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**Subject:** Consultation on *Methodology of applying Spectrum Usage Charges (SUC) under the weighted average method of SUC assessment, in cases of Spectrum Sharing*

**Ref:** Consultation Paper No: 4 of 2020, dated 22 April, 2020

Dear Sir,

This is with reference to the consultation paper on '*Methodology of applying Spectrum Usage Charges (SUC) under the weighted average method of SUC assessment, in cases of Spectrum Sharing*'.

Please find attached GSMA's comments on this consultation as **Annexure-1** to this letter. We hope that our response will merit your kind consideration.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Manoj Kr Misra', written over a horizontal line.

(Manoj Kr Misra)  
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Enclosed: As above (*Annexure-1, total number of pages in annexure 5*).



## Methodology of applying Spectrum Usage Charges (SUC) under the weighted average method of SUC assessment, in cases of Spectrum Sharing

### Annexure -1

The GSMA<sup>1</sup> welcomes the Authority's decision to open for public comments for the SUC charging practice in the event of Spectrum Sharing. We also would like to thank the Authority for coming up with a comprehensive paper, with examples, that explores the aspects of the topic and gives the right context for all interested stakeholders to respond. We also welcome the Authority's acknowledgement of the complexity in the matter through the explanations expressed in clauses 2.14 and 2.19 of the Consultation Paper.

We note that due to different administrative/auction awards and rules, the regulations have led to multiple SUC slabs rates as a percentage of the AGR, leading to calculation and interpretation complexity. This complexity is despite when all spectrum ranges are already considered in the SUC calculation and paid by an Operator as Licensee.

It is important to mention that the Covid-19 crisis has highlighted the role of the telecom industry, although financially stressed, is enabling communication for governance in an all-inclusive and widespread manner; bringing people and businesses closer in times of social distancing and lockdowns. Spectrum Sharing is a tool that would make situation in this unprecedented circumstance easier.

Sharing arrangements allow mobile operators to jointly use spectrum (as well as infrastructure - masts, buildings and antennas), thus avoiding unnecessary duplications and improving quality of service. For example, it can also provide additional capacity in congested areas where space for sites and towers is limited. This practice can also facilitate expanded coverage in previously underserved areas by reducing both CAPEX and OPEX costs (generally higher in more remote areas) for operators.

Spectrum sharing is a great tool for TSPs to respond to the market demands, optimize their networks further to allow an enabling and quality communications infrastructure. Absence of opportunity to share their spectrum would impede operators' ability to address, respond and be prepared for similar circumstances to the ones that arose in the past or to the ones that they anticipate to come up in the future. A great spectrum mix attuned to their respective radios allows for agile spectrum planning decisions, quality coverage and good broadband capacities.

To satisfy the Spectrum sharing aims, the Government should have a regulatory framework that allows for voluntary, need based and barrier free sharing amongst mobile operators. As the number of small cell sites increase as a part of evolving deployments of 5G, governments must consider exemptions for small cell installations, reduce antenna height regulations in

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<sup>1</sup> The GSMA represents the interests of mobile operators worldwide, uniting more than 750 operators with almost 400 companies in the broader mobile ecosystem, including handset and device makers, software companies, equipment providers and internet companies, as well as organisations in adjacent industry sectors. <https://www.gsma.com/aboutus/>



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rural areas in order to maximise coverage, allow colocations or certain site upgrades, as well as establish 'one-stop shopping' licensing procedures and even implicit approval.

Sharing aims to gain spectral efficiency that allows TSPs to meet capacity challenges as first priority. The GSMA advocates, following international best practice, that sharing shall be voluntary and agreed between Operators. Consequently, it must not be taken as a profit maximisation exercise, rather one that allows timely and optimised use of resources to meet on ground demands. **Hence, any spectrum sharing activity should be delinked from the revenue of TSPs. To make Sharing a common practice, it should be incentivised.**

The GSMA understands the complexity of the topic and aims to simplify the best practices suitable for this Consultation Paper, including further comments, as responses of the specific questions raised by the Authority, below.



**Methodology of applying Spectrum Usage Charges (SUC) under the weighted average method of SUC assessment, in cases of Spectrum Sharing**

**Q1. Do you agree that as per the existing Spectrum-Sharing Guidelines dated 24th September 2015, post sharing of spectrum, increment of 0.5% on SUC rate should apply on the spectrum holding in specific band in which sharing is taking place and not on the entire spectrum holding (all bands) of the TSPs. Please justify your answer.**

**AND**

**Q2. Do you think that increment in SUC rate is a deterrent for TSPs in entering into spectrum-sharing arrangements? Further, do you also think that in order to facilitate the spectrum sharing, there should not be any increment in SUC rate post sharing of spectrum? Please justify your answer.**

**GSMA Comments:** Reiterating and complementing our comments from the introduction, we would like to submit the GSMA's position as international best practice, in order to **incentivise Sharing as a wider reality, considering no payment is made to the Government by Operators entering into an agreement:**

- 1) The spectrum range under possible Sharing agreement has been awarded to a specific TSP and has related SUC already under payment by the Operator. Therefore, **there should be no additional charges for spectrum sharing** i.e. if SUC is already paid for the respective spectrum holdings, then in the event of spectrum sharing there should be no additional charges to be borne. The related amount to the spectrum has been, and is still paid to the Government. **There is no specific or new revenue related to the Sharing range.**
- 2) Sharing agreements aim to gain spectral efficiency that allows TSPs to meet capacity challenges as first priority and needs incentives. High fees are the first obstacles for a successful Sharing mechanism and would impede Operators to enter into Spectrum sharing agreements.
- 3) Spectrum Sharing has no regulatory impact as the agreements represent an additional layer of benefits such as coverage, capacity, quality and speed, for users - does not substitute or change any Spectrum duties from the primary licensee. **No additional or incremental payment should be required.**
- 4) Sharing is only voluntary and agreed only between Operators, including timing, payment terms and coverage, with acknowledgment of the Authorities relevant to the contract.
- 5) This leads into the understanding that not even administrative costs arise, as agreements are solely done by Operators and filed with the Authorities.



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As an example, Brazil was the first Latin American country to allow and encourage Sharing agreements. Brazil has similar telecom landscape in terms of several license areas as in India. The government encourages and incentivises spectrum sharing for various purposes including stadiums, concerts etc. that were even used for and during the World Cup.

The country has now more than **six** ongoing contracts amongst all Operators in 700 MHz, 850 MHz, 900 MHz, 1,800 MHz, 2,100 MHz and 2,600 MHz bands. This has led into a coverage of almost 97% of the population with 4G and the first rural voluntary sharing solution.

The concept is called PPDUR with a formula that takes into consideration – **time, coverage and shared spectrum** on **pro rata basis**. The formula simulator is online: [https://sistemas.anatel.gov.br/apoio\\_sitarweb/SPPDUR/telaz.asp?SISQSmodulo=21730](https://sistemas.anatel.gov.br/apoio_sitarweb/SPPDUR/telaz.asp?SISQSmodulo=21730)

We also agree with the assertion that there are deterrents to share Spectrum and therefore, it must be incentivised.

As referred in clauses 2.20 & 2.21 of the Consultation paper, Spectrum Sharing is vital in mitigating coverage and congestion issues from network perspective. It also enables in cost and resource optimisation to help bring more affordability to the customer.

The basic tenet given for spectrum sharing is spectral efficiency. However, that has been curtailed and disincentivized due to ANY incremental charging, but specially via the proposal for considering the entire license service area, full assignments and range, instead of the agreed area, MHz and the non-primary licensee added MHz only.

Without the methods above applied in order of most common and successful international cases, sharing agreements would not financially sustainable. Further, as already stated there is no specific revenue related to the Sharing range and high fees are the first obstacles to a successful Sharing mechanism.

In fact, if operators do enter into a spectrum Sharing agreement, it needs to be looked with the good intent perspective and Authority should incentivise such forward looking measures that bring quality and affordability to the customer, considering no fees for this modality of spectrum usage.

**Q3. What other changes are required in the Spectrum-Sharing Guidelines to facilitate spectrum sharing? Please provide detailed explanation and justification for your suggestions.**

**GSMA Comments:** In order to allow Spectrum Sharing in its full potential, the GSMA suggests some updates to the Spectrum-Sharing Guidelines:



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- 1) As already mentioned above, sharing shall be voluntary and agreed solely amongst Operators with acknowledgment of the Authorities relevant to the contract. Therefore, mobile operators should not be prohibited from voluntarily sharing their spectrum to support faster services, improve coverage and drive innovation.
- 2) Regulators need to help incentivise incumbents in attractive bands to share and some measures would need to be added to the Guidelines.
- 3) Operators favour a simple sharing framework that is investment-friendly and supports reliable, high quality mobile services. This includes flexible terms amongst Operators covered by certain agreement.
- 4) The shared spectrum range should be only between two full Operators and should not include MVNOs. That does not require that both Operators hold the same spectrum bands. E.g an Operator may share its 800 MHz holding with an Operator without 800 MHz in its portfolio, considering the same has other holdings.
- 5) Sharing agreements are no longer seen only between two companies, but also amongst more Operators, especially for less financially attractive areas. This should be considered for several items updates.
- 6) There should not be artificial limit on spectrum sharing by restricting to holdings of spectrum in the same band (i.e. intra band sharing). Inter band spectrum sharing should be permitted.
- 7) Sharing of Access spectrum also requires corresponding increase in backhaul requirements. The microwave assigned to the operators shall also be allowed to be shared at no extra cost
- 8) There may not be limit on minimum or maximum time of the sharing agreement validity. This should be agreed amongst Operators and filed as per contract. Such change gives flexibility and encourages innovation.
- 9) Legacy Sharing agreements should have the choice to adapt to the new Guidelines with incentives or to maintain as is. This will be conducive to the regulations and policies that are adaptive and attuned to the newer and faster technology-changing environment.

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