

SBICAP Response to: Consultation Paper on 'Auction of Spectrum'**Objective of the auction keeping in mind the SC Directives**

1. 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?
2. What are the key objectives to be kept in mind in the auction of the spectrum?

In the observations made by the Hon' Supreme Court in the judgement order, spectrum was identified as a scarce natural resource, in the hands of the Govt as legal owner, whose primary objective must be to ensure larger public good and equitable access to the same by various parties. With the said broad objectives in mind, we propose the following principles to be adhered to, while proceeding with the process of auction of spectrum.

- **Affordability of telecom services:** The focus of these auctions should be on the resultant affordability of the telecom services with latest technologies available to the end user. The burden of high spectrum price paid by operators is usually passed down to subscribers, as happened in the case of 3G services. 3G plans in India are still expensive and the resultant uptake has been low
- **Availability of spectrum in various Bands:** In order to ensure transparency in allocation of spectrum in future as also the availability of the same, the regulator should chart out a clear roadmap for allocation of spectrum in future. This will help various operators in estimating their future fund requirements as well as calibrate their expansion plans. In the past, the roll out plans of various serious operators in select circles could not proceed on account of delay in allocation of spectrum due to non-availability/priority order etc. Additionally, such a clear roadmap would also reduce dependence of dense passive infrastructure networks, as the same is linked to timely availability of spectrum and the frequency band of spectrum available. Also the guideline for M&A and spectrum sharing could ideally be in place before the auction of the spectrum so that spectrum demand can be rationalised.
- **Availability of services in rural areas:** Though the overall tele-density in India has reached to 77.57% the rural tele-density is only 38% as on Jan 2012. Also taking into account the inactive subscriber base and the multiple SIM effect, the teledensity goes down further. Thus, Govt. should encourage operators to expand services in rural areas. This could be achieved through setting up the rollout out criteria for rural areas while auctioning the spectrum.
- **Broadband penetration:** India has 13.42 mn broadband subscribers as on January 31, 2012 which results into 1.11% penetration. Broadband subscribers are far below the desirable target of 48 mn subscribers by the end of 2012. Affordable data services through 3G/BWA technologies could help in achieving the desired internet penetration in the country.
- **Efficient usage of spectrum:** Spectrum is scarce resource and spectrum acquired should be used efficiently. Market discovered prices free of distortions, leading to affordable services would result in optimal utilization of the allotted spectrum. Further, spectrum allotted could come with an incentivized/penalty structure, to encourage efficient use of the resource. With emergence of such incentive/penalty structure, the operators would be encouraged to invest in technological advancements/best practices from across the globe.

- **Sustainability of industry players:** For the telecom sector to grow and affordability/availability of telecom services it is necessary that telecom operators have financial sustainability. As huge capital expenditure is required to rollout 3G and BWA services, operators should get sufficient returns on their investments. At present operators have slowed down the fresh capital expenditure in absence of sufficient returns.
- **Revenue Maximization a secondary aim:** While revenue realisation from the spectrum proposed for auction is one of the objectives of the government, the regulator can ensure that the intent of present process of spectrum auction is to ensure larger public benefit through implementation of broad objectives defined above. The terms and conditions of the draft proposed for UAS licence may also be aligned with the broad objectives finalised after this consultation process. The price discovery in the auctions should be driven by forces aimed at maximising public benefit for larger period rather than one -time revenue maximization for the Government.

Quantity of Spectrum to be auctioned

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| 3. What should be the amount of spectrum which should be auctioned? |
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Liberalization of Spectrum

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| 4. Should the spectrum be liberalised before it is put to auction? |
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Spectrum Re-farming

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| 5. 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. |
| 6. What are the issues that may arise in the above mentioned refarming process? |
| 7. 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? |
| 8. 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? |
| 9. 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? |

Auction of the 700 MHz band

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| 10. Which of the two approaches outlined above be adopted? |
| 11. When should 700 MHz spectrum be auctioned? |
| 12. Should the auction in 700 MHz band be linked with the granting permission for the liberalised use of 800/900 MHz band? |
| 13. 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? |

Auction Block Size
14. What should be the block size of the spectrum?
15. Should the block size be dependent on the frequency? If so, what should be the block size in each band?
16. Should there be a cap on amount of spectrum one can bid? If so, what should it be?
17. Should there be a separate cap on the total amount of spectrum one can hold; if so, what amount should it be?
18. 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?

In Our opinion, the various issues outlined above are closely interlinked, and thus we would like to answer them in a collective manner.

The Indian Telecom Industry has come a long way in terms of a mobile phone being a luxury, to a necessity for every Indian. We are at a stage where-in competition (to the extent of 13-14 players in each circle, pre-cancellation orders) have resulted in some of the lowest usage charges in the world, but an industry which is struggling financially to keep its head above the water.

As discussed above, our views on the spectrum framework are based on aspects summarized as below:

- All operators should have a fair chance to operate in the market
- Customers should be able to experience the latest technology at affordable rates
- Operators should utilize the spectrum in the most efficient manner possible

Liberalization of Spectrum

Keeping in mind the above, at the outset, we would like to first comment upon the liberalization of spectrum.

We believe that the Indian telecom market is at a stage, wherein operators face an enviable task of balancing a leap into the next generation technologies in sync with their financial books.

As we saw, the outcome of the 3G auctions was a fractured mandate, with no operator having a Pan India presence. Subsequent arrangements of operators to enter into intra circle roaming pacts have also been deemed as violations of contracts by the DoT and the same is still under dispute.

Operators at this stage should have the freedom to decide which technology they should deploy in the bands they are holding. This would help them to optimize their spends across the frequency bands they are holding, enabling them ultimately to provide cost efficient services to the end user. It is evident that the high cost of spectrum acquisition in the 3G band, has not really helped consumers with the 3G plans still being out of reach of most of the Indian public and subsequently the uptake of 3G services has not been too encouraging.

Globally, mature telecom markets are moving towards liberalization as well. Some of the cases in point are-

United Kingdom

Ofcom, the UK regulator, opened up the 900 MHz and 1800 MHz band to be used for UMTS services in 2011. Some of the key decisions of the policy were as follows

- Liberalise 2G licences and make them technology neutral, and tradable in the hands of existing licence holders
- Hold a single auction of 800MHz frequencies and 2.6GHz frequencies, allowing those operators that do not have 900MHz licences to bid for 800MHz spectrum
- Allow 900MHz licensees to bid for 800MHz spectrum if they return an equivalent amount of 900MHz spectrum for re-award
- Overall spectrum cap per operator of 2×65MHz
- No operator may have more than 2×17.5MHz of sub-1GHz spectrum

Sweden

- Prior to refarming in Sweden, three operators held both 2G 900MHz licences and 3G 2100MHz licences; one operator had 2100MHz only
- The 900MHz licence holders agreed with the Swedish regulator to release spectrum to the new 3G entrant, the only operator in the market without 900MHz spectrum
- The decision will result in all 900MHz spectrum in Sweden being distributed among the four operators, with some holding 2×10MHz and some 2×5MHz
- All licences will be technology and service neutral

Ireland

- ComReg plans to re-award 900MHz and 1800MHz frequencies in Ireland, in light of:
 - Existing 2G 900MHz licences expiring in 2011, and 1800MHz licences in 2013
 - Previously unallocated spectrum in the 900MHz band being available for award
- Two options have been proposed:
 - Re-awarding the entire 900MHz band in a single auction, in blocks of 2×5MHz (with a maximum of 2×10MHz per operator)
 - Making liberalised 900MHz spectrum available in blocks, with timing linked to expiry of current licences

In case the DoT allows for liberalization at the time of the proposed auction of the 1800 MHz licenses, the following issues could arise

- Since operators holding spectrum in only 1800 MHz band would be allowed to provide 2G services, operators who bid very high amounts for the 3G spectrum would feel hard done by.
- There may be further investments in equipment required to provide UMTS/3G services in the 1800 MHz band

However, if we consider the operators that would be left in the market post cancellation of licenses, most of them have partial 3G spectrum, while everyone would have spectrum in the 1800 MHz band. Post liberalization, they would be able to provide UMTS services on a pan India basis, which could soften the blow of having paid high amounts in the 3G auction.

Amount of spectrum to be allocated in the 1800 MHz band

As per our calculations and as per the data provided by TRAI, 519 MHz of spectrum (cumulative across India) is available for auction in the 1800 MHz band. The same ranges from 3.2 MHz available in Rajasthan to 47.4 MHz available in Tamil Nadu.

The point to consider here is whether to put up the entire 519 MHz up for auction or a partial amount, taking into account the re-farming considerations as well.

Since spectrum is a scarce and an essential resource for providing telecom services, holding back any available spectrum may not result in the most efficient utilization of such a resource. Scarcity of spectrum can lead to the following

- Much denser networks, owing to commissioning of a higher number of towers required to meet the Erlang capacity increase.
- Increase in Capital and Operational expenditure by the operators due to installation, operational and maintenance cost of telecom towers and other core network equipment.
- Environmental degradation due to increased usage of diesel for powering the telecom towers, especially in areas where grid power is not available 24x7.

Further, there is a need to keep in mind the expiry of licenses (and thus the bundled spectrum) of some operators in the 900 MHz band, especially in CY 2014-2016. TRAI, in its recommendations in May 2010, veered towards re-farming and had recommended the following

“Spectrum in 800 and 900 MHz bands should be re-farmed at the time of renewal of the licenses. For holders of spectrum in 900 MHz band, substitute spectrum should only be assigned in 1800 MHz band and for licence holders of 800 MHz band; spectrum should be assigned in 450 /1900 MHz bands. (Para 1.73)”

Spectrum in the 900/800 MHz band lends itself to more efficient operations due to the lower capital and operational expenditure requirements in terms of rolling out a network. Globally, authorities have either deployed UMTS in the 850/900 MHz band, or are in favour of doing so. Some of the operators and regions using the same are as below:

Band	Technology	Uplink	Downlink	Operators and Regionas
850 MHz	UMTS	824-849	869-894	Americas (AT&T, Bell Mobility, Telcel, Telus, Rogers), Oceania (Telstra, Vodafone Hutchison Australia, Telecom NZ), Dominican Republic (Claro), Hong Kong (SmarTone), Israel (Cellcom, Pelephone), Thailand (TrueMove), Brazil (Claro, Vivo), Philippines(Smart Communications)

Thus, if during the time of the expiry of 900/800 MHz, re-farming of the same can be carried out, the band can be freed for further allocation to operators, for UMTS services. In any case, operators only received a 5MHz band for UMTS/3G services in the 2010 auction, which may prove to be insufficient in the future, as we expect the data adoption to pick up significantly in the years ahead.

The options for Re-farming

TRAI has recommended three options for refarming of the 900/800 MHz band of spectrum

- Assign equivalent amount of spectrum in the 1800 MHz band, and auction the remaining 1800 MHz band spectrum in the upcoming auctions
- Allow existing holders to retain 5 MHz/2.5 MHz spectrum and refarm the remaining by allotting equivalent spectrum in the 1800 MHz/450 MHz band.
- Allow existing holders of 900 MHz spectrum to retain 5 MHz spectrum, and give an option to them to surrender the excess immediately (irrespective of the expiry date of license). Spectrum in the 1800 MHz could be then allocated equal to the excess spectrum, as well as allowance of liberalization of spectrum held by them.

The first approach has the following pros and cons

Pros

- Any relatively new entrant would also get a chance to bid for 900 MHz spectrum when the licenses expire in 2014-2016
- Government can define clear bands i.e. 900 MHz and 2100 MHz for UMTS operations and 1800 MHz for 2G operations

Cons

- There would not be enough spectrum in the 1800 MHz band in quite a few of the circles to auction (10 circles to have less than 8 MHz of 1800 MHz spectrum available for auction), thus restricting any further entry of operators.
- Even though clear bands could be defined for type of technologies, it may not be the way forward, as operators should be given the chance to choose their technology across whichever band they hold

Since we are in favour of the DoT allowing spectrum liberalization, coupled with the fact that there may not be enough spectrum in the 1800 MHz band to be auctioned in 45% of the circles, other options may be considered.

The second and third approaches both are based upon the retention of some spectrum in the 900 MHz band. We look at the third approach, which includes proposals on the spectrum liberalization. Such an approach if followed, would have the following pros and cons

Pros

- Liberalization of spectrum to ensure that future bidding to be completely market and need driven
- Incumbents get to retain some of the spectrum in the efficient 900 MHz band, and taking into account the investments they have made over the past 10-15 years in the sector, they probably deserve to do so.
- There would be enough spectrum to be auctioned in the 1800 MHz band after taking into account the refarming needs.

Cons

- Any new entrants to the market may not have much spectrum in the 900 MHz band to bid for, since a significant chunk would be retained by the existing operators
- Even the incumbents have the 900 MHz spectrum usage running upto 2014-2016 (for a majority percentage of the 900 MHz band) and going upto even 2020. Thus, if they have to surrender the excess (greater than 5 MHz) spectrum in the 900 MHz band immediately and be assigned a less efficient 1800 MHz band, they may feel aggrieved.

However, we believe the Cons can be addressed as follows

- The auction of the 700 MHz band, if coupled with the freed spectrum in the 900 MHz band, is done relatively quickly following the 1800 MHz auction, could give the new entrants a shot at the more efficient spectrum bands.
- Even though incumbents may surrender the excess 900 MHz spectrum earlier than the contract date, they gain in terms of a liberalized regime allowing them to provide 3G services on a seamless pan India basis. Moreover, the payment of the refarmed 1800 MHz and the retained 900 MHz spectrum can be structured in a manner that the same becomes due on the date of expiry of the original license.

Auction of the 700 MHz band

As touched upon above, the 700 MHz band is extremely efficient for provision of UMTS/LTE services. It has been estimated that as compared to the 2.1 GHz band, around 50% savings can be achieved in terms of rollout expenditure, if the services are rolled out in the 700 MHz band.

As also discussed, our view is that the DoT should strive to have a clear roadmap auctioning the 900 MHz and 700 MHz bands quickly after the 1800 MHz band auctions. This would ensure that all operators would get a fair shot at obtaining the most efficient spectrum.

However, what is also important is to ensure that the incumbents, if they get to retain the 900 MHz spectrum, are not in a position to hoard the most efficient spectrum. Thus spectrum caps are essential in such a scenario. We opine that the following spectrum caps can be considered

- A cap of maximum of 35% holding of the overall spectrum allotted in any circle (across all the bands) for a single operator. As TRAI is of the view that 35% of market share (subscriber as well as AGR share) is the upper limit for allowing M&As in a circle, we feel the same should be applied to the spectrum as well.
- Spectrum caps on maximum holding of sub 1 GHz band spectrum, depending upon the market dynamics and number of operators in a circle. For Eg: In case there are 6-7 operators in a circle left post the auctions and probable consolidation, a reasonable cap could be 20% of the total sub 1 GHz spectrum allotted for that circle.

We do believe that the government has had a bad experience in 2008 with certain operators who bid for licenses for capital gains through stake sale, and subsequently in these cases the rollouts did not happen. This resulted in 4.4 MHz of spectrum per circle which was has not been efficiently a

better part of 4 years now. We are of the view that the spectrum allocation conditions going ahead, should also contain penalty/incentive structure in terms of the efficient utilization of the allotted spectrum

- Penalties in terms of statutory levies i.e. Spectrum usage charges, in case spectrum is not adequately utilized
- Penalties in terms of power with the government to take back partial/full spectrum in case of under utilization
- Incentives in terms of reducing statutory levies as a basis to encourage efficient utilization

Spectrum Block Sizes

- We are of the opinion that the minimum bid size for the spectrum auctions (for all frequencies) could be 1 MHz. The same is keeping in mind the following
 - There are circles where penetration is at very high levels. Since we advocate penalty/incentive structure based on efficient spectrum utilization, some operators may not feel the need to have a minimum block of say 4.4 MHz or 5 MHz for initial 2G operations, while they may require more for LTE operations. Thus operators should have the freedom to bid for spectrum in block sizes of 1 MHz, tailored to their projected plans.
- As discussed above, we do feel the need for the following spectrum caps, to ensure that all operators get the more efficient sub 1 GHz spectrum, as well as to avoid any monopoly in the market in terms of spectrum holding
- We also would like to suggest here that if the above spectrum caps are considered, the proposed maximum holding caps of 10 MHz for Metros and 8 MHz for Category A,B and C circles may not be required.
- It is important that there is a cap on the maximum spectrum that one can bid in an auction. However, the exact amount of the same can only be determined once the exact amount of spectrum being put up in the auction for that bid is known. Also, an estimate of the number of players expected to bid for the same is required to arrive at a maximum bid cap, to ensure that only a few players don't dominate the auction.

Auction Structure
19. What should be the structure of the auction process?
20. Should auction be held in single stage or multi stage?
21. Should there be a simultaneous auction for spectrum in 800 and 1800 MHz bands?

What should be the structure of the auction process?

The auction process needs to be structured considering the importance of telecom sector and dependency of other sectors as also contribution of telecom in growth of GDP. The objective should move from revenue maximization to efficient allocation of frequencies to companies wherein the operations are financially viable. As we have discussed in the paper, that Indian telecom sector is

now mature and competitive to move a to liberalized spectrum regime, it is pertinent to consider the following points:

- Allowing all eligible license holders to participate including the quashed licenses, incumbents and any new license holders wishing to enter the sector
- There should not be any absolute caps on the amount of spectrum that an operator can bid in a particular circle. However, there can be relative caps as outlined earlier in the document. It also needs to be ensured that there is no hoarding of spectrum by larger operators. It can be done by annual spectrum audits the cost of which can be borne out of the funds raised through auctions / trading.
- We agree with the view that rules such as activity levels and simultaneous closing of all circles should be done away with. As we already have at-least 7 operators present in each of the circles even after the recent cancellation, operators can bid for circles selectively and as required. The experience from 3G / BWA auction was very much evident that activity levels do not help much as most of the C circles receive small bids.

Should auction be held in single stage or multi stage?

- The auction should be held in single stage for all parties to ensure a level playing field and no artificial hoarding by operators so as not to allow multiple stages.

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

- Yes, as we have proposed a liberalized spectrum regime with technology and band neutrality, it is important to have simultaneous auctions for spectrum in all available bands. However, it will be very critical to justifiably quantify the reserve price for different bands.
- Re-farming of spectrum should also be considered prior to the auction.

Eligibility for auction

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

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| <ul style="list-style-type: none"> • Only licensees whose licences have been cancelled; |
| <ul style="list-style-type: none"> • Only eligible applicants as on 10.01.2008; |
| <ul style="list-style-type: none"> • Only licensees whose licences have been cancelled and all new eligible entrants at the time of auction; or |
| <ul style="list-style-type: none"> • Open to all including the existing Licensees |

Our view is that all eligible license holders (under the proposed Unified Licensing regime) be allowed to participate in the auctions. This would include the existing licensees, the licensees who licenses have been quashed and any other eligible party who wishes to enter the sector.

Reserve price

23. What should be reserve price per MHz of spectrum in the year 2012 for 1800 MHz band?
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24. What should be the reserve price per MHz of spectrum in the 700/800/900 MHz bands.
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25. Whether the reserve price should be uniform across the country or service area wise?
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- We are of the view that the reserve price for each of the spectrum bands – 700 MHz, 800 MHz and 900 MHz should be different as each of these bands support different spectral efficiency parameters.
- The reserve price of the spectrum should vary circle wise.
- For the 1800 Mhz band, the reserve price could be the pan-India price discovered for the 4th License in 2001, adjusted for the PLR of SBI.

In our opinion, an auction being a process of discovering market-determined prices, the earlier controversy of fixing a flat price of Rs. 1658 crore for pan-India licence bundled with spectrum, as was done in 2008 favouring a few, does not arise. In case of 3G auction, the scarcity of the available spectrum in 2G band and limited availability of spectrum in 3G band (4-5 blocks against 7 incumbent operators and 5 new operators) drove the bid prices too high.

Since any price discovery in an auction is considered to be the true barometer of demand and supply of the particular good in the market, Government should ensure timely availability of spectrum for the operators.

If adequate spectrum is made available to the operators, market economics and competition would force the operators to bid for price which would reflect the spectral efficiency of the auctioned spectrum and as well as enable the successful bidder to have an economically viable business plan within a reasonable time period.

Rollout obligations

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

For the auctioned spectrum we propose that Govt. can adhere to the rollout obligations, which were recommended by TRAI in its consultation paper on “Spectrum Management and Licensing Framework” in May, 2010, (the same was modified after comments from DOT).

The rollout criteria recommended by TRAI for circle A, B and C is as follows:

Time	Villages having population >10000	Villages having population 5000-10000	Villages having population 2000-5000
2 years from effective date	100%	50%	-
3 years from effective date	100%	100%	50%
4 years from effective date	100%	100%	100%

In the above roll out obligations, all the habitations (in the village) having a population of more than 500 persons should be covered.

In the Metro areas, the licensee has to provide 90% coverage within one year of the effective date.

Since incumbents have networks in place for more than a decade in most cases, it is expected that most of the above rollout conditions would already be complied with. The same may not be the case for new entrants.

- Thus, the above rollout obligations can be imposed upon the new entrants
- The effective date for the operators whose licences have been cancelled can be the original spectrum issue dates (Year 2008-2009), as operators have already rolled out the services in various circles. Operators can be given one to two years buffer period for compliance of above criteria.
- The rollout obligations for the incumbents would revolve around deeper penetration into the rural areas.
- Meeting the rural rollout obligations could be accompanied with suitable incentives for the USOF portion of the license fee.
- Moreover, to avoid ambiguity, rollout obligation should be clearly defined to include commercial availability of services rather than technical rollout.

Spectrum usage charges
27. What should be the annual spectrum usage charge for the spectrum being auctioned?
28. 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?

Telecom operators in India have high burden of regulatory charges which includes state and central level duties and levies, annual license fee, spectrum uses fee and service tax etc. These all regulatory charges results to 19% to 28% of the revenues of telecom operators. These charges range from 3% to 7% in other developing Asian countries like China, Sri Lanka, Malaysia, and Pakistan etc.

This results into higher revenue collection for Govt. but profitability of telecom operators is hampered. Majority of the telecom have negative PAT levels and their return on capital employed (RoCE) is also low. Telecom operators already facing decline in profit margin because of lower ARPU and high operating costs and at the same time very high regulatory charges make their case even worse.

- In our view, a fixed annual percentage of AGR could be set as the spectrum usage charge for the spectrum being auctioned as well as for the current spectrum with the operators rather than the current system of graded usage charges.
- As spectrum allocation would be based on market determined price only and the charges would be paid up front, levying too high a spectrum usage charge shall add to the burden of the operators.
- The spectrum usage charges should only be to recover administrative costs and should not be more than 2-3% of AGR and objective of revenue maximization at successive levels shall impact the financial health of the industry as a whole, which in longer run would neither benefit the Government nor the consumers.
- We also feel all the 2G, 3G and BWA spectrum should be charged at same price. As the operator is buying spectrum (whether 2G, 3G or BWA spectrum) through an auction process, he is already paying the market determined price for the benefits of spectral efficiency in terms of capex and opex savings that could be derived that spectrum. Hence, levying different charges for 2G, 3G and BWA would mean favouring one technology over others or one set of operators over other, which defeats the purpose of spectrum liberalisation and also may add to further controversies. Moreover, charging same price for 2G, 3G and BWA

spectrum would also avoid the situation wherein licensees having same amount of 3G spectrum acquired through auction, pay spectrum usage charges at different rates due to differential prices of 3G spectrum and inclusion of 2G revenues in calculating AGR.

Spectrum Validity
29. What should be the period of validity of spectrum?
30. What should be the period of price of spectrum?
31. Should the government allow deferred payment schedule of the spectrum auction fee, or should the payment be upfront in nature?

- We are of the view that the spectrum auction fees should be paid upfront by the operator and the payment schedule should not be deferred. We feel that upfront payment would signal the seriousness of new operators bidding for the start-up spectrum and also it would prevent operators to artificially inflate the prices in their race to hoard up the spectrum, keeping in view that licences of several operators are coming up for renewal.
- Operators who are expected to have healthy cash flows in coming years can push-up the prices of spectrum as against those who may not be assured of positive cash flows.

Hence, based on above, since a huge capital outlay is made up front, the validity of spectrum auction could be linked to the proposed validity of the Unified license, i.e. 20 years.

Spectrum Trading
32. Should Spectrum trading be allowed in India?
33. Among the various models discussed above, in your opinion which model of spectrum trading is best suited for India?
<ul style="list-style-type: none"> • In your opinion is there any other model which can be implemented in India? If yes, please describe.
34. What should be the eligibility criteria to trade the spectrum?
35. Whether the spectrum assigned for 3G and BWA services be allowed to trade? If yes, give reasons.

- In your opinion is there any other model which can be implemented in India? If yes, please describe.

In our opinion, spectrum sharing be allowed but spectrum trading at this point in time may not be suitable for the industry due to the following reasons

- Having had an experience with operators who haven't rolled out services even after acquiring the spectrum, trading should not be allowed which would provide an exit path to a spectrum holder in terms of transfer of ownership of the spectrum.
- Since we are recommending liberalization and a structure promoting efficient use, operators are likely to bid for amounts of spectrum within their projected plans, and not go overboard.
- Trading could also result in speculative action in the spectrum market

In genuine scenarios, where-in operators reach a stage even after bidding that one experience increased traffic and hence spectrum shortage, and the other doesn't do that well, and has some surplus spectrum, the Government could look at allowing spectrum sharing.

However, strict eligibility criteria could be set for spectrum sharing, such as

- Involved parties should hold spectrum to be eligible for sharing
- Defining appropriate spectrum caps in terms of combined holding of the involved parties
- Eligibility criteria in terms of number of subscribers/network traffic (erlangs) etc.

Further, we feel that spectrum trading could be looked at by the Government a few years down the line once spectrum allocations in various bands have been made and the industry matures in terms of utilization of the allotted frequencies.

Also, we do feel that suitable mechanisms should be in place so that Lenders would be able to realize the value of mortgaged spectrums.

Other Issues
36. Can spectrum be allowed to be mortgaged for raising capital for telecom purposes?

As most of the operators have adopted the concept of infrastructure / network sharing and outsourcing of most of the operational services, the operators hold minimal fixed assets on their balance sheet. This limits the capacity of operators to borrow secured funding resulting in higher interest costs as lenders classify the same as uncovered. However, spectrum being the most valuable and important asset for all telecom operators and more so since spectrum has been unbundled from license, it can be rightfully mortgaged to raise capital and loans by the operators. Though classified as intangible, amount of spectrum is easily quantifiable as well as can be valued. Accordingly, we have requested to various regulatory agencies including RBI to consider spectrum usage rights and licenses as tangible security. Similar concessions have been provided by RBI to the road sector in the past.

The usage right is used as collateral for a loan, analogous to taking out a mortgage on an apartment or house, or securing a loan with pledge of assets. Ownership of the usage right is transferred if certain contractually defined situations occur (e.g. default). Also, allowing mortgage arrangements offers particular benefit to not only new entrants but also incumbents, who may otherwise struggle to gain access to finance at low cost.

Lenders Concerns

Post the Hon'ble Supreme Court order on the cancellation of licenses; we have sought the opinion of some of the Lenders on the matter. Their views are outlined as below

- Lenders could file an independent review petition in relation to the Order
- If the affected licensee(s) approach the SC for review of the Order, the lenders may consider filing an intervention application in such review petition
- Lenders may approach the TRAI and DoT for stipulating taking over their dues as a condition in the eventuality of fresh auctions of the UASL.

- If the DoT and the TRAI do not agree to the request of the lenders as per above, the lenders may consider moving to the SC for these reliefs; and / or
- Some of the licensees have rolled out extensive networks across the country and have substantial assets on their books. Lenders have relied upon the UASL licenses to partly fund these rollouts. Therefore, Lenders may also consider making a representation to the DoT and the TRAI for DoT to take over the assets and infrastructure of the affected licensees and have the compensation in relation to the lenders' due paid out to the lenders.
- Lenders were also of the view that since the licenses have been ordered to be cancelled by the Hon'ble Supreme Court, the Financial and Performance Bank Guarantees which have been extended to the DoT/Government bodies by the Licensees should not be invoked.
- Lenders are also of the view that let the spectrum allocated to the affected companies be bid out separately, with the successful bidder being liable to take up all the debt and other assets of the Company.

We urge the government to keep the Lenders' concerns and interests in mind, while deciding on the exit options for quashed licensees and strategy for future spectrum auctions.