

State Bank of India – Suggestions/ Comments on Consultation on “Valuation and Reserve Price of Spectrum”

The Hon’ble Supreme Court through its judgement dated 2nd February 2012 had ordered fresh auction of the licenses/ spectrum which were allotted in 2008. In light of the Supreme Court judgement, Department of Telecommunications conducted auction of spectrum in November 2012 and March 2013. However, the auctions were marred by tepid response from the telecom players (with no new player entering the market) resulting in a substantial amount of spectrum not being sold and Govt. of India not generating the projected revenues from the auction. There also arose a wide scale debate in media on the setting of the reserve price and valuation expectations. In this connection, the Telecom Regulatory Authority of India, through its Consultation Paper on ‘*Valuation and Reserve Price of Spectrum*’ dated 23rd July 2013 has now sought formalized views from the stakeholders. Please find below our broad views on the subject matter followed by specific comments on various questions/ issues raised in the Consultation paper.

Promoting efficiencies in spectrum allocation and pricing

The allocation of spectrum in our view should be driven primarily by five motives:-

- 1) Optimal utilization of the resource to achieve national objectives
- 2) Affordability & high Quality of service (QoS)
- 3) Efficient Price Discovery
- 4) Sustainability of telecom operators & financing thereof
- 5) Adequate remuneration to the Sovereign

The Global as well as India experience in the above matter suggests that it is very difficult to balance all five motives and more often than not, one of the motives gains precedence over others. We are of the view that the following broad initiatives may help alleviate the problems currently faced by the sector and also balance the above five motives:-

➤ Permit Spectrum Trading through an ‘Exchange or Common Trading Platform’

Govt. of India should consider permitting trading of spectrum which has been granted by way of auction at a market determined price (i.e. liberalized spectrum) on a common trading platform. TRAI can act as the regulator for the trading platform. The trading can be by way of outright sale as well as on a short/long term lease basis and standardized products may be created in this regard. This shall ensure that unutilized spectrum with various players shall be better used by operators who are facing a shortage of the same. It shall not only ensure efficient utilization but also provide liquidity for the resource with players not having to wait for auctions which take place only periodically. Better liquidity will in turn provide the authorities more relevant and accurate benchmarks for setting reserve prices for future spectrum auctions. Further, steady availability of spectrum through

exchange shall encourage competition and ensure that niche players requiring smaller quantities of spectrum are also able to compete in the market. The Exchange can also be utilized by the Govt. for release of additional spectrum as is the case in offers of sale for equity shares. However, such trading/leasing should be subject norms mandated to avoid monopoly situation in the market.

➤ Provide a long term road map for spectrum availability

Currently, there are no public records available for the spectrum available for telecom service usage. There are also no definite timelines provided for future spectrum auctions which prevents telecom operators and other stakeholders from planning their investment decisions and arranging of necessary funding. A defined roadmap (on a rolling 5-10 year basis) shall prevent a 'Now or never' scenario observed during 3G auctions in 2010 which created an unreasonable spike in spectrum price. The high costs incurred on spectrum in 2010 have subsequently been found unviable on account of slower than expected Data growth. A joint committee/ body of various key spectrum holders such as DoT, Defence, Broadcasting, etc. can help resolve any discrepancies/issues in creating this roadmap.

➤ Merger & Acquisition rules promoting consolidation

Consolidation in the sector should be encouraged since it shall enable better spectrum utilization. Smaller players may not have the scale in order to optimize its spectrum usage.

➤ Robust monitoring of roll-out obligations & QoS

Currently monitoring mechanisms are in place which certifies site-wise compliance with signal strength norms. However, a certificate for compliance to roll-out obligations is not currently issued which leads to ambiguity. It is important that a statutory body (or a reputed independent consultant) should monitor the fulfilment of the roll-out obligations and provide relevant certifications which can be used to assess the performance of the licensee (district/circle/national level). This shall enable Banks/ FIs to monitor compliance to the license conditions and also take corrective action against defaulting operators. Further, a similar arrangement for ascertaining the Quality of Service parameters shall ensure that the operators do not compromise on the service quality.

➤ Spectrum fees as mortgageable & tangible asset can increase valuation

The license/ spectrum fees paid by the licensees are currently considered as an intangible asset in the books of the licensees and for security cover calculations as per RBI instructions. Since spectrum is classified as intangible asset, when banks provide funds for roll-out of business plan or for meeting entry fee/ BG requirement, the loans to that extent have to be treated as unsecured loans, even though the licenses are assigned in favour of the lenders. Holding unsecured assets on the banks books have in turn several implications in terms of lower ratings, higher provisioning, etc. In case the future spectrum is priced at high levels, as

in the case of 3G spectrum (approx. Rs 67,000 Crs) , then lenders may not be in a position to fund these business plans considering the unsecured nature of the lending. Hence, we suggest that TRAI may initiate a consultation process with RBI for treating the Spectrum fees as a tangible asset which can be mortgaged for the purpose of lending by banks. In case of default by the operators, Lenders can recover their dues by selling the spectrum on the above 'Trading Platform' or any other methodology as prescribed by the regulator. The valuation of spectrum can be expected to increase if the spectrum is made mortgageable. The spectrum holders on the other hand shall need to mark the value of spectrum to the market value as is happening in case of its other assets.

Specific views based on issues raised

Q1) What method should be adopted for refarming of the 900 MHz band so that the TSPs whose licences are expiring in 2014 onwards get adequate spectrum in 900/1800 MHz band for continuity of services provided by them?

Q2) In case spectrum is to be "reserved" for such TSPs, should it be restricted to licences expiring in 2014 (metros) or include licences expiring afterwards (LSAs other than metros)?

SBI View

Considering that older networks of Airtel, Vodafone, BSNL, Idea, RCOM & Aircel are placed in the 900 MHz band (which requires additional capex to shift to 1800 band) and is servicing a significantly high subscriber base, regulatory forbearance on the refarming issue is required. Forbearance is also required since the licensee whose licenses are expiring may not win sufficient 900 MHz spectrum and shall need to switch the subscriber base to the new band immediately which might not be network ready for absorption. However, it is also acknowledged that no player should be allowed to retain the competitive advantage on account of the quality of spectrum assigned to it without providing opportunity to all players to acquire the same spectrum. In this regard we suggest that on the date of expiry of licenses (in 2014 or even thereafter), spectrum holding above the 4.4 MHz (i.e. spectrum above that initially bundled with the license) attached to the license should be refarmed and be made available to all the players through the Exchange as enumerated above. Further, considering that the license period is extendable as per existing license conditions, an extension should be granted by say up to 5 years to these players by recovering the going market value prorated for the remaining life. During the 5 year period the spectrum holding should be gradually reduced from 4.4 MHz to nil as per a tapering arrangement and released for bidding. This shall ensure a steady supply of spectrum in the market as well provide sufficient time to the authorities to make available spectrum in the 1800/2100 MHz band. Further, the licensee can also opt for Intra-circle roaming arrangements in order to smoothen the transfer of subscriber base onto the new bands over the above 5 year period.

DoT may also direct WPC and TERM cells to accord top priority for certifying/ testing the network reorientation resulting from this switchover from 900 MHz band to the 1800 MHz band. .

Q3) Is any restriction required to be imposed on the eligibility for participation in the proposed auction?

SBI View

The existing criteria for allotment of licenses/ participation in auction are considered sufficient. However, better monitoring in terms of identifying unutilized spectrum or stalled business plans should be implemented.

Q4) Should India adopt E-GSM band, in view of the diminishing interest in the CDMA services? If yes,

- a) How much spectrum in the 800 MHz band should be retained for CDMA technology?
- b) What are the issues that need to be addressed in the process?
- c) What process should be adopted for migration considering the various issues involved?

SBI View

One of the policy initiatives already taken is that the spectrum bands allotted shall be technology neutral. We are of the view that the policy may be continued with no prescriptions being made for encouraging certain technologies. The measuring utilization of the spectrum should be a priority and appropriate actions may be stipulated in case of underutilization. However, the reducing market interest in CDMA reflected in the lower ARPU and the declining number of CDMA subscribers over the years has led to sub-optimal utilization as well as lower equipment availability in the band. In this context, it would be prudent to create the liberalized E-GSM band i.e. merge a portion of 800 MHz band with the GSM 900 MHz which has been predominantly used for voice and auction accordingly.

Q5) Should roll out obligations for new/existing/renewal/quashed licenses be different? Please give justification in support of your answer.

Q6) Is there a need to prescribe additional roll-out obligations for a TSP who acquires spectrum in the auction even if it has already fulfilled the prescribed roll-out obligations earlier?

SBI View

The existing roll-out obligations are considered to be adequate. However, Banks that furnish the Performance Bank Guarantees tied to roll out, do not get a clear and whole picture on the fulfilment of the roll-obligations, when the Operator furnishes the site level roll -out certificates issued by TERM cells. It is desirable that the monitoring and certification mechanism should enable all stakeholders to easily identify circle level compliance status of

the licensees. Further, in case the roll-out obligations have already been fulfilled by a certain TSP fresh obligations may not be applied on it. In this context the roll-out obligations may be monitored licensee wise in a particular service area rather based on blocks of spectrum. In case of TSPs whose licenses were quashed but were successful in acquiring spectrum, revised certifications may be stipulated since the earlier TERM certifications may have been in the name of different entity (ex. Telewings) or there may be significant reconfiguration of respective networks.

Q7) What should be the framework for conversion of existing spectrum holdings into liberalised spectrum?

SBI View

The Govt. of India has already released guidelines for liberalizing spectrum and going forward should be fully adopted across all players. Though the concerns on the cost of such liberalization is still a major concern, the administrative benefits (viz uniformity in fees such as license, spectrum usage, etc.) as well as potential opportunities are immense. The TSPs should be granted the right to liberalize their spectrum based on the last auction determined prices prorated for the period remaining in the life of the license/ spectrum. Further, as detailed above in case the Govt. sells a spectrum block through the Exchange at a particular price, then such price can be used by any telecom player to convert its spectrum into liberalized spectrum.

The broad framework required for the liberalization of spectrum is examined under the following heads:

1. Technical/Regulatory:

- a. WPC/TEC should arrive at the benchmark levels for acceptable levels of signal interference levels since various combinations of technologies are expected to be implemented in a liberalized band. Compliance to these relevant benchmarks of this template must be ensured through proper licencing terms.
- b. Though the spectrum is liberalized, from the interference point of view it may not be desirable to allow, in the same band, both FDD and TDD technologies. The Regulator may have to enforce this policy, in consultation with WPC/TEC.
- c. During the interim period for change-over from a legacy technology to a new technology, there are bound to be degradation in coverage and QoS. There is a need to study these aspects by Bodies like C-DoT/TEC/TCOE and provide for reasonable limits on the degradation allowed, over a stipulated period of time. Once again, compliance to these limits may have to be ensured through proper licensing terms.
- d. Regulator may consider recommending to DoT to ensure contiguous spectrum allocations wherever the technology requires the same.

2. Logistics/Regulatory

- a. An inventory of devices/ handsets connected to the network shall enable the Operators to better manage the migration from a legacy technology to a new technology in the same spectrum. Regulator may consider recommending that an Operator must develop and maintain a data base in this respect.
- b. The change over from legacy technology to a new technology in the same spectrum band will take considerable period – anywhere from 2-3 years for an LSA with a large subscriber base and a large number of base stations. (This was seen when the UK operator, EE, was permitted by the regulator Ofcom to shift from GSM to LTE in his spectrum holding in 1800 MHz band.) During this interim period of change over, the Operator requires buffer spectrum to accommodate his existing subscriber base. Hence, during this period, the leasing of spectrum from other Intra-circle Operators shall be most important.
- c. If many Operators express their desire to change over from their legacy technology to a new technology, Government may need guidelines from the Regulator for the method of allowing such changes in a phased manner.

3. Commercial/Regulatory

- a. The new technology deployment must be approved by WPC, considering interference aspects.
- b. The Operator may be permitted to convert his spectrum, on payment of the most recent auction- discovered price adjusted for the balance period of the existing licence and also indexed against inflation.

Q8) Is it right time to permit spectrum trading in India? If yes, what should be the legal, regulatory and technical framework required for trading?

SBI View

Spectrum trading should be permitted of only the liberalized spectrum due to reasons as highlighted in our broad views above. The key issues for trading to be considered should be as follows:-

- TRAI to act as the regulator on spectrum trading through the Exchange & pricing thereof. Necessary powers may be granted by way of Amendments in the TRAI Act.
- All licensees, Govt. as well as lenders (to whom spectrum has been mortgaged) should be eligible participants.
- Spectrum blocks can be sold or leased (for both short term as well as long term) only post full compliance to the roll-out obligations & meeting of QoS norms. This shall ensure that only serious service providers will participate in the bidding.
- The spectrum block shall need to be surrendered back to the Govt. post completion of the original tenor defined for the spectrum block (20 years currently).

- Minimum Block size can be small say 200 KHzx2 enabling smaller players to enter the market and provide niche services as also enable greater focus on Research & development. However larger block sizes shall also be essential to ensure that the structure of the networks works interference free and also ensure minimal wastage of spectrum.

Normal taxation issues such as Capital Gains as well as loss on sale of assets should be factored in like any other asset. Companies also to mark to market the spectrum asset value in their respective Balance Sheets.

- A suitable IT platform should be developed to ensure transparent bidding process in the exchange. TRAI may recover administrative charges from the participants in this context.

In this context, we are of the view that trading in an open market will not give rise to an ever escalating, run-away pricing for spectrum. Because, with the arrival of each new generation of cellular technology, considerable improvements in spectral efficiency have been observed; thus, starting from AMPS of 1st Generation with the poorest spectrum efficiency, LTE, of 4th Generation, offers the highest spectral efficiency. In other words, newer Generation technologies accommodate more subscribers/MHZ of spectrum compared to older Generation and hence, for a given subscriber base and set of services, require less spectrum. Also, the newer technologies offer small form factor BTSs (Femto, Pico, Micro etc.), which are commercially attractive and allow network planning with better coverage ; hence are better candidates for substitution of spectrum with BTS and bring down the demand for spectrum. Hence, market forces, shaped by these factors of high spectral efficiency, smaller footprint coupled with economic viability of substitution of spectrum by BTSs, are expected to drive the Operator to later generation technologies. This shall help counter balance the price escalation arising out of the availability of spectrum in an open market.

Q9) Would it be appropriate to use prices obtained in the auction of 3G spectrum as the basis for the valuation in 2013? In case the prices obtained in the auction of 3G spectrum are to be used as the basis, what qualifications would be necessary?

SBI View

In 2010, Telecom market perceived the spectrum as a scarce commodity due to lack of clear roadmap and as a result placed an exaggerated economic value. Further, the slow off take of 3G subscriber base has severely impacted their business plans and are suffering under the substantial debt burden taken for 3G spectrum acquisition. Further, whereas in other countries 4G auction follows after a healthy development cycle of 3G market, in this country the auctions for both 3G and BWA (= LTE) took place almost concurrently. LTE offers higher spectral efficiency calling for less spectrum for a given service. So, an LTE Operator is better placed than his 3G counterpart with regard to his investments on the infrastructure. More important, since LTE offers much higher speeds than 3G, the data-savvy customer in the yet to evolve mobile broad band market may tilt in favour of LTE. Further, with VoIP permitted

in the BWA spectrum, the 3G Operator shall face competition on its voice market too. Due to these current market realities, the current perception of economic opportunities for a 3G market is lower than that prevailed at the time of auction in 2010.

Therefore, it would not be appropriate to use the prices obtained in the 3G auction as a basis for spectrum valuation in 2013.

Q10) Should the value of spectrum for individual LSA be derived in a top-down manner starting with pan-India valuation or should valuation of spectrum for each LSA be done individually?

SBI View

Prices discovered in previous auctions are different for the various LSAs and this shows that each LSA presents distinct and different case of market opportunity to the Mobile Operator. Such opportunities are primarily decided by the following:

1. Current levels of demand and market penetration of a particular service; thus at the current level of tele-densities of subscribers using voice service, urban LSAs like Metros, where tele-density is much more than one, present less growth opportunity than LSAs with vast rural markets where voice tele-density is less than one.
2. Average purchasing power of a region, decides the per capita consumption of a particular type of service, and hence is a significant factor in deciding the ARPU in a region.
3. Economic growth in a region is generally indicative of a market potential for all types of service sectors; thus to-day, MP and Bihar, with their annual GSDP growth rates of around 9.5-10%, combined with an unsaturated voice market, present attractive investment opportunities for 2G voice services.

As the above metrics are different for different LSAs, each LSA presents its own distinct economic opportunity to the mobile Operator. Hence, it will be prudent to fix reserve price, for each LSA independently.

Q11) to Q17) & Q19) Reserve Price & Valuation

SBI View

The experience with regards to valuation of spectrum has been that even at a level of Rs 1,650 Cr entry fees paid by new operators (in 2008), the operators have found it difficult to breakeven. The experience of 3G auction at Rs 16,750 Cr for a pan-India spectrum has also not been encouraging leading to operators cutting back on capital expenditure to stress observed on the cashflows. The end result is degrading service quality as well as slow roll-out of services.

It is our considered view that spectrum as an asset class is extremely illiquid with only Govt. being the seller, no secondary market, only periodic release of incremental spectrum & sub-

optimal utilization. Hence to arrive at a reserve price based on previous auction determined prices may be error prone. Reserve Price for the spectrum should primarily be set considering the expected demand in the industry as well as financial feasibility of operations post acquisition of the spectrum. If the reserve price is set too high, there may not be off-takers for the spectrum as seems to be the case for auctions held in Nov 2012 & March 2013, whereas a low reserve price may lead to lower realizations to the Govt. Further, the regulator should also ensure that a successful bidder should ultimately have an economically viable & bankable business plan within a reasonable period of time.

In this context the experience of the 3G auction may be considered wherein a reserve price of Rs 3,500 Crs (for 5 MHz – Pan India) was set, which not only enhanced the interest of telecom players in the auction but also lead to competitive bidding. A new reserve price based on the 3G auction reserve price (derived from circle wise breakup) should be considered indexed to the State Bank Advance Rate which is a widely used index rate for escalable transactions. However, the regulator should also devise a mechanism wherein it can intervene in case the bid prices exceed certain thresholds (like in case of Czech Republic in 2013) which can impact sustainability.

Q18) a) Should annual spectrum usage charges be a percentage of AGR or is there a need to adopt some other method for levying spectrum usage charges? If another method is suggested, all details may be furnished.

b) In case annual spectrum usage charges are levied as a percentage of AGR, should annual spectrum charges escalate with the amount of spectrum holding, as at present, or should a fixed percentage of AGR be applicable?

c) If your response favours a flat percentage of AGR, what should that percentage be?

SBI View

Under the current regulatory regime the following charges are applicable based on the period in which licenses were issued and whether spectrum was auctioned or allotted on administered price basis:-

- 1) Auction determined spectrum price
- 2) Entry Fee for Unified License
- 3) License Fee as a percentage of Adjusted Gross Revenue depending on circle category
- 4) Spectrum Usage Charges as a percentage of Adjusted Gross Revenue depending on amount of spectrum held.

The multitude of fees creates both a substantial burden on the telecom players as well as an administrative challenge for the authorities/operators. The unified licensing regime is a right step in this direction wherein the License Fee has been defined as a fixed percentage of AGR (8%) irrespective of the service area. It is also desirable that liberalization of spectrum is

encouraged and implemented in a time bound manner. Post such liberalization, a common harmonized structure for all charges should be evolved by phasing out all other payments. The key charges which can be retained are as follows:-

- 1) Entry Fee for Unified License to recover administrative costs
- 2) Market driven/ auction based spectrum price
- 3) License fee as a percentage of AGR. A graded approach is essential for charging of such fees with concessions being provided for entry level players up to a certain threshold level of AGR or say first 5 years of operations whichever is achieved earlier. This is essential since the cost structures is substantially different for a new player vis a vis the incumbent which has already achieved scale. This shall support entry of newer players in the sector and also ensure sustainability of operations especially during initial periods of losses. However, a peak rate of 8% is considered reasonable. All other fees should be phased out.
