RECOMMENDATIONS

ON THE

PRE-CONSULTATION PAPER ON ALLOCATION OF SPECTRUM IN 2G BAND IN 22 SERVICE AREAS BY AUCTION

I. Introduction

1.1 This paper provides recommendations on the Pre-Consultation Paper on Allocation of Spectrum in 2G Band in 22 Service Areas by Auction as per the Press Release-16/2012 dated February 3, 2012 issued by the Telecom Regulatory Authority of India ("**TRAI**" or the "**Regulator**").

1.2 Before providing our recommendations, we have attempted to provide a background on the telecom policies adopted by the Government from time to time, which have a bearing on the recommendations.

1.3 It would also be good practice to announce upfront the quantum of spectrum available, an assurance that successful bidders would have minimum of 4.4 MHz of spectrum, beyond 4.4MHz allocation would be prorated to this price discovery and finally but most importantly the validity of this price discovery is for say 3 years with suitable indexation.

1.4 The PM address at India Telecomm 2007 also stated as follows:

"At the same time, we must realise that we need to make use of this precious and limited resource in an optimal manner. All technological options must be explored to maximise its utilisation. ***The policy regime for making spectrum available should be fair, transparent, equitable and forward looking. It should not create entry barriers to newcomers or barriers to the continued growth of the important sector. At the same time, the revenue potential to the government must not be lost sight of.*** *After all, governments across the globe have harnessed substantial revenues while allocating spectrum. In the final analysis, the key issues are correct pricing, fair allocation rules, and a pro-competitive stance. In the past, the department of telecommunication and the regulator have successfully enabled the rapid growth of this sector. I believe that working closely with the independent statutory regulator, we can balance multiple objectives in a fair and reasonably manner."*

1.5 This is an opportunity to resolve all the present ambiguities in the field of telecom including the concerns relating to mergers & acquisitions, exit policy and most importantly pricing of the spectrum.

2. Policy Background

2.1 India's National Telecom Policy 1994 ("**NTP 1994**") was announced on 13th May 1994, to deregulate, liberalise and encourage private sector participation in the telecom industry. However, NTP 1994 did not yield desired results. Therefore, a new National Telecom Policy ("**NTP 1999**") was announced on 1st April 1999.

2.2 The policy on spectrum management as enumerated in NTP 1999 emphasized the need for spectrum to be used efficiently, optimally and economically. It further emphasised the need for a transparent process of allocation of frequency spectrum for use by a service provider and for making it available to various users under specific conditions. Such process required to be effective and efficient and needed to provide for the levy of a spectrum usage fee.

2.3 On 23rd June 2000, pursuant to a reference made by the Ministry of Communications and Information Technology, TRAI made certain recommendations on the issues of appropriate level of entry fee, basis of selection of new operators and entry of 4th cellular operator. TRAI recommended that all new operators, barring Department of Telecom ("DoT")/MTNL would be selected through a competitive bidding process. Prospective operators would be required to meet pre-determined criteria in order to qualify to bid for the licence. Pre-qualification would be mainly on the grounds of financial strength and experience, minimum roll out obligation, technical and business plan, payment terms and other commercial conditions. **TRAI also recommended that bidding process should be carefully structured so as to guard against the possible misuses of the process such as pre-emptive over-bidding or cartelisation. For this purpose, a bid structure involving "Multi Stage Informed Ascending Bids" was recommended.**

2.4 TRAI also recommended that, after each stage of bidding, bids received would be made public and all the bidders would be permitted to raise their bids in the subsequent rounds of bidding. The process would be complete only after a pre-determined number of bid rounds are completed at the end of which the highest bidder for each license would have claim to the licence in question and licences would become effective on payment of the amount of the winning bid for the entry fee within a period specified in the tender document.

2.5 On the issue of entry of third and fourth operator in a spectrum, TRAI opined that considering the issues related to sharing of spectrum, a view could only be taken after getting a full report from the DoT on the quantum of spectrum being made available for the Cellular Mobile Service Providers (CMSP), existing as well as the proposed new entrants, and the allocation of such spectrum, i.e., the bandwidth within which it would fall.

2.6 On 5th January 2001, the Government of India (GoI) issued guidelines for issue of 4th licence for Cellular Mobile Telephony Services (CMTS). These guidelines envisaged a detailed bidding process for selection of the new service providers. On the basis of these recommendations, many licenses were issued. A list of the licenses issued under these guidelines is enclosed as **Annexure A.** In addition to this, few basics services licenses were also issued to operators such as **Reliance Telecomm, Tata Teleservices** etc for providing telecom services by utilising the wireless in Local Loop technology. These licenses were eventually misused for providing full mobility by series of actions of omissions and commissions by the DoT and the TRAI. These actions led to a prolonged legal battle, leading to a negotiated settlement in 2003. Pursuant to this, these licenses were legitimised in 2003. **Reliance Telecomm and Tata Teleservices were the benficiaries of this backdoor entry into full mobility.**

2.7 As a result of this settlement on 27th October 2003, TRAI made recommendations on 'Unified Licensing' under Section 11 of the Telecom Regulatory Authority of India Act, 1997 ("**TRAI Act**"). These recommendations were made in view of NTP 1994, NTP 1999, international practices, national objectives etc. The recommendations contained various alternatives to decide the benchmark for the entry fees for entry into the '*Unified Access Licensing Regime*'. The recommendations laid emphasis on efficient utilization of spectrum and indicated that it would make further recommendations on efficient utilisation, spectrum pricing, availability and spectrum allocation procedure taking into account the need timing and availability of the spectrum. Few key recommendations were:

(a) To de-link spectrum from the license

(b) To fix a license fee fop this plain vanilla license (without any spectrum), and

(c) Most importantly to award all future licenses with spectrum or only spectrum by auctioning as was done for the award of licenses in 2001.

2.8 Meanwhile, a Group of Ministers ("**GoM**") had been constituted in September 2003, mainly to consider and recommend the best measures to ensure release of adequate spectrum needed for the growth of the telecom sector. The GoM recommended that the DoT and Ministry of Finance ("**MoF**") would discuss and finalise spectrum pricing formula which would include incentive for efficient use of spectrum as well as disincentive for sub-optimal usages. The recommendations emphasised that allotment of additional spectrum is transparent, fair and equitable, avoiding monopolistic situation regarding spectrum allotment usage. The GoM also recommended that the fee paid by fourth cellular operator was to form a benchmark for migration of basic players to the new access regime i.e. for those who made fraudulent entry into full mobility by the back door. The two companies were Reliance and Tatas. These recommendations of the GoM were accepted by the Council of Ministers on 31st October 2003.

2.9 On 11th November 2003, the DoT issued new guidelines for UAS licensing. The main features of these guidelines were that existing operators would have the option of continuing under the existing regime or to migrate to the new UAS licence. The obligations with regard to licence/entry fee, service area, roll-out obligations and performance bank guarantees would be the same as the 4th operator. Subsequently, the Chairman, TRAI, recommended that the entry fee for new UAS licensees would be same as the fourth operator and in cases where there is no fourth operator, it would be the fees fixed by the Government for the basic operator or the reserve price fixed by the Licensor.

A summary of the October 2003 Recommendations is as follows:

"Competition

7.37 On the issue of introducing more competition, the TRAI has always been in favour of open and healthy competition. In its recommendations on the introduction of the 5th and 6th Cellular Mobile license, the TRAI opined that

"Induction of additional mobile service providers in various service areas can be considered if there is adequate availability of spectrum for the existing service providers as well as for the new players, if permitted."

Taking cognisance of spectrum availability, the TRAI is in favour of introducing more competition. However, we feel that it in lieu of more cellular operators, it would be more appropriate to have competition in a Unified Licensing framework which will be initiated after six months.

Time and need of introduction of more service providers

7.38 As already mentioned earlier, with the continuing growth trend, the expected wireless subscriber base by December, 2005 will be 100 million. To achieve 100 million wireless subscribers (cellular & WLL both) the required investment is of the order of Rs.50, 000 crore. As brought out in Para 6.5 this highlights a need at present itself for greater *efforts by existing and new service providers to expand the investment and to meet the market demand for telecom services and help achieve the objectives of telecom growth and development in the country.*

7.39 As brought out in Para-7.37 above, the induction of additional mobile service providers in various service areas can be considered if there is adequate availability of spectrum. As the existing players have to improve the efficiency of utilisation of spectrum ***and if Government ensures availability of additional spectrum then in the existing Licensing Regime, they may introduce additional players through a multi-stage bidding process as was followed for 4th cellular operator.***

7.40 Considering the above, the role of existing and new players in wireless services at the present juncture is well established.

Summary of Recommendations

In the interest of consumers of the telecom sector and to promote and ensure orderly growth of the telecom sector, the Authority recommends that the country should migrate to "Unified Licensing" Regime for all telecom services. As a preparatory step, Unified Access License will be implemented for access services in each circle. Finally, within six months Unified Access Licensing through an Authorisation process for all services and all geographical areas should be initiated. Service providers will be free to offer all services in all geographical areas through automatic licensing/authorisation subject to notifying the Regulatory Authority and compliance with published guidelines. The guidelines will be published by the Government/Regulator to include various terms & conditions of authorisation, e.g., nominal entry fee, Universal Service Obligation (USO), security conditions, etc. ***Service providers who need spectrum for their services will approach Government of India separately. The guidelines for spectrum allocation which would cover the methodology for spectrum pricing will also be notified by the Government.*** *Service providers would be given choice to migrate to the new regime or maintain the present position.*

The present licensing regime may not be flexible enough to accommodate changes. To achieve very high growth in the Telecom Sector in a competitive and fast technological development era, the new unified regime will create a litigation free environment because all service providers will be in a position to offer all types of services in all service areas depending upon service provider's choice. As a preparatory step, Unified Access License will be implemented for access services in each circle. Finally, within six months Unified Access Licensing through an Authorisation process for all services and all geographical areas should be initiated."

2.10 These recommendations were accepted by the Minister of Communication & Information Technology (C&IT) on 24th November 2003, since this was a major policy change to the NTP 1999, these changes were also placed on the table of the parliament. The Ministry also decided that, with regard to grant of a UASL licence on first-come-first-served basis, it could be issued on a continuous basis subject to the availability of spectrum and without any guarantee of a spectrum. A UASL license did not mean allocation of spectrum or attendant right of spectrum to the licensee. It was merely meant to be a piece of paper for the licensee to start providing Basic telecomm services under the Indian Telegraph Act, 1885 without the use of a spectrum.

2.11 On 14th December 2005, the DoT issued revised guidelines for UAS licensing. It provided that no restriction should be placed on the number of entrants for provision of UAS in a service area. It further provided that, a licensee would be required to pay an annual licence fee and spectrum charges apart from the non-refundable entry fee. **The guidelines clearly stated that this UASL license did not guarantee them any spectrum.** It appears that the DoT, under pressure, started issuing UASL licenses in the December of 2006 on the plea that there was enough spectrum and not that much demand by the incumbents; therefore those wanting to enter services could do so. It was a farcical situation in the sense that the markets were never tested on the demand and resulted in some 22 licenses to be issued to companies friendly to the then MOC Mr Maran. A list of those who applied for these licenses is attached as **Annexure B. However, the spectrum allocation took place in 2008 except for one who had the spectrum in 2007.**

2.12 It is unknown as to what transpired in the minds of the policy makers, which resulted in a reference to TRAI. Therefore, on 13th April 2007, the DoT requested TRAI to furnish its recommendations on the issues of limiting the number of access providers in each service area and review of the terms and conditions in the access provider licence. TRAI made its recommendations on 28th August 2007. The main emphasis of these recommendations were the principles of fair competition, no restriction on the number of access service providers in any service area, need for spectrum management, measures to increase spectrum efficiency, allocation of spectrum and compliance of roll out obligations by the service providers. **It was also recommended that in future all spectrum; excluding the spectrum in 800, 900 and 1800 MHz bands in 2G services should be auctioned. In addition, allowing the CDMA operators to also offer GSM services under the name of combination of technology and assigning reasons that in view of the existing infrastructure the rollout in rural and sub-urban areas would be faster. These recommendations** were completely flawed for reasons below:

(a) The recommendations that "No Auction" in GSM was in complete reversal of the October 2003 recommendations, which recommended auction,

(b) While recommending open competition for unlimited number of players it never treated a scenario where the number of players exceeded the quantum of spectrum,

(c) The key recommendation of combination of technology violated two key licensing clauses of choice of technology for seeking allocation of spectrum and the 10% equity holding in same areas of operation. The allocation of spectrum under the UASL was categorically either or or and not both. The UASL Licensee had to choose the technology by which he intended to provide Mobile Serrvices ie GSM or CDMA. On receipt of that application, the Wireless Planning and Coordination wing would allocate spectrum earmarked for that Technology. This was a major deviation covered by the government under a policy change in public interest and perhaps under Clause 5 of the unified access service license. **Reliance and Tatas were the beneficiaries of this Largesse yet again.**

3. Key Issues

3.1 In 2003, the TRAI Recommendations of auctioning of licenses either with spectrum or spectrum alone were accepted by the Government. It was also accepted that a plain vanilla license would also be created for anyone to enter the Indian telecom market without the use of spectrum. The government was to come up with the entry fee for that plain vanilla license. Also it was clearly mentioned that those service providers who need spectrum for their services will approach Government of India separately, who shall make recommendations for the same. This method of distribution of license in 2007 was at complete variance to the policy approved by the Government in 2003, as is manifest from the foregoing. The recommendations in 2007 wherein it is very clearly mentioned that in future all spectrum; excluding **the spectrum in 800, 900 and 1800 MHz bands in 2G services should be auctioned was completely flawed. This is the Genesis of the problem leading to strictures on the role of the regulator.**

3.2 It must be emphasised that ever since the telecom markets have opened to the private sector no license, **with spectrum**, whatsoever has been issued without either a bidding process or an auction. **No license with spectrum guaranteed has ever been allocated on FCFS.** The FCFS licenses were granted where there was no requirement of spectrum. The amendment that all licenses would be UASL was the root cause of the problem, though it was implied that such a license carries no guarantee of spectrum.

4. Key Challenges to petitions filed before Supreme Court

4.1 The following points were challenged before the Supreme Court in the matters titled as Centre for Public Interest Litigation & Others v Union of India & Others (Writ Petition (Civil) No. 423 of 2010) and Dr. Subramanium Swamy v Union of India & Others (Writ Petition (Civil) No. 10 of 2011):

a. The entire method adopted by the DoT for grant of license at the entry fee determined by TRAI in 2001 was arbitrary, unconstitutional and contrary to public interest.

b. The principle of first-come-first-served acted upon for grant of license in 2008 is violative of Article 14 of the Constitution and distortion thereof by Minister of C&IT and consequential grant of license is liable to be annulled.

c. Even though a number of licensees failed to fulfill roll-out obligations and violated the conditions of license, the GoI did not take any action to cancel the licenses.

d. The petitioners were not entitled to challenge recommendations made by TRAI and policy decisions taken by Government for grant of UAS licenses.

e. The Court cannot review the grant of licenses at the rate fixed in 2001 and the CAG report cannot be relied upon as it was flawed and based on unfounded assumptions.

f. The licenses were given strictly in accordance with modified first-come-first-served principles and the respondents were able to fulfill LoI conditions as they were aware, through newspaper reports, of the probability of the same being granted in January 2008. Also, applications made in 2004 and 2006 could not be clubbed together with the ones made in August and September 2007 as per the UASL guidelines.

g. Public interest would suffer because of cancellation of licenses as the licensees had made huge investments for creating infrastructure to provide services in different parts of the country.

4.2 The Supreme Court in its Judgment dated February 2, 2012 in the matters titled as Centre for Public Interest Litigation & Others v Union of India & Others (Writ Petition (Civil) No. 423 of 2010) and Dr. Subramanium Swamy v Union of India & Others (Writ Petition (Civil) No. 10 of 2011) ("**Judgment**") declared the licenses granted to the private respondents on or after 10.1.2008 pursuant to two press releases issued on 10.1.2008 and subsequent allocation of spectrum to the licensees as illegal and thus quashed the same.

5. Recommendations/Suggestions to Pre-Consultation Paper of TRAI on Allocation of Spectrum in 2G Band in 22 Service Areas by auction.

Our recommendations/suggestions on the allocation of spectrum in 2G band in 22 Service Areas by auction are as follows:

5.1 **Who should participate i.e. Participants:** One of the interpretations of the Judgment can lead to the view that participation in the proposed grant of licenses and allocation of spectrum in 2G band should be open to all eligible parties excluding incumbent operators and their shareholders as they are not eligible to apply for fresh license due to their respective existing licenses. This is based on the rationale that the licensees whose license has been cancelled by the Judgment should be given a fair change to re-enter the market on such terms which are defined by the licensor in consultation with the Regulator.

Another view which may be taken is that there appears to be an anomaly in the Judgment, as it cancelled only 122 unified access service licenses granted in January 2008. However, that is only part of the story. No doubt these are considered to be the raison d' etre of the malaise, but there are some others who are beneficiaries of this largesse, **but not accounted for, given the fact that the spectrum allocation for such beneficiaries took place post 10.1.2008 except one.** A list of spectrum allocation to licenses post 10.1.2008is attached as Annexure C. From the above, therefore, three categories of applicants can be carved out, who may participate in the auction:

Category A: Those licensees to whom 22 licenses were issued in 2006;

Category B: Those licensee to whom 44 licenses were granted under combination of technology category in 2007;

Category C: Those licensees to whom 122 licenses were granted on or after 10.1.2008, which have now been cancelled by the Supreme Court as per the Judgment.

There could possibly be a fourth category of applicants i.e. Category D who applied up to the earlier announced date of 1st October 2007. These comprise of 343 licenses.

If the above stated view not taken into account by the Regulator, it may give undue and unnecessary advantage to Category A and Category B applicants, which is most undesirable. It must be understood that the licensees mentioned in Category B were a beneficiary of the 2003 litigations and would also be second time beneficiary of a fraud. It is therefore suggested that they must take part in the auction as they are post 2004 licensees and this auction is basically for fresh GSM players post 2004.

5.2 **Reserve Price:** A reserve price is the price at which bidding begins. If there is a transparent auction with enough competition among bidders, the final price will be largely independent of the reserve price (unless the reserve price is set too high, in which case the auction may not result in a transaction). On the other hand, if there is only one bidder, or if there is collusion, then the final price will be close to the reserve price.

In our view, the reserve price could be pegged to the 2001 price discovery by suitably indexing it for both, inflation and cost of money-PLR. By following this method the price arrived at would be around Rupees 3500 to 4000 crore at PLR of say 12%.

We have carried out a calculation to determine the reserve price of the spectrum on the basis of cost contribution through this important scare national resource which is like a raw material vital to provide connectivity. - Let's take 3 situations wherein reserve price of the spectrum is assumed to be 5000 crore, 7500 crore and 10,000 crore for a 4.4 MHz block. By a simple mortgage type calculation for an asset acquired for 20 years, the Equated Monthly Instalment ("**EMI**") is as per table below. This EMI includes both interest as well as the principle amount.

Spectrum Cost (Rupees)	EMI per month at 1% For 20 years for each of the 6 players (Rupees)	No of players	Total EMI paid per month by all the 6 players (Rupees)
5000 crore	50 crore	6	300 crore
7500 crore	75 crore	6	450 crore
10,000 crore	100 crore	6	600 crore

Now assuming that number of total subscribers is 50 crore and the ARPU is 200, the monthly revenue comes up to 10,000 crore. In all the above cases, this cost of spectrum is a miniscule component of the revenues. Assuming that new players have 10% market share, the revenue for them totals up to 1000 crore, which is greater than > EMI's paid in all the three situations by all the 6 players.

However it is obvious that revenue of each of new operators/players depends upon the number of subscribers it has. Let us say Company ABC started its telecom operations in 2009 with zero subscribers and paid the spectrum cost as 1700 crore at that time. So that means Company ABC, has agreed to pay Rupees 17 crore monthly as EMI for the next 20 years. As on January 2012, his subscriber base is, let us say 4 crore and he is still paying Rupees 17 crore EMI, which is clearly an underpaid amount compared to a revenue of around 600 crore at Rupees 150 ARPU.

In the current scenario if reserve price is set at Rupees 5000 crore, with 4 crore as subscriber base, Company ABC can easily generate a revenue worth Rupees 800 crore monthly - 4 crore X 200 (monthly ARPU). Company ABC can easily pay the EMI that is 50 crore monthly for 20 years. All in all there is no reason of setting the reserve price of the spectrum at a low cost considering the above calculations.

Taking 30% out of each of the cost as tax and other deductions, remaining 6 to 10% can be considered for determining the reserve price of the spectrum to be auctioned.

It may not be out of place to mention that a licensee pays around 30% in taxes out of the ARPU. In order to balance the possible higher spectrum charge as result of a market determined price the Regulator may look at a graded tax regime, which may be low to begin with for say for 5 years and ramped up after that say to 20% to start and ramped to 30% or a situation of neutral revenues. Therefore, we believe that a balancing act of an upfront cost and compulsory taxes would bring about equality between the old and new players.

5.3 **Price Discovery**: By the above method, price discovery should be per MHz per block of spectrum.

5.4 **Grant of New License:** Post the conclusion of the auction, all Licenses granted should be a new license with a start and end date. This in turn would imply that all licensees who got their licenses in 2008 starting from 2008 will be wiped out by default by granting 20 years from current date for the license. This can be fruitful for those players whose licenses have been cancelled since they will get the current start date for the license.

5.5 **Refund of License Fees**: We are of the view that at least the entry fees of those players whose licenses have been cancelled by SC should be entitled for full refund of their license fee of 1658 crore. It may be noted that the Letter of Intent issued in 2008 to the licensees were granted as **"conditional, provisional and subject to and no guarantee of spectrum"**. Further, Clause 5 of the unified access service license provides for modification of the terms and conditions of license when there is a public interest.

We suggest that Regulator can take a practical view for refund of all the monies paid by those who face cancellations. Another option which may be explored by the Regulator is to set-off the license fees as well as other payments made in terms of the license agreement by the licensees whose license have been cancelled against the fees for grant of fresh licenses and allocation of spectrum by auction. If such available credit is short for set-off, such short payment should be allowed to be paid within a period of thirty days of grant of license or, as the case may be, allocation of the spectrum after completion of the auction. Similarly, any excess credit available for set-off should be refunded back to the respective license holder within thirty days of communication of the Quashed License holder that either it is not participating in further process or it has not succeeded in procuring fresh license(s) and / or spectrum, as the case may be.

5.6 **Terms of the License Agreement to remain the same**: The terms and conditions as specified in the existing License Agreement could remain the same as for incumbent operators including the duration of license (i.e. duration of 20 years from the date of allocation of the spectrum after completion of the auction).

5.7 **Asset Transfer**: If a licensee who is impacted by the Judgment is unwilling to participate in the process any more or is unsuccessful in either procuring a new license and / or spectrum in the auction, it should be allowed to sell its assets, infrastructure and transfer its employees, which will ensure continuity of employment for the employees as well as facilitate the successful licensee acquiring the same to effectively meet its roll-out obligations expeditiously in terms of the unified access service license agreement by utilizing the existing infrastructure.

5.8 **Subscribers:** Any existing customer contract of a licensee whose license has been quashed should be allowed to be continued on such terms as maybe agreed if it is successful in obtaining a new license.

5.9 **Timeframe for Auction:** As per the Judgment, the process of auction should be completed within a timeframe of four months from the date of the Judgment.

6. Conclusion:

6.1 From the above it can be seen that there is so much of hype that by an auction process resulting in a market determined price point for the spectrum. As per the calculations above the cost of spectrum even at depressed rates of ARPU at Rs 152 is within 3% compared to the 30% taxes which the government charges towards their own revenue generation. There is also a need to look at balancing the spectrum component and the taxes. However it demonstrates a myth that auction could result in a higher cost to the consumers.

6.2 Lastly, we want to highlight the fact that foreign investors have invested in India in good faith and in a right way. They should be given a fair chance to express themselves as they in some way or the other help in the growth of the Indian Economy. In future many technologies will be launched, for which government may seek foreign investment. For example we are going to launch 4G soon, wherein foreign investment is required. In the current scenario no investor would invest knowing that 2 years after 4G, they could lose all their investments. Because of some faulty process, t there has to be a solution for this and it totally depends on the government. Some of the companies have built up a large customer base and these are real operations with thousands of employees, vendors etc. In our view this is the correct time for government to actually put right guidelines and principles at place. Please understand India is a big economy in itself and thousands of foreign investors are keen India for businesses. We have to portray India as a responsible country and we need to protect rights of people who are not responsible for any wrong. No one at any point of time should be given an undue advantage.

Annexure-A

	Sl. No.	Name of Licensee Company	Service Area	Type of Licence	Effective Date of Licence
1	38	Bharti Airtel Limited	Gujarat	UAS	28-Sep-2001
2	39	Bharti Airtel Limited	Haryana	UAS	28-Sep-2001
3	43	Bharti Airtel Limited	Kerala	UAS	28-Sep-2001
4	45	Bharti Airtel Limited	Madhya Pradesh	UAS	28-Sep-2001
5	46	Bharti Airtel Limited	Maharashtra	UAS	28-Sep-2001
6	47	Bharti Airtel Limited	Mumbai	UAS	28-Sep-2001
7	50	Bharti Airtel Limited	Tamilnadu (including Chennai Service Area)	UAS	28-Sep-2001
8	52	Bharti Airtel Limited	Uttar Pradesh (West)	UAS	28-Sep-2001
9	86	Idea Cellular Ltd.	Delhi	CMTS	5-Oct-2001
10	89	Idea Cellular Ltd.	Himachal Pradesh	CMTS	5-Oct-2001
11	100	Idea Cellular Ltd.	Rajasthan	CMTS	5-Oct-2001
12	102	Idea Cellular Ltd.	Uttar Pradesh (East)	CMTS	5-Oct-2001
13	129	Reliance Communications Ltd.	Andhra Pradesh	UAS	20-Jul-2001
14	130	Reliance Communications Ltd.	Bihar	UAS	20-Jul-2001
15	131	Reliance Communications Ltd.	Delhi	UAS	20-Jul-2001
16	133	Reliance Communications Ltd.	Haryana	UAS	20-Jul-2001
17	134	Reliance Communications Ltd.	Himachal Pradesh	UAS	20-Jul-2001
18	136	Reliance Communications Ltd.	Karnataka	UAS	20-Jul-2001
19	137	Reliance Communications Ltd.	Kerala	UAS	20-Jul-2001
20	138	Reliance Communications Ltd.	Kolkata	UAS	20-Jul-2001
21	139	Reliance Communications Ltd.	Madhya Pradesh	UAS	20-Jul-2001
22	140	Reliance Communications Ltd.	Maharashtra	UAS	20-Jul-2001
23	141	Reliance Communications Ltd.	Mumbai	UAS	20-Jul-2001
24	142	Reliance Communications Ltd.	Orissa	UAS	20-Jul-2001
25	143	Reliance Communications Ltd.	Punjab	UAS	20-Jul-2001
26	144	Reliance Communications Ltd.	Rajasthan	UAS	20-Jul-2001
27	145	Reliance Communications Ltd.	Tamilnadu (including Chennai Service Area)	UAS	26-Sep-2001
28	146	Reliance Communications Ltd.	Uttar Pradesh (East)	UAS	20-Jul-2001
29	147	Reliance Communications Ltd.	Uttar Pradesh (West)	UAS	20-Jul-2001
20	148	Reliance Communications Ltd.	West Bengal	UAS	20-Jul-2001
31	152	Reliance Telecom Ltd.	Kolkata	UAS	27-Sep-2001
32	196	Tata Teleservices Ltd.	Delhi	UAS	31-Aug-2001
33	197	Tata Teleservices Ltd.	Gujarat	UAS	31-Aug-2001
34	201	Tata Teleservices Ltd.	Karnataka	UAS	31-Aug-2001
35	209	Tata Teleservices Ltd.	Tamilnadu (including Chennai Service Area)	UAS	31-Aug-2001
36	266	Vodafone Essar South Ltd.	Andhra Pradesh	UAS	29-Sep-2001
37	267	Vodafone Essar South Ltd.	Chennai	UAS	26-Sep-2001
38	268	Vodafone Essar South Ltd.	Karnataka	UAS	26-Sep-2001
39	269	Vodafone Essar South Ltd.	Punjab	UAS	5-Oct-2001

	Sl. No.	Name of Licensee Company	Service Area	Type of Licence	Effective Date of Licence
1	35	Bharti Airtel Limited	Assam	UAS	8-Jul-2004
2	36	Bharti Airtel Limited	Bihar	UAS	10-Feb-2004
3	41	Bharti Airtel Limited	Jammu & Kashmir	UAS	10-Feb-2004
4	48	Bharti Airtel Limited	Orissa	UAS	10-Feb-2004
5	51	Bharti Airtel Limited	Uttar Pradesh (East)	UAS	10-Feb-2004
6	53	Bharti Airtel Limited	West Bengal	UAS	11-Feb-2004
7	56	Dishnet Wireless Ltd.	Assam	UAS	21-Apr-2004
8	57	Dishnet Wireless Ltd.	Bihar	UAS	21-Apr-2004
9	59	Dishnet Wireless Ltd.	Himachal Pradesh	UAS	21-Apr-2004
10	60	Dishnet Wireless Ltd.	Jammu & Kashmir	UAS	21-Apr-2004
11	64	Dishnet Wireless Ltd.	North East	UAS	21-Apr-2004
12	65	Dishnet Wireless Ltd.	Orissa	UAS	21-Apr-2004
13	69	Dishnet Wireless Ltd.	West Bengal	UAS	21-Apr-2004
14	135	Reliance Communications Ltd.	Jammu & Kashmir	UAS	6-Sep-2004
15	195	Tata Teleservices Ltd.	Bihar	UAS	30-Jan-2004
16	198	Tata Teleservices Ltd.	Haryana	UAS	30-Jan-2004
17	199	Tata Teleservices Ltd.	Himachal Pradesh	UAS	30-Jan-2004
18	202	Tata Teleservices Ltd.	Kerala	UAS	30-Jan-2004
19	203	Tata Teleservices Ltd.	Kolkata	UAS	30-Jan-2004
20	204	Tata Teleservices Ltd.	Madhya Pradesh	UAS	12-Feb-2004
21	206	Tata Teleservices Ltd.	Orissa	UAS	30-Jan-2004
22	207	Tata Teleservices Ltd.	Punjab	UAS	30-Jan-2004
23	208	Tata Teleservices Ltd.	Rajasthan	UAS	30-Jan-2004
24	210	Tata Teleservices Ltd.	Uttar Pradesh (East)	UAS	30-Jan-2004
25	211	Tata Teleservices Ltd.	Uttar Pradesh (West)	UAS	30-Jan-2004
26	212	Tata Teleservices Ltd.	West Bengal	UAS	30-Jan-2004
27	270	Vodafone Essar South Ltd.	Uttar Pradesh (West)	UAS	13-Feb-2004
28	271	Vodafone Essar South Ltd.	West Bengal	UAS	23-Mar-2004

Annexure - B

	Sl. No.	Name of Licensee Company	Service Area	Type of Licence	Effective Date of Licence
1	1	Aditya Birla Telecom Ltd.	Bihar	UAS	6-Dec-2006
2	3	Aircel Ltd.	Andhra Pradesh	UAS	5-Dec-2006
3	4	Aircel Ltd.	Delhi	UAS	5-Dec-2006
4	5	Aircel Ltd.	Gujarat	UAS	5-Dec-2006
5	6	Aircel Ltd.	Karnataka	UAS	5-Dec-2006
6	7	Aircel Ltd.	Maharashtra	UAS	5-Dec-2006
7	8	Aircel Ltd.	Mumbai	UAS	6-Dec-2006
8	9	Aircel Ltd.	Rajasthan	UAS	5-Dec-2006
9	58	Dishnet Wireless Ltd.	Haryana	UAS	14-Dec-2006
10	61	Dishnet Wireless Ltd.	Kerala	UAS	14-Dec-2006
11	62	Dishnet Wireless Ltd.	Kolkata	UAS	14-Dec-2006
12	63	Dishnet Wireless Ltd.	Madhya Pradesh	UAS	14-Dec-2006
13	66	Dishnet Wireless Ltd.	Punjab	UAS	14-Dec-2006
14	67	Dishnet Wireless Ltd.	Uttar Pradesh (East)	UAS	14-Dec-2006
15	68	Dishnet Wireless Ltd.	Uttar Pradesh (West)	UAS	14-Dec-2006
16	96	Idea Cellular Ltd.	Mumbai	UAS	5-Dec-2006
17	272	Vodafone Essar Spacetel Ltd.	Assam	UAS	5-Dec-2006
18	273	Vodafone Essar Spacetel Ltd.	Bihar	UAS	5-Dec-2006
19	274	Vodafone Essar Spacetel Ltd.	Himachal Pradesh	UAS	5-Dec-2006
20	275	Vodafone Essar Spacetel Ltd.	Jammu & Kashmir	UAS	5-Dec-2006
21	277	Vodafone Essar Spacetel Ltd.	North East	UAS	5-Dec-2006
22	278	Vodafone Essar Spacetel Ltd.	Orissa	UAS	5-Dec-2006

Annexure C

Details of allotted spectrum to all the GSM operators

S.No.	Service Area	Operators	Date of allocation of spectrum	Allotment in 900MHz band in MHz	Allotment in 1800MHz band in MHz	Total Allotment in MHz
1	Delhi	Bharti	31.05.1995	4.4		
			31.12.1996	1.8		
			17.07.2002	1.8		
			17.07.2003		2.0	
		Total		8.0	2.0	10.0
		Vodafone	05.07.1995	4.4		
			31.12.1996	1.8		
			17.07.2002	1.8		
			15.10.2003		2.0	
		Total		8.0	2.0	10.0
		MTNL	22.12.2000	6.2		
			06.12.2005		1.8	
			30.03.2007		4.4	
		Total		6.2	6.2	12.4
		IDEA	22.10.2002		6.2	
			06.12.2005		1.8	
		Total			8.0	8.0
		Aircel Ltd	11.01.2008		4.4	4.4
		Reliance	11.01.2008		4.4	4.4
		Etisalat DB Pvt Ltd	28.08.2008		4.4	4.4
		Total in Delhi S.A		22.2	31.4	53.6
2	Mumbai	Vodafone	31.05.1995	4.4		
			04.02.1997	1.8		
			17.07.2002	1.8		
			15.10.2003		2.0	
		Total		8.0	2.0	10.0
		Bharti	11.03.2002		6.2	
			21.04.2004		1.8	
			20.01.2006		1.2	
		Total			9.2	9.2
		MTNL	22.12.2000	6.2		
			06.12.2005		1.8	
			30.03.2007		4.4	
		Total		6.2	6.2	12.4
		Idea	11.01.2008		4.4	4.4
		Reliance	11.01.2008		4.4	4.4
		BPL	27.06.1995	4.4		
			Dec 1996	1.8		
			13.01.2003	1.8		
			06.01.2004		2.0	
		Total		8.0	2.0	10.0
		Aircel Ltd.	11.01.2008		4.4	4.4
		Etisalat DB Pvt. Ltd	09.09.2008		4.4	4.4
		Datacom	09.09.2008		4.4	4.4
		Unitech	09.09.2008		4.4	4.4
		TTSL	09.09.2008		4.4	4.4
		Total in Mumbai S.A		22.2	50.2	72.4
3	Kolkata	Bharti	29.11.1995	4.4		
			28.12.1999	1.8		
			20.01.2005		1.8	
		Total		6.2	1.8	8.0
		BSNL	22.12.2000	[illegible]		
			10.05.2007		3.8	
		Total		6.2	3.8	10.0
		Reliance	11.03.2002		6.2	6.2
		Aircel	05.04.2007		4.4	4.4
		Vodafone	29.11.1995	4.4		
			28.01.1997	1.8		
			30.05.2004	1.8		
			12.07.2006		2.0	
		Total		7.8	2.0	9.8
		Datacom	09.01.2009		4.4	4.4
		Idea	09.01.2009		4.4	4.4
		Unitech	09.01.2009		4.4	4.4
		TTSL	09.01.2009		4.4	4.4
		Loop	09.01.2009		4.4	4.4
		Total in S.A		29.2	40.2	60.4

S No	Service Area	Operators	Date of allocation of spectrum	Allotment in 900MHz band in MHz	Allotment in 1800MHz band in MHz	Total Allotment in MHz
4	Maharashtra	Bharti	01.04.2002		6.2	
			14.11.2008		1.0	
			09.03.2009		1.0	
		Total			8.2	8.2
		Idea	12.12.1995	4.4		
			09.08.2000	1.8		
			31.12.2003	1.6		
			01.04.2005		2.0	
		Total		7.8	2.0	9.8
		Reliance	10.01.2008		4.4	4.4
		BSNL	22.12.2000	6.2		
			27.10.2004		1.8	
			12.03.2007		2.0	
		Total		6.2	3.8	10.0
		Vodafone	19.12.1995	4.4		
			28.12.1999	1.8		
		Total		6.2		6.2
		Aircel Ltd.	10.01.2008		4.4	4.4
		Datacom	10.09.2008		4.4	4.4
		Unitech	10.09.2008		4.4	4.4
		Etisalat DB Pvt. Ltd	10.09.2008		4.4	4.4
		Spice	06.05.2009		4.4	4.4
		Loop	14.11.2008		4.4	4.4
		TTSL	14.11.2008		4.4	4.4
		Total in S.A		20.2	49.2	69.4
5	Gujarat	Vodafone	19.12.1995	4.4		
			09.03.2000	1.8		
			31.12.2003	1.6		
			13.05.2005		2.0	
		Total		7.8	2.0	9.8
		Reliance	11.01.2008		4.4	4.4
		BSNL	22.12.2000	6.2		1
			16.05.2005		1.2	
		Total		6.2	1.2	7.4
		Idea	12.12.1995	4.4		
			09.08.2000	1.8		
		Total		6.2		6.2
		Bharti	01.04.2002		6.2	6.2
		Aircel Ltd.	11.01.2008		4.4	4.4
		Datacom	25.09.2008		4.4	4.4
		Unitech	25.09.2008		4.4	4.4
		Etisalat DB Pvt. Ltd	25.09.2008		4.4	4.4
		Loop	09.03.2009		4.4	4.4
		TTSL	09.03.2009		4.4	4.4
		Total in S.A		20.2	40.2	60.4
6	A.P	Vodafone	11.03.2002		6.2	6.2
		Aircel Ltd	10.01.2008		4.4	4.4
		Reliance	10.01.2008		4.4	4.4
		Bharti	12.12.1995	4.4		
			03.04.2000	1.8		
			09.02.2004	1.6		
			27.05.2008		1.4	
			09.03.2009		0.8	
		Total		7.8	2.2	10.0
		BSNL	22.12.2000	6.2		
			20.09.2004		1.8	
			12.03.2007		2.0	
		Total		6.2	3.8	10.0
		IDEA	19.12.1995	4.4		
			27.12.2000	1.8		
			20.09.2004		1.8	
		Total		6.2	1.8	8.0
		Datacom	27.05.2008		4.4	4.4
		Unitech	27.05.2008		4.4	4.4
		Spice	27.05.2008		4.4	4.4
		Etisalat DB Pvt. Ltd	27.05.2008		4.4	4.4
		Loop	27.05.2008		4.4	4.4
		TTSL	27.05.2008		4.4	4.4
		Total in S.A		20.2	49.2	69.4

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S No.	Service Area	Operators	Date of allocation of spectrum	Allocation in 900MHz band in MHz	Allocation in 1800MHz band in MHz	in MHz
7	Karnataka	Bharti	15.02.1996	4.4		
			03.04.2000	1.8		
			31.12.2003	1.6		
			03.12.2004		2.0	
			24.09.2008		0.2	
		Total		7.8	2.2	10.0
		Spice	04.04.1996	4.4		
			03.04.2000	1.8		
		Total		6.2		6.2
		Vodafone	11.03.2002		6.2	
			22.01.2005		1.8	
		Total			8.0	8.0
		Aircel Ltd.	10.01.2008		4.4	4.4
		Reliance	10.01.2008		4.4	4.4
		BSNL	22.12.2000	6.2		
			05.11.2004		1.8	
			05.04.2007		2.0	
		Total		6.2	3.8	10.0
		Datacom	30.05.2008		4.4	4.4
		Idea	30.05.2008		4.4	4.4
		Unitech	30.05.2008		4.4	4.4
		Etisalat DB Pvt. Ltd	30.05.2008		4.4	4.4
		Loop	30.05.2008		4.4	4.4
		TTSL	30.05.2008		4.4	4.4
		Total in S.A		20.2	49.2	69.4
8	Chennai	Aircel Ltd	29.11.1995	4.4		
			01.03.2000	1.8		
			20.01.2006		1.8	
			15.11.2006		0.6	
		Total		6.2	2.4	8.6
		Bharti	29.11.1995	4.4		
			29.01.1998	1.8		
			20.01.2006		1.8	
			15.11.2006		0.6	
		Total		6.2	2.4	8.6
		BSNL	22.12.2000	6.2		
			20.03.2006		1.8	
		Total		6.2	1.8	8.0
		Vodafone	30.05.2002		6.2	
			01.06.2006		1.8	
		Total			8.0	8.0
		Total Chennai S.A		18.6	14.6	33.2
	Tamilnadu	Vodafone	12.12.1995	4.4		
			29.12.1999	1.8		
			30.07.2008	1.0		
		Total		7.2		7.2
		Aircel Ltd	31.12.1998	4.4		
			06.10.1999	1.8		
			09.01.2004	1.6		
			03.12.2004		2.0	
		Total		7.8	2.0	9.8
		BSNL	22.12.2000	6.2		
			20.09.2004		1.8	
		Total		6.2	1.8	8.0
		Bharti	11.03.2002		6.2	6.2
		Total in T.N S.A		21.2	10.0	31.2
	Tamilnadu (incl of Chennai)	Bharti	30.07.2008		0.6	0.6
		Reliance	10.01.2008		4.4	4.4
		BSNL	12.03.2007		2.0	2.0
		Datacom	22.04.2008		4.4	4.4
		Idea	22.04.2008		4.4	4.4
		Unitech	22.04.2008		4.4	4.4
		Etisalat DB Pvt. Ltd	22.04.2008		4.4	4.4
		Loop	22.04.2008		4.4	4.4
		TTSL	22.04.2008		4.4	4.4
		Total		0.0	33.4	33.4

S.No.	Service Area	Operators	Date of allocation of spectrum	Allotment in 900MHz band in MHz	Allotment in 1800MHz band in MHz	Total Allotment in MHz
9	Kerala	BSNL	22.12.2000	6.2		
			20.09.2004		1.8	
			12.03.2007		2.0	
		Total		6.2	3.8	10.0
		Vodafone	12.12.1995	4.4		
			28.12.1999	1.8		
		Total		6.2		6.2
		Bharti	11.03.2002		6.2	6.2
		Idea	12.12.1995	4.4		
			28.12.1999	1.8		
			28.10.2004		1.8	
		Total		6.2	1.8	9.0
		Reliance	10.01.2008		4.4	4.4
		Dishnet	10.01.2008		4.4	4.4
		Datacom	15.05.2008		4.4	4.4
		Unitech	15.05.2008		4.4	4.4
		Etisalat DB Pvt. Ltd	15.05.2008		4.4	4.4
		Loop	15.05.2008		4.4	4.4
		TTSL	15.05.2008		4.4	4.4
		Total in S.A		18.6	42.6	61.2
10	Punjab	Vodafone	03.04.2002		4.4	
			28.01.2004		1.8	
		Total			6.2	6.2
		Bharti	12.12.1995	4.4		
			28.12.1999	1.8		
			09.01.2004	1.6		
		Total		7.8		7.8
		Spice	04.04.1996	4.4		
			03.04.2000	1.8		
			09.01.2004	1.6		
		Total		7.8		7.8
		BSNL	22.12.2000	6.2		6.2
		Reliance	11.01.2008		4.4	4.4
		Aircel Ltd.	11.01.2008		4.4	4.4
		HFCL	10.09.2008		4.4	4.4
		Idea	06.05.2009		4.4	4.4
		Unitech	10.09.2008		4.4	4.4
		Etisalat DB Pvt. Ltd	10.09.2008		4.4	4.4
		Loop	09.03.2009		4.4	4.4
		TTSL	09.03.2009		4.4	4.4
		Total in S.A		21.8	41.4	63.2
11	Haryana	Bharti	01.04.2002		6.2	6.2
		BSNL	22.12.2000	6.2		
			12.07.2007		3.8	
		Total		6.2	3.8	10.0
		Reliance	11.01.2008		4.4	4.4
		Idea	12.12.1995	4.4		
			28.12.1999	1.8		
		Total		6.2		6.2
		Vodafone	28.12.1995	4.4		
			02.01.2001	1.8		
		Total		6.2		6.2
		Dishnet	11.01.2008		4.4	4.4
		Datacom	04.12.2008		4.4	4.4
		Unitech	04.12.2008		4.4	4.4
		Etisalat DB Pvt. Ltd	04.12.2008		4.4	4.4
		Spice	06.05.2009		4.4	4.4
		TTSL	04.12.2008		4.4	4.4
		Loop	04.12.2008		4.4	4.4
		Total in S.A		18.6	45.2	63.8

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S.No.	Service Area	Operators	Date of allocation of spectrum	Allotment in 900MHz band in MHz	Allotment in 1800MHz band in MHz	Total Allocation in MHz
12	UP(West)	Bharti	03.04.2002		6.2	6.2
		Vodafone	06.05.2004	6.2		6.2
		Idea	12.12.1995	4.4		
			26.12.1999	1.8		
			23.01.2006		1.8	
		Total		6.2	1.8	8.0
		BSNL	22.12.2000	6.2		
			28.01.2006		1.8	
			12.03.2007		2.0	
		Total		6.2	3.8	10.0
		Reliance	11.01.2008		4.4	4.4
		Aircel Ltd	11.01.2008		4.4	4.4
		Datacom	25.09.2008		4.4	4.4
		Unitech	25.09.2008		4.4	4.4
		Etisalat DB Pvt. Ltd	25.09.2008		4.4	4.4
		Loop	26.12.2008		4.4	4.4
		TTSL	26.12.2008		4.4	4.4
		Total in S.A		13.6	42.6	61.2
13	UP(E)	Bharti	06.05.2004	6.2		
			21.01.2009		1.0	
		Total		6.2	1.0	7.2
		Vodafone	12.12.1995	4.4		
			02.01.2001	1.8		
			28.01.2006		1.8	
			21.01.2009		0.2	
		Total		6.2	2.0	8.2
		Reliance	11.01.2008		4.4	4.4
		Idea	23.04.2002		4.4	
			22.02.2006		1.8	
		Total			6.2	6.2
		BSNL	22.12.2000	6.2		
			28.01.2006		1.8	
			12.03.2007		2.0	
		Total		6.2	3.8	10.0
		Dishnet	11.01.2008		4.4	4.4
		Datacom	10.09.2008		4.4	4.4
		Unitech	10.09.2008		4.4	4.4
		Etisalat DB Pvt. Ltd	10.09.2008		4.4	4.4
		Loop	21.01.2009		4.4	4.4
		TTSL	21.01.2009		4.4	4.4
		Total in S.A		18.6	43.8	62.4
14	Rajasthan	Vodafone	12.12.1995	4.4		
			02.01.2001	1.8		
		Total		6.2		6.2
		Idea	01.04.2002		4.4	
			10.12.2005		1.8	
		Total			6.2	6.2
		Reliance	11.01.2008		4.4	4.4
		BSNL	22.12.2000	6.2		
			08.05.2006		1.8	
		Total		6.2	1.8	8.0
		Bharti	22.04.1996	4.4		
			10.08.2000	1.8		
			23.12.2008		2.0	
		Total		6.2	2.0	8.2
		Aircel Ltd	11.01.2008		4.4	4.4
		Shyam Telelink	23.12.2008		4.4	4.4
		Datacom	23.12.2008		4.4	4.4
		Unitech	23.12.2008		4.4	4.4
		Etisalat DB Pvt. Ltd	23.12.2008		4.4	4.4
		TTSL	23.12.2008		4.4	4.4
		Loop	23.12.2008		4.4	4.4
		Total in S.A		18.6	45.2	63.8

S.No.	Service Area	Operators	Date of allocation of spectrum	Allotment in 900MHz band in MHz	Allotment in 1800MHz band in MHz	Total Allotmen in MHz
15	M.P	Bharti	01.04.2002		6.2	
			08.01.2007		1.8	
		Total			8.0	8.0
		Vodafone	11.02.2008		4.4	4.4
		BSNL	22.12.2000	6.2		
			10.05.2007		3.8	
		Total		6.2	3.8	10.0
		Reliance	12.12.1995	4.4		
			08.01.2001	1.8		
		Total		6.2		6.2
		IDEA	12.12.1995	4.4		
			09.09.2002	1.8		
			02.11.2006		1.8	
		Total		6.2	1.8	8.0
		Dishnet	11.01.2008		4.4	4.4
		Datacom	28.08.2008		4.4	4.4
		Unitech	28.08.2008		4.4	4.4
		Loop	28.08.2008		4.4	4.4
		TTSL	28.08.2008		4.4	4.4
		Allianz	28.08.2008		4.4	4.4
		Total in S.A		18.6	44.4	63.0
16	West Bengal	Bharti	12.08.2004	4.4		
			10.01.2008		1.8	
		Total		4.4	1.8	6.2
		Dishnet	15.12.2004		4.4	4.4
		Vodafone	12.08.2004	4.4		
			10.01.2008		1.8	
		Total		4.4	1.8	6.2
		Reliance	12.12.1995	4.4		
			20.02.2004		1.8	
		Total		4.4	1.8	6.2
		BSNL	22.12.2000	6.2		
			12.03.2007		1.8	
		Total		6.2	1.8	8.0
		Datacom	09.01.2009		4.4	4.4
		IDEA	29.01.2009		4.4	4.4
		Unitech	09.01.2009		4.4	4.4
		Loop	09.01.2009		4.4	4.4
		TTSL	09.01.2009		4.4	4.4
		Total in S.A		19.4	33.6	53.0
17	HP	Vodafone	11.01.2008		4.4	4.4
		Dishnet	13.03.2006		4.4	4.4
		Bharti	12.12.1995	4.4		
			19.09.2003	1.8		
		Total		6.2		6.2
		Reliance	12.12.1995	4.4		
			25.08.2003	1.8		
		Total		6.2		6.2
		Idea	11.03.2002		4.4	4.4
		BSNL	22.12.2000	6.2		
			12.07.2007		3.8	
		Total		6.2	3.8	10.0
		Datacom	04.12.2008		4.4	4.4
		Unitech	04.12.2008		4.4	4.4
		S.Tel	04.12.2008		4.4	4.4
		Loop	04.12.2008		4.4	4.4
		TTSL	04.12.2008		4.4	4.4
		Total in S.A		19.6	38.0	57.6

			allocation of spectrum	900MHz band in MHz	1800MHz band in MHz	in MHz
18	Bihar	Bharti	06.05.2004	6.2		
			09.06.2006		1.9	
			03.10.2008		9.2	
			30.11.2008		1.0	
		Total		6.2	3.0	9.2
		Vodafone	11.01.2008		4.4	4.4
		Reliance	12.12.1995	4.4		
			28.12.1999	1.8		
			23.10.2006		1.9	
		Total		6.2	1.8	8.0
		BSNL	22.12.2000	6.2		
			24.08.2006		1.8	
			05.04.2007		2.0	
		Total		6.2	3.8	10.0
		Dishnet	07.02.2006		4.4	4.4
		ABTL	11.01.2008		4.4	4.4
		Datacom	03.10.2008		4.4	4.4
		Unitech	03.10.2008		4.4	4.4
		S Tel	03.10.2008		4.4	4.4
		Loop	03.10.2008		4.4	4.4
		TTSL	03.10.2008		4.4	4.4
		Allianz	03.10.2008		4.4	4.4
		Total in S.A		18.6	48.2	66.8
19	Orissa	Vodafone	11.01.2008		4.4	4.4
		Reliance	12.12.1995	4.4		
			06.09.2001	1.8		
		Total		6.2		6.2
		BSNL	22.12.2000	6.2		
			10.05.2007		3.8	
		Total		6.2	3.8	10.0
		Dishnet	24.12.2004		4.4	4.4
		Bharti	06.05.2004	6.2		
			16.09.2006		1.8	
		Total		6.2	1.8	8.0
		Datacom	24.04.2008		4.4	4.4
		Idea	24.04.2008		4.4	4.4
		Unitech	24.04.2008		4.4	4.4
		S Tel	24.04.2008		4.4	4.4
		Loop	24.04.2008		4.4	4.4
		TTSL	24.04.2008		4.4	4.4
		Total in S.A		18.6	40.8	59.4
20	Assam	Vodafone	11.01.2008		4.4	4.4
		Bharti	27.12.2004	1.8		
			15.03.2005		2.6	
			10.11.2006		1.8	
		Total		1.8	4.4	6.2
		BSNL	26.04.2003	6.2		
			24.05.2007		3.8	
		Total		6.2	3.8	10.0
		Reliance	12.12.1995	4.4		
			06.10.2003	1.8		
		Total		6.2		6.2
		Dishnet	22.07.2004	4.4		
			01.12.2006		1.8	
		Total		4.4	1.8	6.2
		Datacom	22.12.2008		4.4	4.4
		Idea	22.12.2008		4.4	4.4
		Unitech	22.12.2008		4.4	4.4
		S Tel	22.12.2008		4.4	4.4
		Loop	22.12.2008		4.4	4.4
		Total in S.A		18.6	35.4	55.0

S.No.	Service Area	Operators	Date of allocation of spectrum	Allotment in 900MHz band in MHz	Allotment in 1800MHz band in MHz	Total Allotment in MHz
21	NE	Bharti	24.12.2004	4.4		
			23.12.2008		1.8	
		Total		4.4	1.8	6.2
		BSNL	28.04.2003	6.2		
			10.05.2007		3.8	
		Total		6.2	3.8	10.0
		Reliance	12.12.1995	4.4		
			20.01.2006		1.8	
		Total		4.4	1.8	6.2
		Dishnet	22.07.2004	4.4		4.4
		Vodafone.	11.01.2008		4.4	4.4
		Datacom	23.12.2008		4.4	4.4
		Idea	23.12.2008		4.4	4.4
		Unitech	23.12.2008		4.4	4.4
		Loop	23.12.2008		4.4	4.4
		S.Tel	23.12.2008		4.4	4.4
		Total in S.A		19.4	33.8	53.2
22	J & K	Vodafone	11.01.2008		4.4	4.4
		Reliance	11.01.2008		4.4	4.4
		BSNL	28.04.2003	6.2		
			16.06.2006	1.8		
		Total		8.0		8.0
		Dishnet	01.09.2004	4.4		4.4
		Bharti	22.06.2004	4.4		
			28.06.2006	1.8		
		Total		6.2		6.2
		Datacom	24.12.2008		4.4	4.4
		Idea	24.12.2008		4.4	4.4
		Unitech	24.12.2008		4.4	4.4
		S.Tel	24.12.2008		4.4	4.4
		Loop	24.12.2008		4.4	4.4
		Total in S.A		18.6	30.8	49.4