

<u>Nelco's response to TRAI Consultation paper</u> <u>On</u> Telecommunication Infrastructure Sharing, Spectrum Sharing, and Spectrum Leasing

Nelco welcomes TRAI's initiatives designed to promote efficiencies in use of network elements and scarce natural resources like radiofrequency spectrum. Its response reflects its firm belief that such efficiencies along with promotion of fair and robust competition between players and technologies are good for the sector, its players as well as consumers. Such steps will expand network access and increase choice and affordability of services to the benefit of the economy and the consumers at large.

This is the transformational phase for telecom across the world and in India, with both satellite as well as terrestrial technologies working as complementary to provide the best of services to the customers irrespective of the location. The new satcom & terrestrial technologies have potential to ensure that no location is remote, and the benefit of government schemes reaches to the citizens in remotest parts of the country. The policy should be able to support various technologies so that all the technologies in combination may work to bring connectivity and other value-added services to all customers.

Satellite services have inherent characteristics of being sharable and thus satellite spectrum is already shared for use of satellite services and that is one of the reasons that the satellite spectrum is allocated on administrative basis across the world. At the same time, satellite spectrum irrespective of spectrum allocation method should not be allowed to be shared for use other than for satellite communication. In other spectrum reserved for Satellite should not be given to terrestrial networks.

As associated orbital slot allocation related to satellite spectrum is managed at ITU level as per its policies and regulations, spectrum sharing among satellite operators may be kept out of scope of this consultation paper.

With respect to Satellite services, Infrastructure sharing should be allowed for passive network including antenna & RF. The active networks should be allowed to be shared only in case of NGSO due to the complex nature of the technology and constellations.

USO-funded projects are awarded on competitive basis and USOF subsidy is given to cover the viability gap whereas majority of the capex and opex investment is made by TSPs. As USO funded projects are in remote areas, the customers in those areas are anyway limited and making it mandated to share such infrastructure with other licensees, will make the viability of investment by the TSP even more difficult. Considering all these, sharing of infrastructure should continue to be done on a voluntary basis only.

With regard to passive infrastructure-sharing, we recognize the issue highlighted by the Authority that enabling provisions for passive infrastructure-sharing are present in some specific service authorizations and not others. However, we believe the intention of the Licensor (DoT) was not to give the benefit of passive infrastructure-sharing to some licensees and exclude some. It seems that it was inadvertent rather than intentional that enabling provisions were included in some authorizations and not in others. Hence a much-needed clarity may be brought in under the licensing, addressing this anomaly.

The infrastructure sharing charges should be allowed as pass-through while determining AGR for the purposes of payment of License Fee (LF) and Spectrum Usage Charge (SUC).

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Q1. Should passive infrastructure sharing be permitted across all telecommunication service licenses/ authorizations? Kindly justify your response.

Response:

Most of the licenses/authorization already permit passive infrastructure-sharing. However, it is suggested to have relook to all individual service authorizations to ensure that all license/authorization permit similar infrastructure sharing for same kind of services.

Q2. Should other active infrastructure elements deployed by service providers under various licenses/ authorizations, which are not permitted to be shared at present, be permitted to be shared among licensees of telecommunication services?

Q3. If your response to the Q2 is in the negative, which active infrastructure elements should not be permitted to be shared? Further, which active infrastructure elements should be permitted to be shared with which licensees/ authorization holders? kindly provide details for each authorization with detailed justification.

Response:

With respect to Satcom services, Active Infrastructure sharing among various licensees should be allowed for Antenna and RF. The Baseband should not be allowed to be shared among various licensees.

Q4. In case it is decided to permit sharing of any additional active infrastructure elements among licensees,

(a) What precautionary conditions should be put in place to avoid disruption in telecommunication services due to any unforeseen situation? The response may be provided for each active infrastructure element.

(b) Whether there is a need to have a provision for permission from/ intimation to the Licensor before commencement of such sharing? If yes, what provisions and timelines need to be prescribed for each active infrastructure element?

Response:

Please refer to response to Q2 & Q3.

No additional active infrastructure elements should be permitted to be shared among licensees. Any further sharing may lower the level of effective competition in the market and will increase the dependency on underlying shared active infrastructure and may impact the network availability, in case of any failure. It will also lower down the incentive to the licensee to make fresh investments and roll out the basic infrastructure, which will be detrimental for the growth of the sector.

Q5. Whether any other amendment is required to be made in the telecommunication services licenses/ authorizations with respect to the provisions relating to both active and passive infrastructure sharing to bring clarity and remove anomaly? If yes, clause-wise suggestions in the telecommunication services licenses/ authorizations may kindly be made with detailed justification.

Response:

Please refer response to question1, 2 and 3 above.

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Q6. Should there be any obligation on telecom service providers to share infrastructure that has been funded, either partially or fully, by the Government through Universal Service Obligation (USO) Fund or otherwise, with other telecom service providers? Kindly justify your response.

Response:

No.

USO-funded projects are awarded on competitive basis and USOF subsidy is given to cover the viability gap whereas majority of the capex and opex investment is made by TSPs. As USO funded projects are in remote areas, the customers in those areas are anyway limited and making it mandated to share such infrastructure with other licensees, will make the viability of investment by the TSP even more difficult. Considering all these, sharing of infrastructure should continue to be done on a voluntary basis only.

Q7. In case it is decided to impose some obligations on telecom service providers to share the infrastructure funded by Government with other telecom service providers, is there a need to provide a broad framework for sharing of such infrastructure? If yes, kindly suggest the key aspects of such framework with detailed justification.

Response:

Please refer to response to Q6 above.

Q8. What measures could be taken to encourage roaming arrangements among telecom service providers in remote and far-flung areas? What could be the associated regulatory concerns and what steps could be taken to address such concerns? Kindly provide details on each of the suggested measures with justification.

Response:

It is suggested that the charges paid by a TSP towards infrastructure sharing should be allowed as a deduction from its Gross Revenue (GR).

Q9. What measures could be taken to encourage roaming arrangements among telecom service providers in remote and far-flung areas? What could be the associated regulatory concerns and what steps could be taken to address such concerns? Kindly provide details on each of the suggested measures with justification.

Q10. What could be the other ways to ease out the hardship faced by the subscribers in remote and far-flung areas due to connectivity issues of the home network provider? Kindly provide detailed response with justification.

Response:

Satcom provides effective way to connect remote & far-flung areas. With new Satcom technologies like NGSO, as well as lowering of Satellite capacity prices in future, it will make the cellular backhaul

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connectivity over satellite more affordable. The cellular network availability in these areas should be enabled with supportive policies like

- i) USO should rollout separate 'satcom based backhauls' tender for enabling backhaul network creation for the specified area/village. Telcos may rollout their cellular network using this backhaul and local RF network.
- ii) USO should provide the subsidy for satellite based backhaul network for five years instead of existing policy of giving subsidy for two years.

This will help to ensure network coverage to far-flung remote areas.

Q11.Whether inter-band access spectrum sharing among the access service providers should be permitted in the country

Response:

Satellite services have inherent characteristics of being sharable and thus satellite spectrum is already shared for use of satellite services and does not require exclusive allocation of spectrum unlike cellular services. This is one of the reasons that the satellite spectrum is allocated on administrative basis across the world.

Satellite spectrum irrespective of spectrum allocation method should not be allowed to be shared for use/purpose other than satellite-based connectivity.

Q 12. In case it is decided to permit inter-band access spectrum sharing among access service providers, please provide detailed inputs to the following questions: (a) What measures should be put in place to avoid any potential adverse impact on competition and dynamics of spectrum auction? Kindly justify your response.

(b) Considering that surrender of spectrum has been permitted in the country, what provisions need to be included in the guidelines for inter-band access spectrum sharing so that any possible misuse by the licensees could be avoided? Kindly justify your response.

(c) What should be the broad framework for inter-band access spectrum sharing? Whether the procedure prescribed for intra-band access spectrum sharing could be made applicable to interband access spectrum sharing as well, or certain changes are required to be made?

(d) What should be the associated charges, and terms & conditions for inter-band access spectrum sharing?

Response:

Please refer to response to Q11.

Q19. Where there is a need to permit spectrum leasing among access service providers? Kindly justify your response.

Q20. In case it is decided to permit spectrum leasing among access service providers, please provide detailed response to the following questions:

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(a) Whether spectrum leasing should be permitted for short-term period only, or for both short-term as well as long-term?

(b) In case only short-term leasing is to be permitted, what should be the maximum duration for such spectrum leasing? Should there be any restrictions on renewal of such short-term lease?

(c) In case it is decided to permit long term leasing, please provide your response to the following questions with justification:

(i) What measures should be put in place to avoid any adverse impact on competition and dynamics of spectrum auction?

(ii) Whether there should be a maximum duration for which spectrum leasing may be permitted?

(d) What should be the applicable roll-out obligations for the Lessee (the access service provider which takes spectrum through leasing arrangement from the Lessor)? Whether the spectrum leasing should have any effect on the roll-out obligations applicable for the Lessor (the access service provider which has leased out the spectrum)? Whether the provisions for roll-out obligation require to be different for short-term and long-term spectrum leasing?

(e) Should the spectrum leasing charges be levied on similar lines as applicable for spectrum trading? If no, what charges should be made applicable in case of spectrum leasing?

(f) Should there be a lock-in period, after acquisition of spectrum, to become eligible for spectrum leasing as applicable in spectrum trading? If yes, what should be the lock-in period post which, spectrum holder would become eligible to lease it to another access service provider?

(g) Whether there is a need for an approval from, or intimation to DoT before the proposed leasing of spectrum? If yes, whether prior approval/ prior intimation requirement be different for long-term and short-term spectrum leasing? What should be the timelines for approval from, or intimation to DoT in each case?

(h) Whether the spectrum held by an access service provider on short-term, or long-term lease be included to calculate compliance to spectrum caps?

(i) Considering that surrender of spectrum has been permitted in the country, what provisions need to be created in the guidelines for leasing of spectrum between access service providers so that any possible misuse by the licensees could be avoided?

(j) What other terms and conditions need to be prescribed in respect of spectrum leasing between access service providers?

Response:

For Satcom services spectrum is a shared resource, and hence spectrum leasing should not be allowed for Satcom services.

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