



भारतीय दूरसंचार विनियामक प्राधिकरण
Telecom Regulatory Authority of India

Recommendations

on

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

(Response to the back reference dated 27th January 2023 received from Department
of Telecommunications on TRAI's recommendations dated 17th August 2020)

New Delhi, India

2nd May 2023

Mahanagar Doorsanchar Bhawan, J.L.N. Marg, New Delhi- 110002

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CHAPTER-I: INTRODUCTION

A. DoT's Reference dated 15.01.2020

1. The Department of Telecommunications (DoT) through its reference letter No. 1000\01\2020-WR dated 15.01.2020 to TRAI, informed, *inter alia*, that the DoT's Guidelines for Sharing of Access Spectrum by Access Service Providers dated 24.09.2015 provide that the Spectrum Usage Charge (SUC) rate of each of the licensees post sharing increases by 0.5% of Adjusted Gross Revenue (AGR). DoT also informed that it has received representations requesting that the incremental SUC rate of 0.5% post sharing should be applied only to the particular spectrum band which has been allowed to be shared between two licensees, and not on the entire spectrum held by the licensees; since sharing is permitted in a particular band. In this background, DoT requested TRAI (hereinafter also referred to as "the Authority") to furnish its recommendations on (i) whether the incremental 0.5% in SUC rate in cases of sharing of spectrum should be applied only on the specific band in which sharing is taking place; or on the overall Weighted Average Rate of SUC, which has been derived from all bands and (ii) any other recommendations deemed fit for the purpose, under section 11(1) of the TRAI Act, 1997, as amended by TRAI Amendment Act, 2000.
2. The Authority vide its letter dated 05.03.2020 sought additional information from DoT. In response, DoT vide its email dated 18.03.2020 provided additional information.

B. TRAI's Recommendations dated 17.08.2020

3. After following a comprehensive consultation process with the stakeholders, the Authority sent the Recommendations on Methodology of applying Spectrum Usage Charges (SUC) under the weighted average method of SUC assessment, in cases of Spectrum Sharing' to DoT on 17.08.2020.

C. DoT's back reference dated 27.01.2023

4. DoT, through its back reference letter No. 1000/01/2020-WR dated 27.01.2023 (received in TRAI on 07.02.2023) on the subject- 'TRAI's Recommendations on "Methodology of Applying Spectrum Usage Charges (SUC) under the Weighted Average Method of SUC assessment, in cases of Spectrum Sharing' dated 17.08.2020' (copy placed as **Annexure**), has informed TRAI as below:

"The recommendation on "Methodology of applying Spectrum Usage Charges (SUC) under the weighted average method of SUC assessment, in cases of Spectrum Sharing" was submitted by TRAI on 17.08.2020. The recommendations have been examined by DoT. The recommendation No. 3.1 related to increment of 0.5% of SUC rate requires reconsideration. Accordingly, the recommendation No. 3.1 is being referred back to TRAI under Section 11 of TRAI act 1997 with a request to provide its considered view at the earliest."

5. Chapter-II contains TRAI's response to the back reference.

CHAPTER-II: TRAI'S RESPONSE TO THE BACK REFERENCE

A. Recommendation No. 3.1 of the TRAI's Recommendations dated 17.08.2020

"3.1 The Authority clarifies that as per the existing spectrum-sharing guidelines, an 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 Licensee."

B. Views of DoT in respect of the aforesaid Recommendation No. 3.1

"The Union Cabinet while approving the "Guidelines on spectrum sharing" considered the following points given in the Cabinet Note dt. 10.08.2015 which are reproduced hereunder:

(a) Para-3.2.3: "For the purpose of charging Spectrum Usage Charges (SUC), the licensor shall consider that the licensees are sharing their entire spectrum holding in the particular band in the entire LSA."

(b) Para-3.2.12: "Spectrum Usage Charges (SUC) rate of each of the licensees post sharing shall increase by 0.5% of Adjusted Gross Revenue (AGR). It is submitted that this is a revision of earlier decision of the Cabinet of November 2012 wherein it was decided that both service providers would have to pay SUC at slab rate applicable on the entire combined spectrum holding which in most cases will lead to higher SUC rate than the one proposed now. In the recent auctions, conducted in 2014 and 2015, the slab rate for levying SUC has been replaced by the flat rate for the spectrum acquired through these auctions and weighted average in case of holding spectrum acquired through these auctions and administratively allotted spectrum."

(d) Para-9.1.12: "SUC rate of each of the licensees post-sharing shall increase by 0.5% of AGR as mentioned in para-3.2.12 of this Note."

Based on the above proposal approved by Union Cabinet, sharing guidelines dated 24.09.2015 were issued by the Department. An illustration explaining the rationale with respect to SUC in case of spectrum sharing is provided in Annexure.

Further, it is intimated that as part of Telecom Reforms 2021, Government decided that "Spectrum Sharing shall not attract any increase in rate of Spectrum Usage Charge (SUC). w.e.f. 01.10.2021".

3. *Reference:*

In view of the above, TRAI is requested to re-consider the above recommendation."

C. TRAI's response to the back-reference

1. On 24.09.2015, DoT notified Guidelines for Sharing of Access Spectrum by Access Service Providers. Clause 12 and 13 of the said Guidelines provided as below:

"(12) For the purpose of charging Spectrum Usage Charges (SUC), it shall be considered that the licensees are sharing their entire spectrum holding in the particular band in the entire LSA.

(13) Spectrum Usage Charge (SUC) rate of each of the licensees post-sharing shall increase by 0.5% of Adjusted Gross Revenue (AGR)."

2. Through the Reference dated 15.01.2020, DoT mentioned that it has received representations requesting that the incremental SUC rate of 0.5% should be applied only to the particular spectrum band which has been allowed to be shared between two licensees, and not on the entire spectrum held by the licensees as sharing is permitted in a particular band. DoT also forwarded copies of the representations of an access service provider, and requested TRAI to furnish its recommendations on (i) whether the incremental 0.5% in SUC rate in

cases of sharing of spectrum should be applied only on the specific band in which sharing is taking place; or to the overall Weighted Average Rate of SUC, which has been derived from all bands and (ii) any other recommendations deemed fit for the purpose.

3. Thereafter, TRAI, through its letter dated 05.03.2020, requested DoT to provide certain additional information, including the weighted average SUC rate applied post sharing along with sample calculations of weighted average SUC rate applied post-sharing in a few cases.
4. DoT, through its email dated 18.03.2020, provided the information sought by TRAI, which included a sample calculation sheet on the weighted average SUC rate applied post-sharing; wherein DoT provided two scenarios. In the first scenario, SUC rate was incremented by 0.5% in a particular band while computing weighted average SUC rate. In the second scenario, the overall weighted average SUC pre-sharing arrangement was incremented by 0.5%. It is apparent that there was no clarity within DoT in respect of the implementation of the clause (13) of the Spectrum Sharing Guidelines dated 24.09.2015 on how the SUC rate should be incremented in case of spectrum sharing.
5. In this regard, after following a comprehensive consultation process with stakeholders, TRAI furnished the Recommendations on 'Methodology of applying Spectrum Usage Charges (SUC) under the weighted average method of SUC assessment, in cases of Spectrum Sharing' to DoT on 17.08.2020 and recommended, *inter-alia*, as below:

"3.1 The Authority clarifies that as per the existing spectrum-sharing guidelines, an 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 Licensee."

6. Now, through the back reference, DoT has requested TRAI to re-consider the Recommendation No. 3.1 of the TRAI's Recommendations dated 17.08.2020 keeping in view (i) a decision taken by the union cabinet in the year 2015, and (ii) a decision taken by the Government in the year 2021 as part of Telecom Reform 2021.
7. In respect of the decision taken by the Union Cabinet in the year 2015, DoT has stated, *inter-alia*, as below:

"The Union Cabinet while approving the "Guidelines on spectrum sharing" considered the following points given in the Cabinet Note dt. 10.08.2015 which are reproduced hereunder:

(a) Para-3.2.3: "For the purpose of charging Spectrum Usage Charges (SUC), the licensor shall consider that the licensees are sharing their entire spectrum holding in the particular band in the entire LSA."

(b) Para-3.2.12: "Spectrum Usage Charges (SUC) rate of each of the licensees post sharing shall increase by 0.5% of Adjusted Gross Revenue (AGR). It is submitted that this is a revision of earlier decision of the Cabinet of November 2012 wherein it was decided that both service providers would have to pay SUC at slab rate applicable on the entire combined spectrum holding which in most cases will lead to higher SUC rate than the one proposed now. In the recent auctions, conducted in 2014 and 2015, the slab rate for levying SUC has been replaced by the flat rate for the spectrum acquired through these auctions and weighted average in case of holding spectrum acquired through these auctions and administratively allotted spectrum."

(e) Para-9.1.12: "SUC rate of each of the licensees post-sharing shall increase by 0.5% of AGR as mentioned in para-3.2.12 of this Note."

Based on the above proposal approved by Union Cabinet, sharing guidelines dated 24.09.2015 were issued by the Department. An

illustration explaining the rationale with respect to SUC in case of spectrum sharing is provided in Annexure.”

8. The extract of the Cabinet Note dated 10.08.2015, as reproduced by DoT in its back-reference, has been noted.
9. Further, DoT has mentioned that as part of Telecom Reforms 2021, Government decided that *“Spectrum Sharing shall not attract any increase in rate of Spectrum Usage Charge (SUC). w.e.f. 01.10.2021”*. The said information has been noted.
10. As already mentioned, DoT, through its reference dated 15.01.2020, had requested TRAI to provide its recommendations on whether the incremental 0.5% in SUC rate in cases of sharing of spectrum should be applied only on the specific band in which sharing is taking place; or to the overall Weighted Average Rate of SUC, which has been derived from all bands. In this regard, TRAI issued a Consultation Paper on the subject on 22.04.2020. After following a comprehensive consultation process with stakeholders, TRAI furnished the Recommendations on ‘Methodology of applying Spectrum Usage Charges (SUC) under the weighted average method of SUC assessment, in cases of Spectrum Sharing’ to DoT on 17.08.2020.
11. It is noteworthy that TRAI in its recommendations dated 17.08.2020 clearly mentioned the reasons as to why an 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 Licensee. The relevant paras of the TRAI’s recommendations dated 17.08.2020 are reproduced below:

"2.6 As already discussed, Spectrum-sharing arrangement results in an enhanced efficiency resulting into increased capacity. Since the guidelines permit intra-band spectrum sharing only, capacity would be enhanced only in the spectrum bands being shared. Increment in

SUC by 0.5% of the overall weighted average SUC would be justified only in a situation wherein a TSP is sharing spectrum in all the spectrum bands held by it. Therefore, the Authority is of the view that as per the existing spectrum sharing guidelines, which were based on the Recommendations of the Authority, the incremental SUC should apply to the spectrum band which is being shared and not on the overall weighted average SUC, which includes all the spectrum bands held by the TSP.

2.7 The Authority concurs with the views of the stakeholders that in case incremental SUC is made applicable on overall weighted average, the cost of spectrum sharing could surpass the benefits achieved by the TSPs. Moreover, there is no rationale in incrementing overall weighted average SUC, post sharing of spectrum in specific band(s)."

- 12. The Authority has considered the back reference dated 27.01.2023 of the Government. In the absence of any new facts and considering the above discussion, the Authority has nothing to add further.**



Government of India
Ministry of Communications
Department of Telecommunications
Sanchar Bhavan, Ashoka Road, New Delhi-110001
(Wireless Planning Finance Division – WR Section)

No.1000/01/2020-WR

dated 27.01.2023

To
 Secretary,
 Telecom Regulatory Authority of India,
 Mahanagar Doorsanchar Bhawan,
 Jawaharlal Nehru Marg (Old Minto Road),
 NEW DELHI-110002



Sub: TRAI's Recommendations on "Methodology of Applying Spectrum Usage Charges (SUC) under the Weighted Average Method of SUC assessment, in cases of Spectrum Sharing" dated 17.08.2020 – Reg.,

The recommendation on "Methodology of Applying Spectrum Usage Charges (SUC) under the Weighted Average Method of SUC assessment, in cases of Spectrum Sharing" was submitted by TRAI on 17.08.2020. The recommendations have been examined by DoT. The recommendation No. 3.1 related to increment of 0.5% of SUC rate requires reconsideration. Accordingly, the recommendation no. 3.1 is being referred back to TRAI under Section 11 of TRAI act 1997 with a request to provide its considered view at the earliest.

The details of TRAI recommendation and Government view on the same are provided below:

1. TRAI recommendations:

3.1 The Authority clarifies that as per the existing spectrum-sharing guidelines, an 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 Licensee (Para-2.8).

2. Government View:

The Union Cabinet while approving the "Guidelines on spectrum sharing" considered the following points given in the Cabinet Note dt.10.08.2015 which are reproduced hereunder:

- (a) Para-3.2.3: "For the purpose of charging Spectrum Usage Charges (SUC), the licensor shall consider that the licensees are sharing their entire spectrum holding in the particular band in the entire LSA"
- (b) Para-3.2.12: "Spectrum Usage Charges (SUC) rate of each of the licensees post-sharing shall increase by 0.5% of Adjusted Gross Revenue (AGR). It is submitted that this is a revision of earlier decision of the Cabinet of November 2012 wherein it

was decided that both service providers would have to pay SUC at slab rate applicable on the entire combined spectrum holding which in most cases will lead to higher SUC rate than the one proposed now. In the recent auctions, conducted in 2014 and 2015, the slab rate for levying SUC has been replaced by the flat rate for the spectrum acquired through these auctions and weighted average in case of holding spectrum acquired through these auctions and administratively allotted spectrum".

(d) Para-9.1.12: "SUC rate of each of the licensees post-sharing shall increase by 0.5% of AGR as mentioned in para-3.2.12 of this Note".

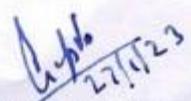
Based on the above proposal approved by Union Cabinet, Sharing guidelines dated 24.09.2015 were issued by the Department. An illustration explaining the rationale with respect to SUC in case of spectrum sharing is provided in Annexure.

Further, it is intimated that as part of Telecom Reforms 2021, Government decided that "*Spectrum Sharing shall not attract any increase in rate of Spectrum Usage Charge (SUC), w.e.f. 01.10.2021*".

3.Reference:

In view of the above, TRAI is requested to re-consider the above recommendation.

This issues with the approval of Competent Authority.


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Annexure

Let's assume the Spectrum holdings of operator-X & Y along with the SUC rates are as below:

Operator-X:

Sl. No.	Spectrum Band	Quantity	SUC Rate	Remarks
1	800 MHz	10 MHz	5%	Flat rate 5% as per 2015 auction
2	1800 MHz	6.4 MHz	5%	Slab rate as per 2012 auction
3	2300 MHz	20 MHz	1%	Flat rate 1% as per 2010 auction

Operator-Y:

Sl. No.	Spectrum Band	Quantity	SUC Rate	Remarks
1	800 MHz	5 MHz	5%	Flat rate 5% as per 2015 auction
2	1800 MHz	6.4 MHz	5%	Slab rate as per 2012 auction
3	2300 MHz	20 MHz	1%	Flat rate 1% as per 2010 auction

If operator-X is sharing 6.4 MHz spectrum in 1800 MHz band with operator-Y having 6.4 MHz spectrum in 1800 MHz band, thereby the total spectrum used by both operators will be 12.8 MHz. Both the operators will be generating higher revenue by utilizing the increased spectrum capacity (i.e. 6.4 MHz + 6.4 MHz = 12.8 MHz).

Rate of SUC for Spectrum acquired in NOV-2012 Rate as per NIA-2012:

Charges for GSM operators (Applicable for 1800 MHz band)	
Spectrum Slab	% of AGR
Upto 2 x 4.4 MHz	3
Upto 2 x 6.2 MHz	4
Upto 2 x 8.2 MHz	5
Upto 2 x 10.2 MHz	6
Upto 2 x 12.2 MHz	7
Upto 2 x 15.2 MHz	8