

**Permitting combination of technology under same license**

Before commenting on the issues for consideration, a basic concept needs to be discussed. Why have provision for more than one licensee ? The answer is simple and straightforward. It is necessary to have competition which will bring improvement in sector efficiency, decrease in prices and better range of services and which will introduce innovation. If this is a correct reply to the question raised, then it can be argued that the competition should then be without any limits. The observation on that argument would be that theoretically yes, if there are no constraints. But as has been repeatedly pointed out in this consultation paper, spectrum has become a major constraint. Till such time as this constraint and any other identified ones are removed and reforms introduced to enable such competition, it may be prudent to restrict the number of service providers.

Another point which needs to be clearly established is that spectrum, a scarce commodity, should not be made available to anybody without imposing suitable conditions about its utilization. There has been considerable discussion on whether spectrum should be allocated on the basis of population or distance, whether its utilization should be judged on the basis of number of subscribers and whether the number of subscribers should be calculated on VLR or HLR figures. With some effort and after studying international practices, it should be possible to lay down the guidelines as to how the utilization of allocated spectrum will be determined. Once this is done, the demand for additional spectrum should be considered only if full utilization of the earlier allocation has been established. At the same time, the order allocating the spectrum should clearly specify that if the spectrum allotted is not utilized within the time period indicated, it could be withdrawn and at that stage it should be used for reallocating it to the new licensees or the existing ones who have successfully utilized the spectrum.

*Q.1 In view of the fact that in the present licensing regime, the initial spectrum allocation is based on the technology chosen by the licensee (CDMA or TDMA) and subsequently for both these technologies there is a separate growth path based on the subscriber numbers, please indicate whether a licensee using one technology should be assigned additional spectrum meant for the other technology under the same license ?*

**Answer 1**

The basic goal of enhanced competition can be achieved by issuing licences to new entrants or to existing licensees who want to deploy alternate technologies. If the licence conditions respect the concept of technology neutrality why should the same not be followed while allocating spectrum ? Keeping in view the basic concepts discussed above, there appears to be no harm in allotting additional spectrum to an existing

licencee who wants to deploy an alternate technology. However, this should only be done if adequate spectrum is available.

Q.2 *In case the licensee is permitted, then how and at what price, the licensee can be allotted additional spectrum suitable for the chosen alternate technology.*

**Answer 2**

As suggested at para 4.15, spectrum for the alternate technology should be provided on the applicant paying an amount equivalent to the initial entry fee.

Q.3 *What should be the priority in allocation of spectrum among the three categories of licensees given in ¶ 4.16 of the chapter ?*

**Answer 3**

The priority should be as follows -:

- (a) Existing licencees who have fully utilized the earlier spectrum allocated.
- (b) New licencees.
- (c) Existing licencees who wants spectrum for deploying alternate technology.

Q.4 *Whether there should be any additional roll out obligations specifically linked to the alternate technology, which the service provider has also decided to use ?*

**Answer 4**

Roll out obligations which were or which are being proposed to be imposed on any new licensee, should also be imposed for the alternate technology which the service provider has decided to use.

Q.5 *Lastly, as such service provider would be using two different technologies for providing the mobile service, therefore what should be the methodology for allocation of future spectrum to him ?*

**Answer 5**

For allocation of future spectrum, the two parameters discussed in the replies above have to be followed.

- (a) Complete utilization of spectrum already allocated.
- (b) Priority to be decided in accordance with pre-determined, widely publicized criteria.

## Chapter 5

### Roll out obligations

- Q1 *Should present roll out obligations be continued in the present form and scale for the Access service providers or should roll out obligations be removed completely and market forces be allowed to decide the extent of coverage ? If yes, then in case it is not met, existing provision of license specifies LD charges upto certain period and then cancellation of license. Should it continue or after a period of LD is over, enhancement of LD, charges till roll out obligation is met. Please specify, in case you may have any other suggestion.*

#### Answer 1

The present roll out condition in the UASL license specifies at least 10% of the DHQs to be covered in the first year and 50% of DHQs to be covered within three years of effective date of license. In Metros, 90% of the service area is to be covered within one year of the effective date. In contrast, in the roll out specified for the Basic Service license, Service Providers were supposed to provide 80% and 100% coverage in terms of PoP at the SDCA level in 5<sup>th</sup> & 7<sup>th</sup> year respectively. In case of Basic Services license, the roll out condition was more stringent as the licensees were always obliged to ensure coverage of 100% SDCAs and bank guarantees were to be released after 4<sup>th</sup> phase only after ensuring fulfillment of the roll out. The earlier roll outs of Basic Services also prescribed targets for Direct Exchange Lines and a percentage of Village Public Telephones to be installed over a period of time.

Most of the UASLs have not met the requisite roll out condition, even when there was no requirement of mandatory coverage of rural areas. With permission to migrate from one License to another with penalty, the obligation has since been removed. As a result, the development of the telecom network has concentrated only in selected areas and the rural-urban divide has widened further. For effective bridging of digital divide, the scope of roll out should be enhanced so as to ensure 100% roll out condition in the license agreement for metro districts and at least 90% in other circles including all DHQs and rural areas in a specified time frame.

LD charges upto certain extent as envisaged in the license agreement act as a deterrent which should be enhanced till the time complete rollout is met. The cancellation of license is a harsh and extreme measure which should be taken only in extreme conditions.

The objective of the USO Fund is to support public access facilities, individual access facilities, broadband connectivity and general infrastructure. The assistance from the USO Fund would be in form of subsidized infrastructure, which would be shared by the service providers in order to roll out different types of services in the rural areas. With the

subsidized infrastructure being made available from USO Fund in the rural areas and sharing being made compulsory, it would be commercially viable for ASPs to provide services in rural areas also.

Q2 *Is there a case for doing away with the performance bank guarantees as the telecom licensees are covered through the penalty provisions, which could be invoked in case of non-compliance of roll out obligations ?*

**Answer 2**

The PBG is to ensure faithful compliance of the terms and conditions of the agreement and that the desired services are being provided effectively. The penalties are to be recovered from the PBG. The PBG also acts as a buffer before resorting to taking actions for termination of the Agreement.

Q3 *Should roll out obligations be again imposed on the existing NLD licensees ? If yes, then what should be the roll out obligations and the penalty provisions in case of failure to meet the same.*

**Answer 3**

Despite rapid and steady growth in tele-density, the Urban-Rural divide continues. The technological innovations which have enabled provision of telecom services in urban areas at an affordable price must also be available to the rural areas. Therefore, the roll out obligations and the penalty provisions should be imposed on the existing NLD licenses as were available in earlier NLD agreements.

Q4 *What additional roll out obligations be levied on ILD operators ?*

**Answer 4**

The roll out obligations on the existing ILD licenses should be again imposed as were available in earlier ILD agreements.

Q5 *What should be the method of verification of compliance to rollout obligations ?*

**Answer 5**

Verification of compliance to roll out obligations could be checked through VTM Cells as this is one of the functions allocated to VTM Cells of DoT. The help of other technical agencies may also be sought in order to verify the roll out speedily.

Q6 *What indicators should be used to ensure quality of service ?*

**Answer 6**

The present QoS achievements by the service providers are not up to the mark as reported by TRAI in its various reports on the subject from time-to-time. It is proposed that the norms of QoS presently being prescribed by TRAI should be strictly adhered to.

Q7 *As the licensees are contributing 5 per cent of AGR towards the USOF, is it advisable to fix a minimum rural roll out obligation ? If yes, what should be that. If no, whether the Universality objectives may be met through only USOF or any other suggestions.*

**Answer 7**

The issue of certain percentage of AGR being collected in the form of USO levy should be seen in its proper perspective. The Government, for very good reasons, on the basis of TRAI recommendations, decided that a certain part of the AGR should be collected as USO levy. It was not as if in addition to the normal fees, an additional fee of 5% of AGR was added. Government, therefore, is at liberty to increase and decrease the percentage of AGR which should be collected as fees and within that it is free to determine what percentage should constitute USO levy and what percentage should flow into the general exchequer. Therefore, it may not be quite correct to link 5% of AGR collected as USO levy with the issue of roll out obligation.

Having said this, it is necessary that roll out conditions must be prescribed for the rural areas. The roll out must be prescribed in terms of coverage of all the villages coming within the licence area. In order to help the service providers to achieve the roll out, USOF assistance can come in the form of an incentive. As a matter of fact, the USOF schemes are designed in a manner which would enable service providers to achieve the goal of universal coverage. There can be synergy between the roll out conditions prescribed and the incentives provided for such coverage by the USO.

Q8 *In case of rural roll out obligation, whether number of BTS in a certain area a viable criterion for verification of roll out obligation ?*

**Answer 8**

Roll out should be verified with reference to coverage in the rural areas and the services provided should meet the QoS prescribed.

Q9 *What should be the incentives and the penalties w.r.t. rural roll out obligations ?*

**Answer 9**

For providing incentives and assistances in rural areas, USO Fund has already finalized a scheme under which about **8000** towers are being set up in rural areas. Other components of power, DG Set, limited backhaul etc are also being supported along with the tower. These towers will be shared by three Service Providers. There are plans to provide additional **10,000** towers in rural areas to be shared amongst the Service Providers. The towers so created would be utilized for provision of mobile services and broadband facilities in rural areas by the ASPs. In addition areas are being marked where general infrastructure in form of Optical Fibre will be provided which will be shared by the ASPs. The existing optical fibre and its associated equipment can also be upgraded which shall be shared by the Service Providers at prescribed rental. USO Fund would also assist service providers in making them available the technological innovations in telecom field.

In para 5.34, the TRAI paper refers to a combination of incentives and penalties. The penalties can come through the licensing route and the incentives can come through USOF.

## Chapter 6

### Determining a cap on number of Access provider in each service area.

Q1 *Should there be a limit on the number of access providers in a service area? If Yes, what should be the basis for deciding the number of operators and how many operators should be permitted to operate in a service area?*

#### Answer 1

If there were no constraints the answer to this question would be a vehement No. However there are constraints, basically spectrum related. It has been argued that these constraints can be removed by introducing changes. If this be so let the constraints be removed and then increase the number of service providers. Till then there should be a maximum number (dictated by spectrum availability) and a minimum number (to prevent monopoly and) to ensure adequate competition.

No policy is formulated for eternal application. Yet policy changes should not be frequent; this creates uncertainty, impedes investment, jeopardizes initiative-a scenario not conducive to growth. However there would be no grounds for complaint if, reworking/identifying adequate spectrum, and after a warning, fresh service providers are permitted entry. Similarly a constant watch would have to be kept on technological developments and whenever these indicate a change in policy, in this case in terms of the number of service providers, suitable changes should be effected.

When we compare ourselves with developed nations such as USA, U.K, Japan and E.U in order to draw lessons for policy formulation, we should exercise caution to the extent that these telecom markets are evolved ones which have gone through various phases from that of having a sole operator, to privatization, to multiplicity of operators and then to the present state whereby mergers and amalgamations have ensured that there are only three-four operators. As depicted in the TRAI report the HHI in these markets is high ranging from .250 in U.K to 0.449 in Japan. In India we may have a fair number of service providers in each circle but our HHI at .188, is also not low and as per international norms we represent a fairly concentrated market. This is underlined by the fact that the market share of the four major mobile operators taken together is 74%.

We are a nation where though the telecom sector is currently growing phenomenally; teledensity is still very low, digital divide is stark and QOS is poor. Ideally in open markets, even robust ones, new players enter and, in order to survive, they innovatively carve out niche markets by catering to previously underserved segments/requirements. Take the case of low

cost airlines which have made air travel possible for a segment who earlier could not dream of it. (It is now, after a number of other players have emerged in the low cost segment that M&A activity in this sector has kicked in.)

Some economists argue that a country such as ours which is still developing should be cautious while advocating the policy that promotes competition as a good thing per se. Our competition policy should be one that fosters economic development. This would in some instances involve a restriction of competition and in others its vigorous promotion. This could also apply to different points of time in the same sector. Too much competition they caution may lead to price wars, sharp falls of profit and diminish corporate propensity to invest. They advocate an "optimum" level of competition. This of course would apply especially to a sector such as telecom where heavy investments are necessary to keep pace with changing technology. TRAI has cautioned against our becoming a high growth, low quality market in an over competitive scenario with low profits.

There can be many counter arguments to this view, such as, when markets are left to manage themselves; mergers and acquisitions automatically take care of this aspect. People who hold this viewpoint favouring unbounded competition also draw attention to the need to keep in mind the propensity of limited number of players to collude in areas such as prices (e.g. roaming charges in India) and other aspect of telecom services such as division of markets, agreement on production limits, discriminatory pricing etc, which will be detrimental to the consumer interests and which we cannot afford. As a telecom market in a developing country, where 70% of the population is still largely devoid of ICT access we have a lot of ground to cover. This can only be achieved in a competitive market. We have seen the fruits of privatization and liberalization, and we should not be too hasty to halt the full realization and unfolding of this process prematurely.

Nevertheless TRAI has rightly pointed out the ill effects of too many players in a situation where spectrum crunch will force operators to invest excessively in network infrastructure leading to higher capex, lower returns and adverse impact on service improvement in the long run. Ultimately keeping in view our own particular stage of development, vigorous competition would be highly desirable. However we are constrained by the limited availability of spectrum as of today. Thus at present perhaps a well thought out upper limit on number of access service providers with a strong competition policy in place, a stringent mechanism to ensure efficient spectrum usage and to penalize its underutilization and a minimum number of service providers to avoid a monopoly/oligopoly situation would be the best answer.



Q2. *Should the issue of deciding the number of operators in each service area be left to the market forces?*

**Answer 2**

Letting market forces decide is the right answer, but not at present:

If experience teaches that with all the steps taken and reforms introduced, the market has evolved and matured, then the case for letting market forces take over would be fairly strong. Any attempt to blindly apply the concept of letting market forces take over to all spheres of activity in the telecom sector, without first introducing reforms and suitable systems, may end in chaos.

Finally, a scenario need not be depicted in terms of black and white only. Why is it difficult to think of a reform based stage wise movement from a cap with "x" service providers to a cap with a larger number of service providers before removing the cap totally?