ASSOCHAM's Discussion Paper on TRAI's Consultation on Valuation & Reserve Price of Spectrum

Preface:

At the outset, ASSOCHAM warmly lauds the Authority for initiating this public consultative exercise with such a comprehensive paper addressing all critical issues surrounding Spectrum valuation and Reserve price, a momentous subject for the industry, the government and citizens of this country.

ASSOCHAM believes that the guiding principle of Spectrum Management should be to maximize the overall public benefit derived from use of this public resource, which the DoT / government holds on behalf and as a trustee of the people at large. This can be achieved through efficient allocation and optimal utilization of spectrum.

The Hon'ble Minister of Communications Shri Kapil Sibal has rightly recognized and endorsed this in his Press Statement dated 07-Jan-2011 stating inter alia that "*… … … Government policy is formulated with a view to maximize public welfare, and not merely to maximize Government revenues. The pricing of different natural resources is often done in a manner that meets this objective… ... …*

… … … It is in this background that successive Governments have chosen to allocate telecom licences and spectrum on a basis other than revenue maximization. It should also be noted that with the enactment of the Telecom Regulatory Authority of India Act, 1997 the recommendations of the independent regulator are a very high important factor in deciding these matters. The TRAI has consistently taken the view that revenue generation should not be a major determinant of the policy governing the telecom sector and this is also the view taken when the 10th Plan was finalized in 2002… … … "

The need for making telecom services more affordable is a prominent and avowed objective of NTP 2012. **It also recognizes the tremendous potential of telecommunication services in furthering the national development agenda while enhancing equity and inclusiveness**. To quote the NTP 2010:

"The primary objective of NTP-2012 is maximizing public good by making available affordable, reliable and secure telecommunication and broadband services across the entire country. The main thrust of the Policy is on the multiplier effect and transformational impact of such services on the overall economy. It recognizes the role of such services in furthering the national development agenda while enhancing equity and inclusiveness. Availability of affordable and effective communications for the citizens is at the core of the vision and goal of

the National Telecom Policy – 2012. NTP-2012 also recognizes the predominant role of the private sector in this field and the consequent policy imperative of ensuring continued viability of service providers in a competitive environment. Pursuant to NTP-2012, these principles would guide decisions needed to strike a balance between the interests of users/ consumers, service providers and government revenue.

The multifarious socio-economic benefits emanating from the spread of mobile communications are only too well-known. From social empowerment, economic upliftment to a better quality of education, health, safety and increased opportunities in almost every sphere of life. The socio-economic impact of mobile communication has been documented and commented upon in several studies globally and a study published by ICRIER (2009) in India looks at the domestic indicators specifically.

The Report observes:

"… … … There is a growing body of careful empirical economic research which provides a compelling picture of the positive impact of mobile telecommunications on economic growth in developing economies. During the past few years this research has built a detailed understanding of the importance of telecommunications infrastructure to economic development. The unique contribution of this report, which makes it of special interest to policy makers, is that it looks at impacts within a single country, potentially delivering much more robust conclusions… … …

Encouragingly, the econometric analysis reported here extends the conclusion that there is a causal relationship within the same country between higher mobile penetration(mobile subscriptions/population) in a region and higher economic growth. Indian states with high mobile penetration can be expected to grow faster than those states with lower mobile penetration rates, by 1.2% points a year more on average for every 10% increase in the penetration rate… …

The extraordinary recent macro-economic performance of the Indian economy has also raised the question of how the benefits of the 8–10% annual GDP growth rate can 'trickle down' to poorer socio-economic groups in the country. In that context, the ICRIER researchers have also looked at three segments of the population – the agriculture sector, the Small and Medium Enterprise (SME) sector and urban slum dwellers. In each case, the research demonstrates that access to telecommunications is an important catalyst to realizing productivity and efficiency improvements and thereby making it possible for the benefits of economic growth to be shared. Mobiles currently provide more than 300 million points of connectivity in India, through which information and opportunity flows. Citizens with access to telecommunications can tap into the benefits of broad economic and social growth much more easily than those who are unconnected… "

Needless to add that to fully benefit from the mobile revolution, it is also essential to build complementary skills (education, technological know-how etc.) as well as

national infrastructure (i.e. roads, power supply etc.). One other critical element driving sustainable growth is access to broadband. A number of welfare schemes of the Government are proposed to be disseminated through the NEGP (i.e. National E-Governance Plan). A number of municipal, financial, judicial, civic utility services can now be availed on-line in various States such as Job Application System (OJAS) in Gujarat, Unemployment Allowance in Haryana, Mother Child Tracking System in Bihar, Pregnancy & Infant Cohort Monitoring System in Tamil Nadu, Blood Group Wise Donor Search in Tripura etc.

The NOFN (National Optic Fibre Network) which plans to connect all the 2,50,000 Gram Panchayats in the country and provide non-discriminatory access for all service providers is in advanced stages of roll-out. This backbone can be leveraged to offer a multitude of services to the people of the country. **The last mile connectivity would be most efficacious on wireless in terms of speed of roll-out. Since most of these services would be data-centric it is necessary that adequate spectrum is available with service providers.**

It is oft repeated that, compared to international average, Indian telecom operators hold much smaller quantum of spectrum. In urban India, the site density is exceptionally high owing to very small spectrum holdings. The available techniques for improving spectral efficiency (such as synthesizer hopping, fractional loading, load sharing, discontinuous transmission etc.) have been deployed by the service providers. The physical spacing of sites prevents further increases in capacity by cell-splitting. The network performance indicators such as TCH congestion and call set-up failure reveal there is considerable network overload. There is a need to enhance capacity and all available routes to increase spectral efficiency require more spectrum. The perils of excessive fragmentation of spectrum are well known. A larger contiguous bandwidth has more capacity than its two halves owing to trunking efficiency losses when spectrum is fragmented. Limited spectrum destroys trunking efficiency and frequency hopping gains. The advantage of frequency hopping increases as more channels are used. Trunking efficiency also increases with more channels. Therefore, the Spectrum Management principles should be keenly conscious of this aspect. Another downside of fragmented holdings is proliferation of towers as there is a discernible trade-off between spectrum and infrastructure. ASSOCHAM has always been mindful of the impact of industry on the environment and advocates policies that minimize intrusion on the environment.

As indicated in Table 2.6 & 2.7 of the Consultation Paper, the government proposes to auction 285 MHz of unused spectrum in 1800 MHz and 57.5 MHz in 800MHz band. It is imperative that this spectrum is promptly sold and put to use as idle spectrum is a lost opportunity, which loss is irrecoverable. The loss is both in terms of deprivation of public from valuable communication services which entail innumerable socio-economic benefits as well loss of revenue to the exchequer. It is

estimated that the total economic loss of unused spectrum is to the tune of hundreds of thousands of crores.

It is therefore desirable that the valuation of spectrum be acutely conscious of the need to successfully auction the available spectrum. It is emphasized that a successful auction is one in which (a) all spectrum is sold and (b) final sale price is above the Reserve Price. Unless there is movement above the Reserve Price, an auction cannot be termed as successful as it is more like an administratively priced sale of spectrum.

In the above backdrop, we now proceed to address some of the issues raised in the Paper:

Q.3 Is any restriction required to be imposed on the eligibility for participation in the proposed auction?

ASSOCHAM's View:

The Auction should be open to all and no additional restriction on participation in the auction needs to be imposed. The eligibility criteria, as stipulated by DoT for the March 2013 auction could be adopted. The same is excerpted below:

"Eligibility criteria to participate in the Auctions:
(i) Any licensee that holds a UAS/ CMTS/ UL(AS) licence; or
(ii) Any licensee that fulfils the eligibility for obtaining a UL(AS)/Unified License; or
(iii) Any entity that gives an undertaking to obtain a Unified Licence (Access Services)/ Unified License through a New Entrant Nominee as per the DoT guidelines / licence conditions before starting telecom operations
can bid for the Spectrum in 1800MHz, 900MHz and 800MHz band (subject to other provisions of the Notice)"

Q.5 Should roll out obligations for new/existing/renewal/quashed licenses be different? Please give justification in support of your answer.

Q.6 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?

ASSOCHAM's View:

In a mature and fully-penetrated market, it may not be necessary to attach roll-out obligations with spectrum allocated through a market-mechanism. When spectrum is acquired by an entity at current market price, it should be given the flexibility to make investment decisions related to the spectrum in terms of choice of technology, roll-out etc.

However, in the Indian context, where rural tele-density is still close to 50, and there is head-room for another 500 million subscribers for voice and a much larger number for data, it is desirable to stipulate roll-out obligations for spectrum. These seek to ensure efficient use of spectrum (thereby guarding against hoarding or other anti-competitive behaviour) as well as ensure that the society benefits from a wider range of services at competitive prices.

The spectrum acquired at the auction should carry the same set of roll-out obligations. It would be inefficient to mandate additional roll-out obligations for a TSP who acquires spectrum in the auction if it has already fulfilled the prescribed roll-out obligations earlier. This would not benefit the consumer as it would neither contribute towards competition nor choice in the form of wider basket of services.

We further recommend that a scheme of incentives be put in place to encourage speedier roll-out. This could take the form of reduction in license fee (say the USO component thereof) for achieving rural coverage above a threshold. Such a scheme was previously introduced by the DoT vide amendment to UASL dated 01-Oct-2008 however was later rescinded. We firmly believe that such incentives can play a crucial role in encouraging optimum use of spectrum to reach out to les-lucrative areas.

We request that the procedure for roll-out coverage testing be revisited as it is cumbersome, time-consuming and ridden with many practical difficulties such as:

- Where 1800MHz spectrum is already in use, segregating the coverage attributable to the additional blocks of spectrum acquired at auction is a challenge

- For additional blocks of spectrum acquired at auction, TERM Cells insist for fresh SACFA clearance and fresh Wireless Operating License leading to duplicity of approvals and wastage of time
- A firm and conclusive list of rural SDCAs/Block HQs is not available from any single source
- Often the applications for testing remain pending for long periods

We therefore recommend that the Licensees be permitted to self-certify compliance to Coverage Criteria and the same may be audited by TERM Cells on random sampling basis.

In summary, Rollout obligations are necessary to ensure that scarce resources like spectrum are put to use for public good and not hoarded. That being said, it does become difficult to determine how rollout obligations need to be set – by spectrum, by service, etc. We recommend that rollout obligations should be generic and not linked to offering any of the services possible under the license in geography. Since that service would be provided with spectrum bought in a market process, the operator would be incentivized to use it effectively. However, this can be supplemented by Roll out obligations as specified in the existing UASL license and that too in one service/ technology only.

Q.7 What should be the framework for conversion of existing spectrum holdings into liberalised spectrum?
ASSOCHAM's View:

The matter of conversion of existing spectrum holdings into liberalised spectrum is sub-judice and we would refrain from commenting thereon.

Q.9 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?

ASSOCHAM's View:

The auction price of 2100 MHz arrived at in May 2010 is not a correct basis for the valuation of 1800 MHz, over three years later, in 2013. The market has undergone drastic changes over the last three years..

Q.10 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?

ASSOCHAM's View:

A bottom-up valuation of spectrum capturing the unique potential of each individual LSA is desirable. The TRAI has costing data of all service providers in the form of Accounting Separation Reports which could be used to derive the average industry costs for all service providers. We therefore recommend that the Authority should adopt a bottom-up valuation of spectrum capturing the unique potential of each individual LSA, however it should be noted that the results could be variable depending upon the assumptions.

Q.11 Is indexation of 2001 prices of 1800 MHz spectrum an appropriate method for valuing spectrum in 2013? If yes, what is the indexation factor that should be used?

ASSOCHAM's View:

Indexation is premised on the assumption that as time progresses prices rise linearly. This does not hold true for all circumstances as experience has shown that price both increase and decrease depending on a variety of factors. In telecom specifically, the valuation of spectrum is a function of an assortment of complex factors and their interplay such as:

- diminishing incremental gains as networks spread further into the hinterland that reduce the attractiveness of the market
- relatively high subscriber acquisition costs
- tariffs which are already one of the lowest tariffs in the world
- steadily rising costs of inputs such as power, diesel which are critical to operating a mobile communication network

- steep rentals for setting up cell-sites
- difficulties in obtaining suitable location for BTSs due to public concerns emanating from misplaced health concerns

All of the above exert a downward pressure on the margins and therefore the value of spectrum is rapidly eroding. We therefore do not support indexation of 2001 prices of 1800 MHz spectrum to derive a value for the same in 2013.
