To.

The Advisor (NSL) TRAI, New Delhi

**Sub.**: Comments on TRAI Consultation Paper on "Recommendation for allocation and pricing of Microwave Access (MWA) and Microwave Backbone (MWB) RF carriers" dated 28.03.2014

TRAI issued consultation paper on 28.03.2014 on the aforesaid subject and asked the various stakeholders to comment on the issues mentioned in the consultation paper. The following comments (broadly on MWA RF carriers, as MTNL is not using MW in backbone network) are made for consideration & submission to TRAI:

- Q1. How many total Microwave Access and Backbone (MWA/MWB) carriers should be assigned to a TSP deploying:
  - a. 2G technology only.
  - b. 3G technology only.
  - c. BWA technology only.
  - d. Both 2G and 3G technologies.
  - e. 2G and BWA technologies.
  - f. 2G, 3G and BWA technologies.

Please give rationale & justification for your answer.

## MTNL Response:

We tend to agree with the recommendation / suggestion of TEC for allocation of MWA/MAB carriers for various services.

Q2. How many MWA/MWB carriers need to be assigned to TSPs in case of 2G, 3G and BWA at the start of their services [i.e. at beginning of rolling of services] Please justify your answer.

#### MTNL Response:

As per TEC Report described in the Consultation Paper. However, there should be no upper capping on number of carriers, however the additional carrier may be allotted after review of maximizing the limited resource of spectrum and also the lurking threat of capturing of the spectrum as captive asset for future usages by big

operators by going in for more no. of carriers without having business case .

## Q3. Should excess spectrum be withdrawn from existing TSPs?

## MTNL Response:

As the MWA carriers were allotted to the operators administratively i.e. following the prevalent criteria at the time of allotment, the spectrum holdings beyond the limit prescribed by TEC should not be withdrawn from the incumbent operators. However, for all future allotments the limit suggested by TEC may be followed. Further, to ensure optimal and efficient utilization of this scarce nation operator may be resource, even though Microwave carriers ( based on requirement justification) beyond TEC prescribed limits, higher % of AGR may be levied on those carriers.

Q4. If yes, what should be the criteria for withdrawal of excess allocation of MWA and MWB carriers, if any, allocated to the existing service providers?

## MTNL Response:

Not applicable in view of our reply to Q3 above.

Q5. What should be the preferred basis of assignment of MWA/MWB carriers to the TSPs i.e. 'exclusive basis assignment' or 'link-to-link based assignment'?

#### MTNL Response:

In our opinion, it should be on exclusive basis assignment' as monitoring of 'link-to-link based assignment will be quite cumbersome.

Q6. In case 'exclusive basis' assignment is preferred, whether MWA and MWB carriers should be assigned administratively or through auction. Please comment with full justifications.

## MTNL Response:

In our opinion, the microwave carriers should be assigned administratively as it is long proven process being followed not only in India but in most of the countries worldwide. Further, considering the fact that TSPs had already paid high cost of auction determined 2G / 3G access spectrums, the auction of microwave spectrum will definitely put additional burden onto the operators. In such case big

operators will be benefitted and the business interest of small regional operators will be defeated.

Accordingly, the administrative allocation of MWA / MWB spectrum should be preferred.

Q7. In case 'link-to-link basis' assignment is preferred, how the carrier assignment for different links should be carried out, particularly in nearby locations?

## MTNL Response:

Not applicable in view of reply to Q5 & Q6 above.

Q8. Considering the fact that different TSPs may require additional carriers at different point of time, what should be the assignment criteria for allocation of additional carriers for MWA and MWB?

## MTNL Response:

Please refer our reply to Q3 above.

Q9. How can it be ensured that spectrum carriers assigned are used optimally and the TSPs are encouraged to move towards the OFC?

## MTNL Response:

The allotment of microwave carriers should be as per TEC recommendation. Further, as suggested above, allotment of additional carriers bevond recommendations for a particular technology, considerably high % of AGR may be levied. Further, Govt should encourage laying of OFC at least in the rural and semi urban areas for backbone requirements and Government should facilitate in co-ordination with different local bodies / agencies including state level/ local Civic Authorities for laying OFC cable with time-bound priority approval.

Q10. Should an upfront charge be levied on the assignment of MWA or MWB carriers, apart from the annual spectrum charges?

## MTNL Response:

No, as it will put additional burden on the operators which may ultimately lead to price increase.

Q11. What should be the pricing mechanism for MWA and MWB carriers? Should the annual spectrum charges be levied as a percentage of AGR or on link-by-link basis or a combination of the two?

## MTNL Response:

In our opinion, the current / existing pricing mechanism i.e. AGR based charging may be continued.

Q12. In case of percentage AGR based pricing, is there any need to change the existing slabs prescribed by the DoT in 2006 and 2008? Please justify your answer.

## MTNL Response:

For the quantum of spectrum holdings recommended by TEC, the existing pricing (% of AGR) may be followed, however, for additional allotments beyond TEC prescribed limits considerably higher % may be levied. For every additional allotment the %should increase sharply.

- Q13. In case link-by-link based charging mechanism is adopted then:
  - (a) Should the spectrum be priced differently for different MW spectrum bands (6GHz/7GHz/13GHz/15GHz/18GHz/21 GHz/26 GHz/28GHz/32GHz/42 GHz etc)? If yes, by what formula should these be charged?
  - (b) What are the factors (viz as mentioned in para 3.22), that should appear in the formula? Please elaborate each and every factor suggested.

## MTNL Response:

No comment

Q14. Should the option of assignment of MWA carriers in all the spectrum bands in 6-42 GHz range be explored in line with other countries? What are the likely issues in its assignment MWA carriers in these additional spectrum bands?

## MTNL Response:

Since the existing bands may exhaust with the passage of time and with entry of new operators in the market, it is right time to explore the possibility of assignment of microwave carriers in other bands also with reference to the nature of application concerned as well. In our opinion, there should not be any technical issue in these bands.

Q15. In your opinion, what is the appropriate time for considering assignment of MWA carriers in higher frequency bands viz. E-band and V-band?

## MTNL Response:

The existing allocations should not be disturbed. However, possibility may be explored.

# Q16. Should E-band be fully regulated or there should be light touch regulations?

## MTNL Response:

May be light regulated at this stage however, Before embarking upon the question of regulations, the extent of utility of this band in telecom services in the given context of Indian telecom scenario needs to be delved into and without the operational analysis including the atmospheric effects of these waves contemplating about regulations is premature.

# Q17. What charging/pricing mechanism would be appropriate for these bands?

## MTNL Response:

It will be too early to comment on the pricing mechanism of E-Band microwave carriers, as in our opinion the pricing mainly depends on market forces prevalent at the time of allotment / usage.

Q18. Apart from Q1-Q17, stakeholders are requested to bring out any other issue, which needs to be examined, with justification.

## MTNL Response:

No comments

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