

Ref : SSTL/ TRAI/02-2012/6

Dated : 21st March, 2012

**The Chairman
Telecom Authority of India
Mahanagar Door Sanchar Bhawan
Jawaharlal Nehru Marg
New Delhi – 110001**

Subject: Consultation paper on “Auction of Spectrum

Respected Sir,

1. We would like to take this opportunity to compliment you for bringing out an exhaustive Consultation paper on “Allocation of Spectrum” in a swift manner.
2. Our issue wise response/comments are attached with this communication. However we wish to summarize our comments on some of the major issues raised in the subject consultation paper.
3. The recent Supreme Court’s judgement has mandated that the fresh auction of 2G spectrum must be guided by constitutional principles, including Doctrine of equality and larger public good. The intent and purport underlying the decision is to have a fair and transparent process for fresh allocation (through auction) having regard to the constitutional principles. It is not the purpose to make the new operators or their business suffer due to the procedural irregularities/lapses in or around the year 2007-08 or to stifle competition. The objective undoubtedly is to ensure competition applying the Doctrine of equality in its true nature and spirit as enshrined in our constitution and conclude the entire Process in a fair and non-discriminatory manner. It is in this background we request TRAI to consider two step process for auction. Step 1 for “Start up spectrum” and step 2 for “Add on spectrum”. Operators whose licenses have been cancelled by the Hon’ble Supreme Court; and any new player who wants to enter the market but does not hold any start up spectrum should be the only eligible operators for taking part in the auction for start up spectrum. Further all players holding start up spectrum could participate only in the Add- on spectrum auction provided operator has not been allocated spectrum beyond the start up spectrum. If the licensee has been awarded lower spectrum than what is contracted, then he should be allowed to participate in the auction and operators having more than the contracted spectrum should not be allowed to participate in the auction. This would help in

adding more spectrum to the add-on spectrum kitty as the unsold initial spectrum will automatically flow into the add-on kitty. In the interest of level playing field, the auction process should be such that that TRAI must ensure that new operators are also given a fair chance to go upto the contracted spectrum.

4. Thus, while taking the above mentioned principles into consideration, it is imperative that auction for both 800 MHz and 1800 MHz of spectrum are held separately. The earlier recommendation of TRAI to derive 800 MHz prices based on GSM 1800 MHz discovered price needs to be re-considered, in the context of the principles laid by the Honble Supreme Court both 800 MHz and 1800 MHz of spectrums should be auctioned separately. It is noteworthy that the earlier derivation of 1.5 times 1800 MHz for CDMA was based only on the radio efficiency and did not take into account the over-all eco-system and the revenue generation potential. Further the entire spectrum available with the Government, including the spectrum being vacated by the 122 Licensees should be made available for auction. Needless to mention that auction should be conducted at the earliest.

5. In parity with 1800 MHz operators, wherein the GSM operators are given initially 4.4 MHz of spectrum and with one mile stone they could reach the contracted spectrum of 6.2 MHz of spectrum, we request TRAI to come up with recommendation of initial spectrum allocation as 3.75 MHz for 800 MHz operators instead of present 2.5 MHz of spectrum. This would help in bridging the level playing field, and since the price discovery is through the auction, the Government will only gain from this move. In a typical scenario, a new entrant in 1800 MHz band will bid for One "initial spectrum" slot and One "add on Spectrum" slot, where as a bidder in 800 MHz will have to bid for One "Initial Spectrum" slot and Two "Add on Spectrum slot for the contracted spectrum. To maintain consistency, TRAI should recommend initial allocation of spectrum as 3.75 MHz for 800 Mhz of auction. Further as 800MHz has only limited spectrum, and there is no migration path available for CDMA operators, we request TRAI to recommend to the Government to open up both 450 MHz and 1900 MHz of spectrum to CDMA operators. It is needless to mention that the entry fee of Rs. 1659 crores paid in 2008 needs to be adjusted/ reimbursed along with interest as mentioned in License agreement i.e 2% above SBI PLR as on beginning of the financial year. In the event of decision being taken to adjust the the entry fee paid by the licensees, same should be adjusted on over all basis and not at circle level basis. Further the revenue share paid for the last few years also needs to be paid back/ adjusted as a principle of natural justice.

6. In conclusion, the Supreme Court verdict is indictment of the policies and procedures followed by DOT i.e. tweaking of “First cum First serve Policy” to the effect that determination of seniority for grant of License and spectrum was to be reckoned from date of compliance of LOI conditions rather from the date of application as was envisaged in Policy framework being followed prior to 2008 allocation ,introducing an artificial cut of date with retrospective effect , which resulted in non-consideration /rejection of 343 pending applications received by DOT till 1st October 2007 , despite the Prevailing Policy being “**no cap**” on the number of licensees, awarding licenses to in-eligible applicants, favoring few set of applicants and not following a fair and transparent process.

a. We request TRAI to follow the broad principles laid down by the Hon’ble Supreme Court with regards to the eligibility of participants in the auction. As the 2G licenses have been granted at various time –periods, and at different terms and conditions, the license conditions should be treated as sacrosanct. Meaning to say that TRAI should not be seen as favoring few set of operators, who have already got more than the contracted spectrum and that too in the absence of any Policy framework Permitting such allocation . Government has been following policy of “No cap “and reiterated the same even in Draft Telecom 1 policy 2011 . Therefore, few operators should not be allowed to garner huge spectrum, thus vitiating the level playing field and stifling the fair and equitable competition, which had been instrumental in bringing down the tariffs to affordable levels and enhanced the Penetration levels from 272 MLN subscribers in 2007 to 687 MLN subscribers in 2011. . It goes without saying that TRAI while making recommendations in pursuance of present process has to ensure that recommendations made are in consonance with Principles of equality, fair play, justice and equity. TRAI has to objectively assess the entire Scenario prevailing in the sector , including inter-alia, objectives underlying the National Telecom Policy , Potential future demand of Telecom services in the country and the undeniable need to usher in healthy competition, while making the final recommendations on the subject .

b. The Government’s policy is reiterated in the press note dated 29th Jan, 2011 wherein “ In future , the spectrum will not be bundled with license. The license to be issued to telecom operators will be in the nature of “Unified License” and the license holder will be free to offer any of the multifarious telecom services”. This is consistent with “No Cap” policy of the Government allowing free entry of new players.

- c. While Clause 43.5(ii) of the UASL conditions mentions that However, spectrum not more than 5+5 MHz in respect of CDMA system or 6.2 + 6.2 MHz in respect of TDMA based system shall be allocated to any new UASL licensee.”
 - d. Clause 2.3 of CMTS licenses issued in 1995 mentions that “ A Cumulative maximum of upto 4.4 MHz in the bands 890-902 & 935-947 MHz shall be permitted based on appropriate justification.”
 - e. If one were to look at the availability of spectrum, there is a limitation on spectrum availability in majority of circles, and therefore it is prudent to follow the principle of restricting operators who have spectrum beyond contracted spectrum.
7. Whilst, we are enclosing our comments, we wish to state that the present comments on the consultation paper are being offered by SSTL without prejudice to the remedies available to it, vis-à-vis Judgment dated 2nd February 2012, rendered by Supreme Court of India in Writ Petition (civil) no 423 of 2010 titled Centre for Public Interest Litigation and others vs. Union of India and others and writ Petition (civil) no 10 of 2011 titled Dr. Subramanyam Swamy vs. Union of India and others wherein , Court has quashed the Licenses/spectrum granted/allocated by Department of Telecom ,government of India, in Pursuance of Press release dated 10th January 2008 ,including 21 UAS Licenses and CDMA spectrum granted /allocated to SSTL . It is pertinent to mention here that SSTL has invoked its rights available to it under Article -137 of the Constitution of India and has sought review of the above judgment by way of Preferring Review Petition before Supreme Court of India .In the said context SSTL is offering the present comments without prejudice to its rights and contentions under the said review proceedings pending before Court.
8. Further, the comments to the Consultation Paper also without prejudice to remedies available to Sistema JSFC, a corporation incorporated under the Laws of Russian Federation and majority shareholder in SSTL. Sistema JSFC has invoked its rights under the Bilateral Investment and Protection Agreement (BIPA) entered into between Government of Russian Federation and the Government of Republic of India for the Promotion and mutual protection of investments in order to protect its investments in India.



9. We do hope that the above is in order and the comments of SSTL are considered and taken into consideration before finalizing its recommendation.

Thanking you

Yours faithfully

For **Sistema Shyam TeleServices Limited**

T. Narasimhan

Dy. Chief Executive Officer

Comments on of Issues

Q1. How can the various principles outlined by the Hon'ble Supreme Court in various observations brought out in para above be sufficiently incorporated in the design of spectrum auction?

Response:

The Hon'ble Supreme Court of India while treating "spectrum" as a natural resource has observed that the process of distribution of spectrum must be guided by the constitutional principles including doctrine of equality and larger public good (Para 72 of the judgment). Furthermore, the Hon'ble Court found that since the whole process of allocation of licenses and spectrum through Press Notes dated 10.01.2008 was irregular, improper and unlawful and therefore has suggested auction as the method to allocate for grant of licenses and allocation of spectrum in 2G band.

The aforesaid observations mandate that the fresh auction must be guided by constitutional principles including doctrine of equality and larger public good.

The intent and purport of Supreme Court judgment is to have a fair and transparent process for fresh allocation (through auction) having regard to the constitutional principles. It is not the purpose to make the new operators or their business suffer due to the procedural irregularities/lapses in or around the year 2007-08 or to stifle competition.

In order to uphold the constitutional principles, the new operators (pursuant to 10.01.2008) ought to be provided a level playing field vis-a vis with the incumbent operators (Right to Equality). The new operators need to be given pre-emptory right of participation in the fresh auction. Failing which their right to equality shall stand violated. Even the Reserve Price for auction has to be calculated with the objective to maintain larger public good and level playing field.

Thus, the spectrum auction ought to be conducted (as mandated by the Hon'ble Court) keeping in mind right to equality and larger public good in mind which would require pre-emptory right to grant of license and allocation of spectrum to the new operators (10.01.2007) and reasonable reserve price for auction subject of course to their meeting of eligibility and terms and conditions as may be laid down by the Government.

Q.2 What are the key objectives to be kept in mind in the auction of the spectrum?

Response:

Some of the key objectives are:

1. The process of grant of licenses and allocation of spectrum must be guided by the constitutional principles.
2. Doctrine of Equality and larger public good are certain principles which ought to be taken care of.
3. Level Playing Field, as a corollary of right to equality must be maintained between the operators.
4. Augmenting the Tele-density in rural and other areas is to be treated as the primary objective and for attaining the said objective , the role played by new operators towards achieving the same has to be given due consideration.
5. Enhancing Healthy competition in the Telecom services, thus, accelerating the thrust of penetration of telecom services in terms of National Telecom Policy has to be the key underlying consideration. This necessarily calls for maintaining level playing field in the sector in terms of allowing Pre-emptory rights to new operators in the spectrum auction and deciding the minimum reserve Price for commencing said auction.
6. Pre-emptory right to participate in the spectrum auction to the existing operators ought to be provided in furtherance of constitutional principles.
7. The process has to be fair and transparent and larger public good must be taken care of.
8. The Reserve Price is to be fixed keeping in mind the objective of tele-density, level playing field and constitutional principles.
9. Further, Auction should be carried out in such a way that it does not create monopolization and subsequent hoarding of spectrum by the incumbent operators. The key objective should be kept in mind is to encourage fair competition in the market.
10. Auction should not be with the aim of maximization of revenue but should be in the interest of public good, affordable services etc
11. Design of the auction should be such that it does not create artificial scarcity of spectrum.

Q3. What should be the amount of spectrum, which should be auctioned?

The entire spectrum available including the spectrum available with DoT and the spectrum to be vacated by the Licensees whose license have been quashed should be auctioned. The spectrum to be vacated by defence in GSM 1800 band may be utilized for refarming 900 MHz band after expiry of the license.

1. It is imperative that artificial scarcity of spectrum is not created. In this context, the following is noteworthy:
 - a. For any scarce and renewable resource that can generate net benefits for the society, it is imperative for the government to not keep any amount of resource idle.
 - b. Unused spectrum has no usage for anyone and will limit the gains for society as a whole.
 - c. As highlighted in the consultation paper also, ample spectrum holdings with the operators will also result in lower number of towers, lower EMF radiation, better ecology and healthy conditions for the people, apart from financial benefits like lower fuel consumption for the overall economy and thereby help save valuable foreign exchange.

To reiterate, DOT should auction,

1. Auction all available spectrum in 800 MHz band ;

Auction all available spectrum 1800 MHz including the spectrum that would be vacated by the operators, whose licenses have been cancelled by the Hon'ble Supreme Court;

- a. Portion of the spectrum to be vacated by defence in GSM 1800 band may be utilized for refarming 900 MHz band after the expiry of the license.

Q4. Should the spectrum be liberalized before it is put to auction?

Yes, the spectrum that is being put to auction should be liberalized before it is put into auction. The tender documents should clearly state that this spectrum which is being auctioned is liberalized, and the winners could be free to use it crossing all technology barriers.

This is consistent with ensuing NTP 2011, and press statement of Shri Kapil Sibal dated 29th January 2011 wherein Mr Sibal stated that “ In future, the spectrum will not be bundled with license. The license issued to telecom operators will be in the nature of “unified license” and the license holder will be free to offer any of the multifarious telecom services. “

Policy for liberalization of spectrum needs to be addressed keeping into consideration two major principles :

1. Existing licensing conditions, wherein the spectrum is not liberalized.
2. Future policies of the Government, where the license holder is allowed to offer, “Multifarious services”.
 - a. Operators paying market price of the spectrum should be able to use the same for Multifarious services. (Liberalized Spectrum)
 - i) This covers spectrum gained through the auction for 3G and BWA.
 - ii) Ensuing 2G spectrum allocation through auction process, both for winners through auction process and applicability of auction prices on certain category of licenses.
 - b. All other spectrum which have been bundled along with license, wherein the operator has not paid the market price, would be liberalized at the time of re auction.
 - c. 900 MHz 2G spectrum linked to old 2G licenses must be reformed, liberalized and then auctioned.
 - d. 1800 MHz linked to 2G licenses and 900 MHz spectrum linked to old 2G licenses are to be liberalized at the time of renewal of licenses.

Q5. For the refarming of 800 and 900 MHz bands from the existing licensees, which of the three options given above should be adopted? Please elaborate with full justification

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Q6. What are the issues that may arise in the above mentioned refarming process?

Refarming of both 800 Mhz and 900 Mhz of spectrum to be done only at the expiry of the license period.

There should be a separate consultation process regarding reframing . At present, reframing of spectrum is not an appropriate decision due to the urgency of implementing Hon'ble Supreme Court judgment 's mandate of allocation of spectrum in 2G band in 22 Service Areas by auction.

We feel refarming should be a separate exercise in order to ensure that there is no delay in the process of auction.

Q7. For new technologies e. g. UMTS/LTE, 5 MHz is the minimum amount of spectrum required. Certain licensees have only 4.4 MHz spectrum in 900 MHz band and 2.5 MHz spectrum in 800 MHz band. What are the possible options in case of such licensees?

At this stage, as per the judgment of Hon'ble Supreme Court of India allocation of spectrum is with regards to 2G band in 22 Service Areas by auction. The issue of 4G technology can be taken up later on. For UMTS/LTE a new consultation process may be initiated separately.

As the 900 MHz spectrum needs to be refarmed after the expiry of the license period and then liberalized and auctioned, we feel that this question about minimum spectrum required and number of slots etc would be governed by the situation arising at that stage, and therefore could be kept in abeyance at this juncture. Further as the spectrum is not liberalized at this juncture it is to be used for the purpose for which this has been allocated.

In a similar fashion licensees who get liberalized 800 MHz spectrum through auction process, could use the same cutting across all technology barriers, in conjunction with other bands which they win through the auction process.

Further The Government must make provisions for these operators to have a credible path from which they can offer services using new technologies. This can be done by:

1. Allowing operators to supplement their spectrum holdings through future auctions
2. These operators must be provided option to procure this additional spectrum on a priority basis (using auctions) before spectrum is made available to other participants
3. Through obligatory inter-operator arrangements between telcos that have 5Mhz and those that don't have 5MHz
4. For operators holding spectrum in the 800 MHz band, if no spectrum is available in the same band, government should ensure availability of suitable tranche of spectrum in 450/1900 MHz.

Q8. Some GSM spectrum allocations may be interleaved between operators; to avoid fragmentation, reconfiguration between operators may be required. Whether frequency reconfiguration is required and what are the challenges and possible solutions?

Fragmentation happened in the previous system of allocation of spectrum by DoT. It is a retrograde step. However, in the present allocation scenario, fragmentation cannot be avoided and reconfiguration would be a very difficult exercise.

Q9. Should the refarming of spectrum in 800/900 MHz bands be dealt independently or should a comprehensive approach be adopted linking it with the availability and auctioning of 700 MHz band?

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Q10. Which of the two approaches outlined above be adopted?

Refarming and auction of spectrum in 800 MHz & 900 MHz bands be dealt independently and not to be linked to availability and auctioning of 700 Mhz band.

Refarming of spectrum should be done at the time of the expiry of the duration of the License, as the spectrum allocated earlier were bundled along with License. At the time of extension of the License Government may offer alternate bands for auction.

There is no reason to link 700 MHz spectrum along with refarming of 900 and 800 bands. Beginning 2014, when some of the licenses come up for renewal, 900 MHz should be taken back and alternate band of 1800 Mhz should be offered for auction.

To conclude

1. 700 MHz band should be independently auctioned , consequent to auctioning of 2G spectrum in 22 service areas.
2. 800 MHz and 900 MHz to be refarmed at the time of expiry of the duration of the license and then auctioned.

Q11. When should 700 MHz spectrum be auctioned?

1. Auction of 700 MHz band spectrum should be scheduled after the allocation of 2G licenses;
2. Government should ensure auction of 700 MHz within 6 to 12 months after the auction of 800/1800 MHz band to realize its full potential enable operators to focus on deployment of advanced technologies in this band
 - a. Current focus of operators will be to expand 3G and BWA rollouts and to get additional spectrum in 800/1800 MHz
 - b. Ecosystem on 700 MHz is still nascent and will take time for it to reach scale needed for cost conscious Indian market. We feel by next year the eco system would have developed to a larger extent.
3. The clear roadmap to 700 Mhz auction and government commitment to stick to the roadmap would be critical for operators to arrive at a fair value for the auctioned spectrum.

Q12. Should the auction in 700 MHz band be linked with the granting permission for the liberalized use of 800/900 MHz band?

1. Auction in 700 MHz band should not be linked to permission for liberalized use of 800/900 MHz band as they differ significantly
 - a. Different technologies will be deployed on 700, 800, 900 MHz with different levels of maturity in the ecosystem globally.
 - b. The technologies to be deployed on 700, 800, 900 MHz also differ in terms of eco system and the expected revenue per MHz.
 - c. Specifically, for 800 MHz as it exists in India, there are several disadvantages like lower adoption rate, weaker ecosystem, higher prices for CDMA equipment and devices, lower CDMA ARPU, smaller CDMA market for international roaming, etc.

In consonance with ensuing NTP 2011, and press statement of Shri Kapil Sibal dated 29th January 2011 the license holder will be free to offer any of the multifarious telecom services. Therefore any spectrum that would be auctioned from now onwards or that have been auctioned recently like 3G and BWA to be considered as liberalized. In the specific case of 900 MHz as soon as it is vacated by the existing users after the expiry of the license period, it needs to be liberalized and auctioned. The same principle for 800 Mhz spectrum also that is slated to be auctioned.

Hon'ble Supreme Court of India in its judgment has directed that TRAI shall make fresh recommendations for grant of license and allocation of spectrum in 2G band in 22 Service Areas by auction in a very short span of time. At this stage, liberalization would delay the process of auction as directed by the Hon'ble Supreme Court of India which in our humble view needs to be accorded Priority over other issues. Therefore, auction of 700 Mhz band should not be linked with liberalization of 800/900 Mhz band. However it should be noted in this regard that any spectrum acquired through the auction route should be considered as liberalized spectrum.

Q13. How much spectrum in 700 MHz band should be put to auction initially and what should be the amount of spectrum, which a licensee should be allowed to win in that auction?

These have already been answered in the Consultation paper No 6/2011 on "IMT Advanced Mobile broadband services" in Nov, 2011.

The questions were

- (6) What should be the block size of spectrum to be put on auction How many blocks of spectrum should be allocated/auctioned per service area.
- (7) What is the minimum spectrum block size for effective usage of 4G technologies?
- (8) What should be the maximum amount of spectrum, which a service provider can be allocated through auction.

We have already provided our written answers to these questions. The summary of the same is reproduced below:

Answer for Q 6 & 7 of IMT Consultation Paper.

Summary: It is recommended that the block size of spectrum for deployment of IMT Advanced should minimum be 2 X 10MHz in FDD mode. The number of blocks to be auctioned could be 3-4 (Pan-India basis) to enable development of a fair market for end consumers. This will allow fair amount of competition and would also provide for required bandwidth to deliver quality services to subscribers. Also, this allocation may be at India level where the service area is treated as Pan-India.

Answer for Q 8. Of IMT Consultation paper

Summary: At the initial auction, the number of spectrum blocks may be capped at 2 (2 X 10 each). However, there may not be any long-term capping on the maximum amount of spectrum which a service provider can be allocated.

Q14. What should be the structure of the auction process?

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Q15. Should auction be held in single stage or multi stage?

Auction should be structured in such a way that the auction process is completed as early as possible because of the time constraints.

We suggest that there should be multi stage auction separate for both 1800 MHz and 800 MHz using the simultaneous ascending e-auction method.

In the first stage of auction, new entrants, licensees whose license has got cancelled and operators without initial spectrum allocation should be allowed to participate and bid upto 4.4 MHz in 1800 band and 3.75 MHz in 800 band.

In the second stage, existing operators holding initial spectrum of 4.4 / 2.5 MHz in 1800 / 800 MHz of spectrum and waiting for allocation upto the limit of contracted spectrum and winners of the first stage will be allowed to participate and may bid for 1.8 MHz/1.25 MHz spectrum in 1800 MHz/800 MHz band. (Excepting for AP, wherein only 2.5 MHz of spectrum in 800 band is available as per TRAI document) .

In the interest of level playing field, the auction process should be such that that TRAI must ensure that new operators are also given a fair chance to go upto the contracted spectrum

Further, operators having more than the contracted spectrum should not be allowed to participate in the auction as the spectrum available is only limited in majority of circles.

Q16. Should there be a simultaneous auction for spectrum in 800 and 1800 MHz bands?

1. Auctions for 800 MHz and 1800 MHz frequency should be treated as two separate auctions like 3G and BWA.
2. Thus a separate market price discovery mechanism i.e. two different auctions need to be carried out for 800 MHz and 1800 MHz bands.
 - a. These two spectrum bands have very different ecosystems associated with them.
 - b. The revenue/MHz for GSM and CDMA spectrum is significantly different
 - c. Hence any price calibration of one band based on market price discovery of the other band would be inappropriate.
3. As SSTL is one of the operators whose licenses have been cancelled, and SC has categorically mentioned to follow auction process, we reiterate that there should be separate auction for both CDMA and GSM.
4. In this regard, it is proposed that 800 MHz spectrum auction should precede 1800 MHz spectrum auction.

Q17. What should be the block size of the spectrum?

1. The block size of startup spectrum should be kept at 4.4 MHz/3.75MHz for 1800 and 800 MHz bands respectively.
2. Add on spectrum which should be auctioned separately should have the block size of 1.8 MHz for 1800 MHz and 1.25 MHz for 800 MHz bands respectively.

Q18. Should the block size be dependent on the frequency? If so, what should be the block size in each band?

1. Yes, block size should be dependent on the frequency.
2. The block size of startup spectrum should be kept at 4.4/3.75MHz for 1800 and 800 MHz bands respectively.
3. Add on spectrum which should be auctioned separately should have the block size of 1.8 MHz for 1800 MHz and 1.25 MHz for 800 MHz bands respectively.

Q19. Should there be a cap on amount of spectrum one can bid? If so, what should it be?

1. For startup spectrum 800/1800:
 - a. No operators should be allowed to bid for more than one block of startup spectrum (4.4/3.75 MHz).
2. For add-on spectrum
 - a. Upto the limit of Contracted Spectrum If the licensee has been awarded lower spectrum than what is contracted, then he should be allowed to participate in the auction and operators having more than the contracted spectrum should not be allowed to participate in the auction.

Q20. Should there be a separate cap on the total amount of spectrum one can hold; if so, what amount should it be?

The cap should be based on the license conditions. If the licensee has been awarded lower spectrum than what is contracted, then he should be allowed to participate in the auction and operators having more than the contracted spectrum should not be allowed to participate in the auction.

Q21. Should there be a cap on the amount of spectrum one can hold in respect of sub-GHz spectrum? If so, what should it be?

Cap on sub 1GHz spectrum should be 25% of the total spectrum available.

Q22. Who all should be eligible to participate in the auction?

1. *Option G* should be adopted
 - a. Creating level playing field for all new eligible entrants.
 - b. If all players are allowed to bid seamlessly, then this is expected to unfairly benefit few operators who have been allocated spectrum based on subscriber linked criteria.
 - c. This is likely to result in increased competition in the sector.
 - d. Incumbents may try and reduce competition in the industry by trying to outbid the new entrants through a strategic purchase of spectrum.

Q23. What should be reserve price per MHz of spectrum in the year 2012 for 1800 MHz band?

As this process of auction has come up due to quashing of licenses by Supreme Court, and most of the operators were green field operators, the reserve price should be carved from the business case, of new green field operator. Further higher reserve price would discourage operators and erode competition. This may result in less monetary realization to Government and higher tariffs to consumers.

1. The reserve price per MHz of spectrum in 2012 for 1800 MHz should be the indexed 2001 price with SBI PLR
 - a. SBI PLR adjusts for the cost of funds from 2001 till date of auction. It is an objective and consistent benchmark
2. The use of alternate approaches is not recommended
 - a. WACC
 - i. WACC varies based on business case of operator – the spectrum holding, band, whether start up spectrum or not. Hence a common WACC across operators cannot be applied
 - ii. The auction is also likely to see companies backed by international telcos participating, for whom cost of funds could be significantly different.
 - b. AGR growth
 - i. Using past growth rates is incorrect as the price paid in the past already accounts for growth potential till 2021
 - ii. Also, currently penetration levels are high and future growth (2012-2022) not likely to be comparable to that seen historically (2001-2011); using historical growth rates will overestimate the value of spectrum.
 - c. 3G based pricing
 - i. 3G and 2G services and revenue potential differ significantly due to significant data potential.
 - ii. Using 3G pricing to estimate 2G prices will overestimate the value of spectrum due to limited use of 2G for data services.

3. In general, higher reserve prices may discourage operators from participating in the auction resulting in lower revenue realization for the government.

4. It is needless to mention the importance of having reasonable reserve precluding the final price that is determined through the auction to accelerate the growth of telecom services in India. The new net additions are going to be from the bottom of the pyramid, and mainly from the rural part of India, which is very sensitive to higher tariffs. The spectrum price has direct linkage to the customer prices and there has been a huge fall in ARPU over the recent years. TRAI has considerable data at their disposal, to predict a model correlating customer price to spectrum price in this competitive scenario, for a green field operator.

Q24. What should be the reserve price per MHz of spectrum in the 700/800/900 MHz bands?

1. The reserve price per MHz of spectrum in 700/800/900/1800 MHz bands needs to be set differently
 - a. Different ecosystems and technology roadmaps for different bands suggest the use of different reserve price for each of the bands
 - b. Reserve price must also account for the difference in the economic potential and advantages/disadvantages of respective bands
 - c. Specifically speaking, disadvantages of 800 Mhz are lower adoption rate, weaker ecosystem, higher prices for equipment and devices priced, lower ARPU, smaller market for international roaming, etc.
 - d. In addition, the technology roadmap for the Indian range of 800 Mhz with operators is also unclear whereas 700 MHz and 900 MHz have relatively clear evolution paths.
2. 900 MHz price
 - a. Can be set based on 1800MHz auction in India adjusted upwards for better economics of 900 vs. 1800 MHz)
 - i. 900 MHz more attractive than 1800 MHz of spectrum and thus should be priced higher than 1800 MHz.
3. 800 MHz price
 - a. In setting the price for 800 MHz spectrum, various limitations of 800 MHz vs. 1800 MHz should be kept in mind. Disadvantages of 800 Mhz are lower adoption rate, weaker ecosystem, higher prices for equipment and devices priced, lower ARPU, smaller market for international roaming, etc.The above could be seen even in 2007, when there were no takers for 800 MHz of spectrum. The last allotment of spectrum in 800 MHz was in year 2006, before allotment to SSTL and TTSL for 3 circles. TRAI while recommending 1.5 times pricing for CDMA compared to GSM had gone only by the radio efficiency factor and not by the development of eco system. In fact it is the eco system plays a bigger role in realizing value from any spectrum. There continues to be significant price differential between GSM and CDMA entry level handsets. In spite of the fact that CDMA

tariffs are lower compared to GSM, however the initial entry price of handsets makes GSM more attractive and better positioned to penetrate to the bottom of the pyramid. Further the cost of CDMA BTS and other infrastructure equipments are almost 1.5 times more expensive compared to GSM. In the light of the above mentioned facts, we strongly request TRAI to keep the reserve price, at least at the same level of 2007, i.e Rs. 1659 Crs for 5 MHz of spectrum for 20 yrs. Any alteration of license period, or initial spectrum allocation the same should be reduced proportionately.

4. In this regard, it is to be noted that in case of the cancelled licenses, if any of the licensees win back the spectrum in a particular license area, then the money already paid while acquiring the (now cancelled) licenses should be adjusted from the auction determined price of the spectrum for the license area. Further the same spot frequencies of spectrum both in 1800/800 MHz and Microwave spectrum should be awarded back.
5. In case such licensees
 - a. either fail to acquire spectrum in the auction for a license area where they earlier had the spectrum (before the cancellation of licenses as per supreme court order) or
 - b. decides not to participate in the auction for spectrum in a license area, the money paid to the government in lieu of license fees in 2008, should be returned to such parties, after due indexation for the amount of period lapsed between receiving the money (2008) and return of the money.

Q25. Whether the reserve price should be uniform across the country or service area wise?

As the business potential in different service areas is vastly different, it only seems appropriate and fair that the reserve price for each service area should be fixed separately. Setting a Uniform reserve price based on high potential area, for all service areas, may result in operators deciding to not bid for low potential service areas thus limiting the growth of telecom ecosystem in these areas and will adversely impact the competition.

Q26. What should be the roll out obligations linked to the auctioned spectrum?

In order to ensure that the available scarce resource is put to most efficient use and also fulfils the service penetration targets of the licensor in line with the national objectives, spectrum roll out obligations may be required and it may also be required to create level playing field with existing operators. Thus it is proposed that same rollout obligations as defined in 2008 allocations be maintained for the current round of spectrum auctions

If any existing License who is a successful bidder and who has already met the roll out obligations should not be mandated to fulfill new roll out obligations.

Q27. What should be the annual spectrum usage charge for the spectrum being auctioned?

Since the spectrum is being auctioned, the spectrum usage charge should not exist or should be a minimal percentage in accordance with the international practices. In the case of BWA it is kept at 1% for administrative charges.

Currently per the system present in India, operators was not paying upfront for the right to use spectrum, hence the graded spectrum charge was logical. Since the right to use spectrum now will be won at market price, using the current methodology may not be logical anymore. The spectrum charge should be fixed at a nominal rate as a % of AGR. (Token amount of less than 1%).

Q28. Should the spectrum usage charge be in line with present criteria of escalating charge with the amount of spectrum holding or a fix percentage as was done for 3G and BWA spectrum?

The spectrum usage charge should be a fix percentage as explained above for all allocation through spectrum of auction.

Q29. What should be the period of validity of spectrum?

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Q30. What should be the period of price of spectrum?

As the ROI (return on investment) period is very high in telecom sector, as the investment is very high, validity and price of spectrum should be for 20 years. Further there has to be consistency and level playing field.

Q31. Should the government allow deferred payment schedule of the spectrum auction fee, or should the payment be upfront in nature?

Deferred payment schedule should be allowed to pay to auction fee. This is due to a) general slowdown in the Indian economy and accompanying high interest rates make capital raising difficult and b) License cancellation by the honorable Supreme Court has made banks averse to lend to telecom thus resulting in a difficult environment to raise funds

A yearly payment plan may be formulated linked to Consumer Price Index/ Whole Sale Price Index for winning bid amount. Keeping in mind that the present situation of funding for telecom industry is difficult, the yearly payment of bid amount in instalments will help faster rollout and provide affordable services to consumers.

Q32. Should Spectrum trading be allowed in India?

Yes, spectrum trading should be allowed in India—in line with liberalization of spectrum holdings. Spectrum is a scarce resource and most efficient use of spectrum is in the best national interest. Spectrum trading will allow the natural migration of spectrum to the hand of operators who would be able to generate maximum value from the spectrum. It will also be the most efficient approach that will allow the migration of spectrum to best possible use in the shortest possible time.

Q33. Among the various models discussed above, in your opinion which model of spectrum trading is best suited for India?

Model a should be the preferred option where in both allocation and assignment rights can be changed.

Q34. What should be the eligibility criteria to trade the spectrum?

The eligibility conditions for spectrum trading can be as follows:

1. Both operators need to have valid license to operate in the circle.
2. In case of 2100 and 2300 Mhz spectrum bands, the acquirer of such spectrum through spectrum trading should not already be holding spectrum in similar bands so as to prevent the reduction of 3G/BWA, in the market place. In case of 700 MHz bands, if the number of market participants is equal to less than 3 (given the quantity of spectrum being put up for auction), similar restrictions as in 2100/2300 MHz bands would apply.

Q35. Whether the spectrum assigned for 3G and BWA services be allowed to trade? If yes, give reasons.

Spectrum trading should be allowed, provided such trading does not reduce the number of operators in the traded spectrum band. In India very limited quantity of 3G and BWA spectrum has been auctioned till now. In this situation if unfretted spectrum trading gets allowed there is a risk of number of operators in a circle reducing below 3 or 2 in case of 3G and BWA spectrums respectively. That can lead to a significantly monopolistic market conditions with regards to 3G and BWA operators. This in turn may hamper the spread of these services among the mass market. Thus, it is proposed that trading in 3G and BWA spectrum be allowed keeping in mind that it does not reduce number of players in the traded spectrum band.

Q36. Can spectrum be allowed to be mortgaged for raising capital for telecom purposes?

Yes.

The main asset with an operator now will be spectrum as the service license is being delinked from spectrum, it is necessary that the spectrum should be allowed to be mortgaged for raising financial resources for meeting various business needs of the telecom operators. In order that the operators and the lenders keep public interest in mind, the tripartite agreement present by prescribed among the service licensee, the licensor and the lender should instead now be prescribed among the spectrum licensee, the licensor and the lender. That will ensure adequate flow of resources required by the licensees and will ease the difficulty that telcos are facing to raise capital in India. Moreover, with more liberalized clauses such as spectrum trading in place, banks will have sufficient incentive to lend money against spectrum