand Over (“HO”) between two BTSs that are connected to the same BSC. Distribution of the functionalities between BTS and BSC may differ depending on the manufacturer. In most cases, one BSC is connected to several BTSs. Therefore, it is possible
- D to increase the efficiency of implementation by shifting as much functionality as possible to the BSC. In general, the BSS is responsible for channel assigning, maintenance of link quality and HO, power control, coding and encryption.

xiv) Difference between Wireless Systems and

E Services:

- F In systems, mobility *per se* is of value – e.g., in cellular telephony. Such services can charge a premium to the customer – i.e., it is more expensive than equivalent wired systems. In cellular telephony the per-minute price is higher than landline telephony and yet on account of competition, the price has come down.

- G Services where wireless access is intended as a cheap cable replacement without additional features have to be cost-effective, as the infrastructure thereof has to be cheaper than wired connections. The classic example of such services is FWA.

- H In the case of systems, mobility is of value whereas in case of services, wireless access is a cheap cable replacement *without additional features*.

References:

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The above technical data of concepts between sub-paras (i) to (xiv) is based on references from the following books:

1. Wireless Communications by Andreas F. Molisch
2. Wireless Intelligent Networking by Gerry Christensen, Paul G. Florack and Robert Duncan.
3. India – The Emerging Giant by Arvind Panagariya
4. Location-Based Services – Fundamentals and Operation by Axel Kupper
5. From WPANs to Personal Networks-Technologies and Applications by Ramjee Prasad and Luc Deneire
6. Mc Graw Hill – Encyclopedia on Networking & Telecommunications by Tom Sheldon
7. Encyclopedia of Technology Terms by Whatis.com

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xv) Generic Requirements:

(a) Generic Model of Wireless Local Loop System:

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Apart from references to the technical data hereinabove, Government of India (DoT) has issued G.R. No. G/WLL-01/01, MAY 96 regarding generic requirements relating to Digital WLL system. These generic requirements issued as far back as May, 1996 is in consonance with the technological concepts enumerated in the above reference books. It supports what is stated hereinabove. We, therefore, quote hereinbelow relevant paragraphs from the above G.Rs.:

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“1.0 INTRODUCITON

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1.1 This Generic Requirement (GR) relates to digital Wireless Local Loop (WLL) system to provide two way communication for Department of Telecommunication (DoT) customer Access Network. It shall be engineered

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- A to provide Wireless connections to cover subscribers located upto 25 kms from the exchange. The specification covers the technical and general requirements of the various components of WLL system namely Base Station Controller (BSC), Base Station (BS), Network Management System (NMS), and Remote Station (RS).
The Remote Station shall be a Fixed Subscriber Adapter Unit capable of supporting standard 2W analogue interface such as standard telephone, FAX, Data Modem, Payphone and 64 kbps interface as applicable.
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- C ...

1.3 A generic model of Wireless Local Loop system consists of :

- D
 - 1. Base Station (BS)
 - 2. Remote Station (RS)
 - 3. Base Station Controller (BSC)
 - 4. Network Management System (NMS)
- E 1.4 The Base Station Controller is responsible for inter-connection between the *WLL system and the PSTN*. It assigns traffic channels to individual users, monitors system performance and provides interface between the BS and PSTN switch etc. BSC can be either co-located with the PSTN switch or located at a different location connected to a PSTN switch through interfaces as specified at clause No.13.1 of this GR. In case of junction interface with PSTN, BSC shall provide switching and charging functions for the area covered by the BSC.
- F

- G ...
- H 1.6 The Base Station (BS) is a conveniently located multiple circuit Transceivers which shall radiate over a cell or a sector. It consists of radio modules, baseband signal processor, network interface, antenna, feeder etc. It can be co-located with BSC or remotely located.

1.7 The Remote Station (RS) provides single circuit and optionally multiple circuit access to the network. The functions of the Remote Station are to convert user's message from its original form into appropriate digital signal and translate this signal into a form suitable for radio transmission, to establish access to the network through Base Station. It has also the power supply, user interface, antenna, feeder etc. and does not include customer premises equipment. A

1.8 The system shall permit the same facilities to the subscriber as are available to the wire line subscribers as defined in clause No.4.2 of this GR. B C

...

2.0 GENERAL REQUIREMENTS

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2.12 Remote station equipment shall be a fixed indoor/outdoor unit suitable for wall mounting with minimum inconvenience to the subscribers. All accessories for mounting shall be supplied alongwith the equipment. E

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2.20 *Mobility functions* : optionally the system may support limited mobility within designated area. The mobile handsets shall conform to relevant standards for mobile application. The equipment supplier shall indicate the coverage area for mobility for the equipment offered. F

...

12.0 Network Management System (NMS) :

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The Network Management System (NMS) shall be capable of performing the following functions:

i) Fault localization including BSC, BS, RS and links between them. H

- A ii) Network configuration i.e., addition, deletion and change of network elements etc.
 - iii) Performance, *data collection*.
 - iv) Security against unauthorised access
- B v) Network statistics – *Data related to channel occupancy, rejected calls etc. with visual display of faulty elements of the network.*

...

- C **15.0 Antenna** : The type of antenna and gain may be decided by the supplier *for getting desired coverage and performance of the system*. Detailed specifications (technical as well as mechanical) shall be furnished by equipment supplier. Fixtures *for antenna mounting at BSs and RSs* shall be included as part of antenna supply.”
- D (b) **Principles of Wireless Access:**

Principles of wireless access have also been enumerated in recommendations of International Telecommunication Union-
E Radio Communication Assembly (“ITU-RCA”). They are as follows:

“1 Introduction

F This Recommendation consists primarily of those terms and definitions that are considered essential to the understanding and application of the *principles of wireless access*. However, they are not exclusive to wireless access and are recommended also for application, insofar as they are relevant, to other types of telecommunication systems and services.

G Included are terms that may already be defined in the Radio Regulations (RR) and other ITU-R/ITU-T Recommendations. However, the definitions given here embrace only the essential concepts and on this basis it is considered that they are not inconsistent with the more

specialized definitions that appear in those texts. A

Where a truncated term is widely used in an understood context, the complete term is quoted following the colloquial form.

Some definitions include terms in italic face to indicate that these terms are defined elsewhere in this Recommendation. B

Technologies in use today for implementing wireless access include cellular systems, cordless phone and cordless telecommunication systems, satellite systems, etc. New technologies and systems such as IMT-2000, wireless broadband ISDN, wireless ATM, HAPS, etc., also form part of wireless access if they satisfy the basic criteria of end-user radio connection(s) to core networks C

Wireless access may be considered from many perspectives, for example: D

– *Mobility capabilities* of the terminal: fixed, nomadic (may be used in different places but the terminal must be stationary while in use), *mobile, restricted mobility* (e.g. within a single cell), etc. E

– *Service support capabilities*: narrow-band, broadband, multimedia, etc.

– *Type of telecommunication service*: conversational, F distribution, information retrieval.

– *Connectivity*: (which would depend on the switched network that the terminal accesses, e.g. Internet, PSTN, etc.). G

– *Radio transmission technology*: access technique (TDMA, CDMA, etc.), modulation

technique (analogue, digital, etc.), duplex technique (FDD, TDD, etc.), etc. H

A – *Delivery mechanism*: terrestrial, satellite, etc.

Of particular interest are the *mobility characteristics of wireless access systems*; thus this Recommendation provides definitions of the terms “fixed”, “mobile” and “nomadic” wireless access.

B The purpose of this Recommendation is to specify terms and definitions for terrestrial wireless access.

2 Scope

C The Recommendation specifies definitions for terms primarily focused in the field of terrestrial wireless access systems. Wireless access applications may be provided within the definitions of the radio services FS, MS, FSS and MSS contained in the RR.

D The ITU has deprecated the use of the term “loop” (see References below: CCITT Blue Book, Vol. I, Fascicle I.3, 1988); for this reason, and more so because this term does not make any sense with radio technologies, the use of the terms that include loop are deprecated. These

E include wireless local loop, radio local loop, and wireless access local loop.

F It should be noted that in many cases systems may be able to support a mixture of users (i.e. fixed, mobile and nomadic) and possibly with restrictions on the type of mobility. It is not practical to define terms for each possible combination, but those above should suffice to refer to the primary characteristics of the system.”

G In addition, the said recommendation also defines relevant terms. The said definitions are contained in clause 4.1, which reads as follows:

“4.1.1 Wireless access

End-user radio connection(s) to core networks.

H NOTE 1 – *Core networks include, for example, PSTN,*

ISDN, PLMN, PSDN, *Internet*, WAN/LAN, CATV, etc. (See A
§ 4.4 for list of acronyms and abbreviations.)

NOTE 2 – *The end-user may be a single user or a user
accessing the services on behalf of multiple users.*

4.1.2 Fixed wireless access (FWA)

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*Wireless access application in which the location of the
end-user termination and the network access point to be
connected to the end-user are fixed.*

4.1.3 Mobile wireless access (MWA)

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Wireless access application in which the location of the
end-user termination is mobile.

4.1.4 Nomadic wireless access (NWA)

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Wireless access application in which the location of the
end-user termination may be in different places but it must
be stationary while in use.

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4.2.2 Base station

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See central station.

...

4.2.4 Central station

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The common name for all the radio equipment located at
one and the same place used for serving one or several
cells.

NOTE 1 – Also known as hub station, and also as base
station, even though RR No. 1.71 defines base station
more restrictively as “a land station in the land mobile
service”.

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4.2.5 Customer premises equipment/network

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The equipment/network administered by the user.

A NOTE 1 – Based on ITU-T Recommendation H.310.

...

4.2.8 End-user

B A human being, organization, or *telecommunications system that accesses the network in order to communicate via the services provided by the network.*

(See ITU-T Recommendation J.112.)

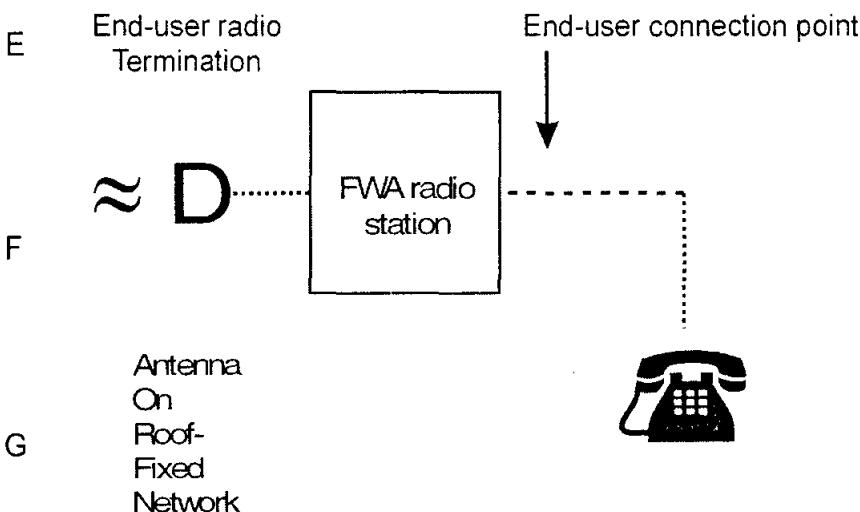
4.2.9 End-user connection point

C Point at which the end-user obtains the communications service (see Fig. 1).

4.2.10 End-user termination, end-user radio termination

D The end-user radio equipment antenna (see Fig. 1).

FIGURE 1
Illustration of terms



xvi) Classification of Services under Licence
Agreement for Provision of Unified Access Services after

H Migration:

At the outset, it may be stated that appellants herein, who were holders of basic service licence(s) migrated to Unified Access Services in November, 2003. The said UAS licence is dated 20.7.2001 w.e.f. 21.11.2003.

The said UAS licence covers "access service" which includes wireline and/or wireless service *including full mobility, limited mobility and FWA*. Basically, in these civil appeals we are concerned with three wireless services, namely, full mobility, limited mobility and FWA. What is FWA has also been explained earlier in this judgment. We quote hereinbelow clause 2.2(a) and clause 2.2(c)(i), which read as follows:

"2.2 (a) The SERVICES cover collection, carriage, transmission and delivery of voice and/or non-voice MESSAGES over LICENSEE's network in the designated SERVICE AREA and includes provision of all types of access services. In addition to this, except those services listed in para 2.2 (b)(i) licensee cannot provide any service / services which require a separate licence. The access service *includes but not limited to wireline and / or wireless service including full mobility, limited mobility as defined in clause 2.2 (c) (i) and fixed wireless access*. However, the licensee shall be free to enter an agreement with other service provider(s) in India or abroad for providing roaming facility to its subscriber under full mobility service unless advised / directed by Lessor otherwise. The LICENSEE may offer "Home Zone Tariff Scheme (s)" as a subset of full mobile service in well defined geographical Areas through a tariff of its choice within the scope of orders of TRAI on the subject. Numbering and interconnection for this service shall be same as that of Full mobile subscribers.

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2.2 (c) (i) In respect of subscriber availing limited mobility facility, the mobility shall be restricted to the *local area i.e. Short Distance Charging Area (SDCA)* in which the

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- A subscriber is registered. While deploying such systems, the LICENSEE has to follow the SDCA based linked numbering plan in accordance with the National Numbering Plan of the respective SDCA within which the service is provided and it should not be possible to authenticate and work with the subscriber terminal equipment in SDCA other than the one in which it is registered. Terminal of such subscriber in wireless access system can be registered in only one SDCA. Multiple registration or Temporary subscriber/ Subscription facilities in more than one SDCA using the same Subscriber terminal in wireless access systems is not permitted and the same Subscriber Terminal cannot be used to avail Limited Mobile facility in more than one SDCA. The system shall also be so engineered to ensure that handover of subscriber does not take place from one SDCA to another SDCA under any circumstances, including *handover* of the calls through call forwarding beyond SDCA. The Licensee must ensure that the mobility in case of such limited mobile service/ facility remains restricted to SDCA.”
- E The concept of limited mobility has been defined in clause 2.2(c)(i). The UAS Licence clarifies *vide* clause 2.2(c)(ii) that the Basic Service operators like the appellants after migration to Unified Access Licence Regime can also offer **limited mobility service** for such customers who so desire.
- F In these civil appeals we are concerned with the concept of limited mobility as a service which attracts ADC.
- G Clause 2.2(d)(i) *inter alia* provides for compliance with standards prescribed by ITU-RCA which have been quoted hereinabove. We quote hereinbelow clause 2.2(d)(i), which reads as follows:
- H “2.2 (d)(i) The LICENSEE is permitted to provide, SERVICE by utilizing any type of network equipment, including circuit and/or packet switches, that meet the relevant International Telecommunication Union (ITU)/

Telecommunication Engineering Center (TEC) / A International standardization bodies such as 3GPP/3GPP-2/ETSI/IETF/ANSI/EIA/TIA/IS".

Meaning of Interconnection Usage Charges ("IUC")/ ADC:

10. On 29.10.2003, TRAI notified IUC. ADC is a part of IUC. ADC is a percentage of the revenue. The framework of IUC regime was established by TRAI through its Regulation dated 24.1.2003 which was subsequently reviewed on 29.10.2003 and 6.1.2005. IUC has to be determined based on minutes of usage for various network elements and the cost of these elements.

11. ADC, on the other hand, is based on the consideration of cost based rent, local call charges, low rental in rural areas, free calls etc. to make the basic telecom services affordable to the common man, to promote universal service and universal access as required by NTP, 1999. **It is important to note that ADC does not arise out of any legal right. It arises out of TRAI's consideration of smoothening the transition process** during competition, i.e., providing support during transition period when costs of access is not fully recoverable from the revenues from access line monthly rental under the existing tariff regime due to competition in the market. In other words, ADC is a depleting regime for ADC purpose. **Calls to/ from WLL(F) is similar to calls to/ from fixed lines. It is important to note that fixed wireless services, provided by fixed service providers, and unified access service licences are classified as Fixed Services.** However, **fixed wireless services for all purposes tantamounts to full cellular services and can be offered seamlessly throughout the SDCA** which created a non level playing field for cellular operators vis-à-vis the fixed wireless service providers, which has led to the present dispute, which is primarily concerned with the "range of mobility" of Fixed Wireless Terminals provided by appellants herein and Reliance Infocomm and not with the size

A of the instrument "Walky" provided by appellants (Handset provided by Reliance Infocomm) or the technology used therein, viz, wireless or wireline, in the context of levy of ADC.

Submissions:

B 12. Mr. Arun Jaitley, learned senior counsel for the appellants, submits that the question to be decided in this case is whether the appellants' instrument ("Walky") falls in the category of Fixed Wireless Service or WLL(M) service. According to the learned counsel, the question of classification

C under Telecom Regulatory Authority of India Act, 1997 ("1997 Act") can only be decided upon by TRAI and not by BSNL as is purported to have been done in the present case, particularly when BSNL is a competing service provider and a contracting party under IUC Regulations. In this case, BSNL has demanded

D ADC from the appellants for the period 14.11.2004 to 26.8.2005. Learned counsel urged that, according to the appellants, the instrument "Walky" is a fixed wireless phone having portability as its feature. That, BSNL had no authority to classify the said instrument as a mobile phone.

E 13. According to the learned counsel, the abovementioned WLL(M) is a service. It refers to a mobile set and not to a portable FWP and, therefore, the said instrument "Walky" which is portable is not classifiable as WLL(M). That, in any event, classification disputes lay before TRAI under the 1997 Act and that BSNL

F has no authority to classify/reclassify the said "Walky" as WLL(M). In this connection, it is urged that BSNL could have filed its complaint before TRAI and BSNL could not have unilaterally called upon the appellants to pay ADC after such reclassification. The questions raised on behalf of the appellants is: Who pays ADC? Who decides as to who pays? In this connection, it is further submitted that under section 11(b)(ii) of the 1997 Act, the terms and conditions for grant of Interconnectivity is to be fixed by TRAI; it is mandatory function of TRAI to do so and, therefore, it is beyond the competence of BSNL to re-classify and fix the ADC liability on to the appellants.

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14. Learned counsel urged that from 1997 to 2004, the said "Walky" had been in the market to the knowledge of BSNL; the market knew the distinction between the three services and that the said Instrument stood classified during above period as WLL(F). That, GOTIT had also treated it as WLL(F). That, the appellants had moved TDSAT, in the present case, to set aside the demand of BSNL only on ground that BSNL had no authority to re-classify the said instrument from Fixed to WLL(M) service. That, BSNL could have challenged the use of "Walky" without payment of ADC before the TRAI in which event the said Authority could have taken up and decided the classification dispute, but was not done.

15. It is next urged that "Walky" as an Instrument is portable, not mobile and, therefore, BSNL had erred in reclassifying Walky as WLL(M). Challenging the impugned decision of TDSAT, it is urged on behalf of the appellants that TDSAT had erred in equating portability with mobility. That, the said two concepts are different. That, the Telecommunication Interconnection Usage Charges Regulations, 2003 ("2003 Regulations") treated WLL(M) and WLL(F) as a separate class of service. That, in the absence of any change in the technology or the instrument and merely because of the advertisement issued by the appellants, the character of service or its classification cannot change. In this connection it may be noted that appellants had given on Advertisement (Ex.-P8) in which it was stated that "Walky" combines the best features of Mobile Phone and the Landline. That, BSNL had complained to TRAI regarding the advertisement in which "Walky" was shown as WLL(F) by invoking Rule 6 of the 2003 Regulations and when the matter was *sub-judice* before the Authority, BSNL raised the unilateral demand for ADC on the appellants which was mis-conceived. That, under the contract between BSNL and the appellants, there was no provision to dis-connect the Access Facility, unilaterally.

16. Learned counsel urged that in the dispute raised by the appellants before TDSAT the only question raised was regarding **unilateralism** on the part of BSNL which TDSAT

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- A failed to decide and, therefore, the matter needs to be remitted to TRAI. In this connection it is urged that under clause 2.7 of the Consultancy Paper the "extent of portability" was the question pending to be decided by the Authority and pending decision, BSNL had no authority to raise the demand.
- B 17. On Technology, learned counsel urged that after introducing the concept of ADC, the categories of the services were Fixed Wireline, WLL(F), WLL(M) and Cellular which is now re-classified unilaterally by BSNL and DoT as Fixed Wireline; WLL(F) = WLL(M) and Cellular. Learned counsel urged that if
- C WLL(F) had to be shifted to WLL(M), then that question needs to be looked into by the Authority, hence remand becomes necessary as such re-classification cannot be done by BSNL unilaterally. Learned counsel submits that correct classification for ADC could have been done only by TRAI and not by BSNL/
- D DoT and that too after following the procedure under section 11 of the 1997 Act.

- E 18. Learned counsel next urged that neither in the Licence nor in the 2003 Regulations is there any **Premises Specific Restriction** ever imposed and, therefore, it was not open to BSNL to make the impugned demand as the said restriction was not there during the relevant period. In this connection it was urged that during the entire period between 1997 to November, 2004, **even DoT understood "Walky" to be portable in the entire SDCA**; that only in March, 2005 it gave directions to the contrary to the appellants incorporating the above "Premises Specific Restriction" and that too without any change in the licence or the IUC Regulations 2003; that till 4.3.2005 the said restriction was never mentioned; that without complying with section 11 of 1997 Act, TRAI could not have
- F issued such a directive on 4.3.2005, particularly when it seeks to impose a liability to pay ADC with retrospective effect. Learned counsel submits that, in the circumstances, matter of classification/reclassification arises which needs to be decided by TRAI.
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19. Mr. Gopal Subramanium, learned senior counsel on behalf of respondent no. 1 - BSNL, at the outset submits that, this civil appeal is infructuous. In this connection, it is urged that by Circular dated 4.3.2005 issued by TRAI, all Access Providers (including appellants herein) were directed to ensure that the terminal used for Fixed Wireless Services should be confined to the premises of the subscriber as the **issue of mobility had revenue implications**. Learned counsel submits that this circular has not been challenged till date and, therefore, this civil appeal is infructuous.

20. It is next urged that the contention of the appellants that when consultation process was on BSNL could not have made the Demand has no merit because in that Process the question was not of reclassification but the question was whether ADC was payable to other Fixed Service Providers, *besides BSNL*. In this connection, it was pointed out that before 1.2.2005, appellants herein used to receive ADC as Fixed Service Provider in respect of "Walky", however, after that date BSNL alone became entitled to ADC which led to disputes. It is urged that neither the Consultation Paper nor the 2003 Regulations was concerned with characteristics of WLL(M) services as that issue stood decided by TRAI vide circular dated 4.3.2005 as well as by Order dated 26.8.2005 issued by DoT by which it was held that appellant had provided Fixed Wireless Terminals as Mobile Terminals. The said Order of DoT stood complied with by the appellant and, therefore, there was no merit in the contention of the appellant on the issue of unilateralism. The said Order dated 26.8.2005 was passed by DoT after giving show cause notice. It is based on breach of licence conditions by appellants.

21. On the technology, it is urged on behalf of BSNL, that WLL(M) is a service which is put in the "Walky". It is urged that WLL(M) is a service given by the instrument "Walky". What is relevant is the Service and not the Instrument. It is urged that the appellants herein had invoked the Original Jurisdiction of TDSAT on the question of characterization of service which has been

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- A answered in favour of BSNL. It is urged, that nature and classification of instrument was not relevant; that what was relevant was the feature of the service in the instrument "Walky" and whether that feature made it WLL(M) service, to which ADC stood attracted. All these questions have been answered by
- B TDSAT by its impugned judgment in favour of BSNL. By the impugned judgment, it has been held by TDSAT that Walky Calls attract ADC under the Regulatory Regime.

22. It was next urged that on facts there was no unilateralism as the Demand was made by BSNL only after the TRAI and the

- C DoT had issued the above Circular and Directive respectively which have not been challenged. It is pointed out that in fact appellants have complied with DoT's order. Learned counsel would submit that if there was compliance of the Order/Directive of DoT dated 26.8.2005 there is no reason why appellants
- D should not pay ADC for the period in question, viz, 14.11.2004 to 26.8.2005. According to learned counsel, compliance of DoT's Order dated 26.8.2005 itself indicates that even according to the appellants, ADC was payable in respect of the service, i.e., WLL(M) and, therefore, there is no merit in the
- E argument advanced on behalf of the appellants that ADC could not be charged without change in the conditions of licence or 2003 Regulations.

23. It was next contended that under 2003 Regulations, reference is made to Fixed Wireless Access, Mobile Wireless

- F Access and Nomadic Wireless Access. **Before TDSAT, the controversy was regarding WLL(M) Service in SDCA.** Before us it was contended that the levy of ADC is not on movement of Walky within SDCA but it is in respect of service rendered in SDCA. **That, WLL(M) is a type of service within SDCA.**
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24. Learned counsel would submit that with the introduction of Unified Access Service Licence ("UASL") in 2003 the distinction between Fixed Wireless, WLL(M) and mobile stood obliterated. The said UASL 2003 brought in the Numbering Plan

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which categorized the series in the said Plan to identify and measure the call for billing purposes. That, in terms of clause 2 of UASL, "mobility" refers to service(s) within SDCA. A

25. The above arguments of learned counsel for BSNL were adopted by Dr. A.M. Singhvi, learned senior counsel for Cable Operators Association. B

26. Mr. Rakesh Dwivedi, learned senior counsel appearing for intervenor-TRAI would submit that in November, 2000, TRAI recommended Limited Mobility Service, i.e., WLL(M) on 25.1.2001, DoT permitted it, whereas Walky came into the market only in October, 2004. According to learned counsel, vide IUC Regulations, 2001, WLL(M) was defined which was incorporated in UASL on 26.11.2003 and, therefore, appellants were fully aware of the difference in WLL(M) Service vis-à-vis WLL(F) and Cellular. C

27. On technology, learned counsel submits that under WLL(M), the **terminal** of the subscriber must be fixed to a socket in the subscriber's premises. That, service given by the appellant is that of Limited Mobility. That in case of WLL(F) the Basic Phone Instrument has to be fixed indoor and since that is not the case of appellants, the instrument "Walky" would fall in the category of WLL(M). D

Finding:

28. India's phenomenal growth in the mobile subscriber base and penetration rate (or teledensity as measured by number of phones per hundred) has attracted global attention. Mobile phones have introduced competition in providing access and services at global competitive prices and state-of-art technology. The competition is now relevant not only among the private providers of mobile services, but also among the private and public providers of both **fixed and mobile services**. India's NTP 1999 emphasised the Government's commitment to provide basic telecom services to all people at affordable and reasonable prices. This commitment is called the Universal G

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A Service Obligation ("USO").

29. At the outset, it may be stated, that, Regulatory Restriction should not be confused with technology limitation. With the technological advancement, "extent of mobility" has gone way beyond the "Premises Specific Restriction" but in this case we are not concerned with technology but with the levy of ADC. According to some authors, ADC is a tax. In the Revenue Regime, the Authority imposing the levy is not always bound by the concepts in technology. It is open to the Authority under the Revenue Regime to impose by way of Regulatory Restriction a parameter like Premises Specific Restriction to explain the concept of Limited Mobility.

30. WLL is a technology. In this case we are only concerned with Wireless Local Loop Mobile Service. As a technological concept, wireless in local loop technology simply means that the subscriber is connected to the nearest exchange of the appellants (MSC) through BTS (which is only concerned with transmission) through a radio link instead of through the copper wires. In general, it is cheaper than copper wire connectivity. In traditional wire-line network, the cost of the Last Mile amounts to substantial portion of the total cost of putting up the network. CDMA and FDMA are technologies used for WLL.

31. In this civil appeal we are not concerned with WLL per se but with the concept of "limited mobility".

F 32. WLL is also called Broadband Wireless Access (BWA) or fixed-radio access or fixed-wireless access or fixed wireless terminal (FWT).

G 33. FWT units differ from mobile terminal units operating within cellular networks – such as GSM - in that a **fixed** wireless terminal or deskphone will be limited to an almost permanent location with no roaming facility.

H 34. WLL + FWT are generic terms for radio based telecommunications technologies and the respective devices which can be implemented using a number of different wireless

and radio technologies. In generic sense, WLL is a technology. It cannot be equated to WLL(M) which is a service like WLL(F). Under the Worldwide Database, WLL does not refer to Limited Mobility. Worldover WLL is used to provide Fixed Wireless Access for speedy roll-out of fixed services. However, under the NTP 1999, cellular operators are allowed to offer all types of mobile services whereas fixed operators like the appellants are allowed to offer fixed services.

35. The core issue, therefore, is not whether Limited Mobility is or is not possible but whether fixed operators are liable to pay ADC when the service(s) provided by them fall in WLL(M) service.

36. The main contention advanced on behalf of the appellants is regarding alleged unilateralism by BSNL in calling upon the appellants herein to pay ADC. According to the appellants, BSNL is a service provider and a competitor to the appellants, therefore, BSNL has no authority to impose ADC liability on the appellants. According to the appellants, BSNL is a contracting party and, therefore, BSNL has no authority to levy ADC unilaterally on the appellants. According to the appellants, TRAI had issued its directive dated 4.3.2005 at the behest of BSNL without TRAI itself decided the categorization of service. According to the appellants, in any event, TRAI had acted at the behest of BSNL in issuing the said directive. According to the appellants, the said directive seeks to treat the Walky calls as WLL(M) whereas all over the years between 1997 to 2004 the said service stood classified as WLL(F). According to the appellants, if at all TRAI wanted to reclassify the said service as WLL(M) it ought to have followed the procedure laid down under Section 11 of the 1997 Act. The effect of such directive, according to the appellants, is not only to reclassify the services but it also seeks to amend the terms and conditions of UAS Licence. It may be stated that directive dated 4.3.2005 stood clarified by DoT vide two clarifications dated 23.3.2005 and 26.8.2005. According to the appellants, the said clarifications were issued in the context of advertisement given by the

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- A appellants, which were later on withdrawn and that the said directive had no connection with ADC chargeability. According to the appellants, DoT is a licensor. According to the appellants, DoT had no authority to categorize Walky as WLL(M). According to the appellants, during the period 1997 to 2004, DoT and TRAI
- B have treated Walky as WLL(F). According to the appellants, by reclassifying Walky as WLL(M), DoT had sought to unilaterally reclassify Walky as WLL(M) which amounts to change in licence conditions. According to the appellants, reclassification could have been done only by TRAI under Section 11 of 1997 Act and
- C not by DoT. Therefore, as can be seen from the above arguments, it is clear that the basic complaint of the appellants is based on unilateralism in imposing ADC liability on them.

37. Before proceeding to deal with the arguments on unilateralism, we quote hereinbelow, *in extenso*, the directive issued by TRAI dated 4.3.2005, clarification issued by DoT dated 23.3.2005 and further clarification issued by DoT dated 26.8.2005, which read as follows:

- D

"File No.406-2/2004-FN Dated 4th March, 2005

- E To:
All the Access Providers
- F Subject:- Issues relating to WLL (F) services
- G The Authority has noted that fixed wireless services were being provided through fixed wireless terminals in which the location of the *network access point* was fixed and end user terminal was connected to it. Recently it has come to the notice of the Authority that new terminals being deployed by access providers do not have any fixed network Access Point physically located at the address of the subscriber. In this regard certain complaints including those of misleading advertisements have also been received by the Authority and subsequently show cause notices were issued to the concerned operators. The responses given by the service providers were not found
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to be in order.

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As the issue of mobility has implications with respect to applicability of ADC, the Authority directs you to strictly ensure that the terminal used for fixed wireless services should be strictly confined to the premises of the subscriber. All Access Providers should also ensure that there are no misleading advertisements in the electronic and print media. It should also be further noted that it is licensee's responsibility to ensure that the subscriber terminal is operated in accordance with the terms of the License for fixed lines. Any violation will attract action against you under the relevant clauses of the License Agreement.

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This issues with the approval of the Authority.

Sd/-
(R.K. Bhatnagar)
Advisor (FN)"

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.....
"No. 10-10/2003-BS II/Vol.VI
Government of India
Department of Telecommunication.
Licensing Cell (Basic Services Group)

E

1406 Sanchar Bhavan,
20, Ashoka Road
New Delhi – 110001

F

23rd March, 2005

To

All the UASL Licensees
BSNL and MTNL

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Sub: Clarification regarding Fixed Wireless Terminal in UAS/Basic Service Licence.

With reference to the subject mentioned above, the undersigned is directed to clarify that the terminal used for

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A fixed wireless services should be strictly confined to the premises of the subscriber where the telephone connection is registered. It should also be noted that it is licensee's responsibility to ensure that the subscriber terminal is operated in accordance with the terms of the Licence for fixed lines including this clarification.

B This is to further reiterate that separate level within allocated SDCA based *Link Numbering is to be used for Wireline & Fixed Wireless Services.*

C Wherever such restriction cannot be imposed, it shall be treated as WLL (M) feature *for all purposes* which inter alia *includes Numbering plan, Interconnection Usage Charges, Interconnection arrangements etc.*

(Subhash Chander)

D ADB(BS-II)
011-23036536

Copy to:

The Secretary TRAI, Safdarjung Enclave
New Delhi

E Sr. DDG (VAS), DOT"

....

"Government of India

F Ministry of Communications & I.T.
Department of Telecommunications
Licensing Cell (Basic Services Group)
713, Sanchar Bhawan, 20, Ashoka Road, New Delhi-1

No.16-10/2004-BSII/TTSL

26th August 2005

G To
M/s. Tata Teleservices Ltd.
10th Floor, Tower-I,
Jeevan Bharti, Connaught Place,
New Delhi-110001.

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Sub: Alleged Violation of licence conditions.

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Whereas M/s. Tata Teleservices Ltd. (M/s TTSL) has been granted licence under Section 4 of Indian Telegraph Act, to establish, maintain and operate telegraph services in the following service areas:-

B

S.No.	SERVICE AREA	LICENCE AGREEMENT NO.
1.	Andhra Pradesh	10-02/2004/BSII/TTSL/AP
2.	Gujarat	10-05/2004/BSII/TTSL/Guj.
3.	Karnataka	10-09/2004/BSII/TTSL/KTK
4.	Tamil Nadu	10-17/2004/BSII/TTSL/TN
5.	Chennai	10-20/2004/BSII/TTSL/Chennai
6.	Delhi	10-21/2004/BSII/TTSL/Delhi
7.	West Bengal	20-201/2003/TATA/BSIII
8.	Bihar	20-204/2003/TATA/BSIII
9.	Haryana	20-206/2003/TATA/BSIII
10.	H.P.	20-207/2003/TATA/BSIII
11.	Kerala	20-210/2003/TATA/BSIII
12.	Madhya Pradesh	20-211/2003/TATA/BSIII
13.	Orissa	20-214/2003/TATA/BSIII
14.	Punjab	20-215/2003/TATA/BSIII
15.	Rajasthan	20-216/2003/TATA/BSIII
16.	UP(W)	20-218/2003/TATA/BSIII
17.	UP (E)	20-219/2003/TATA/BSIII
18.	Kolkata	20-222/2003/TATA/BSIII

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Whereas a complaint was received from Cellular Operators Association of India that M/s Tata Teleservices Ltd. is providing *fixed wireless terminals as mobile terminals* and such terminals are being openly advertised and promoted as "WALKY-Enjoy freedom of mobility at landline rates".

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A Further it was pointed out that BSNL is being severely disadvantaged as *they have not received ADC from WALKY Calls.*

B Whereas M/s. Tata Teleservices Ltd. was supposed to provide services within the scope of its licence agreement and it was expected that by way of advertisement or promotion of its services, the subscriber should not be misled.

C Whereas a notice was issued for alleged violation of conditions and not limited to clause 2 of Unified Access Services Licences on 06.01.2005 and 31.01.2005 regarding WALKY service.

D And whereas M/s Tata Teleservices Ltd. replied to the notice vide letter dated 21.01.2005 and 02.02.2005 of stating that there has been neither any attempt nor any intention to mislead any subscriber in relation to services being provided by M/s TTSL and they continue to provide services within this scope of licences. The Fixed Wireless Terminal (FWT) instruments are prominently advertised as bulky desktop phones and therefore customer is clearly informed of the nature of the services and the phone instrument. The numbering scheme of both FWT & Wireline Phones is same and is different from that of limited mobile services. The FWTs covered by one or sometime more than one Base Trans-receive Stations (BTSSs).

E M/s TTSL further submitted that "Walky" is a brand established by Tata Teleservices essentially to promote and market their desktop Fixed Wireless Phones. These Fixed Wireless Phones combined the advantages of both mobile phones and landline phones.

F Further, clarification regarding Fixed Wireless Terminals was issued vide this office letter No. 10-10/03-BS-II/Vol.VI dated 23.03.2005 vide which it was clarified that the Terminal used for Fixed Wireless Services should be strictly

confined to the premises of the subscriber where the telephone connection is registered. Separate levels within allocated SDCA based link numbering scheme are to be used for Wireline and Fixed Wireless Services. Wherever such restriction cannot be imposed, it shall be treated as WLL (M) feature for all purposes. A

It is needless to mention that the word "Fixed" is clearly understood and it does not require a separate definition in legal or common parlance. B

M/s TTSL submitted compliance to letter dated 23.03.2005 vide its replies dated 31.03.2005 stating that, "the Licenser would surely be aware of the inherent "Soft handover" nature of CDMA technology due to which CDMA terminals (FW or mobile) utilize network and proving to be extremely spectrally efficient. Therefore, the implementation of any restriction would require considerable changes to the network, which need time, effort and considerable resources to complete something that DoT requires to provide. Nevertheless, under constraints of time, some actions have been initiated which are detailed further in this letter". Further vide letter dated 08.04.2005, M/s TTSL has stated that they have taken some exercise to restrict service to the BTSS. C D E

After examining all the responses of M/s Tata Teleservices Ltd. on the above mentioned subject, it is noticed that initially, M/s Tata Teleservices Ltd. has not taken appropriate steps to restrict the mobility within the premises and has advertised such service where consumer can have the impression that mobility is one of the features. In the response also M/s TTSL stated that fixed wireless phones combine the advantage of both mobile and landline phones. Moreover, the measures taken, later on, to restrict the mobility has also been found to be unsatisfactory. It is, therefore, clearly established that mobility is not restricted to the premises and the H

A terminal cannot be treated as fixed terminal.

Whereas such services offered by M/s Tata Teleservices Ltd. does not conform to the scope and character of the fixed service and provide the character of Limited Mobile Service.

B Keeping in view the above, the competent authority has decided that such services are to be treated as limited mobile service within the scope of the licence.

C This is without prejudice to any other action that may be taken by the Government in this regard.

Sd/- 26/8/05
(Sukhbir Singh)
Director (BS-II)
Tel. No.23036536

D

CC:

1. The Secretary, TRAI, Safdarjung Enclave, New Delhi.

2. Shri Rakesh Mehrotra, Chief Officer-Corporate Affairs,
M/s Tata Teleservices Ltd., Indicom Building, 2-A, Old
Ishwar Nagar, Main Mathura Road, New Delhi-110065."

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38. Analysing the directive dated 4.3.2005 issued by TRAI, the point which arises for determination is whether such directive is clarificatory or amendatory. According to TRAI, it is clarificatory

F whereas according to the appellants it is amendatory. In this case, as stated above, we are concerned with the demand of ADC on the appellants for the period 14.11.2004 to 26.8.2005.

According to the appellants, such a directive dated 4.3.2005 cannot operate retrospectively. This is the key issue which we

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need to decide. In this connection, it may be noted that the said directive was issued to all access providers. The said directive came to be issued as it was brought to the notice of TRAI that new terminals were being deployed by access providers which terminals do not have any fixed network access point physically

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located at the address of the subscriber. In the said circular dated

4.3.2005, TRAI noted that fixed wireless services were required A to be provided through fixed wireless terminals with the location of the network access point being fixed and with the end-user terminal being connected to it. That, it had been brought to the notice of TRAI that new terminals were being deployed by certain access providers which did not possess fixed network access point physically located in the premises of the subscriber (PSR). Therefore, by the said circular, TRAI directed the service providers to strictly ensure that the terminal used for fixed wireless services should strictly comply with premises specification restriction, i.e., to the premises of the subscriber. C This stipulation in the directive, according to the appellants, constitutes a new requirement which has the effect of amending the terms and conditions of the UAS licence as well as the Telecommunication Interconnection Usage Charges Regulation 2003. The said directive dated 4.3.2005 stood followed by D letters from DoT dated 23.3.2005 and 26.8.2005.

39. In our view, there is no merit in the above contention advanced on behalf of the appellants that the above directive dated 4.3.2005 is amendatory and not clarificatory. The reasons are as follows. E

40. Firstly, the UAS licence classifies wireless service into three categories, namely full mobility, limited mobility and fixed wireless access. As stated above, in FWA there is no mobility of the User Device. FWA replaces copper lines to the homes of the users by wireless links *but without the benefit of mobility for the User Devices*. FWA is one type of service. Mobility is a service feature. In FWA system, the location of end-user terminal and the network access point to be connected to end-user are fixed. In circular dated 4.3.2005, TRAI has used certain technological terms generally used in telecommunications like network access point, end-user terminal and fixed network access point. These terms find place in the generic requirement formulated as far back as 1996. They also find place in the Principles of Wireless Access formulated by ITU-RCA. Keeping in mind the definitions given both in the technical references as F G H

- A well as in the principles of wireless access formulated by ITU-RCA, it is clear that Premises Specific Restriction ("PSR") is not something new which stood evolved for the first time by circular dated 4.3.2005. In substance, PSR emanates from concepts, which are well known in telecommunications, both in
- B technological references as well as in terms of generic requirements and in terms of principles of wireless access. We may state that broadly FWA is called WLL(F). As stated above, the UAS Licence refers to three types of wireless services, namely, full mobility, limited mobility and FWA. As stated, in
- C FWA, the location of the end-user (Walky) and the network access point (antenna connected to the end-user) are both fixed whereas *in the case of mobile wireless access, the location of the end-user is mobile*. WLL(M) is a hybrid between FWA and MWA. Wireless access may be considered from many
- D perspectives. In this case, we are concerned with mobility capabilities of the terminal: fixed, nomadic, mobile, restricted mobility etc. As stated hereinabove, the main purpose of FWA [WLL(F)] is to provide network access to buildings through exterior antennas communicating with Central Radio Base Stations. In FWA, users in a building are allowed to connect to
- E the network with conventional in-built networks. FWA is a service. *It is intended as a cheap cable replacement, without additional features*. Wireless systems differ depending upon the amount of mobility that they allow for the users. FWA system is a derivative of cordless phones. In FWA there is no mobility of the
- F user devices. This is where the concept/principle of PSR emerges. As stated above, there is a difference between mobility and portability. A terminal may be portable but every portable device is not mobile. Therefore, in our view, the concepts mentioned in circular dated 4.3.2005 issued by TRAI
- G exist in telecommunications right from 2001. The said circular merely clarifies and brings out the concept premises specific restriction.

41. 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), A 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 B cable replacement *without additional features*. WLL(F) is limited to specific premises of the subscriber or permanent location.

42. Secondly, the facts noted above indicate that the C classification of wireless service is done under the licence and based on that classification, chargeability for imposition of interconnection usage charges and ADC is contemplated by IUC Regulation of 2003. In other words, classification is done by UAS licence followed by chargeability under IUC Regulation, D 2003. Therefore, it would be wrong to say that *vide circular dated 4.3.2005* Walky has been reclassified as WLL(M) for the first time by TRAI. If the concept of FWA embodies PSR and that too from 2003 then it is clear that the said circular dated 4.3.2005 E is clarificatory. It does not alter the terms and conditions of the licence. As stated, FWA is one of the wireless services contemplated by UAS Licence which is dated July, 2003, therefore, much prior to circular dated 4.3.2005 these concepts F were known to all access providers right from 2003. Therefore, the said circular cannot be called as amendatory. It is purely clarificatory in nature.

43. Thirdly, as stated above, in this case we are concerned G with regulatory regime. ADC is a levy. Its levy depends on mobility as a service feature. As stated above, the numbering plan, radio frequency etc. are all important elements of a network. The numbering levels for fixed wireless services and for WLL(M) services are different. So also the numbering levels for fixed wireless service, limited mobility service and full mobility service G are different. The identification of the call whether originating from mobile or from Walky or FWA has a correlation with the numbering plan which is an important element of the network of H

- A the appellant in its MSC. For levy of ADC, integrity of numbering plan is very important. In the present case, TRAI has detected that the appellant is providing WLL(M) service in the garb of fixed wireless phone service (FWA) which disturbs the integrity of the numbering plan. It is important to note that in the case of
- B full mobility, the rate is different as compared to the rate in the case of limited mobility as compared to the rate in fixed wireless service. This difference in the rates is spelt out in IUC Regulation, 2003. It is for this reason that even in the clarification issued by DoT on 23.3.2005 that DoT had warned the access providers
- C by pointing out that the issue of mobility has implication with respect to the applicability of ADC. It was further clarified that if it is not possible for the access provider to comply with the requirement of PSR then the Walky services shall be treated as WLL(M) service for all purposes including numbering plan,
- D interconnection usage charges, ADC etc. This is because a separate level with allocated short distance charging area based link numbering is to be used for wireline and fixed wireless services. ADC is a levy. It is based on what is called as recognition of services. Mobility is an important service feature.
- E The record indicates that right from 2003 when UAS licence stood issued the classification was contemplated by the licensor-DoT when it categorized wireless service into full mobility, limited mobility and FWA. ADC, interconnection usage charges etc. follow that classification. IUC Regulation, 2003 imposes the statutory charges based on the classification in
- F the licence. What is important in this case is that besides technological data, even as a matter of policy if there is a contract between DoT and the access provider in terms of UAS licence which provides for three categories then the levy of ADC would depend upon the service which is rendered to the user by the
- G access provider. In the circumstances, apart from technology, this case is more on tax policy which levies ADC on services which fall in the category of WLL(M).

44. Fourthly, wireless systems differ in the amount of mobility that they have to allow for the users. The ability to move

around while communicating is one of the main features of A wireless communication for the user. However, within that requirement of mobility, different grades exist:

(i) Fixed Devices:

Fixed devices are placed only once. There is no B mobility of the user devices in this grade. The main object for using such devices lies in avoiding the laying of cables. All wired communications fall also in this category (example: PSTN).

(ii) Nomadic Devices: C

Nomadic devices are placed at a certain location for a limited duration of time and then moved to a different location. Laptops are typical example of nomadic devices. D

(iii) Low Mobility:

Cordless phones are typical example of low mobility.

45. The point to be noted is that in the licence we have three types of wireless services, namely, limited mobility, full mobility and FWA. IUC levies the charge based on this classification. ADC is a part of IUC. ADC is also levied under IUC Regulation, 2003. In the case of Walky, the instrument can be put in the car, it can be carried throughout SDCA and Walky calls can originate not only from the subscriber's premises but it can also originate from any point in the SDCA. Because of this mobility, it is classifiable in the category of limited mobility. As stated above, in the case of FWA [WLL(F)] there is no mobility of the user device. When there is no such mobility of the user device, it is similar to all wired communications. Therefore, FWA is categorized as WLL(F). All wired communications can also fall in WLL(F) for the purposes of levy of ADC. However, since the user device in the case in hand is mobile throughout SDCA, the services which the instrument Walky offers has to be categorized as WLL(M) service. In the present case, we find E F G H

- A merit in the contention advanced on behalf of BSNL that the appellants were providing WLL(M) services during the above period in the garb of FWA or fixed wireless phone services and thereby they have infringed the integrity of the numbering plan. Therefore, ADC is payable by the appellants for the aforesaid
- B period, namely, 14.11.2004 to 26.8.2005.

46. Lastly, as stated above, classification of services stood effected under UAS Licence 2003. Under the terms and conditions of that licence, the access providers were required to maintain the integrity of the numbering plan. This was one of

- C the conditions of the licence. Similarly, classification/ categorization of wireless services was done under the licence. The categorization constituted the term of the licence. As a matter of follow-up for the purposes of levy of certain charges, including ADC, IUC Regulation 2003 stood enacted. Under Section
- D 11(1)(b) of the 1997 Act, the TRAI is empowered to ensure compliance of terms and conditions of licence and to fix the terms and conditions of inter-connectivity between the service providers [see: section 11(1)(b)(i) and (ii)]. Similarly, under Section 11(1)(c), TRAI is also authorized to levy fees and other
- E charges at such rates and in respect of such services as may be determined by regulations. In the present case, the IUC Regulation, 2003 indicates by way of schedule the rate chargeable for a call originating from mobile to fixed, fixed to fixed, fixed to mobile etc. Under Section 13 of the 1997 Act,
- F TRAI is empowered to issue directions from time to time to the service providers for the discharge of its functions under Section 11(1) of the 1997 Act. As stated above, the classification of the three wireless services was done under the licence. The clarification issued by TRAI on 4.3.2005 was under Section 13 of the 1997 Act. In the circumstances, the said clarification dated 4.3.2005 was issued by TRAI in accordance with law.

47. In our judgment, we have examined the nature of the services, the status of the circulars issued by TRAI and the status of the directive issued by DoT. The reasons given in our judgment

- H are in addition to the reasons given in the impugned order dated

9.9.2005 by TDSAT. We find no infirmity in the judgment of A TDSAT.

48. Mr. Arun Jaitley, learned senior counsel for the appellant, on the issue of Unilateralism submitted that when the question – whether portable WLL(F) Phones should be treated alike as WLL(M) phones was pending before TRAI pursuant to complaints from BSNL dated 4.1.2005, was it open to TRAI to issue a directive as is done in this case on 4.3.2005 without waiting for a Determination by the Competent Authority. In this connection reliance was placed on paras 2.26 and 2.27 of the Consultation Paper. We find no merit in this argument. As stated above, directive dated 4.3.2005 is clarificatory and not amendatory. The context in which the Consultation Paper emanated has been explained by us in our Judgment in the Civil Appeal of Reliance Infocomm Ltd.. We do not wish to repeat the reasons herein once again. In any event, we have looked into technology aspect and policy framework for levy of ADC hence there is no unilateralism as alleged by the appellant. B C D

49. Before concluding, one aspect needs to be mentioned. It is alleged by the appellants and also by Reliance Infocomm Ltd. in the conjoint appeal which we will separately deal with in the subsequent judgment that BSNL have also not disclosed their numbering levels for their fixed wireless service and for their WLL(M) services which they have been providing during the relevant period in the name of "Tarang", which according to the appellants, would now constitute WLL(M) service. According to the appellants, BSNL has also been providing fixed wireless phone services which has limited mobility. This is a matter of quantification. That stage has not yet arrived. However, Mr. Gopal Subramanium, learned senior counsel appearing on behalf of BSNL, has fairly stated that BSNL would abide by the parameters laid down in our judgment and whatever adjustments required to be made in that regard in the context of claims and counter claims, the same shall be worked out in near future. Be that as it may, we express E F G H

- A no opinion on the point of quantification which question did not arise even before TDSAT in this case. Suffice it to state that the services of the appellants *vide* the instrument Walky falls in the category of WLL(M) service and, accordingly, the appellants would be liable to pay ADC in that regard during the relevant period 14.11.2004 to 26.8.2005.

50. Accordingly, civil appeals stand dismissed with no order as to costs.

K.K.T.

Appeal dismissed