

Auction of 3G and BWA Spectrum

Information Memorandum

Government of India
Ministry of Communications & Information Technology
Department of Telecommunications

12th December 2008

Important Notice

This Information Memorandum has been prepared on behalf of the President of India by the Department of Telecommunications, Ministry of Communications & Information Technology, Government of India in connection with the proposed allocation of spectrum in the 2.1GHz, 2.3GHz and 2.5GHz bands by auction. Terms and expressions used in this Important Notice are as defined in Annexure I of the Memorandum.

The Memorandum is for information purposes only and has no binding force. It is made available on the express understanding that it will only be used by the Recipient for the sole purpose of assisting the Recipient in deciding whether it wishes to proceed with a further investigation of possible participation in the Auctions. The Memorandum is not intended to form any part of the basis of any investment decision or other evaluation or any decision to participate in the Auctions and should not be considered as a recommendation by the Government or its advisers to any Recipient of the Memorandum to participate in the Auctions.

Each Recipient must make its own independent assessment of the potential value of an allocation of the spectrum after making such investigation as it may deem necessary in order to determine whether to participate in the Auctions. All information contained in this Memorandum is subject to updating, modification and amendment. The amendments, if any, will be put up on the Auctions website. These amendments will be part of the Memorandum.

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This Memorandum has not been filed, registered or approved in any jurisdiction. Recipients of this Memorandum resident in jurisdictions outside India should inform themselves of, and observe any applicable legal requirements.

This Memorandum outlines the Government's expectations in relation to the proposed Auctions. The Government reserves the right, in its absolute discretion, at any stage, to withdraw its proposal to conduct the Auctions or any part thereof or to terminate further participation in the proposed Auctions by any entity, to change the structure and timing of the proposed Auctions, to refuse entry to any entity into the Auctions or to vary any other terms of spectrum allocation at any time without giving any reason whatsoever.

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I INTRODUCTION

1.1 Summary

1.1.1 Introduction

This Information Memorandum (the “Memorandum”) provides information for those parties wishing to bid for spectrum to support Third Generation (“3G”) mobile services and Broadband Wireless Access (“BWA”) in India. It supplements and updates the guidelines that were issued by the Department of Telecommunications (“DoT”) on 1st August, 2008 along with the amendments issued on 11th September, 2008 (“Guidelines”). Copies of the Guidelines and this Memorandum are available at the Auctions website.

In particular, the Memorandum:

- Summarises the steps which Recipients need to take in order to pre-qualify and take part in the forthcoming auction for radio spectrum in the 2.1GHz band to support 3G mobile services (the “3G Auction”) and radio spectrum in the 2.3GHz and 2.5GHz bands to support BWA (the “BWA Auction”) (together, the “Auctions”);
- Summarises the rules and timetable applicable to the Auctions; and
- Provides background information on the Indian telecommunications market and the regulatory environment.

Recipients of the Memorandum (“Recipients”) intending to apply to pre-qualify for either of the Auctions, should note that the information contained in the Memorandum does not purport to be complete. The intention of the Memorandum is to bring to Recipients’ attention a number of key issues. Recipients will need to undertake their own detailed investigations of the issues raised in the Memorandum and any other relevant issues.

The DoT will separately issue a Notice Inviting Applications for participation in the Auctions (the “Notice”). In the event of any difference between the procedures set out in the Memorandum and the provisions of the Notice (or any other applicable laws, regulations or other statutory provisions), the latter are definitive and take precedence.

The Government of India (the “Government”) is keen that potential new entrants to the Indian telecommunications sector, as well as existing operators, should be encouraged to take part in the Auctions. To this end, the Government is taking a number of pro-competitive steps to enhance the commercial attractiveness of the 3G and BWA business plans for all operators as well as to provide new entrants with the opportunity to bid for the spectrum being auctioned and subsequently roll out their networks on a more equal footing with existing operators. Some of these steps include:

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- Allowing Prospective New Entrants to apply for Universal Access Service (“UAS”) licences after the award of spectrum (but before start of operations);
- Allowing foreign operators with experience of offering 3G services, wishing to enter the Indian mobile services market the flexibility to bid for spectrum on their own, and then transfer it to an Indian subsidiary;
- Announcement of the Mobile Number Portability (“MNP”) policy. The process for the appointment of MNP operators is already underway;
- The Government is in the process of finalising the Mobile Virtual Network Operator (“MVNO”) policy, which is expected to be announced shortly;
- Relaxation of External Commercial Borrowing (“ECB”) guidelines to permit ECB up to US\$ 500 million to finance spectrum acquisition fees.

The Government strongly encourages mobile network operators to share passive infrastructure such as masts and/ or sites and active infrastructure (excluding spectrum) such as antenna, feeder cable, Node B, Radio Access Network (“RAN”) and transmission system in order to reduce the cost of deployment and to minimise the environmental impact of networks. Recent years have seen the growth of several telecom tower companies offering passive infrastructure sharing services.

1.1.2 Objectives of the Auctions

The Government has set itself the following objectives from the Auctions:

- Maximise revenue proceeds from the Auctions;
- Ensure efficient use of spectrum and avoid hoarding;
- Stimulate competition in the sector, promote rollout of 3G and Broadband services and help resolve congestion issues related to second generation (“2G”) mobile services;
- Conduct the Auctions in a timely and transparent manner.

The Government reserves the right to cancel or postpone the Auctions, in part or in full in order to safeguard the above objectives. The Government has the sole discretion to determine the relative priority of the objectives and whether the objectives are adequately safeguarded by the Auctions.

1.1.3 Eligibility conditions

Recipients considering submitting applications to pre-qualify for the Auctions should note the following key points regarding eligibility:

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For the spectrum in 2.1GHz band (“3G Spectrum”):

Any entity:

- (i) who holds a UAS/ Cellular Mobile Telephone Service (“CMTS”) licence; or
- (ii)
 - (a) who has previous experience of running 3G telecom services either directly or through a majority-owned subsidiary; and
 - (b) gives an undertaking to obtain UAS licence through a New Entrant Nominee UAS Licensee as per the DoT guidelines before starting telecom operations

can bid for 3G Spectrum (subject to other provisions of the Notice).

For the purpose of Clause 1.1.3(ii)(a), a wholly and directly-owned company shall be entitled to use the qualifications of its owner.

For the spectrum in 2.3GHz and 2.5GHz bands (“BWA Spectrum”):

Any entity:

- (i) who holds a UAS/ CMTS licence; or
- (ii) who holds a Internet Service Provider (“ISP”) licence (category ‘A’ or ‘B’);
or
- (iii) gives an undertaking to obtain a UAS licence through a New Entrant Nominee UAS Licensee as per the DoT guidelines before starting telecom operations

can bid for BWA Spectrum (subject to other provisions of the Notice).

Successful Bidders in the BWA Auction that currently hold an ISP-category ‘B’ licence will be required to migrate to ISP-category ‘A’ licence, at no additional cost, before they are awarded the BWA Spectrum.

For the sake of clarity, the DoT guidelines stipulate that a UAS licence can only be awarded to an Indian Company¹. Hence, foreign applicants will need to form an Indian subsidiary to obtain the UAS licence. However they are allowed to participate in the Auctions directly, and apply for a licence subsequently through an Indian subsidiary.

It is clarified that services can only be offered as per terms of the licence obtained by the operator. Award of spectrum does not confer any right to provide any telecom services, and these are governed by the terms and conditions of the licence obtained by the operator.

¹ A Company registered in India under the Indian Companies Act, 1956.

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Associated Licensees

In addition, the following participation restrictions would apply in case of Associated Licensees.

For the 3G Auction, Associated Licensees are defined as existing UAS/ CMTS licensees that are controlled, directly or indirectly, by a single entity, which also has atleast 26% shareholding in the company (the “Common Parent”). In the case of licensees that are listed on recognised² stock exchanges, a company of the Promoter group³ could also qualify as a Common Parent, regardless of the level of shareholding.

For the BWA Auction, Associated Licensees are defined as existing UAS/ CMTS/ ISP licensees that are controlled, directly or indirectly, by a single entity, which also has atleast 26% shareholding in the company. In the case of licensees that are listed on recognised stock exchanges, a company of the Promoter group could also qualify as a Common Parent, regardless of the level of shareholding.

For the purpose of either of the Auctions, Associated Licensees corresponding to a single Common Parent shall be required to nominate a single entity (either one of the Associated Licensees or the Common Parent) which shall be authorised to bid on their behalf (“Group Bidding Entity”).

In case a Group Bidding Entity is declared the Successful Bidder in any service area, and there is an Associated Licensee corresponding to the Group Bidding Entity in that service area, then the Government shall assign the spectrum to that Associated Licensee. In such a case, the Group Bidding Entity and the Associated Licensee shall both be jointly and severally liable for the performance of the bid obligations.

In case a Group Bidding Entity is declared the Successful Bidder in any service area in the 3G Auction, and there is no Associated Licensee corresponding to the Group Bidding Entity in that service area, then the Government shall assign the spectrum to the Group Bidding Entity or one of its Associated Licensees or a wholly-owned subsidiary of the Group Bidding Entity that acquires a UAS licence in that service area (“Nominee UAS Licensee”). In case the Nominee UAS Licensee is different from the Group Bidding Entity, the Group Bidding Entity and the Nominee UAS Licensee shall both be jointly and severally liable for the performance of the bid obligations.

In case a Group Bidding Entity is declared the Successful Bidder in any service area in the BWA Auction, and there is no Associated Licensee corresponding to the Group Bidding Entity in that service area (even after taking into account the migration to ISP-category ‘A’ licence), then the Government shall assign the spectrum to the Group Bidding Entity or one of its Associated Licensees or a wholly-owned subsidiary of the Group Bidding Entity that acquires a UAS licence in that service

² “Recognised stock exchanges” refers to stock exchanges recognised by the Securities and Exchange Board of India (SEBI).

³ Definition of “Promoter group” would be the applicable SEBI definition as contained in the most recent Securities and Exchange Board of India - Disclosure and Investor Protection Guidelines, 2000 issued by SEBI and updated from time to time.

area. In case the Nominee UAS Licensee is different from the Group Bidding Entity, the Group Bidding Entity and the Nominee UAS Licensee shall both be jointly and severally liable for the performance of the bid obligations.

More than one Associated Licensees having the same Common Parent shall not be allowed to enter either of the Auctions, even if they intend to bid for different non over-lapping service areas.

1.1.4 3G mobile

3G systems represent the next step in the evolution of mobile cellular communication. 2G systems focus on voice communication, while 3G systems support increased data communication. They allow high speed data transfer of at least 144 kbps, mobile Internet access, entertainment, and triple-play converged communications services, and have markedly greater capacity and spectrum efficiency than 2G systems.

1.1.5 Broadband wireless access

BWA technologies enable high-speed data communication over wireless links. BWA may offer significant advantages over wireline broadband systems based on cable network or DSL in terms of better coverage, speedy deployment, high scalability, lower maintenance and upgrade costs, and phased investment to match market growth.

1.1.6 Policy background

The Government of India has the exclusive authority to award licences and to prescribe rules for conduct in respect of telegraphy including wireless telegraphy under the Indian Telegraph Act 1885 and the Indian Wireless Telegraph Act 1933.

The DoT is the arm of the Government responsible for the discharge of the Government's functions in respect of telecommunications.

The DoT has decided to award the 3G Spectrum and the BWA Spectrum by means of an auction process. However, the DoT reserves the right to use any other means to allot the spectrum as it may deem fit without giving any reason whatsoever. It further reserves the right to abandon one or both of the Auctions at any time prior to the award of spectrum, as it may deem fit without giving any reason whatsoever.

1.1.7 Spectrum to be auctioned

Rights to use spectrum at specified frequencies in the following bands for a specified period are being offered for award in the 3G Auction and the BWA Auction, respectively (subject to fulfilment of eligibility conditions):

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3G Auction

- 2.1GHz

BWA Auction

- 2.3GHz
- 2.5GHz

Spectrum usage rights shall be awarded separately for specific service areas. Details of the number of 2x5 MHz 3G Spectrum blocks that will be auctioned are provided by service area in the following table:

Table 1. Service area-wise 3G Spectrum to be auctioned

Service area	Category	Reserve price (Rs. cr)	Total paired frequency bandwidth to be allotted (MHz)	No. of blocks of 2x5 MHz to be allotted	No. of blocks of 2x5 MHz reserved for BSNL/ MTNL	No. of blocks of 2x5 MHz available for auction
Delhi	Metro	160	15	3	1	2
Mumbai	Metro	160	25	5	1	4
Kolkata	Metro	80	25	5	1	4
Maharashtra	A	160	25	5	1	4
Gujarat	A	160	15	3	1	2
Andhra Pradesh	A	160	25	5	1	4
Karnataka	A	160	25	5	1	4
Tamil Nadu	A	160	25	5	1	4
Kerala	B	80	25	5	1	4
Punjab	B	80	25	5	1	4
Haryana	B	80	25	5	1	4
Uttar Pradesh (E)	B	80	25	5	1	4
Uttar Pradesh (W)	B	80	20	4	1	3
Rajasthan	B	80	0	0	na	0
Madhya Pradesh	B	80	25	5	1	4
West Bengal	B	80	10	2	1	1
Himachal Pradesh	C	30	20	4	1	3
Bihar	C	30	25	5	1	4
Orissa	C	30	25	5	1	4
Assam	C	30	25	5	1	4
North East	C	30	5	1	1	0
Jammu & Kashmir	C	30	25	5	1	4

Any change in spectrum to be auctioned would be notified before the pre-bid conference.

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In case of spectrum to be awarded in the BWA Auction, the Government intends to allocate 4 blocks of unpaired 20MHz spectrum in each of the 22 service areas⁴, with 2 blocks in the 2.3GHz band and 2 blocks in the 2.5GHz band. 1 block in the 2.5GHz band will be reserved for MTNL (in Delhi and Mumbai) and BSNL (in all other service areas) and the remaining 3 blocks will be put up for auction.

Table 2. Service area-wise BWA Spectrum to be auctioned

Service area	Category	Reserve price (Rs. cr)	Total unpaired frequency bandwidth to be allotted (MHz)	No. of blocks of 20 MHz to be allotted	No. of blocks of 20 MHz reserved for BSNL/ MTNL	No. of blocks of 20 MHz available for auction
Delhi	B	80	80	4	1	3
Mumbai	B	80	80	4	1	3
Kolkata	B	40	80	4	1	3
Maharashtra	B	80	80	4	1	3
Gujarat	B	80	80	4	1	3
Andhra Pradesh	B	80	80	4	1	3
Karnataka	B	80	80	4	1	3
Tamil Nadu	B	80	80	4	1	3
Kerala	B	40	80	4	1	3
Punjab	B	40	80	4	1	3
Haryana	B	40	80	4	1	3
Uttar Pradesh (E)	B	40	80	4	1	3
Uttar Pradesh (W)	B	40	80	4	1	3
Rajasthan	B	40	80	4	1	3
Madhya Pradesh	B	40	80	4	1	3
West Bengal	B	40	80	4	1	3
Himachal Pradesh	B	15	80	4	1	3
Bihar	B	15	80	4	1	3
Orissa	B	15	80	4	1	3
Assam	B	15	80	4	1	3
North East	B	15	80	4	1	3
Jammu & Kashmir	B	15	80	4	1	3

⁴ For the BWA Auction, service area definition will be as per the UAS licence conditions. To clarify, Chennai would be included in the Tamil Nadu circle.

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Not more than 1 block of 3G Spectrum and 1 block of BWA Spectrum shall be allotted to any single Bidder in a service area.

The Government is committed to the growth of telecom services in India, and as part of this commitment it shall endeavour to make available more spectrum in the future for different commercial uses. However, it must be noted that there are constraints on the availability of additional spectrum due to various agencies currently utilising spectrum.

The Government does not intend to make a further allotment of spectrum in the 2.1GHz, 2.3GHz or 2.5GHz bands (other than the blocks being offered currently) within the next 12 months. If any auction is carried out within this timeframe, the Reserve Price for such an auction shall be the Winning Price for that particular service area achieved in the Clock Stage of the relevant Auctions for the relevant frequency band, except for service areas where no spectrum is being auctioned as part of the current process.

1.1.8 Pre-qualification process

In order to pre-qualify for the Auctions, prospective Bidders must submit an application (the “Application”), no later than 31st December, 2008 as per the following requirements.

3G

Prospective Bidders are required to submit:

- Completed Application Form and all supporting information including the necessary undertakings and the Application Checklist;
- Application processing fee;
- Notification of the initial number of Eligibility Points applied for;
- Earnest money, in the form of a Bank Guarantee (as per format provided in Annexure H.3) from a Scheduled Bank, of an amount equivalent to summation of 25% of the Reserve Price of the service areas that the Bidder wishes to be eligible to bid for (“Earnest Money Deposit”). Given that flexibility has been provided in the Auction Rules for Bidders to be able to bid across service areas, Applicants should deposit earnest money based on the number of metro, A, B and C service areas that they would like to participate in the 3G Auction for;
- Nomination of an authorised person, who is empowered to take all decisions connected with the relevant Auctions on the Bidder’s behalf and correspond on behalf of the Applicant with the Government/ Auctioneer (the “Authorised Person”), along with a Power of Attorney empowering her/ him for the same;
- In case of Associated Licensees, the following are additionally required to be submitted along with the Application:

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- A completed Nomination Form nominating the Group Bidding Entity. Separate Nomination Forms need to be executed by each of the Associated Licensees corresponding to the Group Bidding Entity that intend to participate in the 3G Auction;
- Details of ownership structures of the Associated Licensees establishing the qualification of the Group Bidding Entity to bid on behalf of the Associated Licensees;
- For service areas where neither the Group Bidding Entity, nor any of its Associated Licensees are existing UAS/ CMTS licensees, an undertaking confirming that, if the Applicant is successful in winning spectrum in any such service area, it shall acquire a UAS licence in advance of starting commercial operations. The Applicant shall be solely responsible for ensuring compliance with all eligibility criteria for the award of a UAS licence including, but not limited to, the criteria required for Foreign Investment Promotion Board (“FIPB”) approvals and security clearances.

Prospective Bidders that are not existing UAS/ CMTS licensees are additionally required to submit:

- An undertaking confirming that, if the Applicant is successful in winning spectrum in any service area, it shall acquire a UAS licence, through an Indian company registered under the Indian Companies Act 1956, in advance of starting commercial operations. The Applicant shall be solely responsible for ensuring compliance with all eligibility criteria for the award of a UAS licence including, but not limited to, the criteria required for FIPB approvals and security clearances.

The Government reserves the right not to pre-qualify any Applicant without giving any reason whatsoever.

BWA

Prospective Bidders are required to submit:

- Completed Application Form and all supporting information including the necessary undertakings and the Application Checklist;
- Application processing fee;
- Notification of the initial number of Eligibility Points applied for;
- Earnest money, in the form of a Bank Guarantee (as per format provided in Annexure H.3) from a Scheduled Bank, of an amount equivalent to summation of 25% of the Reserve Price of the service areas that the Bidder wishes to be eligible to bid for. Given that flexibility has been provided in the Auction Rules for Bidders to be able to bid across service areas, Applicants should deposit earnest money based on the number of metro, A, B and C service areas that they would like to participate in the BWA Auction for;

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- Nomination of an authorised person, who is empowered to take all decisions connected with the relevant Auctions on the Bidder's behalf and correspond on behalf of the Applicant with the Government/ Auctioneer, along with a Power of Attorney empowering her/ him for the same;
- In case of Associated Licensees, the following are additionally required to be submitted alongwith the Application:
 - A completed Nomination Form nominating the Group Bidding Entity. Separate Nomination Forms need to be executed by each of the Associated Licensees corresponding to the Group Bidding Entity that intend to participate in the BWA Auction;
 - Details of ownership structures of the Associated Licensees establishing the qualification of the Group Bidding Entity to bid on behalf of the Associated Licensees;
 - For service areas where neither the Group Bidding Entity, nor any of its Associated Licensees are existing UAS/ CMTS/ ISP (category 'A' or 'B') licensees (even after taking into account the migration to ISP-category 'A' licence), an undertaking confirming that, if the Applicant is successful in winning spectrum in any such service area, it shall acquire a UAS licence in advance of starting commercial operations. The Applicant shall be solely responsible for ensuring compliance with all eligibility criteria for the award of a UAS licence including, but not limited to, the criteria required for FIPB approvals and security clearances.

Prospective Bidders that are not existing UAS/ CMTS/ ISP (category 'A' or 'B') licensees are additionally required to submit:

- An undertaking confirming that, if the Applicant is successful in winning spectrum in any service area, it shall acquire a UAS licence, through an Indian company registered under the Indian Companies Act 1956, in advance of starting commercial operations. The Applicant shall be solely responsible for ensuring compliance with all eligibility criteria for the award of a UAS licence including, but not limited to, the criteria required for FIPB approvals and security clearances.

The Government reserves the right not to pre-qualify any Applicant without giving any reason whatsoever.

After the last date of submission of Applications, the Government shall publish the ownership details submitted by the Applicants, who have not otherwise been disqualified till then, on the DoT website. Not only would the announcement of the Applicants' identities provide important information for other Applicants to submit the Ownership Compliance Certificate, it would also help prevent market speculation.

After this, an Applicant, who has not otherwise been disqualified till then, will be required to submit an undertaking confirming that it complies with the ownership

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restrictions in the light of the ownership details of the other Applicants (the “Ownership Compliance Certificate”).

Separate Applications are required for the 3G Auction and the BWA Auction, in the prescribed formats, respectively.

Applicants should intimate the Government promptly in case of any change in the information submitted by them as part of their Application.

The Government reserves the right to disqualify any pre-qualified Bidder, at any stage of the Auctions or after the Auctions are completed on grounds of non-compliance with eligibility conditions, misrepresentation, non-compliance with Auction Rules, non-compliance with any other pre-condition prescribed for participating in the Auctions or being awarded the spectrum, or any matter that may, in the opinion of the Government, be contrary to general public interest.

For less serious breaches, the Government may forfeit the Earnest Money Deposit, or a part of it. Seriousness of the breach shall be determined by the Government at its sole discretion.

1.1.9 The Auctions

The award of 3G Spectrum and BWA Spectrum shall be conducted as two separate and distinct processes.

Each of the Auctions will be a two-stage simultaneous ascending e-auction, run over the Internet. Bidders will be able to access the Electronic Auction System (“EAS”) using standard web browsing software. Bidders will be provided a Bidder pack containing the software for the relevant Auctions and the user manual.

Prior to the relevant Auction, pre-qualified Bidders will be issued with authentication tokens to allow secure access to the EAS and documentation about how to use the system. Pre-qualified Bidders will be able to participate in the e-auction from any location over a secure internet connection.

Winning Bidders of a spectrum block in each service area will be determined in the first stage, a Clock Stage, which will allocate spectrum blocks available simultaneously for all service areas. A second stage, an Assignment Stage, will allocate specific frequencies within each service area.

More specifically, the 3G Auction will involve the following two-stage process:

- **Clock Stage:** A Clock Stage will establish the Bidders to be awarded a lot in each of the 22 telecom service areas. In this stage, Bidders will bid for generic lots (i.e. a right to a single spectrum block not linked to any specific frequency). The Clock Stage will consist of a number of rounds (the “Clock Rounds”). These rounds will stop once demand for lots in all service areas is less than or equal to the available supply at the prices set in the last

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completed Clock Round and there are no opportunities for Bidders to increase their demand allowed by the Activity Rules (the precise conditions under which the Clock Stage can close are described subsequently). This will establish a common Winning Price for all lots within a service area, and the Winning Bidders in each service area;

- **Assignment Stage:** The Clock Stage will be followed by an Assignment Stage that will allocate specific frequencies available to the Winning Bidders identified in the Clock Stage in case of service areas where more than one spectrum block is being auctioned. This will consist of a single round of bidding and will allow Winning Bidders to express preferences for the specific frequencies at which their lot might be located. This stage will only determine which frequencies Winning Bidders are awarded. All participants in the Assignment Stage will have already won a lot in one or more service areas in the Clock Stage and are guaranteed to be awarded a frequency block even if they choose not to make any bids in the Assignment Stage.

A similar award process will be followed for the BWA Auction. However, for the BWA Auction, blocks in the 2.3GHz and 2.5GHz bands will be treated as distinct blocks in the Clock Stage.

Winning Bidders will pay the sum of their Winning Bids across the Clock Stage and the Assignment Stage. All Winning Bidders in a service area will have equal winning Clock Stage bids as a consequence of the Auction Rules. However, Winning Bidders in a service area may pay different amounts overall according to differences in the value placed by them on different specific frequencies.

It is clarified that the award of spectrum for each service area would be independent of the award of spectrum for the other service areas and Bidders would not be allowed to put in a contingent Bid.

The Auction Rules are detailed in Chapter VIII and Chapter IX for the 3G Auction and the BWA Auction respectively.

1.1.10 The Mock Auction

For the benefit of Bidders, a mock auction shall be conducted to familiarise the Bidders with the Auction Rules and bidding methodology (the “Mock Auction”). The tentative dates for the Mock Auction are 12th and 13th January, 2009. Any change in the dates of the Mock Auction shall be notified through the Auction website, at least 24 hours in advance of the start of the Mock Auction.

1.1.11 Timetable

The Auctions shall be carried out in 4 stages as below:

Figure 1. Stages in the Auction process



There is no pre-set timetable and the Government reserves the right to determine the overall timetable of the Auctions or to amend it from time to time. However, the table below sets out an indicative timetable.

Table 3. Indicative Timetable

Information on Spectrum to be auctioned	12 th December, 2008
Information Memorandum	12 th December, 2008
Presentation on Auction process	12 th December, 2008
Pre-bid conference	23 rd December, 2008
Final date for Applications	5 th January, 2009
Publication of ownership details of Applicants	6 th January, 2009
Bidder Ownership Compliance Certificate	8 th January, 2009
Pre-qualification of Bidders	9 th January, 2009
Mock Auction	12 th - 13 th January, 2009
Start of the 3G Auction	16 th January, 2009
Start of the BWA Auction	2 days from the day of close of the 3G Auction

1.1.12 Public safety standards

There is public concern over exposure to electromagnetic fields. Recipients will be expected to make their own judgements on this issue and Successful Bidders should comply with all appropriate guidelines, recommendations or other standards as appropriate.

1.2 Application instructions, enquiries and further information

Recipients wishing to pre-qualify should refer to Chapter V of the Memorandum and the provisions of the Notice. Contacts for enquiries or further information are provided in Chapter XI of the Memorandum.

Recipients' attention is in particular drawn to the rules regarding collusion and confidentiality of information. Applicants should familiarise themselves and ensure their compliance with these rules, and should note that breach of the rules by themselves, any of their Associated Licensees or their Insiders may lead to their exclusion from the Auctions.

1.3 Advisers to the Government

NM Rothschild & Sons (India) Private Limited and DotEcon Limited (together, referred to as the "Auctioneer") are advising the Government on the Auctions.

The Auctioneer will manage the day-to-day running of the Auctions.

II INDIAN WIRELESS MOBILE SECTOR

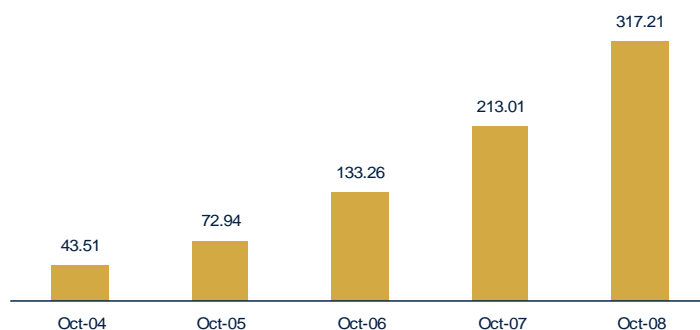
2.1 Sector overview

The Indian market for telecom services is one of the fastest growing in the world. The growth has been driven by the rapid adoption of 2G mobile services in the country, the competitive landscape that has been promoted in the sector and the various policy initiatives undertaken by the Government over the last few years.

The penetration of mobile services stood at 27.5% at the end of October 2008, while the year-on-year growth in mobile subscribers in the last one year was c.49%.

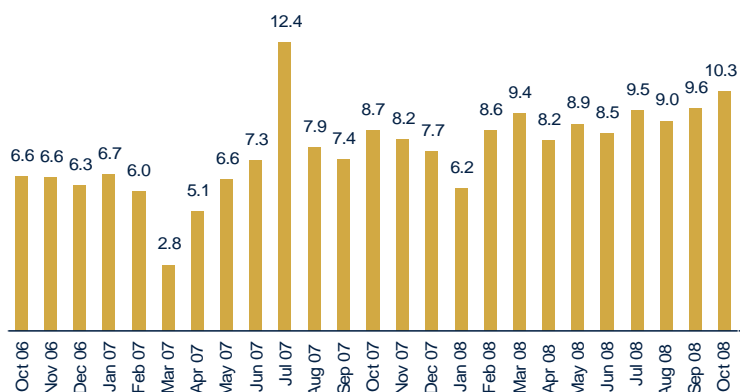
The following charts illustrate the rapid growth in mobile subscribers currently taking place in India. As can be seen from Figure 3, the industry has been consistently adding more than 8 million subscribers every month.

Figure 2. Wireless subscriber base (million)



Notes
COAI, AUSPI

Figure 3. Monthly net wireless subscriber additions (million)



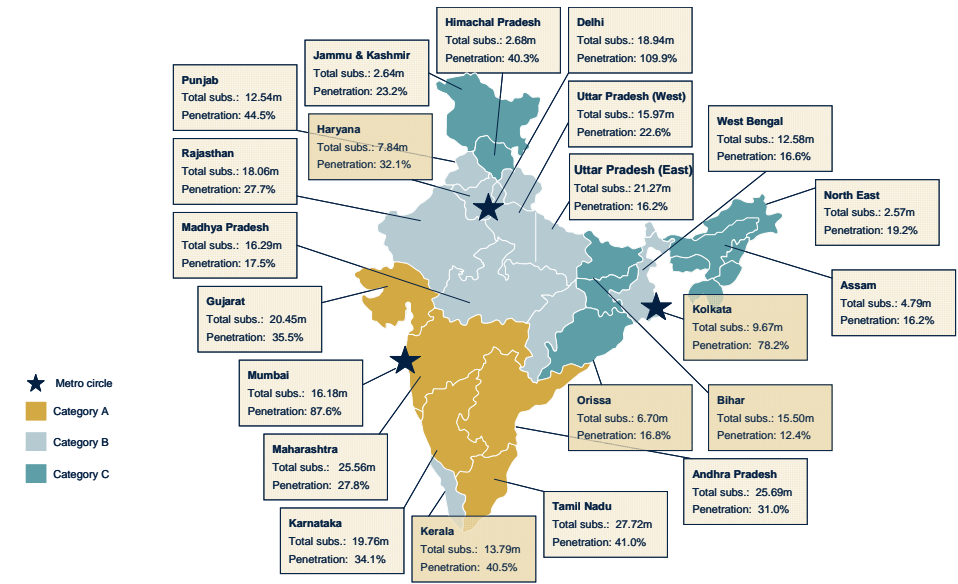
Notes
COAI, AUSPI

2.2 Service areas

India is divided into 22 service areas (metropolitan service areas and telecom circles). An operator wishing to operate in a particular service area is required to have a licence specific for that service area. Based on their characteristics and commercial attractiveness, the service areas are categorised into 4 groups: Metro, category A, category B and category C.

The following figure gives an overview of the 22 service areas. Detailed definition of the service areas is provided in Appendix B.

Figure 4. Overview of service areas



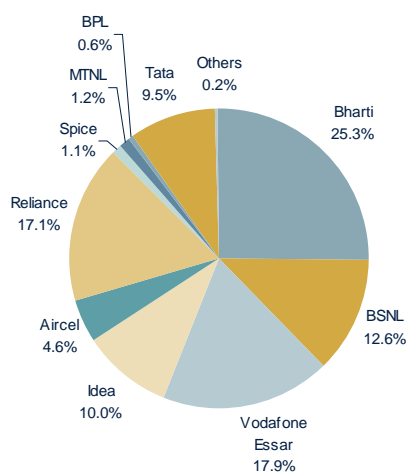
Notes
Chennai and Tamil Nadu service areas have been merged into one.

2.3 Key players

The following chart shows the key players in the Indian mobile services market and their market shares by subscribers on an all-India basis.

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Figure 5. Share of Indian subscriber base, Oct '08



Source COAI, AUSPI

However, the competition dynamics vary across service areas. The following chart shows the service area-wise subscriber figures for major players:

Table 4. Wireless subscriber breakdown – by service area and operator, Oct '08

<i>Fig in million</i>	Bharti	RC	VE	BSNL	TTSL	Idea	Aircel	Spice	BPL	Others	Total subs	Penetration
Metro												
Delhi	4.32	2.92	3.66	1.75	4.08	2.22	-	-	-	-	18.94	109.9%
Mumbai	2.70	3.35	4.04	2.00	2.11	0.18	-	-	1.81	-	16.18	87.6%
Kolkata	2.12	2.31	2.40	1.12	1.41	-	0.31	-	-	-	9.67	78.2%
Circle A												
Maharashtra	5.01	3.49	3.67	3.40	3.73	6.26	-	-	-	-	25.56	27.8%
Gujarat	3.66	2.88	7.08	2.31	1.19	3.33	-	-	-	-	20.45	35.5%
Andhra Pradesh	7.79	4.72	3.33	2.65	2.88	4.33	-	-	-	-	25.69	31.0%
Karnataka	8.72	3.18	3.28	1.89	1.26	-	-	1.43	-	-	19.76	34.1%
Tamil Nadu (incl. Chennai)	7.20	1.33	5.83	3.53	1.12	-	8.71	-	-	-	27.72	41.0%
Circle B												
Kerala	1.97	2.45	2.61	2.31	0.73	3.71	-	-	-	-	13.79	40.5%
Punjab	3.45	1.21	1.89	2.24	1.17	-	-	2.20	-	0.37	12.54	44.5%
Haryana	1.15	1.18	1.78	1.27	1.12	1.34	-	-	-	-	7.84	32.1%
Uttar Pradesh (W)	2.04	2.79	3.68	2.26	1.82	3.37	-	-	-	-	15.97	22.6%
Uttar Pradesh (E)	4.99	3.66	5.28	4.58	1.31	1.46	-	-	-	-	21.27	16.2%
Rajasthan	5.75	2.17	4.15	2.46	2.27	1.06	-	-	-	0.19	18.06	27.7%
Madhya Pradesh	3.87	5.13	0.01	2.10	1.05	4.14	-	-	-	-	16.29	17.5%
West Bengal and Andaman & Nicobar	2.89	2.50	3.85	1.59	0.84	-	0.92	-	-	-	12.58	16.6%
Circle C												
Himachal Pradesh	0.87	0.85	-	0.61	0.13	0.12	0.10	-	-	-	2.68	40.3%
Bihar	6.07	4.81	0.03	2.04	1.36	0.07	1.12	-	-	-	15.50	12.4%
Orissa	2.40	1.76	0.10	1.17	0.58	-	0.70	-	-	-	6.70	16.8%
Assam	1.20	1.20	0.03	0.87	-	-	1.49	-	-	-	4.79	16.2%
North East	0.74	0.41	0.02	0.57	-	-	0.83	-	-	-	2.57	19.2%
Jammu Kashmir	1.29	0.00	-	0.86	-	-	0.48	-	-	-	2.64	23.2%
Total subscribers	80.20	54.31	56.70	43.58	30.16	31.58	14.66	3.64	1.81	0.57	317.21	27.5%
Market share (sub)	25.3%	17.1%	17.9%	13.7%	9.5%	10.0%	4.6%	1.1%	0.6%	0.2%		

Source COAI, AUSPI

Notes:

RC – Reliance Communications Limited

VE – Vodafone Essar Limited

BSNL – Bharat Sanchar Nigam Limited (includes MTNL in Delhi and Mumbai)

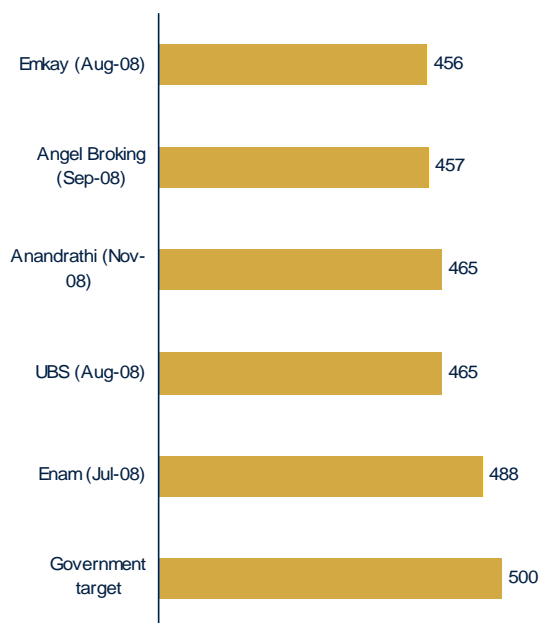
TTSL – Tata Teleservices Limited (includes TTML in Mumbai and Maharashtra)

In addition, in several service areas, there are new licence-holders who are yet to launch commercial operations.

2.4 Outlook

Given the low penetration levels, and the rapid growth of the economy, the growth in subscriber base is expected to continue at a rapid pace in the medium term. The following figure shows estimates by various research houses on the potential growth in subscriber base by 2010:

Figure 6. Subscriber forecast (by 2010) (million)



Source Broker notes

The Government believes that there is potential for the industry to reach the 500 million subscriber mark and is committed to help the industry achieve this target.

2.5 Technology

An operator is free to choose the technology for providing mobile services. Both GSM and CDMA technologies are being employed in India for providing mobile services. At present, GSM comprises c.76% of the subscriber base.

2.6 Evolution of the regulatory regime and its impact on the industry

The Indian telecommunications industry was state-owned until 1991, when the DoT began the process of introducing private participation in the sector by inviting bids for non-exclusive licences to provide cellular services in the four metropolitan service areas (Delhi, Mumbai, Kolkata and the erstwhile Chennai service area). The Bidders were required to be Indian companies with up to 49% foreign ownership. Any foreign partner of the bidding company had to be an entity with experience in the

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telecommunications sector. In 1995, two licences were issued for each of the four metropolitan service areas.

In 1994, the Government announced the National Telecom Policy which defined certain important objectives, including availability of telephone on demand, provision of world class services at reasonable prices, improving India's competitiveness in global market and promoting exports, attracting FDI and stimulating domestic investment, ensuring India's emergence as major manufacturing/ export base of telecom equipment and ensuring universal availability of basic telecom services to all villages.

In 1995, the DoT invited bids for two cellular services licences each in 18 more circles. The Government issued 34 licences covering 18 service areas to 14 companies from 1995 through 1998. No bids were received for the Jammu and Kashmir circle. The terms of the licences required mobile operators to interconnect through the fixed-line networks of BSNL and MTNL.

Another round of reforms in the telecom sector was introduced through the implementation of the New Telecom Policy 1999 ("NTP-99"). NTP-99 was approved on 26th March 1999, to become effective from 1st April 1999. NTP-99 laid down a clear roadmap for future reforms, contemplating the opening up of all the segments of the telecom sector for private sector participation. It clearly recognized the need for strengthening the regulatory regime in telecoms and for restructuring the Department of Telecommunication Services ("DTS") into a corporate organisation, so as to separate the licensing and policy making functions of the Government from that of being an operator. It also recognized the need for resolving the prevailing problems faced by the operators so as to restore their confidence and improve the investment climate.

Key features of the NTP-99 include the following:

- Strengthening of the regulator;
- Opening up of national and international long distance services to private operators;
- Licensing of private telecom operators on a revenue sharing basis, in addition to a one-time entry fee;
- Direct interconnectivity and sharing of network with other telecom operators within the service area permitted;
- Corporatisation of the DTS in 2001;
- Spectrum management made transparent and more efficient;
- BSNL and MTNL permitted to provide mobile services in those service areas where each was already providing fixed-line services. Accordingly, BSNL and MTNL became the third cellular services operators in such service areas.

In January 2001, the Government published guidelines concerning the fourth licence to be awarded for each service area.

Also, in January 2001, based on the recommendations of the Telecom Regulatory Authority of India (“TRAI”), the Government issued guidelines to permit fixed-line telecommunications service providers to provide limited mobility services using Wireless in Local Loop (“WLL(M)”) technology, within specified short distance calling areas in which the relevant subscriber was registered. In October 2003, TRAI recommended to the Government that fixed-line telecommunications service providers intending to provide limited mobility services based on WLL(M) technology pay a specified amount as an additional entry fee.

In November 2003, NTP-99 was amended to include a UAS licence, permitting a licensee to provide fixed-line and/ or mobile services using any technology in a defined licence area upon conversion to a UAS licence. The Government issued guidelines relating to UAS licences in November 2003. There is no limitation on the number of UAS licences that can be granted in any given licence area.

The year 2003 also saw a transition to a Calling Party Pays regime. The termination charges are regulated by the TRAI.

In November 2005, the Government, through Press Note 5 of 2005 raised the foreign direct investment limit applicable to the telecommunications sector from 49% to 74% (held directly or indirectly), subject to compliance with certain conditions, including that the majority of the directors and selective key senior management personnel of a company operating in the telecommunications sector be resident Indian citizens, the shareholder agreements and the memorandum and articles of association of the company be amended to ensure compliance with the conditions of the relevant licence agreement, and a resident Indian promoter hold at least 10% equity of the company.

In 2008, the Government awarded new licences to several operators in various service areas. Additionally, under the “crossover spectrum” policy, CDMA and GSM operators were made eligible to use both technologies under the same licence.

2.6.1 UAS licence – key features

Key features of the UAS licence are described below. Annexure C contains the current draft UAS licence. Annexure D contains the current guidelines for obtaining a UAS licence. The Government could amend the licence conditions and guidelines from time to time.

General conditions

- The licence shall be governed by the provisions of the Indian Telegraph Act 1885, the Indian Wireless Telegraphy Act 1933 and the Telecom Regulatory Authority of India Act 1997 as modified or replaced from time to time;
- There are separate licences for each of the 22 telecom service areas in India (refer Annexure B for a description of the service areas);

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- The licences are non-exclusive;
- The licensee should be an Indian company;
- The applicant for licence (along with its promoters⁵) should have a prescribed minimum net worth depending on the number and category of service areas, for which the licence has been applied for. Specifically, for applying for the licence in all 22 service areas, the minimum net worth required is Rs. 1,380 crore.

Duration

- The duration of the licence is 20 years, extendable by 10 years at a time by mutual negotiation of terms between the licensor (the Government) and the licensee. The decision of the licensor shall be final in this regard.

Ownership

- Foreign investment in the licensee company is allowed up to a maximum of 74%:
 - Foreign investment of up to 49% is permitted under the automatic route i.e. without requiring the prior approval of the FIPB. Foreign investment above 49% requires FIPB approval. While approving the investment proposals, FIPB shall, among other things, take note that investment is not coming from countries of concern and/ or unfriendly entities;
- At least one resident Indian promoter should hold at least 10% equity of the licensee company;
- Direct or indirect cross-holding of greater than 10% by a single entity between two UAS/ CMTS licensees in the same service area is not permitted.

Security Conditions

- The Chief Officer in charge of technical network operations and the Chief Security Officer should be resident Indian citizens;
- Details of infrastructure/ network diagram could be provided on a need basis only to telecom equipment suppliers/ manufacturers and the affiliate/ parents of the licensee company.

Please refer to the guidelines for details.

Mergers and Acquisitions (“M&A”)

- M&A between two licensees within the same service area is permitted provided:
 - Both licensees have held the licences for more than three years;

⁵ For this purpose, promoters are defined as entities holding at least 10% shares in the Company.

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- The merger does not result in less than three operators in the service area;
- In case the merged entity holds excess spectrum (based on the subscriber-linked criteria for spectrum), it would need to be surrendered.

Commercial conditions

- Tariffs will be subject to regulation by TRAI. The TRAI may decide to regulate tariffs in case it perceives lack of competition in any segment;
- There is a one time non-refundable entry fee applicable for each service area (see schedule provided in this section for service area-wise entry fee). The applicable total entry fee for all the 22 service areas is Rs. 1,658.57 crore;
- The applicable recurring annual licence fee is 4-10% of revenue share;
- Spectrum usage charges (in addition to licence fees) are applicable on revenue share basis.

Table 5. Service area-wise entry fee

Service area	Entry fee (Rs. cr)	Service area	Entry fee (Rs. cr)
Delhi	170.70	Uttar Pradesh (E)	45.25
Mumbai	203.66	Uttar Pradesh (W)	30.55
Kolkata	78.01	Rajasthan	32.25
Maharashtra	189.00	Madhya Pradesh	17.45
Gujarat	109.01	West Bengal	1.00
Andhra Pradesh	103.01	Himachal Pradesh	1.10
Karnataka	206.83	Bihar	10.00
Tamil Nadu	233.00	Orissa	5.00
Kerala	40.54	Assam	5.00
Punjab	151.75	North East	2.00
Haryana	21.46	Jammu & Kashmir	2.00

III INDIAN BROADBAND SECTOR

The Government recognizes the potential of Broadband to benefit the Indian economy and is committed to increasing Broadband penetration especially in rural areas. However, limited availability of last mile access has thus far impeded the growth of Broadband services in the country. Lack of adequate infrastructure has also meant that most connections are only at the minimum speed level (256kbps), thus limiting the utility of Broadband. The Government believes that the spectrum allocated in the current Auctions will catalyse the growth of Broadband in India through wireless technology.

3.1 Broadband Policy

Recognizing the potential of ubiquitous Broadband service in the growth of internet penetration and better communication and subsequently economic growth as well as enhancement in quality of life through societal applications including tele-education, tele-medicine, e-governance, entertainment and employment generation by way of high-speed access to information and web based communication, the Government announced the Broadband Policy in October 2004.

The main emphasis of the Broadband Policy is on the creation of infrastructure through various technologies that can contribute to the growth of Broadband services.

As per the Broadband Policy, Broadband is defined as “An ‘always-on’ data connection that is able to support interactive services including Internet access and has the capability of the minimum download speed of 256 kilo bits per second (kbps) to an individual subscriber from the Point of Presence (POP) of the service provider intending to provide Broadband service where multiple such individual Broadband connections are aggregated and the subscriber is able to access these interactive services including the Internet through this POP. The interactive services will exclude any services for which a separate licence is specifically required, for example, real-time voice transmission, except to the extent that it is presently permitted under ISP licence with Internet Telephony”.

The Government acknowledges that the coverage of Broadband services in the country has been limited so far due to infrastructure and other constraints and is committed to improving that. Promotion of wireless Broadband services is a step in that direction and the Government believes that it would be able to achieve the Broadband Policy target of 20 million subscribers by 2010.

3.2 Subscriber numbers

As part of the Broadband Policy, the Government had set the following targets for the number of Broadband subscribers in the country.

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Table 6. Broadband targets

Year	Internet subscribers ⁶	Broadband subscribers
2005	6 million	3 million
2007	18 million	9 million
2010	40 million	20 million

The growth of Broadband services has not been as per expectations so far. The internet subscriber base at the end of June 2008 was at 87.6 million while the Broadband subscriber base was at 4.4 million at the same time.

Table 7. Internet and Broadband subscribers

Subscribers (all figures in million)	Dec 2004	March 2005	March 2006	March 2007	March 2008	June 2008
Internet	5.45	5.55	6.94	9.27	11.09	11.66
Broadband	0.05	0.18	1.35	2.34	3.87	4.38
Wireless internet (through mobile handsets)	-	-	-	31.30	65.50	75.97

Source TRAI

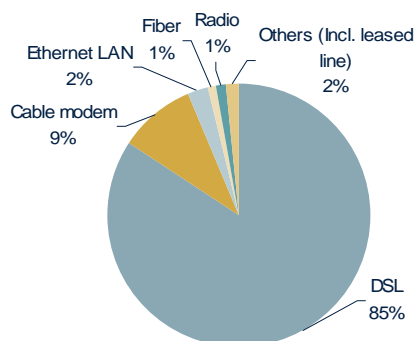
One of the key factors limiting the growth of Broadband in India has been the constraint on last mile access. The low fixed line penetration at c.3.5%, with not all of these lines capable of supporting Broadband, has resulted in limitations for operators to offer Broadband services. The Government believes that the spectrum allocated in the current Auctions will catalyse the growth of Broadband in India through wireless technology. The wireless operators would be able to cater to the substantial Broadband demand in the country enabling the Government to meet the Policy targets. Further, the spectrum available in the current Auctions would also assist in Broadband services reaching the remote corners of the country, and specifically in the rural segment, providing greater connectivity. The Government is committed to providing all requisite support to facilitate the growth of Broadband services.

3.3 Current Broadband access technologies

The following chart provides an analysis of the various technologies used for Broadband access in India. DSL has been the dominant technology for Broadband access so far with a c.81% share of Broadband connections. However, as noted above, availability of last mile copper has been a constraint in the growth of DSL connections.

⁶ Includes Broadband subscribers

Figure 7. Share of Indian Broadband subscriber base, Jun '08



Source TRAI

Growth of Broadband applications has also been limited due to the fact that most connections are available only at the minimum speed level (256kbps).

Table 8. Broadband users per connection speed

Connection speed	% of Broadband subscribers
256 kbps	96%
512 kbps	<3%
>1 Mbps	<1%

Source TRAI

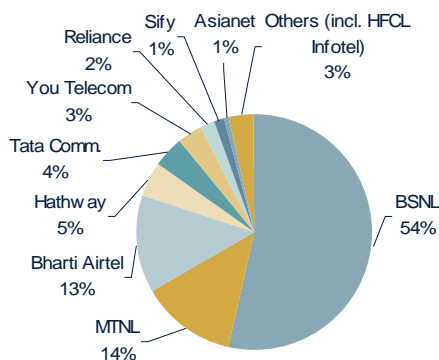
As per the Broadband Policy, wireless technologies would be encouraged for raising the penetration of Broadband and internet services, as these address the issues with last mile connectivity, with the added advantage in serving remote and inaccessible areas.

There is a great opportunity to tap the Broadband market by addressing the challenges faced so far through use of wireless technology. The low penetration levels, even in urban centres, offer an attractive commercial opportunity for service providers. The pick-up of wireless internet demand (through mobile handsets) is an indication of the potential demand.

3.4 Broadband service providers

The Broadband industry in India is still evolving with a large number of operators. There are 72 Broadband service providers out of which 13 service providers have a subscriber base of more than 10,000 subscribers. These 13 service providers have 98.59% share of the total Broadband subscribers.

Figure 8. Share of Indian Broadband subscriber base, Jun '08



Source TRAI

3.5 Internet Service Provider Licence

Internet service sector was opened for private participation in 1998 with a view to encourage growth of internet and increase its penetration. The Government has issued guidelines for grant of licence of internet services on non-exclusive basis. Key elements of the guidelines include the following⁷:

General conditions

- The licence shall be governed by the provisions of the Indian Telegraph Act 1885, the Indian Wireless Telegraphy Act 1933 and the Telecom Regulatory Authority of India Act 1997 as modified or replaced from time to time;
- In terms of geographical coverage, the following types of ISP licence categories exist:
 - Category 'A': This covers the territorial jurisdiction of the Union of India except specified areas that may be notified to be excluded from time to time;
 - Category 'B': Any of the 23 service areas as per the DoT guidelines;
 - The Government has stopped issuing Category 'C' licenses, which related to any Secondary Switching Areas of DoT with geographical boundaries as on 1.4.98;
- The licences are non-exclusive;
- The licensee should be an Indian company;
- Scope of services provided for under the licence include the following:
 - Internet access including IPTV;

⁷ Refer to Annexure E for draft of the ISP licence for category 'A' and to Annexure F for detailed guidelines for the issue of ISP licence.

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- Internet telephony by connecting PC to PC, within or outside India or PC in India to PSTN/ PLMN abroad. The ISP licensee is not permitted to have PSTN/ PLMN connectivity;
- All subscribers, except dial-up subscribers, have to be within the service area.

Duration

- The validity of licence is initially for a period of fifteen years unless otherwise terminated. If requested by the licensee, extension may be granted by the licensor (the Government) on suitable terms and conditions for a period of five years or more at a time. The decision of the licensor shall be final in this regard.

Ownership

- Foreign investment in the licensee company is allowed up to a maximum of 74%:
 - Foreign investment of up to 49% is permitted under the automatic route i.e. without requiring the prior approval of the FIPB. Foreign investment above 49% requires FIPB approval. While approving the investment proposals, FIPB shall, among other things, take note that investment is not coming from countries of concern and/ or unfriendly entities.

Security Conditions

- The Chief Officer in charge of technical network operations and the Chief Security Officer should be resident Indian citizens;
- Details of infrastructure/ network diagram could be provided on a need basis only to telecom equipment suppliers/ manufacturers and the affiliate/ parents of the licensee company.

Please refer to the guidelines for details.

Commercial conditions

- Applicable one time entry fee is Rs. 20 lakh for category ‘A’ licence and Rs. 10 lakh for category ‘B’ licence;
- Annual licence fee is at 6% of the Adjusted Gross Revenues (“AGR”) subject to a minimum of Rs. 50,000 per annum and Rs. 10,000 per annum per licensed service area for category ‘A’ and category ‘B’ respectively.

IV SPECTRUM

4.1 Spectrum to be auctioned

Rights to use spectrum at specified frequencies in the following bands (subject to fulfilment of eligibility conditions) for a specified period are being offered for award in the 3G Auction and the BWA Auction, respectively:

3G Auction

- 2.1GHz

BWA Auction

- 2.3GHz
- 2.5GHz

The spectrum shall not be used for any activity other than the activities for which the operator has a licence. The award of spectrum by itself does not confer the right to provide services. For instance, in order to provide mobile telephony using the 3G Spectrum, the Successful Bidder will also need to possess (or acquire) a UAS/ CMTS licence for the relevant service areas. Similarly, in order to provide BWA services using the BWA Spectrum, the Successful Bidder will also need to possess (or acquire) a UAS/ CMTS/ ISP-category ‘A’ licence. It may be clarified that the ISP licensees are currently not allowed to provide voice services (other than restricted telephony).

The spectrum shall be awarded individually for specific service areas.

Details of the frequencies to be auctioned in each service area in the 2.1GHz band are presented in the following table:

Table 9. Details of 3G Spectrum to be auctioned

Service area	Number of blocks to be auctioned	Carriers of 5 MHz available for 3G services (in MHz)			
		I (UL/DL)	II (UL/DL)	III (UL/DL)	IV (UL/DL)
Delhi	2	1927.5/ 2117.5	1967.5/ 2157.5	-	-
Mumbai	4	1922.5/ 2112.5	1942.5/ 2132.5	1947.5/ 2137.5	1967.5/ 2157.5
Kolkata	4	1932.5/ 2122.5	1937.5/ 2127.5	1942.5/ 2132.5	1947.5/ 2137.5
Maharashtra	4	1922.5/ 2112.5	1942.5/ 2132.5	1947.5/ 2137.5	1967.5/ 2157.5
Gujarat	2	1927.5/ 2117.5	1942.5/ 2132.5	-	-

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Service area	Number of blocks to be auctioned	Carriers of 5 MHz available for 3G services (in MHz)			
		I (UL/DL)	II (UL/DL)	III (UL/DL)	IV (UL/DL)
Andhra Pradesh	4	1922.5/ 2112.5	1927.5/ 2117.5	1932.5/ 2122.5	1937.5/ 2127.5
Karnataka	4	1922.5/ 2112.5	1927.5/ 2117.5	1932.5/ 2122.5	1937.5/ 2127.5
Tamil Nadu	4	1922.5/ 2112.5	1927.5/ 2117.5	1932.5/ 2122.5	1937.5/ 2127.5
Kerala	4	1922.5/ 2112.5	1927.5/ 2117.5	1932.5/ 2122.5	1937.5/ 2127.5
Punjab	4	1927.5/ 2117.5	1932.5/ 2122.5	1942.5/ 2132.5	1962.5/ 2152.5
Haryana	4	1932.5/ 2122.5	1957.5/ 2147.5	1972.5/ 2162.5	1977.5/ 2167.5
Uttar Pradesh (E)	4	1927.5/ 2117.5	1932.5/ 2122.5	1937.5/ 2127.5	1942.5/ 2132.5
Uttar Pradesh (W)	3	1927.5/ 2117.5	1942.5/ 2132.5	1962.5/ 2152.5	-
Rajasthan	0	-	-	-	-
Madhya Pradesh	4	1927.5/ 2117.5	1932.5/ 2122.5	1937.5/ 2127.5	1967.5/ 2157.5
West Bengal	1	1947.5/ 2137.5	-	-	-
Himachal Pradesh	3	1927.5/ 2117.5	1932.5/ 2122.5	1942.5/ 2132.5	-
Bihar	4	1922.5/ 2112.5	1957.5/ 2147.5	1962.5/ 2152.5	1967.5/ 2157.5
Orissa	4	1922.5/ 2112.5	1927.5/ 2117.5	1932.5/ 2122.5	1937.5/ 2127.5
Assam	4	1932.5/ 2122.5	1937.5/ 2127.5	1972.5/ 2162.5	1977.5/ 2167.5
North East	0	-	-	-	-
Jammu & Kashmir	4	1932.5/ 2122.5	1942.5/ 2132.5	1972.5/ 2162.5	1977.5/ 2167.5

Note

Indicated frequencies represent the lower end of the individual 5MHz blocks

Any change in spectrum to be auctioned would be notified before the pre-bid conference.

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Details of the frequencies to be auctioned in each service area in the 2.3 and 2.5GHz bands are presented in the following table:

Table 10. Details of BWA Spectrum to be auctioned				
Service area	Number of blocks to be auctioned	Availability of Spectrum in 2.3-2.4 GHz		Availability of Spectrum in 2.5-2.69 GHz
		I	II	III
Delhi	3	2305.0-2325.0	2327.5-2347.5	2535-2555
Mumbai	3	2305.0-2325.0	2327.5-2347.5	2535-2555
Kolkata	3	2305.0-2325.0	2332.5-2352.5	2535-2555
Maharashtra	3	2305.0-2325.0	2327.5-2347.5	2545-2555 & 2645-2655
Gujarat	3	2305.0-2325.0	2327.5-2347.5	2545-2555 & 2645-2655
Andhra Pradesh	3	2302.5-2322.5	2347.5-2367.5	2545-2555 & 2645-2655
Karnataka	3	2302.5-2322.5	2325.0-2345.0	2535-2555
Tamil Nadu	3	2312.5-2332.5	2335.0-2355.0	2535-2555
Kerala	3	2302.5-2322.5	2325.0-2345.0	2535-2555
Punjab	3	2320.0-2340.0	2357.5-2377.5	2535-2555
Haryana	3	2322.5-2342.5	2362.5-2382.5	2535-2555
Uttar Pradesh (E)	3	2320.0 - 2340.0	2357.5-2377.5	2535-2555
Uttar Pradesh (W)	3	2320.0 - 2340.0	2357.5-2377.5	2535-2555
Rajasthan	3	2320.0-2340.0	2357.5-2377.5	2535-2555
Madhya Pradesh	3	2302.5-2322.5	2332.5-2352.5	2535-2555
West Bengal	3	2305.0-2325.0	2332.5-2352.5	2535-2555
Himachal Pradesh	3	2322.5-2342.5	2345.0-2365.0	2535-2555

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Service area	Number of blocks to be auctioned	Availability of Spectrum in 2.3-2.4 GHz		Availability of Spectrum in 2.5-2.69 GHz
		I	II	III
Bihar	3	2302.5-2322.5	2335.0-2355.0	2535-2555
Orissa	3	2302.5-2322.5	2335.0-2355.0	2535-2555
Assam	3	2302.5-2322.5	2325.0-2345.0	2535-2555
North East	3	2302.5-2322.5	2325.0-2345.0	2535-2555
Jammu & Kashmir	3	2340-2360	2380-2400	2535-2555

Note:

1. Spectrum in the 2535-2545 MHz/ 2635-2645 MHz band has been assigned to BSNL in Gujarat, Maharashtra and Andhra Pradesh, where they are using it in FDD mode.
2. Spectrum in the 2635-2655 MHz band with 20 MHz bandwidth has been assigned to MTNL in Delhi and Mumbai and to BSNL in all the service areas except three service areas where they have been assigned spectrum in FDD mode.

The frequencies indicated are inclusive of emission band and guard bands.

The Government is committed to the growth of telecom services in India, and as part of this commitment it shall endeavour to make available more spectrum in the future for different commercial uses. However, it must be noted that there are constraints on the availability of additional spectrum due to various agencies currently utilising a significant portion of the spectrum.

The Government does not intend to make a further allotment of spectrum in the 2.1GHz, 2.3GHz or 2.5GHz bands (other than the blocks being offered currently) over the next 12 months. In case, an auction is carried out within this timeframe, the Reserve Price for such an auction shall be the Winning Price for that particular service area achieved in the Clock Stage of the relevant Auctions, except for service area where no spectrum is being auctioned as part of the current process.

4.2 Reservation for BSNL/ MTNL

3G Spectrum

The Government has decided to reserve one block of 2x5MHz in Mumbai and Delhi for MTNL and one block of 2x5MHz in the remaining service areas for BSNL. BSNL and MTNL shall not be participating in the Auctions, but will be required to match the Winning Price achieved in the Clock Stage in the respective service areas, as consideration for the spectrum.

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BWA Spectrum

The Government has decided to reserve one block of unpaired 20MHz in Mumbai and Delhi for MTNL and one block of 20MHz in the remaining service areas for BSNL. BSNL and MTNL shall not be participating in the Auction, but will be required to match the Winning Price achieved for the relevant frequency band in the Clock Stage in the respective service areas, as consideration for the spectrum.

The frequencies that have been ear-marked for use by MTNL/ BSNL in the various service areas are tabulated below:

Table 11. Service area-wise frequencies allotted to BSNL/MTNL

Service area	3G Spectrum		BWA spectrum
	Uplink (MHz)	Downlink (MHz)	
Delhi	1962.5-1967.5	2152.5-2157.5	2635-2655
Mumbai	1962.5-1967.5	2152.5-2157.5	2635-2655
Kolkata	1962.5-1967.5	2152.5-2157.5	2635-2655
Maharashtra	1962.5-1967.5	2152.5-2157.5	2535-2545 & 2635-2645
Gujarat	1962.5-1967.5	2152.5-2157.5	2535-2545 & 2635-2645
Andhra Pradesh	1962.5-1967.5	2152.5-2157.5	2535-2545 & 2635-2645
Karnataka	1962.5-1967.5	2152.5-2157.5	2635-2655
Tamil Nadu	1962.5-1967.5	2152.5-2157.5	2635-2655
Kerala	1962.5-1967.5	2152.5-2157.5	2635-2655
Punjab	1937.5-1942.5	2127.5-2132.5	2635-2655
Haryana	1962.5-1967.5	2152.5-2157.5	2635-2655
Uttar Pradesh (E)	1967.5-1972.5	2157.5-2162.5	2635-2655
Uttar Pradesh (W)	1967.5-1972.5	2157.5-2162.5	2635-2655
Rajasthan	1962.5-1967.5	2152.5-2157.5	2635-2655
Madhya Pradesh	1962.5-1967.5	2152.5-2157.5	2635-2655
West Bengal	1930.5-1935.5	2120.5-2125.5	2635-2655
Himachal Pradesh	1937.5-1942.5	2127.5-2132.5	2635-2655
Bihar	1937.5-1942.5	2127.5-2132.5	2635-2655
Orissa	1962.5-1967.5	2152.5-2157.5	2635-2655
Assam	1967.5-1972.5	2157.5-2162.5	2635-2655
North East	1967.5-1972.5	2157.5-2162.5	2635-2655
Jammu & Kashmir	1937.5-1942.5	2127.5-2132.5	2635-2655

4.3 Backhaul

Authorisation for the use of spectrum for individual point-to-point fixed links would be the subject of separate applications. Subject to the usual processes and conditions, the Government would make available spectrum for these purposes under the prevailing terms and conditions (specified by the WPC), within a month of the deposit of the successful bid amount. The fee/ royalty for the use of spectrum/ possession of wireless telegraphy equipment depends upon various factors such as frequency, hop and link length, area of operations and other related aspects.

4.4 Technology

There are broadly no restrictions on the technology to be adopted for providing services in the 3G Spectrum and BWA Spectrum.

The Successful Bidder shall provide details of the technology proposed to be deployed for operation of the service prior to launch of commercial operations. The technology should be based on standards issued by ITU/ TEC or any other International Standards Organization/ bodies/ Industry.

V ELIGIBILITY AND CONDITIONS

5.1 Eligibility criteria to participate in the Auctions

5.1.1 3G Auction

Any entity:

- (i) who holds a UAS/ CMTS licence; or
- (ii)
 - (a) who has previous experience of running 3G telecom services either directly or through a majority-owned subsidiary; and
 - (b) gives an undertaking to obtain UAS licence through a New Entrant Nominee UAS Licensee as per DoT guidelines before starting telecom operations

can bid for 3G Spectrum (subject to other provisions of the Notice).

For the purpose of Clause 5.1.1(ii)(a), a wholly and directly-owned company shall be entitled to use the qualifications of its owner.

5.1.2 BWA Auction

Any entity:

- (i) who holds a UAS/ CMTS licence; or
- (ii) who holds an ISP licence (category ‘A’ or ‘B’); or
- (iii) gives an undertaking to obtain a UAS licence through a New Entrant Nominee UAS Licensee as per the DoT guidelines before starting telecom operations

can bid for BWA Spectrum (subject to other provisions of the Notice).

Successful Bidders in the BWA Auction that currently hold an ISP-category ‘B’ licence will be required to migrate to ISP-category ‘A’ licence, at no additional cost, before they are awarded the BWA Spectrum.

For the sake of clarity, the DoT guidelines stipulate that a UAS licence can only be awarded to an Indian Company⁸. Hence, foreign applicants will need to form an Indian subsidiary to obtain the UAS licence. However they are allowed to participate in the Auctions directly, and apply for a licence subsequently.

It is clarified that services can only be offered as per the terms of the licence obtained by the operator. Award of spectrum does not confer any right to provide any telecom

⁸ A Company registered in India under the Indian Companies Act, 1956

services, and these are governed by the terms and conditions of the licence obtained by the operator.

5.2 Associated Licensees

For the 3G Auction, Associated Licensees are defined as existing UAS/ CMTS licensees that are controlled, directly or indirectly, by a single entity, which also has at least 26% shareholding in the company. In case of licensees that are listed on recognised stock exchanges, a company of the Promoter group could also qualify as a Common Parent, regardless of the level of shareholding.

For the BWA Auction, Associated Licensees are defined as existing UAS/ CMTS/ ISP licensees that are controlled, directly or indirectly, by a single entity, which also has at least 26% shareholding in the company. In case of licensees that are listed on recognised stock exchanges, a company of the Promoter group could also qualify as a Common Parent, regardless of the level of shareholding.

For the purpose of either of the Auctions, Associated Licensees corresponding to a single Common Parent shall be required to nominate a single entity (either one of the Associated Licensees or the Common Parent) which shall be authorised to bid on their behalf.

In case a Group Bidding Entity is declared the Successful Bidder in any service area, and there is an Associated Licensee corresponding to the Group Bidding Entity in that service area, then the Government shall assign the spectrum to that Associated Licensee. In such a case, the Group Bidding Entity and the Associated Licensee shall both be jointly and severally liable for the performance of the bid obligations.

In case a Group Bidding Entity is declared the Successful Bidder in any service area in the 3G Auction, and there is no Associated Licensee corresponding to the Group Bidding Entity in that service area, then the Government shall assign the spectrum to the Group Bidding Entity or one of its Associated Licensees or a wholly-owned subsidiary of the Group Bidding Entity that acquires a UAS licence in that service area. In case the Nominee UAS Licensee is different from the Group Bidding Entity, the Group Bidding Entity and the Nominee UAS Licensee shall both be jointly and severally liable for the performance of the bid obligations.

In case a Group Bidding Entity is declared the Successful Bidder in any service area in the BWA Auction, and there is no Associated Licensee corresponding to the Group Bidding Entity in that service area (even after taking into account the migration to ISP-category 'A' licence), then the Government shall assign the spectrum to the Group Bidding Entity or one of its Associated Licensees or a wholly-owned subsidiary of the Group Bidding Entity that acquires a UAS licence in that service area. In case the Nominee UAS Licensee is different from the Group Bidding Entity, the Group Bidding Entity and the Nominee UAS Licensee shall both be jointly and severally liable for the performance of the bid obligations.

More than one Associated Licensee having the same Common Parent shall not be allowed to enter either of the Auctions, even if they intend to bid for different non over-lapping service areas.

5.3 Prospective New Entrants

Prospective Bidders who do not have a UAS/ CMTS licence (for the 3G Auction) or a UAS/ CMTS/ ISP (category ‘A’ or category ‘B’) licence (for the BWA Auction) (the “Prospective New Entrants”) shall be permitted to enter either of the Auctions subject to the provisions of Section 5.1. However, it is clarified that a Prospective New Entrant who is pre-qualified or is declared a Successful Bidder shall not be automatically awarded the UAS licence. Prospective New Entrants are advised to ensure that they satisfy the conditions for the award of the UAS licence. This includes the relevant provisions for making an FDI into the telecom services sector in India.

If the Successful Bidder is a Prospective New Entrant, the spectrum shall be assigned to it or to a subsidiary of the Successful Bidder, which acquires a UAS licence in the relevant service areas and where the Successful Bidder has a minimum holding of at least 26% (directly or indirectly) (“New Entrant Nominee UAS Licensee”). In such a case, both the Successful Bidder and the New Entrant Nominee UAS Licensee shall be jointly and severally liable for the performance of the bid obligations.

5.3.1 New entrants – foreign entities

Foreign entities are permitted to participate in the Auction, subject to the provisions of Section 5.1. However, it must be noted that the UAS/ CMTS/ ISP licence conditions and the FDI provisions imply that such a foreign entity can operate a telecom service in India only through an Indian subsidiary with no more than 74% foreign shareholding (subject to the approval of the FIPB for the foreign shareholding in excess of 49%).

However interested foreign entities are allowed to participate in the Auctions directly, and apply for a licence subsequently.

It must be noted by interested Bidders that FIPB approval is consequent to security clearances, and under certain circumstances, could take considerable time. Accordingly, such Bidders are advised to initiate the process of getting approvals from the FIPB at the earliest, as such approvals are available for an intent to invest as well.

5.4 Roll-out obligations

The licensee to whom the spectrum is assigned shall have a network rollout obligation as detailed in this section. The obligation reflects the need both to ensure

the efficient use of spectrum and provide a reasonable level of service to a wide cross-section of customers.

5.4.1 Roll-out obligations for 3G Spectrum

Metro service area

The licensee to whom the spectrum is allocated shall be required to provide service in at least 90% of the service area, street as well as in-building coverage in the allocated frequency, within five years of the Effective Date.

Category A, B and C service areas

The licensee to whom the spectrum is allocated shall ensure that at least 50% of the District Headquarters (“DHQ”) in the service area will be covered, out of which at least 15% of the DHQs should be rural Short Distance Charging Areas (“SDCA”)⁹, within five years of the Effective Date. Further:

- the operator shall also be permitted to cover any other town in a District in lieu of the DHQ;
- coverage of a DHQ/ town would mean that at least 90% of the area bounded by the Municipal limits should get the required street as well as in-building coverage in the allocated frequency;
- the DHQ shall be taken as on the Effective Date;
- the choice of DHQ/ towns to be covered and further expansion beyond 50% DHQ/ towns shall lie with the operator.

The Effective Date shall be the later of the date when the spectrum is allocated and the date when the UAS licence, if applicable, is granted to the operator.

If the licensee does not achieve its roll out obligations, it shall be allowed a further period of one year to do so by making a payment of 2.5% of its successful bid amount (i.e. spectrum acquisition price) per quarter or part thereof as penalty. If the operator does not complete its roll out obligations even within the extended period of one year, the spectrum assignment shall be withdrawn.

5.4.2 Roll-out obligations for BWA Spectrum

Metro service area

The licensee to whom the spectrum is allocated shall be required to provide coverage in at least 90% of the service area, street as well as in-building coverage in the allocated frequency, within five years of the Effective Date.

⁹ SDCA is defined as per the definition used by the Census of India. Rural SDCA is defined as an area where 50% of the population lives in the rural areas.

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Category A, B and C service areas

The licensee to whom the spectrum is allocated shall ensure that at least 50% of the rural SDCAs are covered within five years of the Effective Date.

The Effective Date shall be the later of the date when the spectrum is allocated and the date when the UAS licence, if applicable, is granted to the operator.

If the licensee does not achieve its roll out obligations, its spectrum assignment shall be withdrawn.

5.5 Spectrum usage charges

A spectrum usage charge (over and above the spectrum acquisition fees) as a percentage of the AGR shall be payable by the Successful Bidder as per rules notified by the Government from time to time.

DoT has proposed the following revised spectrum charges for the 800MHz/ 900MHz/ 1800MHz spectrum (“2G spectrum”):

Spectrum in MHz in 2G	Proposed charges as percentage of AGR
upto 4.4/2.5*	3
upto 6.2/5*	4
upto 8	5
upto 10	6
upto 12.5	7
upto 15	8

* for spectrum in 800MHz band

The following clarifications are provided with regard to the 3G and BWA spectrum usage charges:

- The new revised slab rates applicable to an operator with 2G spectrum would be applicable to the 2G + 3G spectrum/ BWA spectrum holder on its total AGR;
- Stand alone 3G/ BWA operators will pay 3% of AGR which corresponds to the lowest slab for 2G spectrum;
- 3G/ BWA spectrum to be allocated based on auction shall not be counted for calculating the slab of the total spectrum holding by 2G licensee for levy of spectrum usage charges;
- The spectrum charge shall be payable on total AGR of 2G and 3G and BWA services taken together;

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- There will be moratorium of one year on the payment of annual spectrum charges for the stand alone 3G/ BWA operator only. However, Moratorium of one year will not be applicable to the existing licensees.

Any change in the spectrum usage charges would be notified before the pre-bid conference.

5.5.1 Adjusted Gross Revenue

For this purpose, the AGR shall be defined as in the relevant licence (UAS/ CMTS/ ISP, as applicable) governing the operations of the operator.

At present, the UAS licence defines AGR as below:

The Gross Revenue shall be inclusive of installation charges, late fees, sale proceeds of handsets (or any other terminal equipment etc.), revenue on account of interest, dividend, value added services, supplementary services, access or interconnection charges, roaming charges, revenue from permissible sharing of infrastructure and any other miscellaneous revenue, without any set-off for related item of expense, etc.

For the purpose of arriving at the “Adjusted Gross Revenue (AGR)” the following shall be excluded from the Gross Revenue to arrive at the AGR:

- PSTN related call charges (Access Charges) actually paid to other eligible/ entitled telecommunication service providers within India;*
- Roaming revenues actually passed on to other eligible/ entitled telecommunication service providers; and*
- Service Tax on provision of service and Sales Tax actually paid to the Government if gross revenue had included as component of Sales Tax and Service Tax.*

At present, the ISP licence defines AGR as below:

The Gross Revenue shall be inclusive of revenue from Internet access service, revenue from internet contents, revenue from Internet Telephony service, revenue from activation charges, revenue from sale, lease or renting of bandwidth, links, R&G cases, Turnkey projects etc., revenue from IPTV service, late fees, sale proceeds of terminal equipments, revenue on account of interest, dividend, value added services, supplementary services, interconnection charges, roaming charges, revenue from permissible sharing of infrastructure and any other miscellaneous revenue, without any set-off for related item of expense etc.

For the purpose of arriving at the “Adjusted Gross Revenue (AGR)” the following shall be excluded from the Gross Revenue to arrive at the AGR:

- Charges from pure Internet service, activation charges from pure internet subscribers. Pure Internet Services shall mean any method/ device/*

technology to provide access to Internet unless explicitly prohibited and all content available including web-hosting, web-colocation which is available on internet without access restriction;

- (ii) *Service Tax on provision of service and Sales Tax actually paid to the Government if gross revenue had included as component of Sales Tax and Service Tax;*
- (iii) *Roaming revenue actually passed on to other eligible/ entitled telecom service provider.*

5.6 Duration

3G Spectrum

The right to use the spectrum allotted in the 2.1GHz band will be valid for 20 years, unless revoked or surrendered earlier, subject to the operator continuing to have the UAS/ CMTS licence. In case the UAS/ CMTS licence is cancelled/ terminated for any reason, the spectrum shall stand withdrawn forthwith.

If the period of existing UAS/ CMTS licence of a Successful Bidder is expiring before the period of expiry of the right to use the 3G Spectrum, its existing licence shall be extended in the 19th year of its validity, for the period required to make it co-terminous with the 3G Spectrum allocation period by amending licence conditions as required, at a price determined by the Government at the time of extension of licence.

BWA Spectrum

The right to use the spectrum allotted in the 2.3GHz and 2.5GHz bands will be valid for 15 years subject to the operator continuing to have the UAS/ CMTS/ ISP licence. In case the UAS/ CMTS/ ISP licence is cancelled/ terminated for any reason, the spectrum shall stand withdrawn forthwith.

If the period of existing UASL/ CMTS/ ISP licence of a Successful Bidder is expiring before the period of expiry of the right to use the BWA Spectrum, its existing licence shall be extended in the penultimate of its validity (19th year in case of UAS/ CMTS licence and 14th year in case of ISP licence), for the period required to make it co-terminous with the BWA Spectrum allocation period by amending licence conditions as required, at a price determined by the Government at the time of extension of licence.

5.7 Breach, revocation and surrender

The spectrum allotment may be revoked, withdrawn, varied or surrendered in accordance with applicable licence conditions or any other applicable laws, rules, regulations or other statutory provisions.

The spectrum allotment may also be revoked if the Government determines the user of the spectrum to be in serious breach of any of the conditions for the award of the spectrum (including adherence to the Auction Rules), and the consequent obligations.

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In case of less serious breaches, the Government may impose fines, at its discretion. Seriousness of the breach shall be determined by the Government at its sole discretion.

The spectrum allotment shall be valid only as long as the applicable licence is valid.

The operator may surrender the spectrum, by giving notice of at least 60 calendar days in advance. In that case, it shall also notify all its customers of consequential withdrawal of service by sending a 30 calendar days notice to each of them. The operator shall pay all fees payable by it till the date on which the surrender of the spectrum becomes effective. The effective date of surrender of the spectrum will be the later of the dates of expiry of the two notices mentioned in this clause.

If at any stage, the spectrum allotment is revoked, withdrawn, varied or surrendered, no refund will be made except at the discretion of the Government.

VI ASSOCIATED POLICY ISSUES

6.1 Government's vision

The Government recognizes that provision of world class telecommunications infrastructure and information is the key to rapid economic and social development of the country. It is critical not only for the development of the Information Technology industry, but also has widespread ramifications on the entire economy of the country. It is also anticipated that going forward, a major part of the GDP of the country would be contributed by this sector. Accordingly, it is of vital importance to the country that there be a comprehensive and forward looking telecommunications policy which creates an enabling framework for development of this industry.

New Telecom Policy, 1999

The following are the objectives of the New Telecom Policy, adopted in 1999:

- Access to telecommunications is of utmost importance for achievement of the country's social and economic goals. Availability of affordable and effective communications for the citizens is at the core of the vision and goal of the telecom policy;
- Strive to provide a balance between the provision of universal service to all uncovered areas, including the rural areas, and the provision of high-level services capable of meeting the needs of the country's economy;
- Encourage development of telecommunications facilities in remote, hilly and tribal areas of the country;
- Create a modern and efficient telecommunications infrastructure taking into account the convergence of IT, media, telecom and consumer electronics and thereby propel India into becoming an IT superpower;
- Convert Public Calls Offices wherever justified, into Public Teleinfo centres having multimedia capability like ISDN services, remote database access, Government and community information systems etc.;
- Transform in a time bound manner, the telecommunications sector to a greater competitive environment in both urban and rural areas providing equal opportunities and level playing field for all players;
- Strengthen research and development efforts in the country and provide an impetus to build world-class manufacturing capabilities;
- Achieve efficiency and transparency in spectrum management;
- Protect the defence and security interests of the country;
- Enable Indian telecom companies to become truly global players.

Broadband Policy, 2004

Recognising the potential of ubiquitous Broadband service in the growth of internet penetration and better communication and subsequently economic growth as well as enhancement in quality of life through societal applications including tele-education, tele-medicine, e-governance, entertainment and employment generation by way of high speed access to information and web based communication, the Government came out with a policy to accelerate the growth of Broadband services. The Broadband Policy framework visualises creation of infrastructure through various access technologies which can contribute to growth and can mutually coexist. Spread of infrastructure is a must for healthy competition and therefore it would be the endeavour of the Government that the telecommunications infrastructure growth in the country is not compromised in any manner.

DoT's annual report for the year-ended March, 2008 identifies the following priorities for the future:

- Since 70% of the population lives in villages, telecom development in rural areas assumes special significance. It is proposed to achieve rural tele-density of 25% (around 200 million rural connections) by the end of the 11th plan period (March 2012);
- The Government is also working steadily towards addressing the issue of releasing additional spectrum from Government use for use of commercial telecom operators so that the growth of this dynamic sector is not constrained by the shortage of spectrum. The Government also recognizes the need to take a forward-looking approach, based on an appreciation of changing technologies and to accelerate structural changes in this sector in line with trends in other countries to ensure that telecommunications services are not only made available on the scale needed to sustain rapid growth in the economy as a whole but also that the quality and cost of these services come up to the requirements of a modernizing economy;
- Recognizing the potential of Broadband services in the growth process, it has been proposed in the 11th Plan targets to provide Broadband for all secondary and higher secondary schools, all Public Health Care centres and *Gram Panchayats*. It is also visualized to link Block headquarters and nearest exchange through State Wide Area Network (SWAN) connectivity. It is also envisaged that internet and Broadband subscribers will increase to 40 million and 20 million respectively, by 2010.

6.2 Objectives of the Auctions

The Government has set itself the following objectives from the Auctions:

- Maximise revenue proceeds from the Auctions;
- Ensure efficient use of spectrum and avoid hoarding;

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- Stimulate competition in the sector, promote rollout of 3G and Broadband services and help resolve 2G congestion issues;
- Conduct the Auctions in a timely and transparent manner.

The Government reserves the right to cancel or postpone the Auctions, in part or in full in order to safeguard the above objectives. The Government has the sole discretion to determine the relative priority of the objectives and whether the objectives are adequately safeguarded by the Auctions.

6.3 Mobile Number Portability

Number portability is a facility provided by one operator to another, which enables subscribers to keep the same telephone number when switching the service between different operators. It is the intention of the Government to introduce intra-service area MNP in a phased manner.

In the initial phase, MNP shall be implemented in the cities of Delhi, Mumbai, Kolkata and Chennai. It is expected that MNP shall be available in these cities from June 2009 onwards.

Accordingly, the Government has issued a Notice Inviting Tender for the appointment of MNP operators on 25th November, 2008.

6.4 Mobile Virtual Network Operator

The Government is also evaluating the implementation of the MVNO policy soon as a natural progression towards enhancing free market principles and contributing to the efficient use of existing telecommunications infrastructure. The MVNO policy is expected to reduce the capital expenditure requirement of new operators and enhance efficient spectrum utilisation.

6.5 Mergers & Acquisitions

M&A shall be as per policy guidelines on the subject issued by DoT (No. 20-100/2007-AS-I dated 22nd April, 2008) or any subsequent revision thereof. This policy is applicable for merger between 2 licence holders only in a service area.

These conditions shall also be applicable to ISP licensees that are awarded BWA Spectrum.

Key features of the current M&A policy are as below:

- Prior approval of the DoT would be required for merger of licences and any permission for merger shall be accorded only after completion of three years from effective date of the licences (as defined in the licence);

- The market share of the merged entity in the relevant service area shall not be greater than 40% either in terms of subscriber base separately for wireless as well as wireline subscriber base or in terms of Adjusted Gross Revenue;
- The post merger licensee entity shall be entitled to the total amount of the spectrum held by the merged entities and will have to fulfil all the conditions applicable for holding such spectrum within 3 months of the merger. In case of failure to meet the spectrum allocation criterion within 3 months, the excess spectrum would have to be surrendered.

It is clarified that a Successful Bidder, who is not a current UAS/ CMTS licence holder in a service area, is permitted to acquire equity in an existing UAS/ CMTS licensee in that service area. Assignment of spectrum to the acquired entity will be permitted subject to the provisions of Clause 5.3 and the M&A guidelines.

6.6 Infrastructure sharing

The Government encourages infrastructure sharing to reduce the cost of deployment and to minimise the environmental impact of networks. At present, the UAS licence permits the following:

- Sharing of “passive” infrastructure viz., building, tower, dark fibre etc. is permitted;
- Provision of point to point bandwidth from their own infrastructure within their service area to other licensed telecom service providers for their own use (resale not permitted) is also permitted;
- Sharing of switch by the licensee for providing other licensed services is permitted;
- Active infrastructure sharing limited to antenna, feeder cable, Node B, RAN and transmission system only and excluding spectrum has also been permitted now and the requisite amendments would be made to the UAS licence shortly.

ISP licence holders that are awarded BWA Spectrum will also be permitted to share infrastructure to the same extent as permitted in the UAS licence.

6.7 Public safety standards

There is public concern over exposure to electromagnetic fields. Recipients will be expected to make their own judgements on this issue and Successful Bidders should comply with all appropriate guidelines, recommendations or other standards as appropriate.

In particular, attention is drawn to Clauses 43.5 and 43.6A of the UAS licence.

VII AUCTION DETAILS

7.1 General conditions

7.1.1 Confidentiality

Confidential Information means any information which, if known to other Bidders, would be likely to affect the price that the other Bidders would be prepared to bid in the Auctions. Such information would include (but not necessarily be limited to) the Bidder's business case, auction strategy and the highest price it is willing to bid for spectrum in any service area. Any party to whom Confidential Information in relation to a Bidder is disclosed is deemed to be an "Insider" in relation to that Bidder. Bidders and Insiders must not convey Confidential Information to any other Bidder or its Insiders.

7.1.2 Directors, employees and advisers

The Bidders are responsible for ensuring that any person who is a director or an employee or an adviser, and who is also a director or employee or adviser of any other Bidder does not:

- (a) take part in both Bidders' preparations for the Auctions; or
- (b) possess or receive Confidential Information relating to both Bidders and their Associated Licensees; or
- (c) pass Confidential Information in respect of one Bidder to another Bidder.

7.1.3 Anti-competitive activity

Bidders must not enter into any arrangements with suppliers of equipment or software, that would restrict the supplier's ability to supply such equipment or software to other Bidders for the purposes of planning, building or operating a network utilising the frequencies to be auctioned. Bidders are also not permitted to agree with suppliers of equipment or software any form of restriction as to the prices charged or other terms and conditions that such suppliers may agree with any other Bidder.

7.2 Application requirements

7.2.1 Application format and procedures for submission

In order to pre-qualify for the Auctions, prospective Bidders must submit an Application, no later than 31st December, 2008 as per the following guidelines.

3G Auction

Prospective Bidders are required to submit:

- Completed Application Form and all supporting information including the necessary undertakings and the Application Checklist;
- Application processing fee;
- Notification of the initial number of Eligibility Points applied for;
- Earnest money, in the form of a Bank Guarantee (as per format provided in Annexure H.3) from a Scheduled Bank, of an amount equivalent to summation of 25% of the Reserve Price of the service areas that the Bidder wishes to be eligible to bid for. Given that flexibility has been provided in the Auction Rules for Bidders to be able to bid across service areas, Applicants should deposit earnest money based on the number of metro, A, B and C service areas that they would like to participate in the 3G Auction for;
- Nomination of an Authorised Person for future correspondence with the Bidder, along with a Power of Attorney empowering him/ her to take all decisions connected with the relevant Auctions, on the Applicant's behalf;
- In case of Associated Licensees, the following are additionally required to be submitted along with the Application:
 - Completed Nomination Form nominating the Group Bidding Entity. Separate Nomination Forms need to be executed by each of the Associated Licensees corresponding to the Group Bidding Entity that intend to participate in the 3G Auction;
 - Details of ownership structures of the Associated Licensees establishing the qualification of the Group Bidding Entity to bid on behalf of the Associated Licensees;
 - For service areas where neither the Group Bidding Entity, nor any of its Associated Licensees are existing UAS/ CMTS licensees, an undertaking confirming that, if the Applicant is successful in winning spectrum in any such service area, it shall acquire a UAS licence in advance of starting commercial operations. The applicant shall be solely responsible for ensuring compliance with all eligibility criteria for the award of a UAS licence including, but not limited to, the criteria required for FIPB approvals and security clearances.

Prospective Bidders that are not existing UAS/ CMTS licensees are additionally required to submit:

- Undertaking confirming that, if the Applicant is successful in winning spectrum in any service area, it shall acquire a UAS licence, through an Indian company registered under the Indian Companies Act 1956, in advance of starting commercial operations. The Applicant shall be solely responsible for ensuring compliance with all eligibility criteria for the award of a UAS

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licence including, but not limited to, the criteria required for FIPB approvals and security clearances.

The Government reserves the right not to pre-qualify any Applicant without assigning any reason whatsoever.

BWA Auction

Prospective Bidders are required to submit:

- Completed Application Form and all supporting information including the necessary undertakings and the Application Checklist;
- Application processing fee;
- Notification of the initial number of Eligibility Points applied for;
- Earnest money, in the form of a Bank Guarantee (as per format provided in Annexure H.3) from a Scheduled Bank, of an amount equivalent to summation of 25% of the Reserve Price of the service areas that the Bidder wishes to be eligible to bid for. Given that flexibility has been provided in the Auction Rules for Bidders to be able to bid across service areas, Applicants should deposit earnest money based on the number of metro, A, B and C service areas that they would like to participate in the BWA Auction for;
- Nomination of an Authorised Person for future correspondence with the Bidder, along with a Power Of Attorney empowering him/ her to take all decisions connected with the relevant Auctions, on the Bidder's behalf;
- In case of Associated Licensees, the following additional forms are required to be submitted alongwith the Application:
 - Completed Nomination Form nominating the Group Bidding Entity. Separate Nomination Forms need to be executed by each of the Associated Licensees corresponding to the Group Bidding Entity that intend to participate in the BWA Auction;
 - Details of ownership structures of the Associated Licensees establishing the qualification of the Group Bidding Entity to bid on behalf of the Associated Licensees;
 - For service areas where neither the Group Bidding Entity, nor any of its Associated Licensees are existing UAS/ CMTS/ ISP (category 'A' or 'B') licensees (even after taking into account the migration to ISP-category 'A' licence), an undertaking confirming that, if the Applicant is successful in winning spectrum in any such service area, it shall acquire a UAS licence in advance of starting commercial operations. The Applicant shall be solely responsible for ensuring compliance with all eligibility criteria for the award of a UAS licence including, but not limited to, the criteria required for FIPB approvals and security clearances.

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Prospective Bidders that are not existing UAS/ CMTS/ ISP (category ‘A’ or ‘B’) licensees are additionally required to submit:

- Undertaking confirming that, if the applicant is successful in winning spectrum in any service area, it shall acquire a UAS licence, through an Indian company registered under the Indian Companies Act 1956, in advance of starting commercial operations. The Applicant shall be solely responsible for ensuring compliance with all eligibility criteria for the award of a UAS licence including, but not limited to, the criteria required for FIPB approvals and security clearances.

The Government reserves the right not to pre-qualify any Applicant without assigning any reason whatsoever.

After the last date of submission of Applications, the Government shall publish the ownership details submitted by the Applicants, who have not otherwise been disqualified till then, on the DoT website. Not only would the announcement of the Applicants’ identities provide important information for other Applicants to submit the Ownership Compliance Certificate, it would also help prevent market speculation.

After this, an Applicant who has not otherwise been disqualified till then, will be required to submit an Ownership Compliance Certificate confirming that it complies with the ownership restrictions in view of the other Applicants.

Separate Applications are required for the 3G Auction and the BWA Auction, in the prescribed formats, respectively.

Applicants should intimate the Government promptly in case of any change in the information submitted by them as part of their Application.

The Government reserves the right to disqualify any pre-qualified Bidder, at any stage of the Auctions or after the Auctions are completed on grounds of non-compliance with eligibility conditions, misrepresentation, non-compliance with Auction Rules, non-compliance with any other pre-condition prescribed for participating in the Auctions or for getting the spectrum, or any matter that may, in the opinion of the Government, be contrary to general public interest.

For less serious breaches, the Government may forfeit the Earnest Money Deposit, or a part of it. Seriousness of the breach shall be determined by the Government at its sole discretion.

Formats for Application and various undertakings are provided in Annexure H.

7.2.2 Pre-qualification tests

In order to pre-qualify, the Applicant must satisfy the following tests:

a) Application requirements

The Applicant must comply with the requirements for provision of information, the required certification and payment of the Earnest Money Deposit. Failure to provide any of these documents or to make the payment at the time specified may result in the Applicant not qualifying for the relevant Auctions.

b) Ownership restrictions

The Government must be satisfied that no two Applicants in either of the Auctions have the same entity directly or indirectly owning more than 10% equity in them. If two Applicants having common ownership greater than 10% apply for pre-qualification, one of them must withdraw till the last date for submission of Ownership Compliance Certificate, failing which both shall not be pre-qualified.

c) General power of exclusion

The Government will retain a general power to exclude any Applicant, without providing any reason for such action, if in its opinion:

- i) the holding of a UAS licence by that Prospective Bidder would be prejudicial to the interests of national security; or
- ii) the Prospective Bidder would not be a fit and proper person to hold a UAS licence.

During the pre-qualification stage, the Government may ask Applicants to provide additional information or documentation relating to their Applications.

Pre-qualification for either of the Auctions or declaration as Successful Bidder does not guarantee that the UAS licence application of the prospective Bidder (if applicable) shall be approved. Prospective Bidders who are not existing UAS/ CMTS/ ISP licence-holders must satisfy themselves that they meet the criteria for award of UAS licence (as applicable).

7.2.3 Earnest Money Deposit

The earnest money (in the form of a Bank Guarantee from a Scheduled Bank) shall be 25% of the Reserve Price. This should be submitted along with the Application for pre-qualification.

The Bank Guarantee shall be from a Scheduled Bank, and valid for six months (and extendable for a further period of six months) in the prescribed format as given in Annexure H.3.

Given that flexibility has been provided in the Auction Rules for Bidders to be able to bid across service areas, Applicants should deposit earnest money based on the number of metro, A, B and C service areas that they would like to participate in the relevant Auctions for. Bidders should note that at no stage in the Auctions, will they be allowed to bid for more service areas than the Initial Eligibility Points corresponding to the Earnest Money Deposit will permit.

The Earnest Money Deposit will be returned following failure to pre-qualify, or following the end of the Auctions, as applicable.

Without prejudice to any other remedy that may be available to it, the Government reserves the right to encash the Earnest Money Deposit, in part or full, in case:

- (a) The Applicant misrepresents facts in its application;
- (b) The Bidder violates any of the Auction Rules or otherwise disrupts the Auctions process;
- (c) The Bidder does not bid for even 1 service area in the first Clock Round of the relevant Auctions;
- (d) The Bidder defaults on its bid.

7.2.4 Application processing fee

The Applicant shall pay a non-refundable application processing fee of Rs. 100,000/- payable to Pay and Accounts Officer, DoT, New Delhi, through a demand draft.

7.3 Announcement of pre-qualified Bidders

The Government shall put up a list of qualified Bidders on the DoT website. At the same time, qualified Bidders will be issued a notice (the “Bidder Participation Notice”), which shall include:

- Each qualified Bidder’s Initial Eligibility Points;
- Auction software, user manual and authentication certificate.

7.4 Bid validity

The Bids made in the Auction shall be valid for a period of six months from the date when the Bids were made.

7.5 Payment methodology

Successful Bidders shall deposit 25% of the Successful Bid Amount as Bid Deposit within 5 days of the close of the Auction, failing which the Earnest Money Deposit shall stand forfeited.

Successful Bidder shall deposit the balance amount (Successful Bid Amount less Bid Deposit) within 15 calendar days of the bid, failing which the Earnest Money Deposit and the Bid Deposit shall stand forfeited.

7.6 Assignment of spectrum

Existing licensees

- Upon receipt of the Successful Bid Amount, the DoT shall issue a Letter of Intent identifying the frequencies to be allotted to the Successful Bidder;
- Necessary amendments (including migration to ISP-category ‘A’ licence, if applicable) will be made to the existing UAS/ CMTS/ ISP licence of the Successful Bidder (as applicable);
- Within 15 days of receipt of the Successful Bid Amount from the Successful Bidder and subsequent to the necessary amendments to the applicable licence, the DoT shall assign the specified spectrum.

New entrants

- Upon receipt of the Successful Bid Amount, the DoT shall issue a Letter of Intent identifying the frequencies to be allotted to the Successful Bidder;
- Within 15 days of receipt of the Successful Bid Amount from the Successful Bidder, DoT shall issue a letter confirming the provisional award of spectrum in the specified frequencies;
- Upon the Successful Bidder obtaining a UAS licence, the DoT shall assign the specified spectrum.

Successful Bidders shall obtain SACFA clearance and a separate wireless operating licence from the Wireless Planning and Coordination (“WPC”) Wing as per prescribed procedure.

VIII THE 3G AUCTION – AUCTION RULES

8.1 Conduct of the Auction

1. The e-auction will be run over the Internet. Bidders will be able to access the Electronic Auction System (“EAS”) using standard web browsing software. The system requirements for Bidders are detailed in Section 8.7. Bidders are expected to take reasonable steps to ensure that they have a reliable means of accessing the EAS and appropriate backup facilities.
2. Prior to the Auction, qualified Bidders will be issued with authentication tokens to allow secure access to the EAS and documentation about how to use the system. An opportunity will be provided for Bidders to ask questions relating to the rules and become familiar with the Auction software prior to the commencement of the Auction.
3. The Auction Rules provide contingency measures to deal with failure of the EAS, Internet connectivity problems and power failures. With the prior permission of the Auctioneer, it will be possible for Bidders to submit bids by alternative means if technical problems prevent access to the EAS. These measures are outlined in Section 8.8.

8.2 Overview of the Auction stages

4. Spectrum licences available for award in this process will be allocated by simultaneous ascending e-auction.
5. The award is a two-stage process:
 - A Clock Stage will establish the Bidders to be awarded a lot in each of the 22 service areas. In this stage, Bidders will bid for generic lots (i.e. a right to a single 2x5MHz spectrum block but not linked to any specific frequency). The Clock Stage will consist of a number of rounds. These rounds will stop once demand for lots in all service areas is less than or equal to the available supply at the prices set in the last completed Clock Round and there are no opportunities for Bidders to increase their demand allowed by the Activity Rules (the precise conditions under which the Auction can close are described subsequently). This will establish a common Winning Price for all lots within a service area, and the Winning Bidders in each service area;
 - The Clock Stage will be followed by an Assignment Stage that will allocate specific frequencies available to the Winning Bidders identified in the Clock Stage. This will consist of a single round of bidding and will allow Winning Bidders to express preferences for the specific frequencies at which their lot might be located. This stage will only determine which frequencies Winning Bidders are awarded, while all participants in the Assignment Stage will have already won a lot in one or more service areas in the Clock Stage and are

guaranteed to be awarded a frequency block even if they choose not to make any bids in the Assignment Stage.

6. Winning Bidders will pay the sum of the relevant Winning Prices set in the Clock Stage plus their Winning Bids in the Assignment Stage. Winning Bidders in a service area may pay different amounts overall, but differences in the overall amount only reflect the differences in the value placed by Winning Bidders on specific frequency blocks.

8.3 The Clock Stage

8.3.1 Overview

7. In the Clock Stage, there is simultaneous bidding for lots across all 22 service areas. Bidding proceeds in rounds (Clock Rounds). During each Clock Round, bids may be placed for some or all of the 22 service areas according to the detailed bidding rules described below.
8. In each Clock Round, Bidders will be told the Clock Round price of a lot in each of the 22 service areas. Bidders will be able to bid for at most one generic lot in each service area. Therefore, in each Clock Round, a Bidder's decisions will consist of a yes/no choice of whether to make a bid on each of the 22 service areas. By bidding on a service area, if that bid becomes a Winning Bid, the Bidder commits to buy any lot in that service area at a price not greater than the Clock Round price in the round when the bid was submitted.
9. A Clock Round will close at a finishing time specified by the Auctioneer, by which time all Bidders must have placed their bids. The finishing time is subject to provisions for rounds to be extended and re-scheduled, discussed in Section 8.3.8.
10. At the end of each Clock Round, the Provisional Winning Bidders and Provisional Winning Prices in each service area are determined as follows:
 - for each Bidder, only the highest bid (if any) submitted by that Bidder for a lot in that service area during any completed Clock Round will be considered;
 - considered bids will be ranked according to their value and then, if necessary, using the tie-breaking criteria detailed in Section 8.3.5;
 - where n is the number of lots available in that service area, the first n bids in each service area according to this ranking will become Provisional Winning Bids, and the Bidders who submitted these bids will become the Provisional Winning Bidders;
 - the lowest round clock price at which any of the Provisional Winning Bids was submitted will be the Provisional Winning Price in that service area.

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11. Bidders will be able to switch bids across service areas from one round to the next subject to certain limitations (called “Activity Rules”) detailed in Section 8.3.4. These rules require that Bidders must demonstrate sufficient bidding activity to maintain their eligibility to make bids in subsequent rounds, otherwise their ability to make bids in subsequent rounds will be curtailed. These Activity Requirements will be tightened in steps according to the overall amount of bidding activity in the Auction. Provisional Winning Bids cannot be switched to other service areas.
12. In the first Clock Round, the price of a generic lot in each service area will be set equal to the Reserve Price (as shown in Table 12). For subsequent rounds, the Clock Round prices in each service area will be set as follows:
 - if the Excess Demand (discussed further in Section 8.3.6) is negative, the Clock Round price in that service area will be equal to the Clock Round price in the last completed Clock Round;
 - otherwise, the Clock Round price in that service area will be equal to the Clock Round price in the last completed Clock Round plus a price increment linked to the amount of Excess Demand (discussed further in Section 8.3.6).
13. Further bids will be invited at the new Clock Round prices. The Clock Rounds will continue until demand can be satisfied within each and every service area. The final Clock Round will be the first round in which:
 - (a) for every service area, the number of bids at the current Clock Round price is less than or equal to the number of available lots in that service area; **and**
 - (b) the Activity Requirement has been increased to the maximum level (i.e. the Auction Activity Requirement is set to 100%, as discussed subsequently in Section 8.3.4).
14. All Provisional Winning Bids for lots at the end of the final Clock Round will be Winning Bids. The Provisional Winning Prices will become the Winning Prices, and the Provisional Winning Bidders in the last Clock Round will become the Winning Bidders who will then be awarded a generic lot in each service area at the Winning Price.
15. A consequence of these rules is that if a Bidder is a Provisional Winning Bidder in a service area in Clock Round R, but a further Clock Round R+1 occurs with a higher Clock Round price, then that Bidder will need to make a bid at the higher clock price in Clock Round R+1 to be guaranteed to win a lot if round R+1 happens to be the final Clock Round. If the Bidder does not raise its bid in round R+1 to the higher clock price, but this turns out to be the last Clock Round, the Bidder will only win a lot in the event that there are fewer Provisional Winning Bids equal to the clock price than the number of available lots in the service area.
16. At the end of the Clock Stage, the Auctioneer will announce the Winning Bidders, along with the list of generic lots each Bidder has won. The Auction will then proceed to the Assignment Stage to determine which specific frequencies are assigned to each Winning Bidder.

8.3.2 Making bids during Clock Rounds

17. In each Clock Round, Bidders will be presented with a bid form by the EAS. For each of the 22 service areas the bid form will display:
 - the name of the service area;
 - the number of lots available in the service area;
 - the number of Eligibility Points linked to a lot in the service area (discussed subsequently in Section 8.3.3);
 - the Clock Round price in the service area for the current Clock Round;
 - after the first Clock Round, whether the Bidder is a Provisional Winning Bidder in that service area and, if so, the ranking of its bid in that service area;
 - after the first Clock Round, the Provisional Winning Price in that service area; and
 - after the first Clock Round, the Clock Round price and the total number of bids received in that service area in the last completed Clock Round.

18. On the bid form, each service area will have a tick-box associated to it. The Bidder will be required to tick the boxes associated with the service area(s) in which it wishes to place a bid for one lot at the specified Clock Round price. Bids are subject to the Activity Rules described in Section 8.3.4.

19. Bidders are required to make a bid for at least one service area in the first Clock Round. Any Bidder who fails to make a bid for at least one service area in the first Clock Round will forfeit its deposit.

20. In the event that a Bidder is unable to access the EAS, the Auctioneer may allow the Bidder to submit a bid by fax or any other means that the Auctioneer permits to enable an orderly auction process. In advance of the Auction, qualified Bidders will be provided with forms listing the 22 service areas that must be used for making any such fax bids. Qualified Bidders will need to provide details of the persons authorised to certify bids submitted by such alternative means in advance of the Auction. The Auctioneer is under no obligation to accept bids other than through the EAS. Bidders should ensure that they have reliable access to the EAS and must inform the Auctioneer of any difficulties they might have in accessing the EAS at the first reasonable opportunity using contact telephone numbers provided in advance of the Auction. Back-up procedures for making bids in exceptional circumstances are detailed in Section 8.8.

8.3.3 Eligibility Points

21. For the purposes of applying an Activity Rule, each of the 2x5MHz lots in each service area has been assigned a specific number of Eligibility Points, based on the Reserve Price of licences in that service area. The number of points associated with a 2x5MHz block in each service area is listed in the following table:

Table 12. Reserve prices, deposits required and associated Eligibility Points

Service area type	Number of service areas of this type	Names of service areas	Reserve price for each service area (Rs. Crore)	Required deposit per service area (25% of reserve) (Rs. Crore)	Number of Eligibility Points associated with a lot
Delhi, Mumbai & Category A	7	Delhi Mumbai Andhra Pradesh Gujarat Karnataka Maharashtra Tamil Nadu	160	40	16
Kolkata & Category B	9	Kolkata West Bengal Haryana Kerala Madhya Pradesh Punjab Rajasthan Uttar Pradesh (W) Uttar Pradesh (E)	80	20	8
Category C	6	Assam Bihar Himachal Pradesh Jammu & Kashmir North East Orissa	30	7.5	3

22. Each Bidder begins the Auction with the Initial Eligibility applied for by the Bidder and subsequently approved by the Auctioneer during the application process. This Initial Eligibility will limit Bidders' subsequent ability to make bids as described in the following subsection.
23. As each Bidder is able to bid for at most one lot in each service area, the maximum Initial Eligibility that can be applied for is 202 points. Therefore, Bidders may apply for any Initial Eligibility between 3 and 202 points. The Initial Eligibility of Bidders and the identities of Bidders participating in the Auction will be made public once the Government has determined which applicants are qualified to bid in the Auction.

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24. Bidders must make deposits in proportion to their Initial Eligibility. A deposit or bank guarantee in the amount of Rs. 2.5 crore per eligibility point must be received prior to the deadline notified to Bidders by the Government. Any Bidder failing to make such a deposit by this deadline may not participate in the Auction.

8.3.4 Activity Rule

25. In any given Clock Round, the activity of a Bidder may not exceed its eligibility in that Clock Round.
26. The activity of a Bidder in a Clock Round is equal to:
- In the first Clock Round, the Eligibility Points associated with service areas where the Bidder places a bid for a lot;
 - After the first Clock Round, the sum of:
 - (i) the Eligibility Points associated with service areas in which the Bidder has been determined to be a Provisional Winning Bidder at the end of the last completed Clock Round (regardless of whether or not this bid is raised by the Bidder in the current Clock Round); and
 - (ii) the Eligibility Points associated with service areas where the Bidder has not been determined to be a Provisional Winning Bidder at the end of the last completed Clock Round and in which the Bidder submits a bid in the current Clock Round (referred to as “New Bids”).
27. For each Clock Round, the Auctioneer will announce the Auction Activity Requirement that will apply to that Clock Round. The Auction Activity Requirement is the percentage of the Bidder’s Eligibility Points that determines the level of activity that a Bidder must meet in that Clock Round in order to maintain its eligibility in the following Clock Round. This threshold (rounded up to the nearest whole number) is referred to as the Bidder’s Activity Requirement in that Clock Round.
28. After the first Clock Round, the eligibility of each Bidder is calculated as follows:
- If the Bidder’s activity in a Clock Round is equal to or greater than its Activity Requirement, then the Bidder’s eligibility in the following Clock Round will be equal to the Bidder’s eligibility in the current Clock Round.
 - If the Bidder’s activity in a Clock Round is less than the Bidder’s Activity Requirement for that Clock Round, then the eligibility of the Bidder in the next Clock Round (n+1) will be equal to its activity level in the current Clock Round (n) multiplied by the reciprocal of the Auction Activity Requirement, rounded down to the nearest whole number:

$$\text{Bidder Eligibility Points in round } n+1 = \text{Activity level in round } n \times \frac{1}{\text{Auction Activity Requirement in round } n}$$

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29. For example, suppose that in the first Clock Round, Bidder X has an eligibility of 48 points. If the Auction Activity Requirement is 80%, the Bidder's Activity Requirement is 39 points (80% \times 48 rounded up to the nearest whole number). Suppose that Bidder X submits a bid with an associated activity of 42 points, then, the eligibility of Bidder X in the second Clock Round would be equal to 48 points. However, suppose that Bidder X submits a bid with an associated activity of 30 points; then the eligibility of Bidder X in the second Clock Round would be reduced to 37 points (30 * 1/80% rounded down to the nearest whole number).
30. Bidders will be informed of their eligibility and the associated Activity Requirement in each Clock Round in advance of the start of the Clock Round. In the first Clock Round, the Auction Activity Requirement will be set at 80%. Subsequently, the Auction Activity Requirement will be increased in two steps as the Auction progresses, from 80% to 90% and then to 100%. The timing of these steps would be determined by the Auctioneer depending on the extent of overall bidding activity in the Auction process.
31. The Clock Rounds will end only when the Auction Activity Requirement is 100%.

8.3.5 Ranking of Bidders and Provisional Winning Bidders

32. At the end of each Clock Round, only the highest bid submitted by each Bidder in any completed Clock Round will be considered. Considered bids will be ranked using the following criteria:
 - bids will be ranked in descending order according to the Clock Round price for that service area in the Clock Round when the bid was made;
 - where there is a tie according to the first criterion, tied bids will be ranked in ascending order according to the Clock Round when the bid was submitted (thus, bids submitted in earlier Clock Rounds take precedence);
 - where there is a tie according to the first two criteria, tied bids will be ranked in descending order according to the total value of all bids submitted by the Bidder in the Clock Round when the bid is submitted, plus any Provisional Winning Bids at the start of that Clock Round that the Bidder did not raise in that Clock Round;
 - where there is a tie according to the first three criteria, ties will be broken according to a random index assigned to the bid when it is received by the EAS.
33. A consequence of these ranking criteria is that, once two bids received in a given Clock Round have been ranked, their relative ranking will be preserved in any subsequent Clock Rounds.
34. Where a service area has n lots available, the first n bids according to this ranking will be declared to be the Provisional Winning Bids for that Clock Round, and the Bidders that submitted such bids will be declared the Provisional Winning Bidders.

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If there are fewer than n such bids for that service area, all such bids will be declared to be Provisional Winning Bids.

35. The Provisional Winning Price will be equal to the smallest of the Clock Round prices at which the Provisional Winning Bidders submitted their Provisional Winning Bids. In case that the Auction ends, Provisional Winning Bidders will be required to pay the Provisional Winning Price associated with their Provisional Winning Bids, unless they cease to be Provisional Winning Bidders in a subsequent Clock Round. Note that the Provisional Winning Price associated with a Provisional Winning Bid may increase if New Bids are received from other Bidders; however, the Provisional Winning Price will never be greater than the Clock Round price at which the Provisional Winning Bid was submitted.

8.3.6 Prices and price increments

36. In the first Clock Round, the Clock Round price per lot in each service area will be the Reserve Price as determined by the Government. The Reserve Price associated with each service area is shown in Table 12.
37. In subsequent Clock Rounds, Clock Round prices will be increased relative to the previous Clock Round depending on the demand for lots. Excess Demand in a service area is defined to be:
 - the total number of bids received in this service area at a Clock Round price equal to the Clock Round price set in the last completed Clock Round **minus**
 - the number of lots available in that service area.
38. Clock round prices in the next Clock Round will be set according to the following rules:
 - if Excess Demand is negative in a service area, the Clock Round price for lots in this service area in the next Clock Round will be set equal to the Clock Round price in the last completed Clock Round;
 - if Excess Demand is zero or positive in a service area, the Clock Round price for lots in this service area in the next Clock Round will be set equal to the Clock Round price in the last completed Clock Round plus a strictly positive price increment.

Therefore, Clock Round prices will only increase in service areas where the Provisional Winning Price at the end of the previous Clock Round is equal to the Clock Round price.

39. Price increments may vary by service area and will be positively related to Excess Demand in each service area. They will be set to no more than 10% of the Clock Round price for that service area in the last completed Clock Round. The Auctioneer will typically follow the rule set out in Table 13, though may set any strictly positive

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percentage increment less than or equal to 10% in the interests of the smooth and expeditious running of the Auction.

Table 13. Proportionate price increment rule

Excess Demand	Price increment as a proportion of previous Clock Round price
0	2%
1 or 2	5%
3 or more	10%

40. The price increment calculated for a service area will always be capped at Rs. 2.5 crore times the number of Eligibility Points for one lot in that service area. The maximum absolute price increments for each category are summarised in the following table:

Table 14. Maximum absolute price increments

Service area type	Maximum price increment per round (Rs. Crore)
Delhi, Mumbai & Category A	40
Kolkata & Category B	20
Category C	7.5

41. All price increments will be in Rs. crore, rounded down to one decimal place. Therefore, throughout the Auction all prices will be in Rs. crore with at most one decimal place.

8.3.7 Winning Bids and Winning Prices

42. The final Clock Round will be the first Clock Round with an auction Activity Requirement of 100% and in which, for each service area, the number of bids at the current Clock Round price is less than or equal to the number of lots available in that service area.
43. The Provisional Winning Price in that service area at the end of the final Clock Round will become the Winning Price for the service area, and Provisional Winning Bidders will become Winning Bidders, with their associated Provisional Winning Bids becoming the Winning Bids. A consequence of these rules is that the Winning Price in a service area is the highest Clock Round price that maximises the number of lots sold in that service area.
44. As a consequence of the rules, the Winning Price in any service area in which there are unsold lots will be the Reserve Price. Any lots that remain unsold in a service area will not be awarded as part of this exercise and will be retained by the Government.

8.3.8 Length of Clock Rounds and extension periods

45. Auction rounds will only be scheduled to begin between the hours of 09.00 and 17.30 Indian time on Monday through Friday, except national holidays. The Auctioneer may choose not to hold Clock Rounds on one or more days at its absolute discretion.
46. Prior to the start of any Clock Round, the Auctioneer will notify Bidders of the starting and finishing times of the next Clock Round through the EAS. At least 20 minutes notice will be given of the start of the next Clock Round.
47. Additionally, Bidders will be notified in advance of the starting time and date of the first Clock Round. At least two working days notice of the first Clock Round will be given.
48. A Clock Round will not be shorter than 30 minutes. It is expected that during the early rounds of the Auction, Clock Rounds will run for one hour. During the Clock Round, Bidders will be able to enter their bids into the EAS. Entering a bid will be a two-step process, in which Bidders must first enter a bid for checking by the EAS. The EAS will report back to the Bidder the bid logged by the system and whether it is compatible with the Auction Rules. In the event that the bid would lead to a reduction in the Bidder's eligibility, a warning will be given. Optionally, the Bidder will be able to go back and modify the decision entered into the EAS for checking. As a second step, the Bidder must then confirm the bid that has been checked and logged by the EAS. Only bids that are subject to this confirmation step will be accepted.
49. Bidders are responsible for ensuring that bids are received and confirmed by the EAS prior to the end of the Clock Round. For the purposes of determining whether or not a bid is received prior to the end of the Clock Round, the EAS must receive a confirmed bid by the end of the Clock Round. Bidders should be aware that it takes a finite amount of time to transmit a bid across the Internet and for the EAS to respond. Bidders submitting decisions close to the end of the Clock Round do so entirely at their own risk of failing to meet the Clock Round deadline due to network delays or delays in response by the EAS. Bids are not processed by the EAS until the Clock Round is closed and no tactical or strategic advantage is conferred by submitting bids late within the Clock Round.
50. In the event that a Bidder has technical problems that prevent access to the EAS, the Bidder must inform the Auctioneer at the first reasonable opportunity. Procedures for submitting bids in exceptional circumstances are described in Section 8.8.
51. Shortly after the end of a Clock Round, results will be announced on a service area-by-service area basis. The information that will be released is described in the following subsection. If there is Excess Demand for lots in any service area and a further Clock Round is required, this Clock Round will be scheduled and the start and finish times announced to Bidders through the EAS subject to at least 10 minutes notice of the start of the next Clock Round.

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52. To guard against technical problems and provide Bidders with some additional flexibility in making bidding decisions, Bidders are provided with limited opportunities to extend a Clock Round and defer submission of a bid. Each Bidder is allocated an Extension Budget of 2 hours.
53. In the event that a Bidder fails to submit a valid, confirmed bid by the end of the initial finishing time of a Clock Round (and has at least 10 minutes remaining in its Extension Budget), 10 minutes will be subtracted from its Extension Budget and the finishing time of the Clock Round will be deferred by 10 minutes for that Bidder. In the event that the Bidder fails to submit a decision by the revised deadline (and has at least 10 minutes remaining in its Extension Budget), a further 10 minutes will be subtracted from its Extension Budget and the finishing time deferred by a further 10 minutes for that Bidder. A Bidder may defer the original scheduled finishing time of any one Clock Round by at most 30 minutes in this way.
54. If the original finishing time of the Clock Round has been deferred by 30 minutes or if the Bidder's Extension Budget is exhausted, no further deferral of the Clock Round finishing time will be possible. In this case, if no confirmed decision is logged by the EAS prior to the end of the Clock Round, that Bidder will be deemed to have entered a bid of zero lots in each service area.
55. If one or more Bidders trigger an extension period, all Bidders will be informed of the revised finishing time through the EAS. For the avoidance of doubt, one Bidder triggering an extension does not remove the requirement on other Bidders to submit bids by the original deadline or to have their Extension Budget reduced if they have also failed to submit their bids within the stipulated time. In particular, if more than one Bidder has failed to submit a decision by the original finishing time of a Clock Round, all such Bidders will either be penalised 10 minutes from their Extension Budgets or (if they have exhausted their Extension Budget) have their bid deemed to be zero. Bidders that have already entered and confirmed a decision prior to the original finishing time of the Clock Round will not be able to revise or modify their decision during an extension period.
56. A Clock Round may close prior to the finishing time of an extension period if the EAS has received bids from all Bidders. For the avoidance of doubt, this provision does not apply within a normal Clock Round that has not been extended; Clock Rounds will not close prior to the scheduled finishing time even if the EAS has received bids from all Bidders.
57. There will be the following minimum times between the ending of one Clock Round and the starting of the next:
 - If no extensions are triggered in the current Clock Round, there will not be less than 30 minutes between the finishing time of the current Clock Round and the starting time of the next Clock Round;
 - If the finishing time of the current Clock Round is extended, there will not be less than 30 minutes between the original scheduled finishing time of the current Clock Round and the starting time of the next Clock Round and not

less than 20 minutes between the extended finishing time of the current Clock Round and the starting time of the next Clock Round.

In early rounds of the Auction, it is expected that about one hour will be left between the end of one Clock Round and the start of the next.

58. In exceptional circumstances, such as technical failure affecting a large number of Bidders, the Auctioneer may:
- reschedule the start of a Clock Round whose starting time has been announced but the Clock Round not yet started;
 - reschedule the finishing time of a Clock Round in progress;
 - cancel a Clock Round in progress and re-run it;
 - grant one or more Bidders additional Extension Budget.

8.4 Assignment Round

59. The Assignment Round will be scheduled for the next working day after the end of the Clock Stage. Only Bidders who have won a generic lot in at least one service area will be able to participate. Prior to the start of the Assignment Round, all Winning Bids and the identities of Winning Bidders will be made public.
60. The Assignment Round will be at least four hours in length. There will be no ability for Bidders to extend the Assignment Round. If a Bidder fails to submit a bid by the finishing time of the round, it will be deemed to have made a bid of zero for all assignment options. There is no obligation on a Bidder to submit a bid in the Assignment Round.
61. In the Assignment Round, Bidders that have been awarded lots in the clock phase will be presented with the specific frequency blocks available for award in the service areas where they have won a lot. At this point, Bidders have an opportunity to make an additional bid for any of the specific frequency blocks they have a preference for. Bidders who have been awarded a lot in the clock phase are guaranteed to win one of the specific frequency blocks in the relevant service area regardless of the assignment bids they make, even if they choose not to make any bids in the Assignment Round.
62. Bidders will be provided with a bid form listing the specific frequency blocks available in each service area in which they won a generic lot. Bidders may choose a bid amount for each one of the specific frequency blocks in each service area. Bids must be expressed in Rs. crore with at most one decimal place.
63. If a Bidder does not enter a bid for one or more frequency blocks, it will be deemed to have entered a bid of zero for those blocks.
64. Bids should be entered using the EAS. In the event of exceptional circumstances preventing a Bidder from accessing the EAS, bids may be accepted by other means

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where the Auctioneer has given prior permission at its discretion, as described in Section 8.8.

65. The Winning Bids from the Assignment Round will be determined for each service area by taking the assignment of specific frequency blocks to Winning Bidders that yields the greatest total of Winning Bids. In the event of a tied outcome with more than one assignment producing the same total value of Winning Bids, the tie will be broken by selecting one of the tied outcomes at random.
66. Bidders will pay the sum of their Winning Bid in the Assignment Round and the Winning Price for each service area in which they won a lot.

8.5 Information policy

67. Prior to the start of the Auction, the Government will make public:
 - a list of the qualified Bidders;
 - the information provided in these Bidders' applications about their ownership structures;
 - the number of Initial Eligibility Points applied for by each Bidder; and
 - the amount of deposit provided by the Bidder.
68. During the Clock Stage the following information will be provided to Bidders after each completed Clock Round:
 - the Clock Round price per lot in each service area in the last completed Clock Round;
 - the total number of bids received in each service area in the last completed Clock Round; and
 - the Excess Demand in each service area.
69. If the last completed Clock Round was not the final Clock Round, the following information will also be provided:
 - the Provisional Winning Bids held by that Bidder in each service area at the end of the completed round;
 - the ranking of any provisional bids held by that Bidder amongst all the provisional bids within the relevant service area;
 - the Provisional Winning Price in each service area at the end of the completed round;
 - total number of Eligibility Points available to the particular Bidder for the next Clock Round;
 - the price increment to be applied in each service area; and

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- the Clock Round price per lot in each service area that will apply for the next Clock Round.
70. At the end of the final Clock Round, the following information will be provided to Bidders:
- that the last completed Clock Round was the final Clock Round;
 - the Winning Prices;
 - the Winning Bids made by that Bidder (if any);
 - the number of unsold lots in each service area (i.e. the number of lots available less the total number of Winning Bids in each service area).
71. Information relating to the specific bids made by Bidders in each service area will not be provided at the end of each Clock Round, but will be made public in their entirety subsequently. Specifically, after the Assignment Stage, all bids made throughout the Auction process will be announced, comprising:
- all bids made during Clock Rounds (whether successful or not) and;
 - all assignment bids (whether successful or not).

8.6 Collusion and other prohibited behaviour

72. The Government of India reserves the right to disqualify any Bidder that:
- colludes or attempts to collude with another Bidder in determining its bids during the Auction;
 - releases confidential information with the effect or intention of modifying the bidding behaviour of other qualified Bidders;
 - breaches or attempts to breach the secure measures within the EAS;
 - frustrates or attempts to frustrate any other Bidder (or other users of the EAS) from accessing the EAS;
 - attempts to influence the decisions of the Auctioneer in conducting the Auction;
 - obstructs or attempts to obstruct the running of the Auction;
 - provides inaccurate information in its application to participate in the Auction.

In the event of such disqualification, a Bidder will forfeit its deposit.

73. The Government reserves the right to impose a fine equal to some or all or a Bidder's deposit for less serious breaches of these rules. Such fines shall be deducted from that Bidder's deposit.

8.7 System requirements for accessing the EAS

74. The Auction will be run on an electronic auction system (EAS) over the public Internet using encryption. Bidders will not need any specialist hardware or software and can access the system using a standard Internet browser. The only additional requirement is to install the digital certificates needed for authentication and data encryption.

8.7.1 Operating system and software

75. The EAS works on a wide range of operating systems and Internet browsers complemented with Java. However, the digital certificates used for user authentication in the EAS are 2048 bit keys. These keys are longer than those in current common usage for e-commerce applications and provide a higher level of security. It is important that Bidders use an up-to-date operating system and browser, and the latest version of Java. Windows XP (Service Pack 2 with Internet Explorer 7), Windows Vista and Macintoshes with OSX are all able to use these longer keys. Obsolete versions of Internet Explorer may not support longer keys.
76. The EAS has been tested using a few popular configurations, and therefore we recommend that Bidders use:
- Windows XP Service Pack 2 or Windows Vista with Internet Explorer 7 or Firefox 2.0, and Java 1.5 or 1.6; or
 - Mac OSX with Safari and Java 1.5 or 1.6.

8.7.2 Java

77. The EAS uses a Java application embedded within a web page. This requires the Bidders' Internet browser to support Java. Under Windows, the browser will usually, but not always, have Java enabled by default. **It is important that Bidders have an up-to-date version of Java installed on any computer to be used for bidding in the Auction, as older versions may not be able to cope with the long digital certificates used.**
78. If Bidders are using Windows, Bidders can find out if they have Java installed on their computer using Sun's Java installation verification tool found at:

<http://www.java.com/en/download/installed.jsp>

If Bidders are using Mac OSX, use the Software Update feature (found on the Apple menu) to check if Bidders have the most up-to-date version of Java for their Mac. If Bidders need to install java, this is available from Sun Microsystems' Java website at <http://java.com>.

79. If Bidders have Java installed, but are unable to access the EAS, it is possible that their Windows settings are such that:
- Java has been disabled (by default or due to corporate IT policies, for example);
 - Bidders are accessing the Internet through a proxy server, but that Internet Explorer has not been set up correctly to allow Java to download applications through their proxy server;
 - a proxy server is being used, but Java has not been configured to use this.

In these cases, Bidders may need to refer to their IT department or other suitably qualified persons to ensure that their PC has a Java installed and enabled on their browser, and that their Internet browser is correctly set up. Sun Microsystems' Java website at <http://java.com> may provide helpful information on how to do this.

80. Detailed manuals and troubleshooting guides will be provided to qualified Bidders prior to the Auction. A mock auction will also be run to allow Bidders to test that they can access the EAS and to resolve any technical problems.

8.7.3 Pop-up blockers

81. Bidders should ensure that there is no software installed on their computer that will interfere with the normal operation of their Internet browser. Do not use any pop-up blockers, such as those provided by Internet Explorer and complementary software, like for example the Google tool bar. This might, depending on Bidders' settings, prevent some of the EAS windows from opening.

8.7.4 Power management settings

82. To ensure that Bidders can view progress in the Auction without delay or difficulty it is recommended that Bidders:
- turn off any power management features on their computer such as automatic hibernation or suspension; and
 - disable any screensavers.

If a Bidder's computer hibernates or suspends automatically, it will need to go through the login procedures again when the computer is awakened. This will cause some delay in returning to the Auction system.

8.7.5 Using other software at the same time

83. We recommend that Bidders do not open other web pages when they are accessing the EAS. Viewing other web pages (especially complex ones) at the same time as

viewing EAS pages increases the risk of possible problems with their browser. Therefore, we recommend that ideally Bidders should dedicate one computer to running the EAS, and do not access other web pages or run other applications on this computer while using the EAS. This will help to minimise the risk of crashes or problems.

8.7.6 Internet connection

84. In order to use the EAS Bidders need an Internet connection. We recommend that Bidders use a reliable broadband Internet connection with a download bandwidth of 512kbit/s or higher. However, there are no complex graphics on any of the web pages served by the system and it should work adequately with any reasonable narrowband connection. Wireless connections may be adequate, but it is important that the latency of network connections to the EAS does not exceed 20-30 seconds to ensure reliable access. In the event of a temporary loss of contact between the Bidder and the EAS, the EAS will automatically log out the Bidder for security reasons, who will then need to go back through login procedures.
85. It is recommended that Bidders have a back-up computer and backup Internet connection that can be used in the case that either their primary computer or Internet connection fails.

8.7.7 Display

86. Bidders are recommended use a display with a screen resolution of 1280x1024 (or higher). Bidders can use a lower screen resolution, but Bidders may find that some tables are more difficult to view.

8.8 Back up procedures for making bids

87. Bidders experiencing technical problems with accessing the EAS either before or during a round should contact the Auctioneer as soon as reasonably possible. Bidders will be provided with telephone and fax numbers to contact the Auctioneer. In the event of problems accessing the EAS, Bidders should not rely on email to communicate with the Auctioneer.
88. Bidders must provide the Auctioneer with at least four alternative telephone numbers, two of which should be cellular. This will permit the Auctioneer to contact the Bidder in the event that the Auctioneer observes the Bidder have difficulties in accessing the EAS.
89. Any telephone calls between the Auctioneer and a Bidder may be subject to password verification. The Auctioneer may ask the Bidder for a password from a list of one-time passwords provided to the Bidder prior to the Auction.

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90. The Auctioneer may then at its absolute discretion permit a Bidder to submit its bids by fax or phone. Where the Auctioneer grants permission, the Bidder must submit its bid using the agreed mechanism, i.e. either fax or phone (in these circumstances any bids submitted by the electronic auction system will not be accepted unless the Auctioneer has expressly agreed with the Bidder to use these bids).
91. Permission to submit Bidders other than through the EAS will not be granted in a situation when Bidders could reasonably be expected to be able to access the EAS. Bids by phone or fax will not be accepted until the Auctioneer has granted the Bidder permission to make bids other than through the EAS. Such permission may be granted for just one round or a number of rounds.
92. Any bid made by fax or phone will be subject to password verification and must use the template bid form provided to the Bidder by the Auctioneer. The Auctioneer will provide template forms and a list of one-time passwords to Bidders prior to the start of the Auction.
93. Only the first valid bid form received by the Auctioneer from a Bidder will be considered. All bids made by fax or phone will be subjected to the same Activity Rules and will only be deemed valid after verification by the Auctioneer. In the event that a bid does not satisfy the Activity Rules, the entirety of the bid will be discarded (i.e. all service areas within the bid).
94. In the event of a bid made by fax being illegible or subject to error, the Auctioneer will make reasonable attempts to contact the Bidder to determine the Bidder's intention. However, the entry of a bid decision into the EAS on behalf of a Bidder is then at the Bidder's risk.
95. For the purposes of determining how much of a Bidder's Extension Budget has been exhausted, the Auctioneer will determine the time at which a valid bid has been received in full from the Bidder by the agreed mechanism. The Extension Budget will be reduced by the appropriate number of 10 minute intervals wholly or partially elapsed since the original scheduled finishing time of a Clock Round.
96. Bidders may make use of similar procedures for submitting decisions in the Assignment Round.

IX THE BWA AUCTION – AUCTION RULES

9.1 Conduct of the Auction

1. The e-auction will be run over the Internet. Bidders will be able to access the Electronic Auction System (“EAS”) using standard web browsing software. The system requirements for Bidders are detailed in Section 9.7. Bidders are expected to take reasonable steps to ensure that they have a reliable means of accessing the EAS and appropriate backup facilities.
2. Prior to the Auction, qualified Bidders will be issued with authentication tokens to allow secure access to the EAS and documentation about how to use the system. An opportunity will be provided for Bidders to ask questions relating to the rules and become familiar with the Auction software prior to the commencement of the Auction.
3. The Auction Rules provide contingency measures to deal with failure of the EAS, Internet connectivity problems and power failures. With the prior permission of the Auctioneer, it will be possible for Bidders to submit bids by alternative means if technical problems prevent access to the EAS. These measures are outlined in Section 9.8.

9.2 Overview of the Auction stages

4. Spectrum licences available for award in this process will be allocated by simultaneous ascending e-auction.
5. The award is a two-stage process:
 - A Clock Stage will establish the Bidders to be awarded a lot in each of the 22 service areas. There are two distinct categories of generic lot within each service area (referred to here as “Lot Categories”) that Bidders may bid for during the Clock Stage. In each service area, one Lot Category contains generic lots whose frequencies are within the 2.3GHz band, while the other contains generic lots within the 2.5GHz band. In each service area, Bidders may bid for at most one generic lot in at most one of the two Lot Categories (i.e. a right to a single 20MHz spectrum block but not linked to any specific frequency within the relevant frequency band for that Lot Category). The Clock Stage will consist of a number of rounds. These Clock Rounds will stop once demand for lots in all Lot Categories is less than or equal to the available supply in each Lot Category at the prices set in the last completed Clock Round and there are no opportunities for Bidders to increase their demand allowed by the Activity Rules (the precise conditions under which the Auction can close are described subsequently). This will establish a common Winning Price for all lots within a Lot Category, and the Winning Bidders in each Lot Category;

- The Clock Stage will be followed by an Assignment Stage that will allocate specific frequencies available to the Winning Bidders in each Lot Category identified in the Clock Stage. This will consist of a single round of bidding and will allow Winning Bidders to express preferences for the specific frequencies at which their lot might be located. This stage will only determine which frequencies Winning Bidders are awarded while all participants in the Assignment Stage will have already won a lot in one or more service areas in the Clock Stage and are guaranteed to be awarded a frequency block even if they choose not to make any bids in the Assignment Stage. It is clarified that this stage will be relevant in a Lot Category only if there is more than one specific frequency blocks available for award in a given Lot Category.
6. Winning Bidders will pay the sum of the relevant Winning Prices set in the Clock Stage plus their Winning Bids in the Assignment Stage. Winning Bidders in a Lot Category may pay different amounts overall, but differences in the overall amount only reflect the differences in the value placed by Bidders on specific frequency blocks.

9.3 The Clock Stage

9.3.1 Overview

7. In the Clock Stage, there is simultaneous bidding for lots across all 44 Lot Categories (i.e. 2 Lot Categories in each service area). Bidding proceeds in rounds. During each Clock Round, bids may be placed for some or all of the 22 service areas in one of the Lot Categories according to the detailed bidding rules described below. It is not possible to bid for lots in both categories in the same service area.
8. In each Clock Round, Bidders will be told the Clock Round price of a lot in each Lot Category. Bidders will be able to bid for at most one generic lot in each service area. Therefore, in each Clock Round, a Bidder's decisions will consist of a yes/no choice of whether to make a bid on each of the 22 service areas in one of the two Lot Categories in that service area. By bidding on a Lot Category, if that bid becomes a Winning Bid, the Bidder commits to buy any lot in that service area in that Lot Category at a price not greater than the Clock Round price for that Lot Category in the round when the bid was submitted.
9. A Clock Round will close at a finishing time specified by the Auctioneer, by which time all Bidders must have placed their bids. The finishing time is subject to provisions for rounds to be extended and re-scheduled, discussed in Section 9.3.8.
10. At the end of each Clock Round, the Provisional Winning Bidders and Provisional Winning Prices in each Lot Category are determined as follows:
- for each Bidder, only the highest bid (if any) submitted by that Bidder for a lot in that Lot Category during any completed Clock Round will be considered;

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- considered bids will be ranked according to their value and then, if necessary, using the tie-breaking criteria detailed in Section 9.3.5;
 - where n is the number of lots available in a given Lot Category, the first n bids for that Lot Category according to this ranking will become Provisional Winning Bids, and the Bidders who submitted these bids will become the Provisional Winning Bidders;
 - the lowest round clock price at which any of the Provisional Winning Bids was submitted in that Lot Category will be the Provisional Winning Price in that Lot Category.
11. Bidders will be able to switch bids across service areas and across Lot Categories from one round to the next subject to certain limitations (Activity Rules) detailed in Section 9.3.4. These rules require that Bidders must demonstrate sufficient bidding activity to maintain their eligibility to make bids in subsequent rounds, otherwise their ability to make bids in subsequent rounds will be curtailed. These Activity Requirements will be tightened in steps according to the overall amount of bidding activity in the Auction. Provisional Winning Bids cannot be switched to other service areas or to the other Lot Category.
12. Bidders will not be able to switch between Lot Categories within a service area if they are a Provisional Winning Bidder for any lot in that service area. In any service area, there may at most one bid across both Lot Categories, including both Provisional Winning Bids from the previous round and any New Bids made for Lot Categories in which the Bidder was not already a Provisional Winning Bidder in the previous round. Therefore, if a Bidder is a Provisional Winning Bidder in one Lot Category, in the following round that Bidder is limited to:
- raising its bid on the lot for which it has been designated the Provisional Winning Bidder; or
 - not placing any other bids in that service area (and thus leaving its Provisional Winning Bid unchanged).

In the first round, a Bidder may not bid for both Lot Categories in the same

13. In the first Clock Round, the price of a generic lot in each Lot Category will be set equal to the Reserve Price (as shown in Table 15). For subsequent rounds, the Clock Round prices in each Lot Category will be set separately as follows:
- if the Excess Demand (discussed further in Section 9.3.6) is negative, the Clock Round price will be equal to the Clock Round price for that Lot Category in the last completed Clock Round;
 - otherwise, the Clock Round price will be equal to the Clock Round price in the last completed Clock Round plus a price increment linked to the amount of Excess Demand (discussed further in Section 9.3.6).

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14. Further bids will be invited at the new Clock Round prices. The Clock Rounds will continue until demand can be satisfied within each and every service area and across the two Lot Categories. The final Clock Round will be the first round in which:
 - (a) for every Lot Category, the number of bids at the current Clock Round price is less than or equal to the number of available lots in that Lot Category; **and**
 - (b) the Activity Requirement has been increased to the maximum level (i.e. the Auction Activity Requirement is set to 100%, as discussed subsequently in Section 9.3.4).
15. All Provisional Winning Bids for lots at the end of the final Clock Round will be Winning Bids. The Provisional Winning Prices will become the Winning Prices, and the Provisional Winning Bidders in the last Clock Round will become the Winning Bidders who will then be awarded a generic lot in each Lot Category at the Winning Price.
16. A consequence of these rules is that if a Bidder is a Provisional Winning Bidder in a Lot Category in Clock Round R, but a further Clock Round R+1 occurs with a higher Clock Round price, then that Bidder will need to make a bid at the higher clock price in Clock Round R+1 to be guaranteed to win a lot if round R+1 happens to be the final Clock Round. If the Bidder does not raise its bid in round R+1 to the higher clock price, but this turns out to be the last Clock Round, the Bidder will only win a lot in the event that there are fewer Provisional Winning Bids equal to the clock price than the number of available lots in the Lot Category.
17. At the end of the Clock Stage, the Auctioneer will announce the Winning Bidders, along with the list of generic lots each Bidder has won. The Auction will then proceed to the Assignment Stage to determine which specific frequencies are assigned to each Winning Bidder.

9.3.2 Making bids during Clock Rounds

18. In each Clock Round, Bidders will be presented with a bid form by the EAS. For each of the 44 Lot Categories the bid form will display:
 - the name of the service area containing the Lot Category;
 - the number of lots available in the Lot Category;
 - the number of Eligibility Points linked to a lot in the Lot Category (discussed subsequently in Section 9.3.3);
 - the Clock Round price for the current Clock Round for that Lot Category;
 - after the first Clock Round, whether the Bidder is a Provisional Winning Bidder in that Lot Category and, if so, the ranking of its bid in that Lot Category;
 - after the first Clock Round, the Provisional Winning Price in that Lot Category; and

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- after the first Clock Round, the Clock Round price and the total number of bids received in that Lot Category in the last completed Clock Round.
19. On the bid form, each Lot Category will have a tick-box associated to it. The Bidder will be required to tick the boxes associated with the Lot Categories in which it wishes to place a bid for one lot at the specified Clock Round price for that Lot Category. As explained earlier, Bidders would only be able to place a bid for a generic lot in at most one of the Lot Categories in a service area and therefore can only tick at most one of the two boxes associated with a service area. If a Bidder is already a Provisional Winning Bidder in that service area, it will be not be possible to tick the box for the other Lot Category in that service area. Bids are subject to the Activity Rules described in Section 9.3.4.
 20. Bidders are required to make a bid for at least one Lot Category in the first Clock Round. Any Bidder who fails to make a bid for at least one Lot Category in the first Clock Round will forfeit its deposit.
 21. In the event that a Bidder is unable to access the EAS, the Auctioneer may allow the Bidder to submit a bid by fax or any other means that the Auctioneer permits to enable an orderly auction process. In advance of the Auction, qualified Bidders will be provided with forms listing the 44 Lot Categories that must be used for making any such fax bids. Qualified Bidders will need to provide details of the persons authorised to certify bids submitted by such alternative means in advance of the Auction. The Auctioneer is under no obligation to accept bids other than through the EAS. Bidders should ensure that they have reliable access to the EAS and must inform the Auctioneer of any difficulties they might have in accessing the EAS at the first reasonable opportunity using contact telephone numbers provided in advance of the Auction. Back-up procedures for making bids in exceptional circumstances are detailed in Section 9.8.

9.3.3 Eligibility Points

22. For the purposes of applying an Activity Rule, each of the 20MHz lots in each service area has been assigned a specific number of Eligibility Points, based on the Reserve Price of licences in that service area. All lots in a given service area will be attributed the same number of Eligibility Points, regardless of which Lot Category (2.3GHz or 2.5GHz) the generic lot is in. This will allow Bidders to substitute between different Lot Categories in a service area on a one-to-one basis subject to the Activity Rules. The number of points associated with a 20MHz block in each service area is listed in the following table:

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Table 15. Reserve prices, deposits required and associated Eligibility Points

Service area type	Number of service areas of this type	Names of service areas	Reserve price for each service area (Rs. Crore)	Required deposit per service area (25% of reserve) (Rs. Crore)	Number of Eligibility Points associated with a lot
Delhi, Mumbai & Category A	7	Delhi Mumbai Andhra Pradesh Gujarat Karnataka Maharashtra Tamil Nadu	80	20	16
Kolkata & Category B	9	Kolkata West Bengal Haryana Kerala Madhya Pradesh Punjab Rajasthan Uttar Pradesh (W) Uttar Pradesh (E)	40	10	8
Category C	6	Assam Bihar Himachal Pradesh Jammu & Kashmir North East Orissa	15	3.75	3

23. Each Bidder begins the Auction with the Initial Eligibility applied for by the Bidder and subsequently approved by the Auctioneer during the application process. This Initial Eligibility will limit Bidders' subsequent ability to make bids as described in the following subsection.
24. As each Bidder is able to bid for at most one lot in each service area, the maximum Initial Eligibility that can be applied for is 202 points. Therefore, Bidders may apply for any Initial Eligibility between 3 and 202 points. The Initial Eligibility of Bidders and the identities of Bidders participating in the Auction will be made public once the Government has determined which applicants are qualified to bid in the Auction.
25. Bidders must make deposits in proportion to their Initial Eligibility. A deposit or bank guarantee in the amount of Rs. 1.25 crore per eligibility point must be received prior to the deadline notified to Bidders by the Government. Any Bidder failing to make such a deposit by this deadline may not participate in the Auction.

9.3.4 Activity Rule

26. In any given Clock Round, the activity of a Bidder may not exceed its eligibility in that Clock Round.
27. The activity of a Bidder in a Clock Round is equal to:
- In the first Clock Round, the Eligibility Points associated with service areas where the Bidder places a bid for a lot;
 - After the first Clock Round, the sum of:
 - (i) the Eligibility Points associated with service areas in which the Bidder has been determined to be a Provisional Winning Bidder at the end of the last completed Clock Round (regardless of whether or not this bid is raised by the Bidder in the current Clock Round); and
 - (ii) the Eligibility Points associated with service areas where the Bidder has not been determined to be a Provisional Winning Bidder at the end of the last completed Clock Round and in which the Bidder submits a bid in the current Clock Round (referred to as New Bids).
28. For each Clock Round, the Auctioneer will announce the Auction Activity Requirement that will apply to that Clock Round. The Auction Activity Requirement is the percentage of the Bidder’s Eligibility Points that determines the level of activity that a Bidder must meet in that Clock Round in order to maintain its eligibility in the following Clock Round. This threshold (rounded up to the nearest whole number) is referred to as the Bidder’s Activity Requirement in that Clock Round.
29. After the first Clock Round, the eligibility of each Bidder is calculated as follows:
- If the Bidder’s activity in a Clock Round is equal to or greater than its Activity Requirement, then the Bidder’s eligibility in the following Clock Round will be equal to the Bidder’s eligibility in the current Clock Round.
 - If the Bidder’s activity in a Clock Round is less than the Bidder’s Activity Requirement for that Clock Round, then the eligibility of the Bidder in the next Clock Round (n+1) will be equal to its activity level in the current Clock Round (n) multiplied by the reciprocal of the Auction Activity Requirement, rounded down to the nearest whole number:

$$\text{Bidder Eligibility Points in round } n+1 = \text{Activity level in round } n \times \frac{1}{\text{Auction Activity Requirement in round } n}$$

30. For example, suppose that in the first Clock Round, Bidder X has an eligibility of 48 points. If the Auction Activity Requirement is 80%, the Bidder’s Activity Requirement is 39 points (80%x48 rounded up to the nearest whole number). Suppose that Bidder X submits a bid with an associated activity of 42 points, then, the eligibility of Bidder X in the second Clock Round would be equal to 48 points. However, suppose that Bidder X submits a bid with an associated activity of 30

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points; then the eligibility of Bidder X in the second Clock Round would be reduced to 37 points ($30 * 1/80\%$ rounded down to the nearest whole number).

31. Bidders will be informed of their eligibility and the associated Activity Requirement in each Clock Round in advance of the start of the Clock Round. In the first Clock Round, the Auction Activity Requirement will be set at 80%. Subsequently, the Auction Activity Requirement will be increased in two steps as the Auction progresses, from 80% to 90% and then to 100%. The timing of these steps would be determined by the Auctioneer depending on the extent of overall bidding activity in the Auction process.
32. The Clock Rounds will end only when the Auction Activity Requirement is 100%.

9.3.5 Ranking of Bidders and Provisional Winning Bidders

33. At the end of each Clock Round, only the highest bid submitted by each Bidder in any completed Clock Round will be considered in each Lot Category. Considered bids for each Lot Category will be ranked using the following criteria:
 - bids will be ranked in descending order according to the Clock Round price for that service area in the Clock Round when the bid was made;
 - where there is a tie according to the first criterion, tied bids will be ranked in ascending order according to the Clock Round when the bid was submitted (thus, bids submitted in earlier Clock Rounds take precedence);
 - where there is a tie according to the first two criteria, tied bids will be ranked in descending order according to the total value of all bids submitted by the Bidder in the Clock Round when the bid is submitted, plus any Provisional Winning Bids at the start of that Clock Round that the Bidder did not raise in that Clock Round;
 - where there is a tie according to the first three criteria, ties will be broken according to a random index assigned to the bid when it is received by the EAS.
34. A consequence of these ranking criteria is that, once two bids received in a given Clock Round have been ranked, their relative ranking will be preserved in any subsequent Clock Rounds.
35. Where a Lot Category has n lots available, the first n bids according to this ranking will be declared to be the Provisional Winning Bids for that Clock Round, and the Bidders that submitted such bids will be declared the Provisional Winning Bidders. If there are fewer than n such bids for that Lot Category, all such bids will be declared to be Provisional Winning Bids.
36. The Provisional Winning Price will be equal to the smallest of the Clock Round prices at which the Provisional Winning Bidders submitted their Provisional Winning Bids. In case that the Auction ends, Provisional Winning Bidders will be required to pay the Provisional Winning Price associated with their Provisional Winning Bids,

unless they cease to be Provisional Winning Bidders in a subsequent Clock Round. Note that the Provisional Winning Price associated with a Provisional Winning Bid may increase if New Bids are received from other Bidders; however, the Provisional Winning Price will never be greater than the Clock Round price at which the Provisional Winning Bid was submitted.

9.3.6 Prices and price increments

37. In the first Clock Round, the Clock Round price per lot in each Lot Category will be the Reserve Price as determined by the Government. The Reserve Price associated with each service area is shown in Table 15. The Reserve Price will be the same for both the 2.3GHz and 2.5GHz categories in a service area.
38. In subsequent Clock Rounds, Clock Round prices will be increased relative to the previous Clock Round depending on the demand for lots. Excess Demand in a Lot Category is defined to be:
 - the total number of bids received in that Lot Category at a Clock Round price equal to the Clock Round price set in the last completed Clock Round **minus**
 - the number of lots available in the Lot Category in that service area.
39. Clock round prices in the next Clock Round in each Lot Category will be set according to the following rules:
 - if Excess Demand is negative, the Clock Round price for lots in the next Clock Round will be set equal to the Clock Round price in the last completed Clock Round;
 - if Excess Demand is zero or positive, the Clock Round price for lots in the next Clock Round will be set equal to the Clock Round price in the last completed Clock Round plus a strictly positive price increment.

Therefore, Clock Round prices will only increase in service areas where the Provisional Winning Price at the end of the previous Clock Round is equal to the Clock Round price.

40. Price increments may vary by Lot Category and will be positively related to Excess Demand in each Lot Category. They will be set to no more than 10% of the Clock Round price for that Lot Category in the last completed Clock Round. The Auctioneer will typically follow the rule set out in Table 16, though may set any strictly positive increment less than or equal to 10% in the interests of the smooth and expeditious running of the Auction.

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Table 16. Proportionate price increment rule

Excess Demand	Price increment as a proportion of previous Clock Round price
0	2%
1 or 2	5%
3 or more	10%

41. The price increment calculated will always be capped at Rs. 1.25 crore times the number of Eligibility Points for one lot in that service area. The maximum absolute price increments for each service area are summarised in the following table:

Table 17. Maximum absolute price increments

Service area type	Maximum price increment per round (Rs. Crore)
Delhi, Mumbai & Category A	20
Kolkata & Category B	10
Category C	3.80

42. All price increments will be in Rs. crore, rounded down to one decimal place. Therefore, throughout the Auction all prices will be in Rs. crore with at most one decimal place.

9.3.7 Winning Bids and Winning Prices

43. The final Clock Round will be the first Clock Round with an auction Activity Requirement of 100% and in which for each Lot Category the number of bids at the Clock Round price is less than or equal to the number of lots available in that Lot Category.
44. The Provisional Winning Price in each Lot Category at the end of the final Clock Round will become the Winning Price for that Lot Category, and Provisional Winning Bidders will become Winning Bidders, with their associated Provisional Winning Bids becoming the Winning Bids. A consequence of these rules is that the Winning Price in a Lot Category is the highest Clock Round price that maximises the number of lots sold in that service area.
45. As a consequence of the rules, the Winning Price in any Lot Category in which there are unsold lots will be the Reserve Price. Any lots that remain unsold in a service area will not be awarded as part of this exercise and will be retained by the Government.

9.3.8 Length of Clock Rounds and extension periods

46. Auction rounds will only be scheduled to begin between the hours of 09.00 and 17.30 Indian time on Monday through Friday, except national holidays. The Auctioneer may choose not to hold Clock Rounds on one or more days at its absolute discretion.
47. Prior to the start of any Clock Round, the Auctioneer will notify Bidders of the starting and finishing times of the next Clock Round through the EAS. At least 20 minutes notice will be given of the start of the next Clock Round.
48. Additionally, Bidders will be notified in advance of the starting time and date of the first Clock Round. At least two working days notice of the first Clock Round will be given.
49. A Clock Round will not be shorter than 30 minutes. It is expected that during the early rounds of the Auction, Clock Rounds will run for one hour. During the Clock Round, Bidders will be able to enter their bids into the EAS. Entering a bid will be a two-step process, in which Bidders must first enter a bid for checking by the EAS. The EAS will report back to the Bidder the bid logged by the system and whether it is compatible with the Auction Rules. In the event that the bid would lead to a reduction in the Bidder's eligibility, a warning will be given. Optionally, the Bidder will be able to go back and modify the decision entered into the EAS for checking. As a second step, the Bidder must then confirm the bid that has been checked and logged by the EAS. Only bids that are subject to this confirmation step will be accepted.
50. Bidders are responsible for ensuring that bids are received and confirmed by the EAS prior to the end of the Clock Round. For the purposes of determining whether or not a bid is received prior to the end of the Clock Round, the EAS must receive a confirmed bid by the end of the Clock Round. Bidders should be aware that it takes a finite amount of time to transmit a bid across the Internet and for the EAS to respond. Bidders submitting decisions close to the end of the Clock Round do so entirely at their own risk of failing to meet the Clock Round deadline due to network delays or delays in response by the EAS. Bids are not processed by the EAS until the Clock Round is closed and no tactical or strategic advantage is conferred by submitting bids late within the Clock Round.
51. In the event that a Bidder has technical problems that prevent access to the EAS, the Bidder must inform the Auctioneer at the first reasonable opportunity. Procedures for submitting bids in exceptional circumstances are described in Section 9.8.
52. Shortly after the end of a Clock Round, results will be announced on a service area-by-service area basis for each Lot Category. The information that will be released is described in the following subsection. If there is Excess Demand for lots in any service area and a further Clock Round is required, this Clock Round will be scheduled and the start and finish times announced to Bidders through the EAS subject to at least 10 minutes notice of the start of the next Clock Round.

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53. To guard against technical problems and provide Bidders with some additional flexibility in making bidding decisions, Bidders are provided with limited opportunities to extend a Clock Round and defer submission of a bid. Each Bidder is allocated an Extension Budget of 2 hours.
54. In the event that a Bidder fails to submit a valid, confirmed bid by the end of the initial finishing time of a Clock Round (and has at least 10 minutes remaining in its Extension Budget), 10 minutes will be subtracted from its Extension Budget and the finishing time of the Clock Round will be deferred by 10 minutes for that Bidder. In the event that the Bidder fails to submit a decision by the revised deadline (and has at least 10 minutes remaining in its Extension Budget), a further 10 minutes will be subtracted from its Extension Budget and the finishing time deferred by a further 10 minutes for that Bidder. A Bidder may defer the original scheduled finishing time of any one Clock Round by at most 30 minutes in this way.
55. If the original finishing time of the Clock Round has been deferred by 30 minutes or if the Bidder's Extension Budget is exhausted, no further deferral of the Clock Round finishing time will be possible. In this case, if no confirmed decision is logged by the EAS prior to the end of the Clock Round, that Bidder will be deemed to have entered a bid of zero lots in each service area.
56. If one or more Bidders trigger an extension period, all Bidders will be informed of the revised finishing time through the EAS. For the avoidance of doubt, one Bidder triggering an extension does not remove the requirement on other Bidders to submit bids by the original deadline or to have their Extension Budget reduced if they have also failed to submit their bids within the stipulated time. In particular, if more than one Bidder has failed to submit a decision by the original finishing time of a Clock Round, all such Bidders will either be penalised 10 minutes from their Extension Budgets or (if they have exhausted their Extension Budget) have their bid deemed to be zero. Bidders that have already entered and confirmed a decision prior to the original finishing time of the Clock Round will not be able to revise or modify their decision during an extension period.
57. A Clock Round may close prior to the finishing time of an extension period if the EAS has received bids from all Bidders. For the avoidance of doubt, this provision does not apply within a normal Clock Round that has not been extended; Clock Rounds will not close prior to the scheduled finishing time even if the EAS has received bids from all Bidders.
58. There will be the following minimum times between the ending of one Clock Round and the starting of the next:
 - If no extensions are triggered in the current Clock Round, there will not be less than 30 minutes between the finishing time of the current Clock Round and the starting time of the next Clock Round.
 - If the finishing time of the current Clock Round is extended, there will not be less than 30 minutes between the original scheduled finishing time of the current Clock Round and the starting time of the next Clock Round and not

less than 20 minutes between the extended finishing time of the current Clock Round and the starting time of the next Clock Round.

In early rounds of the Auction, it is expected that about one hour will be left between the end of one Clock Round and the start of the next.

59. In exceptional circumstances, such as technical failure affecting a large number of Bidders, the Auctioneer may:
- reschedule the start of a Clock Round whose starting time has been announced but the Clock Round not yet started;
 - reschedule the finishing time of a Clock Round in progress;
 - cancel a Clock Round in progress and re-run it;
 - grant one or more Bidders additional Extension Budget.

9.4 Assignment Round

60. The Assignment Round will be scheduled for the next working day after the end of the Clock Stage. Only Bidders who have won a generic lot in at least one service area will be able to participate. Prior to the start of the Assignment Round, all Winning Bids and the identities of Winning Bidders will be made public.
61. The Assignment Round will be at least four hours in length. There will be no ability for Bidders to extend the Assignment Round. If a Bidder fails to submit a bid by the finishing time of the round, it will be deemed to have made a bid of zero for all assignment options. There is no obligation on a Bidder to submit a bid in the Assignment Round.
62. In the Assignment Round, Bidders that have been awarded lots in the clock phase will be presented with the specific frequency blocks available for award in each Lot Category in which they have won a lot. At this point, Bidders have an opportunity to make an additional bid for any of the specific frequency blocks they have a preference for. Bidders who have been awarded a lot in the clock phase are guaranteed to win one of the specific frequency blocks in the relevant Lot Category regardless of the assignment bids they make, even if they choose not to make any bids in the Assignment Round.
63. Bidders will be provided with a bid form listing the specific frequency blocks available in each Lot Category in which they won a generic lot and where there is a choice of frequency. Bidders may choose a bid amount for each one of the specific frequency blocks in each Lot Category. Bids must be expressed in Rs. crore with at most one decimal place.
64. If a Bidder does not enter a bid for one or more frequency blocks, it will be deemed to have entered a bid of zero for those blocks.

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65. Bids should be entered using the EAS. In the event of exceptional circumstances preventing a Bidder from accessing the EAS, bids may be accepted by other means where the Auctioneer has given prior permission at its discretion, as described in Section 9.8.
66. The Winning Bids from the Assignment Round will be determined for each Lot Category by taking the assignment of specific frequency blocks to Winning Bidders that yields the greatest total of Winning Bids. In the event of a tied outcome with more than one assignment producing the same total value of Winning Bids, the tie will be broken by selecting one of the tied outcomes at random.
67. Bidders will pay the sum of their Winning Bid in the Assignment Round and the Winning Price for each Lot Category in which they won a lot.

9.5 Information policy

68. Prior to the start of the Auction, the Government will make public:
 - a list of the qualified Bidders;
 - the information provided in these Bidders' applications about their ownership structures;
 - the number of Initial Eligibility Points applied for by each Bidder; and
 - the amount of deposit provided by the Bidder.
69. During the Clock Stage the following information will be provided to Bidders after each completed Clock Round:
 - the Clock Round price per lot for each Lot Category in the last completed Clock Round;
 - the total number of bids received in each Lot Category in the last completed Clock Round; and
 - the Excess Demand in each Lot Category.
70. If the last completed Clock Round was not the final Clock Round, the following information will also be provided:
 - the Provisional Winning Bids held by that Bidder in each Lot Category at the end of the completed round;
 - the ranking of any provisional bids held by that Bidder amongst all the provisional bids within the relevant Lot Category;
 - the Provisional Winning Price for each Lot Category at the end of the completed round;
 - total number of Eligibility Points available to the particular Bidder for the next Clock Round;

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- the price increment to be applied to each Lot Category; and
 - the Clock Round price per lot in each Lot Category that will apply for the next Clock Round.
71. At the end of the final Clock Round, the following information will be provided to Bidders:
- that the last completed Clock Round was the final Clock Round;
 - the Winning Prices;
 - the Winning Bids made by that Bidder (if any);
 - the number of unsold lots for each Lot Category (i.e. the number of lots available less the total number of Winning Bids in each Lot Category).
72. Information relating to the specific bids made by Bidders in each Lot Category will not be provided at the end of each Clock Round, but will be made public in their entirety subsequently. Specifically, after the Assignment Stage, all bids made throughout the Auction process will be announced, comprising:
- all bids made during Clock Rounds (whether successful or not) and;
 - all assignment bids (whether successful or not).

9.6 Collusion and other prohibited behaviour

73. The Government of India reserves the right to disqualify any Bidder that:
- colludes or attempts to collude with another Bidder in determining its bids during the Auction;
 - releases confidential information with the effect or intention of modifying the bidding behaviour of other qualified Bidders;
 - breaches or attempts to breach the secure measures within the EAS;
 - frustrates or attempts to frustrate any other Bidder (or other users of the EAS) from accessing the EAS;
 - attempts to influence the decisions of the Auctioneer in conducting the Auction;
 - obstructs or attempts to obstruct the running of the Auction;
 - provides inaccurate information in its application to participate in the Auction.

In the event of such disqualification, a Bidder will forfeit its deposit.

74. The Government reserves the right to impose a fine equal to some or all of a Bidder's deposit for less serious breaches of these rules. Such fines shall be deducted from that Bidder's deposit.

9.7 System requirements for accessing the EAS

75. The Auction will be run on an electronic auction system (EAS) over the public Internet using encryption. Bidders will not need any specialist hardware or software and can access the system using a standard Internet browser. The only additional requirement is to install the digital certificates needed for authentication and data encryption.

9.7.1 Operating system and software

76. The EAS works on a wide range of operating systems and Internet browsers complemented with Java. However, the digital certificates used for user authentication in the EAS are 2048 bit keys. These keys are longer than those in current common usage for e-commerce applications and provide a higher level of security. It is important that Bidders use an up-to-date operating system and browser, and the latest version of Java. Windows XP (Service Pack 2 with Internet Explorer 7), Windows Vista and Macintoshes with OSX are all able to use these longer keys. Obsolete versions of Internet Explorer may not support longer keys.
77. The EAS has been tested using a few popular configurations, and therefore we recommend that Bidders use:
- Windows XP Service Pack 2 or Windows Vista with Internet Explorer 7 or Firefox 2.0, and Java 1.5 or 1.6; or
 - Mac OSX with Safari and Java 1.5 or 1.6.

9.7.2 Java

78. The EAS uses a Java application embedded within a web page. This requires the Bidders' Internet browser to support Java. Under Windows, the browser will usually, but not always, have Java enabled by default. **It is important that Bidders have an up-to-date version of Java installed on any computer to be used for bidding in the Auction, as older versions may not be able to cope with the long digital certificates used.**
79. If Bidders are using Windows, Bidders can find out if they have Java installed on their computer using Sun's Java installation verification tool found at:

<http://www.java.com/en/download/installed.jsp>

If Bidders are using Mac OSX, use the Software Update feature (found on the Apple menu) to check if Bidders have the most up-to-date version of Java for their Mac. If Bidders need to install java, this is available from Sun Microsystems' Java website at <http://java.com>.

80. If Bidders have Java installed, but are unable to access the EAS, it is possible that their Windows settings are such that:
- Java has been disabled (by default or due to corporate IT policies, for example);
 - Bidders are accessing the Internet through a proxy server, but that Internet Explorer has not been set up correctly to allow Java to download applications through their proxy server;
 - a proxy server is being used, but Java has not been configured to use this.

In these cases, Bidders may need to refer to their IT department or other suitably qualified persons to ensure that their PC has a Java installed and enabled on their browser, and that their Internet browser is correctly set up. Sun Microsystems' Java website at <http://java.com> may provide helpful information on how to do this.

81. Detailed manuals and troubleshooting guides will be provided to qualified Bidders prior to the Auction. A mock auction will also be run to allow Bidders to test that they can access the EAS and to resolve any technical problems.

9.7.3 Pop-up blockers

82. Bidders should ensure that there is no software installed on their computer that will interfere with the normal operation of their Internet browser. Do not use any pop-up blockers, such as those provided by Internet Explorer and complementary software, like for example the Google tool bar. This might, depending on Bidders' settings, prevent some of the EAS windows from opening.

9.7.4 Power management settings

83. To ensure that Bidders can view progress in the Auction without delay or difficulty it is recommended that Bidders:
- turn off any power management features on their computer such as automatic hibernation or suspension; and
 - disable any screensavers.

If a Bidder's computer hibernates or suspends automatically, it will need to go through the login procedures again when the computer is awakened. This will cause some delay in returning to the Auction system.

9.7.5 Using other software at the same time

84. We recommend that Bidders do not open other web pages when they are accessing the EAS. Viewing other web pages (especially complex ones) at the same time as

viewing EAS pages increases the risk of possible problems with their browser. Therefore, we recommend that ideally Bidders should dedicate one computer to running the EAS, and do not access other web pages or run other applications on this computer while using the EAS. This will help to minimise the risk of crashes or problems.

9.7.6 Internet connection

85. In order to use the EAS Bidders need an Internet connection. We recommend that Bidders use a reliable broadband Internet connection with a download bandwidth of 512kbit/s or higher. However, there are no complex graphics on any of the web pages served by the system and it should work adequately with any reasonable narrowband connection. Wireless connections may be adequate, but it is important that the latency of network connections to the EAS does not exceed 20-30 seconds to ensure reliable access. In the event of a temporary loss of contact between the Bidder and the EAS, the EAS will automatically log out the Bidder for security reasons, who will then need to go back through login procedures.
86. It is recommended that Bidders have a back-up computer and backup Internet connection that can be used in the case that either their primary computer or Internet connection fails.

9.7.7 Display

87. Bidders are recommended use a display with a screen resolution of 1280x1024 (or higher). Bidders can use a lower screen resolution, but Bidders may find that some tables are more difficult to view.

9.8 Back up procedures for making bids

88. Bidders experiencing technical problems with accessing the EAS either before or during a round should contact the Auctioneer as soon as reasonably possible. Bidders will be provided with telephone and fax numbers to contact the Auctioneer. In the event of problems accessing the EAS, Bidders should not rely on email to communicate with the Auctioneer.
89. Bidders must provide the Auctioneer with at least four alternative telephone numbers, two of which should be cellular. This will permit the Auctioneer to contact the Bidder in the event that the Auctioneer observes the Bidder have difficulties in accessing the EAS.
90. Any telephone calls between the Auctioneer and a Bidder may be subject to password verification. The Auctioneer may ask the Bidder for a password from a list of one-time passwords provided to the Bidder prior to the Auction.

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91. The Auctioneer may then at its absolute discretion permit a Bidder to submit its bids by fax or phone. Where the Auctioneer grants permission, the Bidder must submit its bid using the agreed mechanism, i.e. either fax or phone (in these circumstances any bids submitted by the electronic auction system will not be accepted unless the Auctioneer has expressly agreed with the Bidder to use these bids).
92. Permission to submit Bidders other than through the EAS will not be granted in a situation when Bidders could reasonably be expected to be able to access the EAS. Bids by phone or fax will not be accepted until the Auctioneer has granted the Bidder permission to make bids other than through the EAS. Such permission may be granted for just one round or a number of rounds.
93. Any bid made by fax or phone will be subject to password verification and must use the template bid form provided to the Bidder by the Auctioneer. The Auctioneer will provide template forms and a list of one-time passwords to Bidders prior to the start of the Auction.
94. Only the first valid bid form received by the Auctioneer from a Bidder will be considered. All bids made by fax or phone will be subjected to the same Activity Rules and will only be deemed valid after verification by the Auctioneer. In the event that a bid does not satisfy the Activity Rules, the entirety of the bid will be discarded (i.e. all service areas within the bid).
95. In the event of a bid made by fax being illegible or subject to error, the Auctioneer will make reasonable attempts to contact the Bidder to determine the Bidder's intention. However, the entry of a bid decision into the EAS on behalf of a Bidder is then at the Bidder's risk.
96. For the purposes of determining how much of a Bidder's Extension Budget has been exhausted, the Auctioneer will determine the time at which a valid bid has been received in full from the Bidder by the agreed mechanism. The Extension Budget will be reduced by the appropriate number of 10 minute intervals wholly or partially elapsed since the original scheduled finishing time of a Clock Round.
97. Bidders may make use of similar procedures for submitting decisions in the Assignment Round.

X APPLICATION INSTRUCTIONS

Applications must be submitted in hard copy, in triplicate, to be received latest by 5:00 p.m. on 5th January, 2009 (Indian Standard Time) at the following address:

Department of Telecommunications – Auction Team
Office of the Joint Secretary (T)
Department of Telecommunications,
Sanchar Bhawan,
20 Ashoka Road,
New Delhi

Applicants should note that, at its sole discretion, the Government may designate another time and/ or place at which Applications should be submitted. However, this power will only be used in exceptional circumstances. The alternative location will be publicised on the DoT website.

Applications should be marked:

“Application for Pre-Qualification – 3G Auction/ BWA Auction”

Applications should contain:

- Completed Application Form and all supporting information including the necessary undertakings;
- The Applicant shall pay a non-refundable application fee of Rs. 100,000/- payable to Pay and Accounts Officer, DoT, New Delhi, through a demand draft;
- Earnest Money Deposit (Bank Guarantee);
- Nomination of the Authorised Person for future correspondence with the Bidder, along with a Power of Attorney empowering her/ him to take all decisions connected with the relevant Auctions, on the Bidder’s behalf.

Withdrawal of applications shall be allowed by means of a written request to the Department of Telecommunications – Auction Team up to seven days before the scheduled start of the Auctions.

XI CONTACT AND FURTHER INFORMATION

11.1 Contacts for further enquiries

Enquires may be directed to the following e-mail address spectrum-dot@nic.in.

The Government may or may not respond to any query, in part or full, at its sole discretion. In case it responds to any query, the response shall be made public. However, the identity of the person asking the query will not be disclosed, to the extent possible.

11.2 Further information

Annexures A to I form a part of this Memorandum. These annexures contain the following:

- A. Regulatory regime in the Indian telecommunications sector
- B. Detailed definition of service areas
- C. Standard UAS licence
- D. Guidelines for obtaining UAS licence
- E. Standard ISP-category 'A' licence
- F. Guidelines for obtaining ISP-category 'A' licence
- G. Illustration of Auction Rules
- H. Application formats and checklist
- I. Definitions and glossary of terms

11.3 Disclosure of further information

Following issue of this Memorandum, the Government has the discretion to publish further information and amend the Memorandum from time to time. All such amendments will constitute a part of the Memorandum.

XII ANNEXURE

A. Regulatory regime in the Indian telecommunications sector

Telecommunications in India is a Union subject i.e. the federal government has the exclusive authority to legislate on it. The key Acts of Parliament which govern the Indian telecommunications sector are:

- Indian Telegraph Act 1885
- Indian Telegraph (Amendment) Rules 2004
- Indian Wireless Act 1933
- Information Technology Act 2000
- Communication Convergence Bill 2001
- Telecom Regulatory Authority of India Act 1997

The texts of these Acts are available on the DoT website (<http://www.dot.gov.in/Acts/acts.htm>).

The institutional framework for regulating telecom in India comprises the following key agencies:

A.1 Telecom Commission

The Telecom Commission was set up by the Government of India in 1989 with administrative and financial powers of the Government of India to deal with various aspects of telecommunications. The Commission consists of a Chairman and four full time members who are ex-officio Secretaries to the Government of India in the DoT, besides there are four part time members who are Secretaries to the Government of India of the concerned departments.

A.2 Department of Telecommunications

The Department of Telecommunications is part of the Ministry of Communication and Information Technology of the Government of India. It is the authority in India which looks after licensing and overall policy making in India.

Together the main functions of the Telecom Commission and the Department of Telecommunications include:

- Policy formulation
- Review of performance of the sector
- Licensing

- Wireless spectrum management
- Administrative monitoring of Public Sector Undertakings in telecom (including BSNL and MTNL)
- Research and development
- Standardization/ validation of equipment
- International Relations

A.3 Telecom Regulatory Authority of India

TRAI was formed in 1997 by an Act of Parliament as an independent regulator for the Indian telecommunications industry. Subsequently, in 2000, the adjudicatory powers of TRAI were separated and entrusted to the Telecom Dispute Settlement & Appellate Tribunal (“TDSAT”).

TRAI’s mission is to create and nurture conditions for growth of telecommunications in the country in a manner and at a pace which will enable India to play a leading role in emerging global information society.

One of the main objectives of TRAI is to provide a fair and transparent policy environment which promotes a level playing field and facilitates fair competition.

In pursuance of the above objective, TRAI has issued from time to time a large number of regulations, orders and directives to deal with issues coming before it and provided the required direction to the evolution of the Indian telecoms market.

The key functions of TRAI include:

- Regulation of tariff, interconnection and quality of service;
- Making recommendations to the Government on policy issues, licensing, terms & conditions, licence revocation, competition facilitation etc. It is mandatory for the Government to seek recommendations of TRAI in respect of specified matters.

A.4 Telecom Dispute Settlement & Appellate Tribunal

The Telecom Regulatory Authority of India Act, 1997 was amended by the Telecom Regulatory Authority of India (Amendment) Act, 2000. The amendments were brought about to remove certain difficulties that had arisen in the implementation of the Act. A clear distinction was made between the recommendatory and regulatory functions of TRAI by the setting up of a separate dispute settlement mechanism.

By the Amendment Act, an Appellate Tribunal known as the Telecom Disputes Settlement & Appellate Tribunal was set up to adjudicate disputes and dispose off appeals with a view to protect the interests of service providers and consumers of the

telecoms sector and to promote and ensure orderly growth of the sector. The Appellate Tribunal came into existence on 29th May 2000 and started hearing cases from January 2001.

The functions of the appellate tribunal are:

- to adjudicate any dispute:
 - between a licensor and licensee;
 - between two or more service providers;
 - between a service provider and a group of consumers;
- to hear and dispose of appeals against any decision or order of TRAI.

Broadly, the issues involved in cases filed before the Appellate Tribunal relate to interconnection, challenging the basis of computation of licence fee by the licensor, wrongful levy and charge of royalty and licence fee for frequency allocation, blocking of calls by one group of service providers, disputes relating to default traffic, challenges to tariff fixed by TRAI, encashment of bank guarantees, disputes between broadcasters etc.

A.5 Wireless Planning & Coordination Wing

The Wireless Planning & Coordination Wing of the Ministry of Communications, created in 1952, is the National Radio Regulatory Authority responsible for frequency spectrum management, including licensing and caters for the needs of all wireless users (Government and Private) in the country. It exercises the statutory functions of the Central Government and issues licences to establish, maintain and operate wireless stations. WPC is divided into major sections like Licensing and Regulation (“LR”), New Technology Group (“NTG”) and Standing Advisory Committee on Radio Frequency Allocation (“SACFA”).

SACFA makes the recommendations on major frequency allocation issues, formulation of the frequency allocation plan, making recommendations on the various issues related to International Telecom Union (“ITU”), to sort out problems referred to the committee by various wireless users, siting clearance of all wireless installations in the country etc.

A.6 Telecom Engineering Centre

Telecom Engineering Centre (“TEC”) is a technical body representing the interest of the Department of Telecommunications, Government of India.

The role of TEC is to bring together the telecom industry to decide the standards that network elements and services would have to conform to in order to make the Indian telecom network deliver acceptable service in a multi-operator environment at par with global standards. TEC is responsible for the formulation of Generic

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Requirements (“GR”) for network elements, Interface Requirements (“IR”) for interfaces between different network elements, Service Requirements (“SR”) for networks and services and Test Schedule and Test Procedures (“TSTP”) thereof.

Key functions of the TEC include the following:

- Specification of common standards with regard to telecom network equipment, services and interoperability;
- Issuing Interface Approvals and Service Approvals;
- Formulation of Standards and Fundamental Technical Plans;
- Interacting with multilateral agencies like APT, ETSI and ITU etc. for standardisation;
- Developing expertise to imbibe the latest technologies and results of R&D;
- Providing technical support to DoT and technical advice to TRAI & TDSAT;
- Coordinating with C-DoT on the technological developments in the telecom sector for policy planning by DoT.

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B. Detailed definition of service areas

Delineation of service areas (Telecom circles/metros) for licence purpose – UAS licence			
Sl. No.	Name of Telecom Circle/ Metro Service Area	Areas covered	Category
1	West Bengal	Entire area falling within the Union Territory of Andaman & Nicobar Islands and area falling within the State of West Bengal and the State of Sikkim excluding the areas covered by Kolkata Metro Service Area.	B
2	Andhra Pradesh	Entire area falling within the State of Andhra Pradesh.	A
3	Assam	Entire area falling within the State of Assam.	C
4	Bihar	Entire area falling within the re-organized State of Bihar and newly created State of Jharkhand pursuant to the Bihar Reorganization Act, 2000 (No.3 of 2000) dated 25 th August, 2000.	C
5	Gujarat	Entire area falling within the State of Gujarat and Union Territory of Daman and Diu, Silvassa (Dadra & Nagar Havelli).	A
6	Haryana	Entire area falling within the State of Haryana except Panchkula town and the local areas served by Faridabad and Gurgaon telephone exchanges.	B
7	Himachal Pradesh	Entire area falling within the State of Himachal Pradesh.	C
8	Jammu & Kashmir	Entire area falling within the State of Jammu & Kashmir including the autonomous council of Ladakh.	C
9	Karnataka	Entire area falling within the State of Karnataka.	A
10	Kerala	Entire area falling within the State of Kerala and Union Territory of Lakshadweep and Minicoy.	B
11	Madhya Pradesh	Entire area falling within the re-organized State of Madhya Pradesh as well as the newly created State of Chhattisgarh pursuant to the Madhya Pradesh Reorganisation Act, 2000 (No.28 of 2000) dated 25 th August, 2000.	B
12	Maharashtra	Entire area falling within the State of Maharashtra and Union Territory of Goa, excluding areas covered by Mumbai Metro Service Area.	A
13	North East	Entire area falling within the States of Arunachal Pradesh, Meghalaya, Mizoram, Nagaland, Manipur and Tripura.	C
14	Orissa	Entire area falling within the State of Orissa.	C

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Sl. No.	Name of Telecom Circle/ Metro Service Area	Areas covered	Category
15	Punjab	Entire area falling within the State of Punjab and Union territory of Chandigarh and Panchkula town of Haryana.	B
16	Rajasthan	Entire area falling within the State of Rajasthan.	B
17	Tamil Nadu	Entire area falling within the State of Tamil Nadu and Union territory of Pondicherry including local areas served by Chennai Telephones, Maramalai Nagar Export Promotion Zone (MPEZ), Minzur and Mahabalipuram exchanges.	A
18	Uttar Pradesh (West)	Entire area covered by Western Uttar Pradesh with the following as its boundary districts towards Eastern Uttar Pradesh: Pilibhit, Bareilly, Badaun, Etah, Mainpuri and Etawah. It will exclude the local telephone area of Ghaziabad and Noida. However, it will also include the newly created State of Uttaranchal pursuant to the Uttar Pradesh Re-Organisation Act, 200 (No.29 of 2000) dated 25 th August, 2000.	B
19	Uttar Pradesh (East)	Entire area covered by Eastern Uttar Pradesh with the following as its boundary districts towards Western Uttar Pradesh: Shahjahanpur, Farrukhabad, Kanpur and Jalaun.	B
20	Delhi	Local Areas served by Delhi, Ghaziabad, Faridabad, Noida and Gurgaon telephone exchanges.	Metro
21	Kolkata	Local areas served by Calcutta telephones	Metro
22	Mumbai	Local areas served by Mumbai, New Mumbai and Kalyan telephone exchanges	Metro

Notes

Yenum, an area of Union Territory of Pondicherry is served under Andhra Pradesh Telecom circle in East Godavari LDCA

C. Standard UAS licence

Provided at the following link:

<http://www.dot.gov.in/uas/uasindex.htm>

D. Guidelines for obtaining UAS licence

Provided at the following link:

<http://www.dot.gov.in/uas/uasindex.htm>

E. Standard ISP-category ‘A’ licence

Provided at the following link:

<http://www.dot.gov.in/ispt/isptindex.htm>

F. Guidelines for obtaining ISP-category ‘A’ licence

Provided at the following link:

<http://www.dot.gov.in/ispt/isptindex.htm>

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G. Illustration of Auction Rules

There are three lots in circle X.

The provisional winners at the end of each round are shown in bold.

An 'x' represents a bid in that round at the clock price; a '-' represents no bid in that round, though a bidder may continue to be a provisional winner if no new higher bids are received in that round.

Price increments shown as P+1 etc.

EG1 Excess demand in circle X in Round n; no excess demand in other circles

Clock price in round

Round	Bidder						
	A	B	C	D	E	F	
n	x (3)	x (1)	x (5)	x (4)	x (2)	-	P
n+1	x (2)	x (1)	x (3)	-	-	x (4)	P+1
	Auction continues with bids ranked as shown						
n+1	x	-	x	x	-	-	P+1
	Auction closes; A, D and C are winners and pay P+1						
n+1	x	x	-	-	x	-	P+1
	Auction closes; B, E and A are winners and pay P+1						
n+1	-	-	x	x	-	x	P+1
	Auction closes; D, C and F are winners and pay P+1						
n+1	x	x	-	-	-	-	P+1
	Auction closes; B, A and E are winners and pay P						
n+1	x	-	x	-	-	-	P+1
	Auction closes; A, C and B are winners and pay P						
n+1	-	-	-	-	-	x	P+1
	Auction closes; F, B and E are winners and pay P						
n+1	-	-	-	-	-	-	P+1
	Auction closes; B, E and A are winners and pay P						

EG1 Excess supply in circle X and excess demand in at least one other circle in round n; no excess demand in other circles in round n+1

Round	Bidder				
	A	B	C	D	
n	x (1)	x (2)	-	-	P
n+1	- (1)	- (2)	x (3)	x (4)	P
	Auction continues with bids ranked as shown				
n+1	-	-	x	-	P
	Auction closes; A, B and C are winners and pay P				
n+1	-	-	-	-	P
	Auction closes; A and B are winners and pay P				
	(Unsold lot only because never had three bids for this circle in this case.)				

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EG3 Supply equal to demand in circle X and excess demand in at least one other circle in round n; no excess demand in other circles in round n+1

Round	Bidder				
	A	B	C	D	
n	x (3)	x (2)	-	x (1)	P
n+1	x (2)	x (3)	x (4)	x (1)	P+1
	Auction continues with bids ranked randomly				
n+1	x	x	-	x	P+1
	Auction closes; D, B and A are winners and pay P+1				
n+1	-	x	x	x	P+1
	Auction closes; D, B and C are winners and pay P+1				
n+1	x	x	-	-	P+1
	Auction closes; D, B and A are winners and pay P				
n+1	-	x	-	-	P+1
	Auction closes; A, B and D are winners and pay P				
n+1	-	-	x	-	P+1
	Auction closes; C, D and B are winners and pay P				
n+1	-	-	-	-	P+1
	Auction closes; D, B and A are winners and pay P				

EG3

Round	Bidder				
	A	B	C	D	
n-1	x (3)	x (2)	x (1)	x (4)	P
n	x (1)	- (3)	- (2)	-	P+1
	(B and C now secondary provisional winners)				
n+1	x (1)	x (3)	x (2)	x (4)	P+1
	Auction continues with bids ranked as shown				
n+1	x	x	x	-	P+1
	Auction closes; A, C and B are winners and pay P+1				
n+1	x	-	x	x	P+1
	Auction closes; A, C and D are winners and pay P+1				
n+1	x	-	x	-	P+1
	Auction closes; A, C and B are winners and pay P				
n+1	-	-	-	-	P+1
	Auction closes; A, C and B are winners and pay P				

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H. Application Checklist

S No	Particulars	Please tick	Page number of Application document
1.	Completed Application Form	<input type="checkbox"/>	
2.	Certified copy of Certificate of Registration along with Articles of Association and Memorandum of Understanding. Company Secretary to certify the copy (in case, the Applicant is not an Indian company, copies of the incorporation documents of the Company have to certified by a Company Secretary registered in India)	<input type="checkbox"/>	
3.	Self certification from the Company Secretary of his/ her name and membership number	<input type="checkbox"/>	
4.	Certificate from Company Secretary certifying details of Promoters/ Partners/ Shareholders in the Company and break-up of the equity of the Company	<input type="checkbox"/>	
5.	Certificate from Company Secretary certifying the paid up capital	<input type="checkbox"/>	
6.	Certificate from Company Secretary certifying the net worth	<input type="checkbox"/>	
7.	Certified copy of approval of Government of India for terms of Foreign Collaboration or copy of application submitted to SIA/ Government in this regard with proof of Submission (if applicable) <i>(Copy to be certified by the Company Secretary)</i>	<input type="checkbox"/>	
8.	Bank Guarantee from a Scheduled Bank (for the Earnest Money Deposit)	<input type="checkbox"/>	
9.	Power Attorney by Resolution of Board of Directors that the person signing the Application is an authorized signatory <i>(Copy to be certified by Company Secretary and duly stamped and notarized)</i>	<input type="checkbox"/>	
10.	Ownership Compliance Certificate	<input type="checkbox"/>	
11.	Non-refundable application fee of Rs. 100,000/- payable to Pay and Accounts Officer, DoT, New Delhi	<input type="checkbox"/>	
<i>In case of Associated Licensees:</i>			
12.	Joint undertaking to nominate the Group Bidding Entity	<input type="checkbox"/>	

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S No	Particulars	Please tick	Page number of Application document
13.	Certificates from Company Secretary on ownership details of each of the Associated Licensees establishing the shareholding of the Common Parent in each of the Associated Licensees	<input type="checkbox"/>	
	▪ In case of step-down subsidiaries, the shareholding details at each level have to be submitted, in the same format as above, clearly establishing the direct/ indirect shareholding of the Common Parent in the Associated Licensees.	<input type="checkbox"/>	
	▪ In case any of the Associated Licensee is a listed Company, attach the stock exchange filing establishing the Common Parent as the promoter of the Company	<input type="checkbox"/>	
14.	Undertaking from each Associated Licensee (excluding the Applicant) that it will conform to the terms and conditions of the award of spectrum, including changes to the existing licence, if the Group Bidding Entity is declared a Successful Bidder in a service area where it operates	<input type="checkbox"/>	
	<i>In case of Prospective New Entrants:</i>		
15.	Self-certification with supporting documents of having the experience of running 3G services in any country	<input type="checkbox"/>	
16.	Undertaking confirming that, if the Applicant is successful in winning spectrum in any service area, it shall acquire a UAS licence, through an Indian company registered under the Indian Companies Act 1956, in advance of starting commercial operations	<input type="checkbox"/>	

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H.1 Application Format for the 3G Auction

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS AND INFORMATION TECHNOLOGY
DEPARTMENT OF TELECOMMUNICATIONS
SANCHAR BHAWAN, 20 ASHOKA ROAD, NEW DELHI-110 001.

APPLICATION FOR PARTICIPATING IN AUCTION OF RADIO SPECTRUM IN THE 2.1GHz BAND

General instructions:

- (a) All the pages of the form/ supporting documents must be separately signed along with the rubber stamp by the Authorised Signatory or Company Secretary, as required. The name and designation of the signatory and the stamp of the relevant company must also appear wherever documents have been signed.
- (b) In case the Applicant has to furnish no information against any of the items below, either 'Nil', 'No' or 'Not applicable', as the case may be, should be mentioned. If in the information supplied, against any item, a dash is marked or is left blank, it shall be treated as incomplete and the Application may not be considered for further processing.

1. Name of Applicant Company:

(Note: Attach certified copy of Certificate of Registration along with Articles of Association and Memorandum of Understanding. Company Secretary is required to certify the copy. In case, the Applicant is not an Indian company, copies of the incorporation documents of the Company have to be certified by a Company Secretary registered in India.)

2. Complete postal address with Telephone/ Fax numbers/ e-mail address
i) Corporate Office

ii) Registered Office

3. Address for correspondence with Telephone/ Fax numbers/ e-mail address

4. Name of the Company Secretary certifying the documents along with his/ her Membership number

(Note: Attach self certification from the Company Secretary.)

5. Name of Authorised Person, designation, address and Telephone/ Fax numbers/ e-mail address

Auction of 3G and BWA Spectrum – Information Memorandum

(Note: Attach Power of Attorney empowering him/ her to take all decisions connected with the relevant Auctions, on the Bidder's behalf.)

6. (a) Details of Promoters/ Partners/ Shareholders in the Company:
(Note: the Promoters are required to be separately indicated.)

S No	Name of Promoter/ Partner/ Shareholder	Indian/ Foreign	Equity percentage	Networth	Paid-up capital

(Note: Complete break-up of 100% of equity must be given. Equity holding upto 5% of the total equity shared among various shareholder can be clubbed but Indian and Foreign equity must be separate.)

(Note: Copy to be certified by the Company Secretary)

- (b) Equity details

Indian	
Foreign	
Total	

7. List of UAS/ CMTS licence(s) held by the Applicant and its Associated Licensees, if any. Please mention operative licences only.

Type of the Licence (UAS/CMTS)	Service area	Name of the Company

(Note: Attach Undertaking that in case the Applicant is declared a Successful Bidder in any service area where it (alongwith its Associated Licensees) does not currently hold a UAS/ CMTS licence, it will acquire a UAS licence.)

8. Ownership details of each of the Associated Licensees establishing the shareholding of the Common Parent in each of the Associated Licensees.

(Note: In case of step-down subsidiaries, the shareholding details at each level have to be submitted, in the same format as in point 6(a) (above), clearly establishing the direct/ indirect shareholding of the Common Parent in the Associated Licensees.)

(Note: In case any of the Associated Licensees is a listed Company, attach the stock exchange filing establishing the Common Parent as a promoter of the Company.)

(Note: Attach Certificates from Company Secretary of each Company whose shareholding is presented.)

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9. List of telecom service licence(s) held by the Applicant and its allies/ sister concerns/ partners, if any, and their present status:

Type of the Licence (Basic Cellular/ UASL/ Paging/ NLD/ ILD/ IP-II etc) and service area	Name of the Company	Status whether operative/ surrendered/ terminated

(Type of the Licence means Basic/ Cellular/ UASL/ Paging/ NLD/ ILD/ IP-II licences etc. Details of all the Licences held by Allies/ sister concerns/ Partners or legal entities with 10% or more common equities must be shown separately.)

10. Networth required for the Licence

No. of cellular/ UAS licence in category A service area	No. of Cellular/UAS licence in category B service area	No. of Cellular/UAS licence in category C service area
U	V	W
$U * 100 = X$	$V * 50 = Y$	$W * 30 = Z$

Total = X+Y+Z

11. Paid up capital of the Company (certificate from Company Secretary certifying the paid up capital to be provided.)
12. Net worth of the Company (certificate from Company Secretary certifying the net worth to be provided).
- a. Also provide combined net worth of any promoter that holds more than 10% in the Company (actual break-up to be provided; certificate from the Company Secretary of each of such promoter that has been considered in the calculation to be provided).
13. Certified copy of approval of Government of India for terms of Foreign Collaboration or copy of application submitted to SIA/ Government in this regard with proof of Submission (if applicable).

(Note: Copy to be certified by the Company Secretary)

14. Number of initial Eligibility Points applied for and details of corresponding Bank Guarantee for the Earnest Money Deposit.

(Note: Attach Bank Guarantee)

Auction of 3G and BWA Spectrum – Information Memorandum

15. For Applicants who are not existing UAS/ CMTS licensees, nor having any Associated Licensees, a self-certification with supporting documents of having the experience of running 3G services in any country.
16. Power of Attorney by Resolution of Board of Directors that the person signing the Application is an authorized signatory.

(Note: Copy to be certified by Company Secretary and duly stamped and notarized.)

Certificates/ undertaking:

- A. I hereby certify that the Applicant has carefully read the Notice and undertakes to fully comply with the terms and conditions of the Notice.
- B. I hereby certify that the Applicant is legally capable of both bidding for and satisfying its obligations under the terms and conditions for award of the spectrum and the UAS licence (if applicable), including but without limitation to any approvals, consents, permissions and board approvals from its holding company(ies) under any laws or rules and regulations issued by any governmental or regulatory or supervisory body in any competent jurisdiction.
- C. I hereby certify that neither the Applicant nor any of its Associated Licensees are the subject of criminal or civil proceedings that could be expected to adversely affect its business or its ability to bid in the 3G Auction.
- D. I hereby certify that the Applicant will accept any changes required to be made to the existing licences held by it or any of its Associated Licensees (if applicable) as a pre-condition to or as a consequence of the allotment of spectrum.
- E. I hereby certify that the Applicant understands that this Application, if found incomplete in any respect and/ or if found with conditional compliance or not accompanied with the Earnest Money Deposit, shall be summarily rejected.
- F. I hereby certify that the Applicant understands that the processing fee is non-refundable irrespective of whether or not the spectrum is granted to it.
- G. I hereby certify that the Applicant has read and understood the FIPB guidelines for investment in telecom services in India, and will comply with the same before commencing operations.
- H. I hereby certify that the Applicant will intimate the DoT promptly in case of any change in the information submitted as part of the Application.
- I. I hereby certify that the Applicant will comply, and ensure to the best of its ability, that all of its Insiders and Associated Licensees will comply with the terms and conditions of the Notice relating to confidentiality.
- J. I hereby certify that the Applicant understands that all matters relating to the application or spectrum if granted to it will be subject to jurisdiction of courts/ Tribunal(s) in Delhi/ New Delhi only.

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- K. I hereby certify that the Applicant understands that if at any time, any averments made or information furnished as part of this application is found incorrect, then its application and the spectrum if awarded on the basis of such application shall be cancelled.
- L. I certify that the information provided in this Application (including the attachments) is true, accurate and complete to the best of its knowledge.

Date:

Signature and name of the Authorised
Signatory

Place:

(Company's Seal)

Auction of 3G and BWA Spectrum – Information Memorandum

H.2 Application Format for the BWA Auction

GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS AND INFORMATION TECHNOLOGY
DEPARTMENT OF TELECOMMUNICATIONS
SANCHAR BHAWAN, 20 ASHOKA ROAD, NEW DELHI-110 001.

APPLICATION FOR PARTICIPATING IN AUCTION OF RADIO SPECTRUM IN THE 2.3GHz AND 2.5GHz BANDS

General instructions:

- (a) All the pages of the form/ supporting documents must be separately signed along with the rubber stamp by the Authorised Signatory or Company Secretary, as required. The name and designation of the signatory and the stamp of the relevant company must also appear wherever documents have been signed.
- (b) In case the Applicant has to furnish no information against any of the items below, either 'Nil', 'No' or 'Not applicable', as the case may be, should be mentioned. If in the information supplied, against any item, a dash is marked or is left blank, it shall be treated as incomplete and the Application may not be considered for further processing.

1. Name of Applicant:

(Note: Attach certified copy of Certificate of Registration along with Articles of Association and Memorandum of Understanding. Company Secretary is required to certify the copy. In case, the Applicant is not an Indian company, copies of the incorporation documents of the Company have to be certified by a Company Secretary registered in India.)

2. Complete postal address with Telephone/ Fax numbers/ e-mail address
i) Corporate Office

ii) Registered Office

3. Address for correspondence with Telephone/ Fax numbers/ e-mail address

4. Name of the Company Secretary certifying the documents along with his/ her Membership number

(Note: Attach self certification from the Company Secretary.)

5. Name of Authorised Person, designation, address and Telephone/ Fax numbers/ e-mail address

Auction of 3G and BWA Spectrum – Information Memorandum

(Note: Attach Power of Attorney empowering him/ her to take all decisions connected with the relevant Auctions, on the Bidder’s behalf.)

6. (a) Details of Promoters/ Partners/ Shareholders in the Company:
(Note: the Promoters are required to be separately indicated.)

S No	Name of Promoter/ Partner/ Shareholder	Indian/ Foreign	Equity percentage	Networth	Paid-up capital

(Note: Complete break-up of 100% of equity must be given. Equity holding upto 5% of the total equity shared among various shareholder can be clubbed but Indian and Foreign equity must be separate.)

(Note: Copy to be certified by the Company Secretary)

- (b) Equity details

Indian _____
 Foreign _____
Total _____

7. List of UAS/ CMTS/ ISP (category ‘A’ or category ‘B’) licence(s) held by the Applicant and its Associated Licensees, if any. Please mention operative licences only.

Type of the Licence (UAS/ CMTS/ ISP (Category ‘A’ or Category ‘B’))	Service area	Name of the Company

(Note: Attach Undertaking that in case the Applicant is declared a Successful Bidder in any service area where it (alongwith its Associated Licensees) does not currently hold a UAS/ CMTS/ ISP (Category ‘A’ or Category ‘B’) licence, it will acquire a UAS licence.)

8. Ownership details of each of the Associated Licensees establishing the shareholding of the Common Parent in each of the Associated Licensees.

(Note: In case of step-down subsidiaries, the shareholding details at each level have to be submitted, in the same format as in point 6(a) (above), clearly establishing the direct/ indirect shareholding of the Common Parent in the Associated Licensees.)

(Note: In case any of the Associated Licensees is a listed Company, attach the stock exchange filing establishing the Common Parent as a promoter of the Company.)

(Note: Attach Certificates from Company Secretary of each Company whose shareholding is presented.)

Auction of 3G and BWA Spectrum – Information Memorandum

9. List of telecom service licence(s) held by the Applicant and its allies/ sister concerns/ partners, if any, and their present status:

Type of the Licence (Basic Cellular/ UASL/ Paging/ NLD/ ILD/ ISP etc) and service area	Name of the Company	Status whether operative/ surrendered/ terminated

(Type of the Licence means Basic/ Cellular/ UASL/ Paging/ NLD/ ILD/ ISP licences etc. Details of all the Licences held by Allies/ sister concerns/ Partners or legal entities with 10% or more common equities must be shown separately.)

10. Details of the CMTS/ UAS licence in the name of the applicant company and Network required for the Licence

No. of cellular/ UAS licence in category A service area	No. of Cellular/UAS licence in category B service area	No. of Cellular/UAS licence in category C service area
U	V	W
$U * 100 = X$	$V * 50 = Y$	$W * 30 = Z$

Total = X+Y+Z

11. Paid up capital of the Company (certificate from Company Secretary certifying the paid up capital to be provided.)
12. Net worth of the Company (certificate from Company Secretary certifying the net worth to be provided.)
- a. Also provide combined net worth of any promoter that holds more than 10% in the Company (actual break-up to be provided; certificate from the Company Secretary of each of such promoter that has been considered in the calculation to be provided).
13. Certified copy of approval of Government of India for terms of Foreign Collaboration or copy of application submitted to SIA/ Government in this regard with proof of Submission (if applicable).

(Note: Copy to be certified by the Company Secretary)

14. Number of initial Eligibility Points applied for and details of corresponding Bank Guarantee for the Earnest Money Deposit.

Auction of 3G and BWA Spectrum – Information Memorandum

(Note: Attach Bank Guarantee)

15. Power of Attorney by Resolution of Board of Directors that the person signing the Application is an authorized signatory.

(Note: Copy to be certified by Company Secretary and duly stamped and notarized.)

Certificates/ undertaking:

- A. I hereby certify that the Applicant has carefully read the Notice and undertakes to fully comply with the terms and conditions of the Notice.
- B. I hereby certify that the Applicant is legally capable of both bidding for and satisfying its obligations under the terms and conditions for award of the spectrum and the UAS licence (if applicable), including but without limitation to any approvals, consents, permissions and board approvals from its holding company(ies) under any laws or rules and regulations issued by any governmental or regulatory or supervisory body in any competent jurisdiction.
- C. I hereby certify that neither the Applicant nor any of its Associated Licensees are the subject of criminal or civil proceedings that could be expected to adversely affect its business or its ability to bid in the BWA Auction.
- D. I hereby certify that the Applicant will accept any changes required to be made to the existing licences held by it or any of its Associated Licensees (if applicable) as a precondition to or as a consequence of the allotment of spectrum, including the requirement of migration of ISP category 'B' licence to an ISP category 'A' licence, if applicable.
- E. I hereby certify that the Applicant understands that this Application, if found incomplete in any respect and/ or if found with conditional compliance or not accompanied with the Earnest Money Deposit, shall be summarily rejected.
- F. I hereby certify that the Applicant understands that the processing fee is non-refundable irrespective of whether or not the spectrum is granted to it.
- G. I hereby certify that the Applicant has read and understood the FIPB guidelines for investment in telecom services in India, and will comply with the same before commencing operations.
- H. I hereby certify that the Applicant will intimate the DoT promptly in case of any change in the information submitted as part of the Application.
- I. I hereby certify that the Applicant will comply, and ensure to the best of its ability, that all of its Insiders and Associated Licensees will comply with the terms and conditions of the Notice relating to confidentiality.
- J. I hereby certify that the Applicant understands that all matters relating to the application or spectrum if granted to it will be subject to jurisdiction of courts/ Tribunal(s) in Delhi/ New Delhi only.
- K. I hereby certify that the Applicant understands that if at any time, any averments made or information furnished as part of this application is found incorrect, then its

Auction of 3G and BWA Spectrum – Information Memorandum

application and the spectrum if awarded on the basis of such application shall be cancelled.

- L. I certify that the information provided in this Application (including the attachments) is true, accurate and complete to the best of its knowledge.

Date:

Signature and name of the Authorised
Signatory

Place:

(Company's Seal)

Auction of 3G and BWA Spectrum – Information Memorandum

H.3 Format for Earnest Money Deposit (in the form of Bank Guarantee from a Scheduled Bank)

To
The President of India,
New Delhi.

1. Whereas **<Full name of the Applicant>** (hereinafter called “**the Proposer**”) desires to submit the proposal for participating in the Auction for spectrum in the 2.1GHz band/ 2.3GHz and 2.5GHz bands in compliance to DoT Notice Document No. **<XXX>**.

Know all men by these presents that we **<Name of the Bank>** (hereinafter called “**the Bank**”) are bound unto the President of India (hereinafter referred to as “the Authority”), in the sum of **<Amount in figures>** (**<Amount in words>**) for which payment will and truly be made to the said Authority, the Bank binds itself, its successors and assignees by these presents.

2. The conditions of this obligation are:
 - (i) If the Proposer having been notified of the acceptance of its proposal by the DoT, during the period of the proposal’s validity:
 - (a) fails or refuses to execute the contract form, if required; or
 - (b) fails to deposit the Successful Bid Amount in the stipulated timeframe as per the Notice;
 - (ii) The Proposer misrepresents facts in its application;
 - (iii) The Proposer violates any of the Auction Rules or otherwise disrupts the Auction process;
 - (iv) The Proposer does not bid for even 1 service area in the first Clock Round of the relevant Auctions;
 - (v) The Proposer defaults on its bid;
 - (vi) If the Proposer withdraws its proposal during the period of its validity specified in the Notice.

We undertake to pay to the Authority, the above amount upon demand, without any demur and without the Authority having to substantiate its demand.

3. This guarantee will remain in force up to one year from the date of issue, further extendible by another six months on request and any demand in respect thereof should reach the Bank not later than the date up to which this Bank Guarantee is valid.

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4. Notwithstanding anything contained above, our liability, under the Guarantee shall be restricted to <Amount in figures>- and our Guarantee shall remain in force until 1 year from the date hereof. Unless a demand or claim under this Guarantee is made on us in writing within this date i.e. __ <date> all your rights under the Guarantee shall be forfeited and we shall be released and discharged from all liabilities thereunder.

Dated __ day <month>, 2008

<Name of Bank>

Signature

Witness:

1) _____

2) _____

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H.4 Format for undertaking to obtain UAS licence (for existing licencees)

(in respect of each service area where neither the Applicant nor any of its Associated Licensees has an existing UAS/ CMTS licence)

(applicable in the case of BWA Spectrum, if the Applicant does not have an UAS/ CMTS/ ISP (category 'A' or category 'B' licence) in a service area)

UNDERTAKING TO OBTAIN UAS LICENCE

We, _____ and _____, the undersigned, as Directors and Authorised Representatives of _____ <Name of the Applicant> (“Applicant”) hereby confirm, undertake, acknowledge and certify the following:

- a) That neither the Applicant, nor any entity sharing more than 10% common ownership with the Applicant, is a UAS/ CMTS licensee in _____ <Name of the telecom service area> (as defined in the UAS guidelines) (“Specified Service Area”);
- b) That in case the Applicant is declared a Successful Bidder in the Specified Service Area, it shall apply for a UAS licence in the Specified Service Area either directly or through one of its Associated Licensees or through a wholly-owned subsidiary of the Applicant (“Nominated UAS Applicant”);
- c) That the Nominated UAS Applicant will satisfy all the conditions required to obtain a UAS licence as per the UAS guidelines;
- d) That the Applicant has read and understood the UAS guidelines;
- e) That in case the UAS licence application of the Nominated UAS Applicant is rejected, the Government shall have the right to revoke the spectrum;
- f) That in case an application for a UAS licence by the Nominated UAS Applicant has not been made within three (3) months of the Applicant being declared a Successful Bidder, the Government shall have the right to revoke the spectrum;
- g) That in case the Applicant and the Nominated UAS Applicant are different entities, the Applicant and the Nominated UAS Applicant shall be jointly and severally responsible for the performance of the bid obligations and that the Applicant shall obtain an undertaking to this effect (“Adherence Undertaking”) from the Nominated UAS Applicant before the Nominated UAS Applicant submits the UAS licence application along with a certified copy of the Adherence Undertaking.

Date: _____ Signature and name of the Authorised Signatory

Place: _____

(Company’s Seal)

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H.5 Format for undertaking to obtain UAS licence (for Prospective New Entrant)

(in respect of each service area where the Applicant wishes to bid for)

UNDERTAKING TO OBTAIN UAS LICENCE

We, _____ and _____, the undersigned, as Directors and Authorised Representatives of _____ <Name of the Applicant> (“Applicant”) hereby confirm, undertake, acknowledge and certify the following:

- a) That neither the Applicant, nor any entity sharing more than 10% common ownership with the Applicant is a UAS/ CMTS licensee in _____ <Name of the telecom service area> (as defined in the UAS guidelines) (“Specified Service Area”);
- b) That in case the Applicant is declared a Successful Bidder in the Specified Service Area, it shall apply for a UAS licence in the Specified Service Area either directly or through a subsidiary of the Applicant where the Applicant has a minimum holding of at least 26% (“New Entrant Nominated UAS Applicant”);
- c) That the New Entrant Nominated UAS Applicant will satisfy all the conditions required to obtain a UAS licence as per the UAS guidelines;
- d) That the Applicant has read and understood the UAS guidelines;
- e) That in case the UAS licence application of the New Entrant Nominated UAS Applicant is rejected, the Government shall have the right to revoke the spectrum;
- f) That in case an application for a UAS licence by the New Entrant Nominated UAS Applicant has not been made within three (3) months of the Applicant being declared a Successful Bidder, the Government shall have the right to revoke the spectrum;
- g) That in case the Applicant and the New Entrant Nominated UAS Applicant are different entities, the Applicant and the New Entrant Nominated UAS Applicant shall be jointly and severally responsible for the performance of the bid obligations and that the Applicant shall obtain and undertaking to this effect (“Adherence Undertaking”) from the New Entrant Nominated UAS Applicant before the New Entrant Nominated UAS Applicant submits the UAS licence application along with a certified copy of the Adherence Undertaking;

Date:

Signature and name of the Authorised
Signatory

Place:

(Company’s Seal)

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H.6 Format for undertaking to nominate Group Bidding Entity for 3G Auction

(for Associated Licensees bidding through a Group Bidding Entity)

JOINT UNDERTAKING TO NOMINATE GROUP BIDDING ENTITY

We, _____ and _____, the undersigned, as Directors and Authorised Representatives of _____ <Name of the Associated Licensee> (“Nominator”)

and,

We, _____ and _____, the undersigned, as Directors and Authorised Representatives of _____ <Name of the Group Bidding Entity> (“Group Bidding Entity”)

hereby confirm, undertake, acknowledge and certify the following:

- a) That the Nominator has authorised the Group Bidding Entity to bid for 3G Spectrum in the 3G Auction on its behalf in the following service areas:
 - 1. _____
 - 2. _____
- b) That the Nominator is a UAS/ CMTS licensee in all the service areas mentioned in point (a) above;
- c) That the Nominator has read and understood the Notice for the Auctions and will abide with all applicable conditions including, but not limited to, payment of bid amount, spectrum usage charges and compliance with rollout obligations;
- d) That in case the Group Bidding Entity is declared a Successful Bidder in any of the service areas mentioned in point (a), the Nominator shall accept the assignment to itself of spectrum won by the Group Bidding Entity in that service area by the Government;
- e) That the Nominator and the Group Bidding Entity shall be jointly and severally liable for the performance of the bid obligations;
- f) That the Nominator agrees to make the necessary changes to its existing UAS/ CMTS licence (as required by the conditions specified in the Notice) before award of spectrum.

Signed:

For <name of the Nominator Company>

Authorised signature
(name and position)

Authorised signature
(name and position)

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Company seal affixed

Date: _____

Signed:
For <name of the Group Bidding Entity>

Authorised signature
(name and position)

Authorised signature
(name and position)

Company seal affixed

Date: _____

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H.7 Format for undertaking to nominate Group Bidding Entity for BWA Auction

(for Associated Licensees bidding through a Group Bidding Entity)

JOINT UNDERTAKING TO NOMINATE GROUP BIDDING ENTITY

We, _____ and _____, the undersigned, as Directors and Authorised Representatives of _____ <Name of the Associated Licensee> (“Nominator”)

and,

We _____ and _____, the undersigned, as Directors and Authorised Representatives of _____ <Name of the Group Bidding Entity> (“Group Bidding Entity”)

hereby confirm, undertake, acknowledge and certify the following:

- a) That the Nominator has authorised the Group Bidding Entity to bid for BWA Spectrum in the BWA Auction on its behalf in the following service areas:
 - 1. _____
 - 2. _____
- b) That the Nominator is a UAS/ CMTS/ ISP (Category ‘A’ or ‘B’) licensee in all the service areas mentioned in point 1 (above);
- c) That the Nominator has read and understood the Notice for the Auctions and will abide with all applicable conditions including, but not limited to, payment of bid amount, spectrum usage charges and compliance with rollout obligations;
- d) That in case the Group Bidding Entity is declared a Successful Bidder in any of the service areas mentioned in point (a), the Nominator shall accept the assignment to itself of spectrum won by the Group Bidding Entity in that service area by the Government;
- e) That the Nominator and the Group Bidding Entity shall be jointly and severally liable for the performance of the bid obligations;
- f) That the Nominator agrees to make the necessary changes to its existing UAS/ CMTS/ ISP licence (as required by the conditions specified in the Notice) before award of spectrum;

Signed:

For <name of the Nominator Company>

Authorised signature
(name and position)

Authorised signature
(name and position)

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Company seal affixed

Date: _____

Signed:

For <name of the Group Bidding Entity>

Authorised signature
(name and position)

Authorised signature
(name and position)

Company seal affixed

Date: _____

Auction of 3G and BWA Spectrum – Information Memorandum

H.8 Format for Ownership Compliance Certificate for 3G Auction

(for all Applicants)

We, _____ and _____, the undersigned, as Directors and Authorised Representatives of _____ <Name of the Applicant> (“Applicant”) hereby confirm, undertake, acknowledge and certify the following:

- a) That we have carefully gone through the list of Applicants (“Provisional Bidders”) for the 3G Auction and their Associated Licensees and their ownership details put up on the DoT website;
- b) That we have made due enquires to the extent reasonably possible of any entity:
 - who holds a direct or indirect material interest in the Applicant or any of its Associated Licensees; and
 - in whom the Applicant or any of its Associated Licensees hold a direct or indirect material interest;
- c) That no common entity holds more than 10% stake in the Applicant (or any of its Associated Licensees) and any of the other Provisional Bidders (or any of their respective Associated Licensees);
- d) That the UAS/ CMTS licence is subject to the condition that:
“No single company/ legal person, either directly or through its associates, shall have substantial equity holding in more than one licensee Company in the same service area for the Access Services namely; Basic Cellular and Unified Access Service. ‘Substantial equity’ herein will mean ‘an equity of 10% or more’. A promoter company/ Legal person cannot have stakes in more than one licensee company for the same service area.”
- e) That the Applicant will promptly intimate the Government if any part of this undertaking were to undergo a material change.

Signed:

Authorised signature
(name and position)

Authorised signature
(name and position)

Company seal affixed

Date: _____

Auction of 3G and BWA Spectrum – Information Memorandum

H.9 Format for Ownership Compliance Certificate for BWA Auction

(for all Applicants)

We, _____ and _____, the undersigned, as Directors and Authorised Representatives of _____ <Name of the Applicant> (“Applicant”) hereby confirm, undertake, acknowledge and certify the following:

- a) That we have carefully gone through the list of Applicants (“Provisional Bidders”) for the BWA Auction and their Associated Licensees and their ownership details put up on the DoT website;
- b) That we have made due enquires to the extent reasonably possible of any entity:
 - who holds a direct or indirect material interest in the Applicant or any of its Associated Licensees; and
 - in whom the Applicant or any of its Associated Licensees hold a direct or indirect material interest;
- c) That no common entity holds more than 10% stake in the Applicant (or any of its Associated Licensees) and any of the other Provisional Bidders (or any of their respective Associated Licensees);
- d) That the UAS/ CMTS licence is subject to the condition that:
“No single company/ legal person, either directly or through its associates, shall have substantial equity holding in more than one licensee Company in the same service area for the Access Services namely; Basic Cellular and Unified Access Service. ‘Substantial equity’ herein will mean ‘an equity of 10% or more’. A promoter company/ Legal person cannot have stakes in more than one licensee company for the same service area.”
- e) That the Applicant will promptly intimate the Government if any part of this undertaking were to undergo a material change.

Signed:

Authorised signature
(name and position)

Authorised signature
(name and position)

Company seal affixed

Date: _____

Auction of 3G and BWA Spectrum – Information Memorandum

I. Definitions and glossary of terms

Unless the context otherwise requires, the different terms and expression used in this Memorandum (other than in Annexures C to F) shall have the meaning assigned to them in this section:

2G	Second Generation
3G	Third Generation
3G Auction	Auction process for allotting 3G Spectrum blocks as per the provisions of the Notice
3G Spectrum	Radio spectrum frequencies in the 2.1GHz band (paired with 1.9GHz)
Activity Rule	The requirement for Bidders to bid for a certain proportion of Eligibility Points in each Clock Round to maintain eligibility to bid in subsequent Clock Rounds
AGR	Adjusted Gross Revenue
Applicant	Person making the Application
Application	Application for participating in either the 3G Auction or the BWA Auction, to pre-qualify in either the 3G Auction or the BWA Auction respectively
Application Form	Format for submitting the Application
APT	Asia-Pacific Telecommunity
Assignment Stage	The second stage of the relevant Auctions as described in the Auction Rules
Associated Licensees	For the 3G Auction – existing UAS/ CMTS licensees that have a Common Parent For the BWA Auction – existing UAS/ CMTS/ ISP licensees that have a Common Parent
Auctioneer	NM Rothschild & Sons (India) Private Limited and DotEcon Limited, in their capacity as advisers to the Government on the Auctions
Auctions	The 3G Auction and the BWA Auction
Activity Requirement	The percentage of the Bidder's Eligibility Points (rounded up to the nearest whole number) that determines the level of activity that a Bidder must meet in that Clock Round in order to maintain its eligibility in the following Clock Round. This threshold is referred to as the Bidder's Activity Requirement in that Clock Round.
Activity Rules	Minimum bidding requirement stipulated in the Clock Stage for bidders to be able to switch bids across services areas from one Clock Round to the next
Auction Rules	Rules governing conduct of the Auctions as described in the Notice

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Authorised Person	Nominated authorised person for future correspondence with the Applicant having a Power of Attorney from the Applicant empowering him/ her to take all decisions connected with the relevant Auctions on behalf of the Applicant
Bank Guarantee	A guarantee from a Scheduled Bank, in the prescribed format
Bid	Bidder's statement in each Clock Round of the Clock Stage in the form of a yes/ no choice of whether it is interested in acquiring a lot in the specified service area at the current Clock Round price; while it is the amount that a Successful Bidder is willing to pay for a specified frequency block in a service area in the Assignment Stage.
Bid Deposit	25% of the Successful Bid Amount required to be deposited by the Successful Bidders within 5 days of the close of the Auction
Bidder	Pre-qualified Applicants that do not withdraw their Application till the last date of withdrawal
Bidder Participation Notice	Notice issued to pre-qualified Bidders that shall include each pre-qualified Bidder's Initial Eligibility Points, auction software, user manual and authentication certificate
BSNL	Bharat Sanchar Nigam Limited
BWA	Broadband Wireless Access
BWA Auction	Auction process for allotting BWA Spectrum blocks
BWA Spectrum	Radio spectrum frequencies in the 2.3GHz and 2.5GHz bands (unpaired)
CDMA	Code Division Multiple Access
C-DOT	Centre for Development of Telematics
Clock Round	Individual rounds of the Clock Stage as described in the Auction Rules
Clock Stage	The first stage of the relevant Auctions as described in the Auction Rules
CMTS	Cellular Mobile Telephone Service
Common Parent	Single entity that controls, and also has at least 26% shareholding, directly or indirectly, in more than one UAS/ CMTS/ ISP licensee. In case of licensees that are listed on recognised stock exchanges, a company of the Promoter group could also qualify as a Common Parent, regardless of the level of shareholding
Confidential Information	Any information which, if known to other Bidders, would be likely to affect the price that the other Bidders would be prepared to bid in either of the Auctions. Such information would include (but not necessarily be limited to) the Bidder's business case, auction strategy and the highest price it is willing to bid for spectrum in any service area
DHQ	District Headquarter
DoT	Department of Telecommunications, Ministry of Communications & Information Technology, Government of India

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DSL	Digital Subscriber Line
DTS	Department of Telecommunication Services
EAS	Electronic Auction Systems
Earnest Money Deposit	The earnest money (in the form of a Bank Guarantee from a Scheduled Bank) to be submitted along with the application for pre-qualification
ECB	External Commercial Borrowing
Effective Date	In the context of rollout obligation, the later of the date when the spectrum is allocated and the date when the relevant UAS licence, if applicable, is granted to the operator
Eligibility Points	Number of points associated with a service area/ Lot Category based on the Reserve Price of licences in that service area/ Lot Category
ETSI	European Telecommunications Standards Institute
Excess Demand	The total number of bids received in a service area at a Clock Round price equal to the Clock Round price set in the last completed Clock Round minus the number of lots available in that service area
Extension Budget	Provision for Bidders to extend the Clock Round and defer submission of a bid
FDI	Foreign Direct Investment
FIPB	Foreign Investment Promotion Board
GDP	Gross Domestic Product
Government	Government of India
GR	Generic Requirements
Group Bidding Entity	A single entity nominated by Associated Licensees corresponding to a single Common Parent, which shall be authorised to bid on their behalf in the relevant Auctions
GSM	Global System for Mobile communications
Guidelines	Guidelines that were issued by the Department of Telecommunications (DoT) on 1 st August, 2008 along with the amendments issued on 11 th September, 2008 on the Auction and allotment of spectrum for 3G telecom services and BWA services
Initial Eligibility	Number of Eligibility Points allocated to a Bidder based on its Application and quantum of Earnest Money Deposit, wherein the Eligibility Points are linked to the applicable Reserve Price for each service area
Insider	Any party to whom Confidential Information in relation to a Bidder is disclosed
IPTV	Internet Protocol Television
IR	Interface Requirements
ISP	Internet Service Provider

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ISDN	Integrated Services Digital Network
IT	Information Technology
ITU	International Telecommunication Union
Kbps	Kilo bits per second
Lot Category	Categories of generic frequency lots of BWA Spectrum in a service area, where one category contains generic lots whose frequencies are within the 2.3GHz band, while the other contains generic lots within the 2.5GHz band
LR	Licensing and Regulation (section of the WPC)
M&A	Merger & Acquisition
Memorandum	The Information Memorandum and its appendices as supplemented, amended, updated or replaced from time to time by the Government
MNP	Mobile Number Portability
Mock Auction	A mock auction to familiarise the Bidders with the Auction Rules and bidding methodology
MTNL	Mahanagar Telephone Nigam Limited
MVNO	Mobile Virtual Network Operator
New Bids	Bids in service areas where the Bidder has not been determined to be a Provisional Winning Bidder at the end of the last completed Clock Round and in service areas where the Bidder submits a bid in the current Clock Round
New Entrant Nominee UAS Licensee	The entity (either the Prospective New Entrant or a subsidiary of the Prospective New Entrant where the Prospective New Entrant has a minimum holding of at least 26% (directly or indirectly)) that acquires a UAS licence in a service area in case the Prospective New Entrant is declared the Successful Bidder in that service area in the 3G/ BWA Auction
Nomination Form	Forms executed by each of the Associated Licensees nominating the Group Bidding Entity
Nominee UAS Licensee	The entity (either the Group Bidding Entity or one of its Associated Licensees or a wholly-owned subsidiary of the Group Bidding Entity) that acquires a UAS licence in a service area in case the Group Bidding Entity is declared the Successful Bidder in that service area in the 3G/ BWA Auction
Notice	Notice inviting Applications for participation in the Auctions
NTG	New Technology Group
NTP-99	New Telecom Policy 1999
Ownership Compliance Certificate	An undertaking from the Applicant confirming that it complies with the ownership restrictions in view of the other Applicants
PLMN	Public Land Mobile Network
POP	Point of Presence

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Prospective New Entrants	Prospective Bidders who do not have a UAS/CMTS licence (for the 3G Auction) or a UAS/CMTS/ISP (category 'A' or category 'B') licence (for the BWA Auction)
Provisional Winning Bidders	Bidders who submit the Provisional Winning Bid
Provisional Winning Bid	If n is the number of lots available in a service area, the first n bids in each service area ranked according to the values of the bids and then, if necessary, using the tie-breaking criteria detailed in Section 8.3.5
Provisional Winning Price	The lowest round clock price at which the Provisional Winning Bids are submitted
PSTN	Public Switched Telephone Network
RAN	Radio Access Network
Recipients	Recipients of the Memorandum
Reserve Price	The minimum bid price per lot in each service area as determined by the Government and notified in the Guidelines
SACFA	Standing Advisory Committee on Radio Frequency Allocation
SDCA	Short Distance Charge Area
SR	Service Requirements
Successful Bid Amount	Sum of the relevant Winning Price set in the Clock Stage plus the Winning Bid in the Assignment Stage for each frequency block being auctioned
Successful Bidder	A Bidder who at the end of the Clock Stage of the Auctions is declared to be among the Winning Bidders for a particular service area
SWAN	State Wide Area Network
TDSAT	Telecom Dispute Settlement & Appellate Tribunal
TEC	Telecom Engineering Centre
TRAI	Telecom Regulatory Authority of India
TSTP	Test Schedule and Test Procedures
TTML	Tata Teleservices (Maharashtra) Limited
TTSL	Tata Teleservices Limited
UAS	Universal Access Service
Winning Bids	Provisional Winning Bids at the end of the final Clock Round
Winning Bidders	Provisional Winning Bidders at the end of the final Clock Round
Winning Price	Provisional Winning Prices at the end of the final Clock Round
WLL(M)	Wireless in Local Loop
WPC	Wireless Planning and Coordination