DO. No. 103-5/2008-MN Date:- 23rd January 2009

Dear

DoT vide its letter No.P-11014/02/2008-PP dated 9^{th} January 2009 has sent a reference on the issue of the auctioning procedure and reserve price for one carrier 2x1.25 MHz for EVDO in 800 MHz for CDMA 3G services.

2. The comments of the TRAI, as sought by DoT vide above letter, are annexed with this letter. These comments contain 11 pages apart from annexures.

3. This letter along with comments is also being placed on TRAI's website <u>www.trai.gov.in</u> as required in terms of transparency under TRAI Act.

Yours sincerely,

-Sd-

(Nripendra Misra)

Shri Siddhartha Behura, Secretary, Department of Telecommunications, Sanchar Bhawan New Delhi – 110001

Encl:- As above

COMMENTS OF TELECOM REGULATORY AUTHORITY OF INDIA ON THE REFERENCE ON THE AUCTIONING PROCEDURE AND RESERVE PRICE OF ONE CARRIER 2X1.25 MHz for EVDO in 800 MHz band for CDMA 3G SERVICES. (DoT letter No. P-11014/02/2008-PP dated 9th January, 2009)

Dated: 23rd January, 2009

INTRODUCTION

1. The Telecom Regulatory Authority of India (TRAI) had submitted recommendations to Department of Telecommunications (DoT) on "Allocation and pricing of spectrum for 3G and Broadband Wireless Access Services" vide letter No. 101-36/2006-MN dated 27th September, 2006. DoT made references on certain select recommendations on dated 10th April 2008, 1st July 2008 and on 24th November, 2008. The Authority sent its recommendations on these references on dated 25th April, 2008, 12th July, 2008 and 9th December 2008 respectively. These correspondences are available on TRAI website- www.trai.gov.in

PRESENT REFERENCE FROM DEPRATMENT OF TELECOMMUNICATIONS

2. On the recommendations dated 27th September, 2006, the DoT vide its letter no. P-11014/02/2008-PP dated 9th January, 2009, has sent another reference on the issue of the auctioning procedure and reserve price of one carrier of 2x1.25 MHz for EVDO in 800 MHz band for CDMA 3G services(Copy enclosed as **Annex.-I**). The salient points in the reference of DoT are following:

3(a). On the auctioning procedure of one carrier 2 X 1.25 MHz for EVDO in 800 MHz band for CDMA 3G services, DoT has stated that the Government has decided to

auction one carrier for EVDO in 800 MHz band for CDMA 3G services instead of organizing one stage bidding process (as recommended by TRAI) as there is only one carrier available in 800 MHz band whereas the numbers of CDMA operators are more than three in all telecom circles.

3(b). For being eligible to participate in the auction, the DoT has stated that it will be the same as the eligibility decided for the auction of spectrum in 2.1GHz band. The eligibility criteria for 2.1 GHz band as notified earlier by the DoT is -

Any person

(i) who holds a UAS/CMTS licence or

(ii) (a) who has previous experience of running 3G Telecom Services;

and

(b) gives an undertaking to obtain Unified Access Services Licence(UASL) as per Department of Telecommunications guidelines dated 14.12.2005before starting telecom operations

shall be eligible to bid for 3G spectrum.

3(c) On the reserve price for spectrum in 800 MHz band for EVDO services, the DoT has stated that "Since the spectrum efficiency in 800 MHz band, which will be used for EVDO services, is the similar as the 2.1 GHz band, the reserve price for per MHz spectrum in these two bands should be same. Therefore, the reserve price for auction of one block of 2x1.25 MHz spectrum in 800 MHz band shall be 25% of reserve price for 2X5 MHz in 2.1 GHz band."

4. The Government has requested Authority to provide its considered views/comments on the auctioning procedure and reserve price for 1 x 1.25 MHz carrier for EVDO in 800 MHz for CDMA 3G services within a fortnight, as per the proviso under 11 (1) of TRAI Act 1997, as amended in 2000.

5. <u>Authority's recommendations on 3G spectrum in 800MHz band (in its</u> <u>Recommendations on 'Allocation and Pricing of 3G and Broadband Wireless</u> <u>Access services, dated 27th September, 2006)</u>

As the subject matter pertains specific to 800 MHz spectrum band, therefore Authority's recommendations in respect of 800MHz band given in its recommendations of dated 27th September 2006 are reproduced below:-

i) Since the quantum of spectrum in the 800 MHz band is limited, the Authority recommends that this band be allocated to the existing UASL CDMA operators only. (Para 4.29)

ii) DoT should allocate 2 x 5 MHz in the 450 MHz band to one of the existing UASL CDMA operators depending on market demand and based on the allocation process. (*Para 4.22*)

iii) An UASL CDMA operator will have the option to seek 2×1.25 MHz in the 800 MHz band at a determined price. Additionally, it will have the option of taking spectrum in either the 2.1 GHz or 450 MHz bands. In case it opts for the 2.1 GHz band, the UASL CDMA operator will have to bid along with the other operators. In case it is among the successful bidder, it will have an option of either retaining 2×1.25 MHz in the 800 MHz and getting an additional 2×3.75 MHz in the 2.1 GHz band, or giving up the option on 2×1.25 MHz in the 800 MHz and getting 2 × 5 MHz in the 2.1 GHz band. (Para 4.35)

	2.00	200.g
450 MHz (2 x 5 MHz)	2 x 5 MHz	Block A
800 MHz (15 carriers in 2 x 20 MHz)	2 x 2.5 MHz	Block B
2.1 GHz (2 x 25 MHz)	2 x 5 MHz	Block C
	2 x 5 MHz	Block D
	2 x 5 MHz	Block E
	2 x 5 MHz	Block F
	2 x 5 MHz	Block G
		(D)

iv) The Authority recommends that this spectrum should be allocated as follows: Band Block Designation v) Currently, if a UASL CDMA operator in 800 MHz band has to acquire an additional carrier, it will need to build a certain subscriber base. In order to provide EV-DO services, this operator will have to dedicate this carrier only for data. However, the increased subscriber base will need this additional carrier to support voice traffic. Hence, the operator will not be able to provide EV-DO services using this carrier. In order to break this cycle, the Authority believes that a non-subscriber base criterion is justified for the two carriers earmarked for EV-DO services. Since the allocation of Block B in 800 MHz at the same time as the 2.1 GHz will be independent of the currently followed subscriber base criteria, a new set of criterion to allocate this block of spectrum has been considered. The Authority believes that a market driven price determination would be transparent, equitable, just, and non-discriminatory. Thus, the Authority recommends that the allocation criterion followed for Block B should also be a spectrum acquisition fee, set in the same framework as Blocks A, and C-G. (Para 4.42)

vi) If there are more operators interested in the 450 MHz or 800 MHz bands than the number of available blocks, then a one-stage bidding process should be organized to decide the winners. (**Para 4.60**)

vii) "....to set a reasonable price for the 800 MHz band 3G carriers, the Authority recommends that the second-highest winning bid in the 2.1 GHz auction should be pro-rated to a per-2x1.25 MHz price. This pro-rated price should be charged as a one-time spectrum acquisition fee to each of the UASL CDMA operators who opt to be allocated one carrier in the 800 MHz band. After paying the price, the CDMA operators should be immediately assigned the carrier. (Para 4.78)

viii) It should be noted here that an additional allocation on one carrier in the 800 MHz band should not be linked to the subscriber base criteria for 2G operations. This is a stand alone allocation and should not influence the allocation of carriers for voice-centric 2G services as and when operators qualify for additional carriers. (Para 4.79)

6. <u>DoT's Guidelines dated 1st August, 2008 on 3G Auction and</u> <u>Allotment related to 800MHz band</u>

DoT issued guidelines for Auction and allotment for 3G services on 1st August,2008 (**Annex-II**) wherein in respect of 800 MHz following is mentioned:-

"Spectrum shall be auctioned in the 450 MHz band, in 800 MHz band for EVDO services, and in 1900 MHz band (1900-1910 paired with 1980-1990 MHz) when it becomes available. UASL CDMA telecom service providers may have the option to seek 2x1.25 MHz in 800 MHz band subject to availability at a price equivalent to the highest winning bid in 2.1 GHz auction prorated to a per 2x1.25 MHz price. The seniority for allotment shall be the subscriber base in a telecom service area." (Para 3.2)

7. Authority's response to above guidelines communicated vide letter No.103-5/2008-MN dated 8th August, 2008:

The Authority after due deliberation had conveyed following observation to the DoT on the guidelines for 3G services dated 1st August,2008 (**Annex-III**). Following is the relevant para mentioned by the Authority in its response:-

"In Para 3.2, regarding allotment of 2x1.25 MHz spectrum in 800 MHz band, whenever available, to the UASL - CDMA service providers, the criteria for allotment has been linked to the subscriber base of respective service providers in a telecom service area. As various service providers have been given licenses in different service areas at different period of time, therefore the Authority feels that keeping the subscriber base as the criterion for deciding the priority of allotment shall be against the level playing field and the principle of equity. Moreover, other than Reliance and Tata, now BSNL/MTNL as well as Shyam Telecom have been given the license/permission to provide full mobility service using the CDMA technology. Therefore, the Authority suggests that in order to ensure equity, level playing field and optimal pricing in allotment in 800 MHz band, the DoT may consider the auction route particularly as the UASL licensee using CDMA technology is also eligible to get 5 MHz through auction is 2.1 GHz band. The spectrum in 800 MHz band should be auctioned amongst the applicants with the highest bid price received for the auction of 2.1GHz spectrum as the reserve price. The subscriber base of CDMA network of the service provider in any service area is a result of different environment and cannot muster the test of fairness if it was to become the basis of priority."

It may be noted that the Authority in its recommendations on "Allocation and pricing of 3G and BWA services" dated 27th September, 2006, had recommended for allocation of one carrier for 2X1.25 MHz EVDO to each of the existing UASL CDMA operators because at that time there were mainly two UASL CDMA operators operating in most of the services areas. Subsequently, the Government vide its letter No.20-100/2007-AS-1 dated 8th November, 2007, had accepted the recommendations of the Authority on allowing use of dual technology by the CMTS/UAS licensee. Thus, with the grant of permission to use dual technology for providing access services, the scenario has significantly changed. Presently, there are more than two service providers who are providing full mobility using CDMA spectrum. Therefore in order to maintain level playing field, the Authority recommended auction of spectrum in 800MHz band also.

8. DoT's clarification / amendment to the Guidelines for Auction and Allotment of Spectrum for 3G Telecom Services dated 11th September, 2008:

DoT in its clarification/amendments to the Guidelines for Auction and allotment of spectrum for 3G services dated 11th September,2008, in respect of sub para 3.2

(amount of spectrum) of its Guidelines for 3G services dated 1st August, 2008, made following clarification :-

"Spectrum shall be auctioned for 3G services in the 450 MHz band, 2x1.25 MHz in 800 MHz band for EVDO services, and in 1900 MHz band (1900-1910 paired with 1980-1990MHz) when it becomes available.

The reserve price for auction of one block of 2x1.25 MHz spectrum in 800 MHz band shall be 25% of reserve price for 2x5 MHz in 2.1 GHz band. The reserve price for one block of spectrum in 450 MHz and 1900 MHz bands would be notified separately."

9. RECOMMENDATIONS WITH REGARD TO DOT'S REFERENCE DATED 9th JANUARY, 2009

9.1 As per para 2.1 of the letter, the Government has decided to auction one carrier of 2x1.25MHz for EVDO in 800 MHz band for CDMA 3G services as per the eligibility for auction of spectrum in the 2.1 GHz band (details in para 3(b)).

The Authority understands that it is perhaps possible to identify more than one carrier in 800MHz band (refer **Annex-IV**). It is all the more imperative as there are more than two access service providers in this category of technology for competition. Therefore **the Authority recommends DoT may explore more than one block for EVDO in 800MHz band for CDMA 3G services**.

9.2 The Authority in its recommendations on 'Allocation and Pricing of 3G and BWA services' dated 27th September,2006 had recommended that only the existing service providers may be allowed to bid for 3G spectrum. Subsequently on the reference of DoT vide letter No P-11014/02/2008-PP (Pt.I) dated 10th April, 2008 on eligibility of operators for participating in the auction for spectrum for 3G services,

Authority in its response dated 25th April, 2008 to this reference of DoT had reiterated its earlier recommendation for allowing only the existing operators to bid for spectrum for 3G services giving detailed reasons for the same. With the present availability of only one block of 2x1.25 MHz block of spectrum, the Authority firmly believes that the issues of technical feasibility and financial viability mentioned in the Authority's letter dated 25th April 2008 for a standalone 3G service provider becomes more acute. A standalone licensee with only one block of 2x1.25 MHz band will not find a viable business model. Therefore, the Authority remains firms on its earlier recommendation that the eligibility for bidding for maximum carrier available for EVDO in 800 MHz band for CDMA 3G services may be restricted only to the existing licensees allotted CDMA spectrum.

9.3 The Authority while giving its observation on the guidelines issued by DoT for 3G services on 1st August,2008, mentioned it its communication dated 8th August,2008 "....*The spectrum in 800 MHz band should be auctioned amongst the applicants with the highest bid price received for the auction of 2.1GHz spectrum as the reserve price...*".

As stated in its recommendations dated 27th September, 2006, (para 4.45), for allocation of spectrum, the Authority was guided by the following considerations :-

- *(i) Maximizing spectrum utilization,*
- (ii) Sufficient revenue to cover present and future spectrum management, logistical relocation and re-farming or vacation costs,
- (iii) Affordability of 3G services to be ensured,
- *(iv)* Allocates a scarce resource fairly when demand is greater than supply,
- (v) Transparent methodology that allows all prospective parties an equal opportunity to acquire spectrum.
- (vi) Technological neutrality and level playing field situation

(vii) Determine the order of allocation for spectrum as and when additional spectrum is made available

9.4 In view of the above, the Authority in order to maintain technological neutrality and ensure level playing field wanted to ensure that the bid price of 2 x 1.25 MHz spectrum in 800 MHz band should not be less than the pro-rated bid price of 2X 5 MHz in 2.1 GHz band. Therefore in its communication dated 8th August, 2008, it recommended that the spectrum in 800 MHz band should be auctioned amongst the applicants with the highest bid price received for the auction of 2.1GHz spectrum as the reserve price.

9.5 In the letter, the DoT has not mentioned anything about the timing for the auction of spectrum in 800MHz and 2.1GHz. Depending on the timing of auction of spectrum in these two bands, following three scenarios emerges. The Authority's response on these three scenarios is as below:

(a)The auction for spectrum in 800 MHz band is held before the auction of spectrum in 2.1 GHz:

In this scenario as there is only one carrier of 2X1.25 MHz spectrum in 800 MHz band it is possible that there is large variation between the bid price received for 2x1.25 MHz in 800 MHz band and prorated bid price received in the auction of 2.1 GHz spectrum. This may have legal implications and may affect the entire auction process. Therefore the **Authority recommends that the Auction of spectrum in 800 MHz band should either be held simultaneously or after the auction in 2.1 GHz band**.

(b) The auction for spectrum in 800 MHz band is held simultaneously with the auction of spectrum in 2.1 GHz:

In this case, the reserve price for 2 x 1.25 MHz spectrum in 800 MHz band will be 25% of reserve price of 2.1 GHz spectrum band and the successful bidder shall pay

the highest bid amount for 2 X 1.25 MHz spectrum in 800 MHz band or pro-rated highest bid amount in 2.1 GHz band, whichever is higher.

(c) The auction for spectrum in 800 MHz band is held after the auction of spectrum in 2.1 GHz:

In this case, the reserve price for 2 x 1.25 MHz spectrum in 800 MHz band should be 25% of highest successful bid amount obtained in auction of 2.1 GHz spectrum band as mentioned by Authority in its communication dated 8th August, 2008, to DoT. This is to ensure that the benchmark for the bids in 800MHz carrier is same or higher than the successful bids in the 2.1GHz band.

9.6 The Authority has earlier recommended that two percent (2%) of the highest bid amount should be charged as annual administrative charge during the validity period of 3G services. Therefore, In case of spectrum in 800MHz auctioned for EVDO services, the same annual administrative charges on highest bid amount determined by auction in 800MHz band shall be payable with one year moratorium from the time of allocation of spectrum.

9.7 In 3G & BWA spectrum-Information memorandum, at clause 1.1.7, the Government has mentioned that "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". However in case the auction for spectrum in 800 MHz band also for 3G services is held either simultaneously with 2.1 GHz band or after, then the above condition need reconsideration, in the background of the recommendations made by TRAI, in the recommendations on 'Allocation and Pricing of 3G & BWA services' dated 27th September,2006.

9.8 Any further allocation of spectrum for 3G services will be only through auction process. The successful bidder of 3G spectrum will not be required to follow the

subscriber base criteria for obtaining additional spectrum for 3G services as any subsequent allocation of spectrum will be through auction process only. However, the additional spectrum for 2G services is given based on the subscriber base criteria of WPC. For a service provider having 2G and 3G spectrum, it will not be feasible for him to separate the subscribers of 2G and 3G services. Therefore it will be difficult to allot additional spectrum in 2G band to such a service provider on the subscriber base criteria. In view of the fact that the DoT has already formed a committee to look into the issue of spectrum allocation criteria, the Authority recommends that the **DoT must ask this committee to look into this aspect also.**

-----End------End------

No. P-11014/02/2008-PP Government of India Ministry of Communications &IT Department of Telecommunications

Sanchar Bhawan, Ashoka Road, New Delhi -10001 Dated: 9th January 2009

To

The Secretary Telecom Regulatory Authority of India MTNL Bhawan, Jawahar Lal Nehru Marg New Delhi - 110002

Subject: - TRAI Recommendations on the auctioning procedure and Reserve Price of one carrier 2 x 1.25 MHz for EVDO in 800 MHz band for CDMA 3G Services.

Sir,

This has reference to the TRAI Recommendation/Report of September 2006 on "Allocation and pricing of spectrum for 3G and broadband wireless access services".

2. Auctioning procedure of one carrier 2 x 1.25 MHz for EVDO in 800 MHz band for CDMA 3G Services

TRAI has made the following recommendation in para 4.60 for EVDO in 800 MHz band for CDMA 3G Services:

"If there are more operators interested in the 450 MHz or 800 MHz bands than the number of available blocks, then a one-stage bidding process should be organized to decide the winners."

2.1 The Government has decided to auction one carrier for EVDO in 800 MHz band for CDMA 3G Services as per the eligibility for 2.1 GHz band instead of organizing one stage bidding process as there is only one carrier is available in 800 MHz whereas the numbers of CDMA operators are more than three in all telecom circles. The eligibility criteria for 2.1 GHz band is as follows:

Any person

(ii)

(i) who holds a UAS/CMTS licence or

and

(a) who has previous experience of running 3G Telecom Services;

(b) gives an undertaking to obtain Unified Access Services Licence (UASL) as per Department of Telecommunications guidelines dated 14.12.2005 before starting telecom operations

shall be eligible to bid for 3G spectrum.

Reserve Price for EVDO in 800 MHz band for CDMA 3G Services

3.

TRAI has made the following recommendation (para 4.78) for reserve price for EVDO in 800 MHz band for CDMA 3G Services:

"To set a reasonable price for the 800 MHz band 3G carriers, the Authority recommends that the second-highest winning bid in the 2.1 GHz auction should be pro-rated to a per-2 x 1.25 MHz price. This pro-rated price should be charged as a one-time spectrum acquisition fee to each of the UASL CDIMA operators who opt to be allocated one carrier in the 800 MHz band. After paying the price, the CDMA operators should be immediately assigned the carrier."

3.1 Since the spectrum efficiency in 800 MHz band, which will be used for EVDO services, is the similar as the 2.1 GHz band, the reserve price for per MHz spectrum in these two bands should be same. Therefore, the reserve price for auction of one block of 2x1.25 MHz spectrum in 800 MHz band shall be 25% of reserve price for 2x5 MHz in 2.1 GHz band.

4. Considering the above and the various legacy issues involved, TRAI is requested to kindly provide their considered views/comments on the auctioning procedure and reserve price for 1 x 1.25 MHz carrier for EVDO in 800 MHz for CDMA 3G services within a fortnight, as per the provisio under 11 (1) of TRAI Act 1997, as amended in 2000 (reproduced below):

"Provided also that if the Central Government having considered that recommendation of the Authority, comes to a prima facie conclusion that such recommendation can not be accepted or needs modifications, it shall, refer the recommendation back to the Authority for its reconsideration, and the Authority may, within fifteen days from the date of receipt of such reference, forward to the Central Government its recommendation after considering the reference made by the Government. After receipt of further recommendation, if any, the Central Government shall take a final decision".

5. It is requested that the views of TRAI on these issues may be conveyed to the Government expeditiously.

Yours faithfully

(S. Chandrashekhar) Deputy Secretary to the Government of India

Government of India Ministry of Communications & IT Department of Telecommunications WPC Wing

Dated 1 August 2008

Guidelines for Auction and Allotment of Spectrum for 3G Telecom Services

The Government of India hereby announces the following guidelines for auction and allotment of spectrum for 3G telecom services.

1. Frequency Bands:

 Spectrum in 2.1 GHz band shall be allocated for 3G telecom services through bidding/ auction;

2. Eligibility for Bidding for 3G Spectrum

Any person

(i) who holds a UAS licence or

(ii) who fulfils the eligibility criteria for obtaining a Unified Access Service Licence(UASL) as per Department of Telecommunications guidelines dated 14.12.2005 and has previous experience of running 3G telecom services

can bid for 3G spectrum.

3. Amount of Spectrum

3.1 Spectrum shall be auctioned in blocks of 2x5 MHz in 2.1 GHz band. The number of blocks to be auctioned may vary from 5 to 10 subject to availability in different telecom service areas. In exceptional cases of non-availability, the number of blocks may be less than 5 in a telecom service area. The actual number of blocks to be auctioned in a telecom service area will be announced well before the auction.

- (a) The auction of spectrum shall be telecom service area wise as defined in UAS guidelines dated 14.12.2005 subject to availability. Each successful bidder shall be allocated only one block in a telecom service area.
- (b) The bidders can make bids for one block of 2 x 5 MHz each for 3 G telecom services in the 2.1 GHz band(1920 – 1980 MHz for uplink and 2110--2170 MHz for downlink) in a telecom service area.
- (c) The technology used would have to co-exist with other technologies/ services/applications operating in 2.1GHz band.
- 3.2 Spectrum shall be auctioned in the 450 MHz band, in 800 MHz band for EVDO services, and in 1900 MHz band (1900 1910 paired with 1980-1990 MHz) when

it becomes available. UASL CDMA telecom service providers may have the option to seek 2x1.25 MHz in 800 MHz band subject to availability at a price equivalent to the highest winning bid in 2.1 GHz auction prorated to a per 2x1.25 MHz price. The seniority for allotment shall be the subscriber base in a telecom service area.

4. Mergers and Acquisitions

 Mergers and acquisitions shall be as per guidelines on the subject issued by Department of Telecommunications vide No. 20-100/2007-AS-I dated 22nd April 2008 or any subsequent revision thereof.

5. Reserve Price & Earnest Money for the Bids

 The 'Reserve Price' for a 2 x 5 MHz block of spectrum for each of Metro Category 'A' areas, Category 'B' & 'C' service areas shall be as under:

Service Area	Reserve Price (Rs. in crore)
Mumbai, Delhi and Category 'A'	160
Kolkata & Category 'B'	80
Category 'C'	30

- In the event of subsequent auctions, due to more spectrum becoming available, the reserve price will be the highest bid price of the last auction.
- The earnest money (in the form of a Bank Guarantee from a Schedule Bank) shall be 25% of the reserve price.

6. Auction Process

Auction amount as per successful bid shall be payable upfront. For this purpose, a controlled, simultaneous, ascending e-auction shall be conducted, as per details to be notified separately. The broad stipulations shall be as follows:-

- (a) The bidding shall be service area wise.
- (b) The reserve price for auction shall be set for each service area.
- (c) The bid shall be submitted in Rupees for a block of 2 x 5 MHz spectrum for 2.1 GHz band.
- (d) Successful bidder shall deposit 25 per cent of the successful bid amount as bid deposit within 5 days of the close of the auction, failing which the earnest money shall stand forfeited.
- (e) Successful bidder shall deposit the balance amount (bid amount bid deposit) within fifteen calendar days of the bid, failing which the earnest money shall stand forfeited.
- (f) Neither a bidder can withdraw a bid after placing, nor it can reduce a bid in subsequent rounds. If a bidder withdraws a bid at any point of time, the earnest money deposited shall stand forfeited.

- (g) The Government of India reserves the right to disqualify any bidder violating these rules.
- (h) If the number of bids is less than or equal to the number of spectrum blocks available in the service area, the spectrum shall be allocated to all the bidders at the highest bid price. If the number of bids is greater than the number of spectrum blocks available, the auction shall proceed as per e-auction rules.
- (i) One block shall be allocated to MTNL in Delhi and Mumbai/Metro service Areas and BSNL in other Service Areas at a price equal to the highest bid in the respective service area. When the number of bidders left is equal to the number of blocks of spectrum being auctioned in any service area, the auction shall be closed. All the bidders shall have to match the bid of the highest bidder (H1). In case they do not match, then that block would be offered to the next highest bidder at the highest bid price (H1). If any block is left vacant then that block shall be re-auctioned.
- (j) The top bidders shall be called in decreasing order of their bids to choose which block of spectrum they wish to be allocated.
- (k) If there is a tie between more than one bidder, then preference would be given to an existing service provider in that telecom service area.
- (I) If there is a tie between more than one bidder who are all existing service providers in that telecom service area, preference would be given to the bidder with the highest subscriber base.

7. Grant of Licence.

- (a) The successful bidder shall get spectrum allotment for 3 G services for a period of 20 years. Successful bidders who are not UAS licensees would be granted a separate UAS Licence for the concerned service area under Indian Telegraph Act, 1885. The terms and conditions of existing UAS licence shall be amended accordingly.
- (b) The successful bidder shall obtain SACFA clearance and a separate wireless operating licence from Wireless Planning and Coordination (WPC) Wing as per prescribed procedure.
- (c) In case UASL is cancelled/terminated for any reason, the spectrum allotted shall stand withdrawn forthwith;

(d)If the period of existing UAS telecom licence of a successful bidder is expiring before this period of 20 years for spectrum allotment for 3G services, its existing UAS licence shall be extended in the 19th year of its validity to a date 20 years from the date of 3G spectrum allotment at a price as may be determined by the Government at the time of extension of licence. This extension shall be done in the 19th year of the UAS licence for the period required to make it co-terminus with the 3G spectrum allocation period by amending licence conditions if required.

(e) A separate entry fee shall be payable for grant of UAS licence for 3G Telecom Services in addition to 3G spectrum auction price. This shall be equal to the entry fee of the UAS licence.

8. Roll Out Obligations:

The roll out obligations for 3G services in various service areas shall be as follows:

Category of Circle	At the End of 3 Years From Date of 3G Spectrum Allocation	
Metros	-	90% of metro area
A, B and C	-	50% of the DHQs or cities in the service area <i>out of which</i> 15% of the DHQs should be rural SDCAs.

9. Penalty for Spectrum Hoarding:

If licensee does not achieve its roll out obligations under para 8 above, it shall be given a further period of one year to do so by making payment of 2.5 percent of its successful auction bid (i.e. spectrum acquisition price) per quarter or part thereof as penalty. If licensee does not complete its roll out obligations even within the extended period of one year, the spectrum assignment shall stand withdrawn.

10. Spectrum Usage Charges:

- No annual spectrum charge shall be payable for 3 G Telecom services in the first year from the date of allotment of spectrum.
- The licensee shall pay annual spectrum charge of 1% of AGR after a period of one year.

11. Other Issues:

- The Government of India reserves the right to amend or modify these terms and conditions before the commencement of auction process. The final conditions shall be as indicated in the bidding document.
- The Government of India reserves the right to cancel the bidding process or disqualify any bidder.
- Trading/sharing of spectrum, if any, shall be governed by policy as may be determined by the Government of India.
- Auction shall be conducted by an independent expert agency to be appointed for this purpose by the Government of India.

D.O. No. 103-5 /2008-MN Dated: 8th August, 2008

Dear

Kindly refer to the 'Guidelines for Auction and Allotment of Spectrum for **3G Telecom Services**' issued by DoT on 1st August 2008. The Authority has deliberated upon these guidelines and its observation on various decisions given in the guidelines are given in the following paragraphs:-

1) In para 2 of these guidelines, amongst existing access service providers, only those service providers who holds UAS license have been mentioned as eligible for bidding for 3G spectrum.

The Authority feels that as both CMTS and UAS licensees are eligible to provide all types of mobile services including triple play i.e. Voice, Video and Data, therefore, along with UAS licensee, CMTS licensee should also be eligible for allotment of spectrum for 3G services. Perhaps in the guidelines, the CMTS licensees have been left out because of oversight. The same needs to be corrected accordingly.

2) In para 3.1(C), the guideline says that "the technology used would have to co-exist with other technologies / services /applications operating in 2.1 GHz band". It is our understanding that since the entire band of 2.1 GHz (1920-1980 MHz for uplink and 2110-2170 MHz for downlink) is not vacant at present and portion of this band is being used by Defence; therefore this condition has been kept to ensure non-interference between the technologies being used by the Defence and the 3G service provider.

In para 3.2, regarding allotment of 2x1.25 MHz spectrum in 800 MHz band, 3) whenever available, to the UASL - CDMA service providers, the criteria for allotment has been linked to the subscriber base of respective service providers in a telecom service area. As various service providers have been given licenses in different service areas at different period of time, therefore the Authority feels that keeping the subscriber base as the criterion for deciding the priority of allotment shall be against the level playing field and the principle of equity. Moreover, other than Reliance and Tata, now BSNL/MTNL as well as Shyam Telecom have been given the license/permission to provide full mobility service using the CDMA technology. Therefore, the Authority suggests that in order to ensure equity, level playing field and optimal pricing in allotment in 800 MHz band, the DoT may consider the auction route particularly as the UASL licensee using CDMA technology is also eligible to get 5 MHz through auction is 2.1 GHz band. The spectrum in 800 MHz band should be auctioned amongst the applicants with the highest bid price received for the auction of 2.1GHz spectrum as the reserve price. The subscriber base of CDMA network of the service provider in any service area is a result of different environment and cannot muster the test of fairness if it was to become the basis of priority.

4) In para 6 (e), it is mentioned that "Successful bidder shall deposit the balance amount (bid amount – bid deposit) within fifteen calendar days of the bid failing which, the earnest money shall stand forfeited." The Authority is of the opinion that, in case the successful bidder deposits 25% of the successful bid amount as bid deposit within 5 days of the close of the auction but subsequently fails to deposit the balance amount (bid amount - bid amount - bid deposit) within 15 calendar days of the bid, then his earnest money as well as his bid deposit should be forfeited.

5) Regarding spectrum usage charges in para 10 of these guidelines, it is mentioned that *"The licensee shall pay annual spectrum charge of 1% of AGR after a period of one year"*

As there is a possibility that both existing CMTS/UASL and new nonlicensee entities may be the successful bidders, therefore the above clause regarding the spectrum charge needs more clarity. On this issue, DoT is requested to refer Authority's recommendations on 'Allocation and pricing of spectrum for 3G and broadband wireless access services' dated 27 September, 2006, wherein it was recommended that :-

"DoT should have a one year moratorium on incremental annual spectrum fees for 3G spectrum from the time of spectrum assignment. After this one year, the DoT should charge operators an additional annual spectrum charge of 1 per cent of the operator's total adjusted gross revenue (AGR)." (para S24)

Perhaps, DoT also desired to indicate the same in these guidelines. Accordingly, it is suggested that the corresponding sentence in para 10 may be reworded as "The 3G licensee shall pay an **additional** spectrum charge of 1 percent of **total** adjusted gross revenue (AGR) after the period of one year."

6) In para 7(a) of these guidelines it has been mentioned "…….Successful bidders who are not UAS licensees would be granted a separate UAS Licence for the concerned service area under Indian Telegraph Act 1885. The terms and conditions of existing UAS licence shall be amended accordingly". Further clause 7(e) says " A separate entry fee shall be payable for grant of UAS licence for 3G Teleom Services in addition to 3G spectrum auction price. This shall be equal to the entry fee of the UAS licence".

A combined reading of above two clauses suggest that in case a Nonlicensee entity becomes successful bidder in the auction then he will be given a new(modified) UAS license without the provision of 2G spectrum (spectrum in the bands of 800,900 & 1800MHz) at an entry fee equal to the entry fee of UAS license. As this would require laying down the terms & conditions of this new license including the annual license fee, therefore the Authority would like to draw the attention of DoT to the sub-clauses (i) & (ii) of clause (a) of subsection (1) of section 11 of the TRAI Act 1997 wherein recommendation of TRAI is necessary.

7) The DoT may revisit the present"**Guidelines for auction and allotment of spectrum for 3G telecom services**" on the matters mentioned above.

With

Yours sincerely,

(Nripendra Misra)

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Extract from recommendation on ' Allocation and Pricing of 3G and BWA services' dated 27th September, 2006

In its recommendation on 'Allocation and Pricing of 3G and BWA services' dated 27th September, 2006 the Authority recommended that :-

• "....It will be possible to free some carriers, reallocate them to the fast growing operators, and thus open the possibility to separately earmark two to three carriers for 3G services in the 800 MHz band." (para 3.28)

The Authority also examined the option of adding one more carrier to the existing 800 MHz without making major adjustments. One stakeholder suggested that it would be possible to increase the number of carriers in the 800 MHz without seeking additional spectrum. The Authority discussed this option with the technology developer (Qualcomm) and a vendor (Lucent). The Authority found that it was possible, by adjusting the inter-carrier and inter-operator guard bands, and ensuring harmonization of carrier allocations in the present Indian 800 MHz band, to increase the total number of carriers available in 800 MHz band from 14 to 15 without significant capacity degradation and where the number of operators are three. If the number of operators is four, then the number of carriers can only be 14. The maximum achievable will be one additional carrier. This takes the total number of carriers available for CDMA operations in the 800 MHz band to 15 (details of the arrangement are in Annex H). If the number of carriers increases by one to 15, then the spectrum constraints in circles like Mumbai and Delhi ease, allowing for more rapid growth than estimated and improving the utilization of spectrum. This process might inconvenience some consumers because their handsets will need manual programming, as they are older and incapable of overthe-air-programming (OTAP). However, estimates inform us that the number of such handsets in the market is about 20 per cent, declining sharply over the next year. This problem could thus be resolved for the residual consumers through effective awareness program by operators within the next few months. Thus, the Authority recommends that the Government work with operators in the next three months to modify the existing 800 MHz band plan, adjusting guard bands to add one 1.25 MHz carrier. (para 3.29)

• Since 15 carriers can be obtained only when there are at the most three CDMA operators, this arrangement is not currently applicable to the Punjab and Rajasthan circles where there are four CDMA operators. However, given the growth trends of these operators (Table 4), it is evident that 12 carrier should be sufficient to accommodate the voice traffic in these circles into the future. Hence, at least two carriers, i.e. 2 x 2.5 MHz, can still be dedicated for EV-DO services in the 800 MHz band even in these circles. (para 3.31)