Draft for Comments of the Stakeholders

Telecom Regulatory Authority of India

सत्यमेव जयते

The Draft Telecommunication Tariff (Sixtieth Amendment) Order, 2015

New Delhi, 27.02.2015

Mahanagar Door Sanchar Bhawan, Jawahar Lal Nehru Marg, New Delhi – 110002

Stakeholders are requested to furnish their written comments on the Draft Telecommunication Tariff (Sixtieth Amendment) Order, 2015 by 13.03.2015 to the Advisor (F&EA)-I, TRAI, New Delhi. The comments may also be sent by e-mail to manishsinha@trai.gov.in. For any clarification/ information, Shri Manish Sinha, Advisor (F&EA)-I may be contacted at Tel. No. +91-11-23230752, Fax: +91-11-23236650.

DRAFT

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TELECOM REGULATORY AUTHORITY OF INDIA

THE TELECOMMUNICATION TARIFF (SIXTIETH AMENDMENT) ORDER, 2015

No. ….. of 2015

NOTIFICATION

New Delhi, the …………., 2015

No. 301-16/2014-F&EA — In exercise of the powers conferred upon it under sub-section (2) of section 11, read with sub-clause (i) of clause (b) of sub-section (1) of the said section, of the Telecom Regulatory Authority of India Act, 1997(24 of 1997), the Telecom Regulatory Authority of India hereby makes the following Order further to amend the Telecommunication Tariff Order, 1999, namely:-

1. (1) This Order may be called the Telecommunication Tariff (Sixtieth Amendment) Order, 2015 (…. of 2015).

(2) This Order shall come into force on …..

2. In the Schedule II to the Telecommunication Tariff Order, 1999, under item (14), for sub-item (14.a) and entries thereto, the following sub-items and entries relating thereto shall be substituted, namely:--

Schedule-II

Cellular Mobile Telecom Services (CMTS)

ITEM	TARIFF
"(14.a) National roaming	
(14.a.i) Fixed charge for national roaming	Nil provided that Special Tariff Voucher and Combo Voucher shall be permitted and in case of RTP-FR, the fixed charge shall be under forbearance.
(14.a.ii) Charge for outgoing local voice call while on national roaming	Ceiling of Re. 0.65 per minute
(14.a.iii) Charge for outgoing long distance (inter-circle) voice call while on national roaming	Ceiling of Re. 1.00 per minute
(14.a.iv) Charge for incoming voice call while on national roaming	Ceiling of Re. 0.45 per minute
(14.a.v) Charge for outgoing local Short Message Services (SMS) while on national roaming	Ceiling of Re. 0.20 per SMS
(14.a.vi) Charge for outgoing long distance (inter-circle) Short Message Services (SMS) while on national roaming	Ceiling of Rs. 0.25 per SMS
(14.a.vii) Charge for incoming Short Message Services (SMS) while on national roaming	Nil
(14.a.viii) Surcharge while national roaming	Nil
(14.ab) International roaming	Forbearance
(14.ac) Any other item related to roaming but not falling under sub-item (14.a) and (14.ab) above	Forbearance.".

(Manish Sinha)

Advisor (F&EA)

Note.1. – The Telecommunication Tariff Order, 1999 was published in the Gazette of India, Extraordinary, Part III, Section 4 under notification No.99/3 dated 09.03.1999, and subsequently amended as given below:-

Amendment No.	**Notification No. and Date**
1st	301-4/99-TRAI (Econ) dated 30.3.1999
2nd	301-4/99-TRAI(Econ) dated 31.5.1999
3rd	301-4/99-TRAI(Econ) dated 31.5.1999
4th	301-4/99-TRAI(Econ) dated 28.7.1999
5th	301-4/99-TRAI(Econ) dated 17.9.1999
6th	301-4/99-TRAI(Econ) dated 30.9.1999
7th	301-8/2000-TRAI(Econ) dated 30.3.2000
8th	301-8/2000-TRAI(Econ) dated 31.7.2000
9th	301-8/2000-TRAI(Econ) dated 28.8.2000
10th	306-1/99-TRAI(Econ) dated 9.11.2000
11th	310-1(5)/TRAI-2000 dated 25.1.2001
12th	301-9/2000-TRAI(Econ) dated 25.1.2001
13th	303-4/TRAI-2001 dated 1.5.2001
14th	306-2/TRAI-2001 dated 24.5.2001
15th	310-1(5)/TRAI-2000 dated 20.7.2001
16th	310-5(17)/2001-TRAI(Econ) dated 14.8.2001
17th	301/2/2002-TRAI(Econ) dated 22.1.2002
18th	303/3/2002-TRAI(Econ) dated 30.1.2002
19th	303/3/2002-TRAI(Econ) dated 28.2.2002
20th	312-7/2001-TRAI(Econ) 14.3.2002
21st	301-6/2002-TRAI(Econ) dated 13.6.2002
22nd	312-5/2002-TRAI(Eco) dated 4.7.2002
23rd	303/8/2002-TRAI(Econ) dated 6.9.2002
24th	306-2/2003-Econ dated 24.1.2003
25th	306-2/2003-Econ dated 12.3.2003
26th	306-2/2003-Econ dated 27.3.2003

27th	303/6/2003-TRAI(Econ) dated 25.4.2003
28th	301-51/2003-Econ dated 5.11.2003
29th	301-56/2003-Econ dated 3.12.2003
30th	301-4/2004(Econ) dated 16.1.2004
31st	301-2/2004-Eco dated 7.7.2004
32nd	301-37/2004-Eco dated 7.10.2004
33rd	301-31/2004-Eco dated 8.12.2004
34th	310-3(1)/2003-Eco dated 11.3.2005
35th	310-3(1)/2003-Eco dated 31.3.2005
36th	312-7/2003-Eco dated 21.4.2005
37th	312-7/2003-Eco dated 2.5.2005
38th	312-7/2003-Eco dated 2.6.2005
39th	310-3(1)/2003-Eco dated 8.9.2005
40th	310-3(1)/2003-Eco dated 16.9.2005
41st	310-3(1)/2003-Eco dated 29.11.2005
42nd	301-34/2005-Eco dated 7.3.2006
43rd	301-2/2006-Eco dated 21.3.2006
44th	301-34/2006-Eco dated 24.1.2007
45th	301-18/2007-Eco dated 5.6.2007
46th	301-36/2007-Eco dated 24.1.2008
47th	301-14/2008-Eco dated 17.3.2008
48th	301-31/2007-Eco dated 1.9.2008
49th	301-25/2009-ER dated 20.11.2009
50th	301-24/2012-ER dated 19.4.2012
51st	301-26/2011-ER dated 19.4.2012
52nd	301-41/2012-F&EA dated 19.09.2012
53rd	301-39/2012-F&EA dated 1.10.2012

54th	301-59/2012-F&EA dated 05.11.2012
55th	301-10/2012-F&EA dated 17.06.2013
56th	301-26/2012-ER dated 26.11.2013
57th	312-2/2013-F&EA dated 14.07.2014
58th	312-2/2013-F&EA dated 01.08.2014
59th	310-5(2)/2013-F&EA dated 21.11.2014

Note.2. – The Explanatory Memorandum explains the objects and reasons for the Telecommunication Tariff (Sixtieth Amendment) Order, 2015.

Explanatory Memorandum

A. Introduction and background

1. Section 11(2) of the Telecom Regulatory Authority of India Act, 1997 empowers the Telecom Regulatory Authority of India (hereinafter referred to as the Authority) to notify rates for various telecommunication services. In exercise of these powers, the Authority has been notifying tariffs for telecommunication services including national roaming services.

2. The tariffs for national roaming services have been regulated in the form of ceiling tariffs prescribed by the Authority under clause 14(a) of Schedule II of the Telecommunication Tariff Order 1999 (hereinafter referred to as the TTO, 1999) as amended from time to time. The most recent amendments in the tariff regime for national roaming services were carried out through the Telecommunication Tariff (Fifty Fifth Amendment) Order, 2013 dated 17.06.2013 (hereinafter referred to as the TTO (55th Amendment), 2013).

3. While formulating the revised tariff regime for national roaming services through the TTO (55th Amendment), 2013, the Authority had indicated that the new tariff regime shall be subject to review by the Authority after a year. Further, one of the objectives of National Telecom Policy (NTP) 2012 is to work towards One Nation - Free Roaming. The present review exercise has been undertaken in this background.

4. TRAI's Consultation Paper No. 2/2013 on Review of Tariff for National Roaming dated 25.02.2013 may be referred to for details regarding the working of the national roaming services, call routing and underlying costs.

B. Regulatory regime for tariffs for national roaming services in India

5. The TTO, 1999 notified by the Authority on 09.03.1999 did not prescribe any tariffs for national roaming services. These remained under forbearance along with tariffs for supplementary telecommunication services and other Value Added Services (VAS). On observing that the charges for national roaming services were substantially high, the Authority, through the TTO (18th Amendment), 2002 dated 30.01.2002, brought the

tariffs for national roaming services under regulation by prescribed ceiling tariffs for national roaming services. Since then, the ceiling tariffs for national roaming services have been revised by the Authority on two occasions, first through the TTO (44th Amendment), 2007 dated 24.01.2007 and later through the TTO (55th Amendment), 2013 dated 17.06.2013.

6. The tariffs for national roaming services were last reviewed in 2013. The review was carried out in view of (i) the decline in per unit incremental cost for national roaming and (ii) the objective of NTP 2012 to work towards One Nation - Free Roaming. Through a Consultation Paper dated 25.02.2013, the Authority sought comments from stakeholders on various aspects of the tariff regime for national roaming services including the appropriateness of free national roaming i.e. a tariff regime in which (i) incoming calls while on national roaming are free; and (ii) roam tariff is equal to home tariff for outgoing voice calls and SMS[1] (Home Price Rule or HPR).

7. After analyzing the comments received from the stakeholders, the Authority came to the conclusion that fully-free national roaming across all tariff schemes was not practicable at that juncture because of the following reasons.

   (i) A tariff regime in which <u>incoming</u> voice calls while on national roaming are free could create serious distortions in the telecom market. Particularly, it would lead to an arbitrage opportunity[2] resulting in SIM movement behaviour across the licensed service areas (LSA). In such a scenario, the TSPs would not be able to recover the costs such as carriage charge involved in incoming calls while on national roaming.

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[1] SMS is an acronym of Short Message Service.

[2] For example, a migrant worker resident in a particular LSA, who makes long-distance (STD) calls to his family residing in another LSA frequently, would purchase a SIM card from the LSA where he works and give it to his family residing in another LSA. In this eventuality, the calling party (i.e. the migrant worker) would save money by paying for a local call instead of an STD call and the called party (i.e. the family of the migrant worker) would <u>not</u> have to pay to receive the call as incoming calls while on national roaming would have become free of charge. As a result, many subscribers would be incentivized to move SIMs across LSAs in order to gain from such an arbitrage opportunity and the TSPs would lose revenue because they would not be able to recover the carriage charge and the incremental cost for roaming.

(ii) A tariff regime with 'home equal to roam' for outgoing voice calls and SMS could lead to cross-subsidization of roaming subscribers at the expense of non-roaming subscribers. To recover revenues lost as a result of this regime, telecom service providers (TSPs) would need to increase home tariffs. This would result in an increase in the home tariff for all subscribers.

8. Through the TTO (55th Amendment), 2013, the Authority brought about the following changes in the tariff regime for national roaming services.

(i) **Reduced the ceiling tariffs for national roaming services**: The following table shows the revised ceiling tariffs and the percentage reduction in the ceiling tariffs for the national roaming services.

Table-1: Reduction in the ceiling tariffs for national roaming services

Item	Ceiling tariff prior to the TTO (55th Amendment), 2013	Ceiling tariff prescribed through the TTO (55th Amendment), 2013	Reduction in ceiling tariff
Outgoing local voice call	Rs. 1.40/ minute	Re. 1.00/ minute	29%
Outgoing long-distance (inter-circle) voice call	Rs. 2.40/ minute	Rs. 1.50/ minute	38%
Incoming voice call	Rs. 1.75/ minute	Re. 0.75/ minute	57%
Outgoing local SMS	Forbearance	Re. 1.00/ SMS	-
Outgoing long-distance (inter-circle) SMS		Rs. 1.50/ SMS	-

(ii) **Permitted Special Tariff Vouchers (STVs) and Combo Vouchers (CVs) for national roaming** to provide flexibility and convenience to the consumers

(iii) **Mandated the TSPs to offer special roaming tariff plans (RTP and RTP-FR)** in which subscribers can avail of either partially-free national roaming or fully-free national roaming (on payment of certain fixed charges).

9. The manner in which the ceiling tariffs for national roaming services were determined is briefly described below.

(i) **Ceiling tariffs for outgoing voice calls**: Through the TTO (55th Amendment), 2013, the ceiling tariffs for outgoing voice calls while on national roaming were fixed at the level of the then generally prevailing tariffs while on national roaming.

(ii) **Ceiling tariff for incoming voice calls**: In the Calling-Party-Pays (CPP) regime, which was put in place in 2003, subscribers are not charged for incoming calls. However, this does not apply to incoming calls received while on national roaming because all incoming calls while on national roaming first reach the home network from where they are forwarded to the visited network through a National Long Distance Operator (NLDO). Through the TTO (55th Amendment), 2013, the ceiling tariff for incoming voice calls while on national roaming was fixed at Re. 0.75 per minute on the basis of the following computation.

Ceiling tariff for incoming voice call per minute while on national roaming = Ceiling carriage charge per minute + Incremental cost per minute for national roaming = (Re. 0.65 +Re. 0.10) = Re. 0.75 * Incremental cost for national roaming was determined as Re. 0.10 per minute on the basis of information received from TSPs

(iii) **Ceiling tariff for outgoing SMS:** Through the TTO (55th Amendment),2013, the ceiling tariffs for outgoing SMS while on national roaming were fixed at the level of the then generally prevailing tariffs for SMS in the home service area (HSA).

C. Impact of implementation of the TTO (55th Amendment), 2013

10. Since the implementation of the revised tariff regime for national roaming, about 1% of total national roamers (i.e. 13.5 lakh out of about 12 crore) have moved to special roaming tariff plans (RTP and RTP-FR). The special packs for roaming (viz. STVs and CVs), which were also permitted in the revised tariff regime, now contribute about 14% of the total revenue from national roaming and 28% of the total voice usage by national outroamers.

11. The following table shows the trend in the usage profile of the national outroamers as reported by the GSM service providers.

Table 2: Traffic per national outroamer per month

Quarter ending	**No. of incoming minutes per outroamer per month**	**No. of outgoing minutes per outroamer per month**	**No. of total minutes per outroamer per month**
	(a)	**(b)**	**(c)=(a)+(b)**
June, 2013	31	44	75
September, 2013	34	45	79
December, 2013	33	43	76
March, 2014	36	45	81
June, 2014	37	44	81
September, 2014	39	44	83

A subscriber is counted as a national outroamer in a month, if he consumes national roaming services even once during the month.

12. As can be seen from the above table, in five quarters after the implementation of the TTO (55th Amendment), 2013, the overall usage per outroamer per month increased from 75 minutes in June, 2013 to 83 minutes in September, 2014. The increase in the traffic was solely because of the increase in incoming usage; the incoming usage per outroamer increased by 26%. This increase in incoming usage occurred mainly because of the reduction in the tariff for incoming calls by 25% from the then generally prevailing tariff (market price) level of Re. 1 per minute to Re. 0.75 per minute (the revised ceiling tariff prescribed by the Authority). Based on the above, the price elasticity of demand[3] for incoming calls while on national roaming can be computed as below.

[3] Price elasticity of demand (PED or E_d) is a measure used in Economics to show the responsiveness, or elasticity, of the quantity demanded of a good or service to a change in its price, with other things being equal or held constant. If a small change in price is accompanied by a large change in quantity demanded, the product is said to be elastic (or responsive to price changes). Conversely, a product is inelastic if a large change in price is accompanied by a small amount of change in quantity demanded.

Price elasticity of demand (E_d) for incoming calls while on national roaming

$$= \frac{\Delta D/D}{\Delta P/P} = \frac{(39-31)/31}{(0.75-1.00)/1.00} = -\frac{26\%}{25\%}$$

$$= -1.05$$

13. On the other hand, since the ceiling tariffs for outgoing calls while on national roaming were fixed at the level of the then prevalent market rates, the outgoing traffic per outroamer per month remained unchanged at 44 minutes.

D. Analysis

14. As per the present regulatory regime in the country, the cellular tariffs in HSA are under forbearance since 2002. On the other hand, the tariffs for national roaming services have been regulated through ceiling tariffs since 2002. It is proposed to continue with tariff regulation of national roaming services even as forbearance continues to be the regulatory stance on the home tariffs. The Authority has computed the following indicators on the basis of the quarterly reports on subscriber, revenue and usage, furnished by the TSPs for the quarter ending September 2014.

Table-3: Average revenue realization per outgoing minute and average revenue realization per outgoing SMS in HSA in the Q.E. September 2014

S. no.	Item	Price
1	Average revenue realization per outgoing minute in HSA	Re. 0.50 per minute
2	Average revenue realization per outgoing SMS in HSA	Re. 0.16 per SMS

15. The average tariff levels for national roaming services are much higher than the average revenue realizations in the HSA. It appears that the ceiling tariffs for voice calls and SMS while on national roaming prescribed through the TTO (55th Amendment), 2013 have not helped in bringing down the tariffs to cost-based levels (with a reasonable mark-up for normal profits). Therefore, there is a need for further lowering of ceiling tariffs for voice calls and SMS while on national roaming. In the review of tariffs for national roaming services conducted in the year 2006-07, the

Authority had prescribed cost-based ceiling tariffs for voice calls while on national roaming. In view of the lack of competition witnessed in the present national roaming services market, the Authority is of the opinion that the best way forward is to prescribe cost-based ceiling tariffs for voice calls while on national roaming.

16. The cost of work-done in carrying voice calls while on national roaming to be recovered from the subscribers can be viewed in the following terms:

(i) Cost for incoming voice call while on national roaming
= Carriage charge *plus* Incremental cost for roaming

(ii) Cost for outgoing local voice call while on national roaming
= Cost of origination *plus* Termination charge *plus* Incremental cost for roaming

(iii) Cost for outgoing STD voice call while on national roaming
= Cost of origination *plus* Carriage charge *plus* Termination charge *plus* Incremental cost for roaming

This was also discussed in TRAI's Consultation Paper No. 2/2013 on Review of Tariff for National Roaming dated 25.02.2013.

17. In the International Calling Card Services (Access Charges) Regulations, 2014, issued by the Authority on 19.08.2104, a costing methodology for calculation of access charge to be paid by calling card service providers to access service providers for calling card services, based broadly on the principle of 'work done' by the access service provider, was utilized. In this exercise, the access cost per outgoing minute was determined and a mark-up was provided on this cost to arrive at an access charge per minute in wireless service of Re. 0.40 per minute. As per the present regulatory regime in the country, the origination charges are under forbearance. The Authority is of the view that, under the circumstances, the access charge derived on the basis of 'work done' is the best available surrogate for the cost of origination, without disturbing the principle of forbearance on origination charges. Therefore, the access charge of Re. 0.40 per minute may be used as proxy for the cost of origination indicated in para 16 above.

18. Recently, the Authority has notified the Telecommunication Interconnection Usage Charges (Eleventh Amendment) Regulations, 2015 dated 23.02.2015 and the Telecommunication Interconnection Usage Charges (Twelfth Amendment) Regulations,

2015 dated 24.02.2015, according to which, the following interconnection charges would become applicable from 01.03.2015.

(i) Termination charge for local and national long distance calls from wireless to wireless = Re. 0.14 per minute

(ii) Carriage charge = Re. 0.35 per minute

19. The Authority, in the review of tariffs for national roaming services in 2013, had computed incremental cost for national roaming as Re. 0.10 per minute. It is expected that this cost would not have undergone any major change in the intervening period.

20. On the basis of above cost components, the cost-based ceiling tariffs for voice calls while on national roaming may be computed as below.

Table-4: Computation of cost-based ceiling tariffs for voice calls while on national roaming

S. no.	Cost component	Incoming voice call (in Rs. per minute)	Outgoing local voice call (in Rs. per minute)	Outgoing STD voice Call (in Rs. per minute)
1	Cost of origination	-	0.40	0.40
2	Carriage charge	0.35	-	0.35
3	Termination charge	-	0.14	0.14
4	Incremental cost for roaming	0.10	0.10	0.10
5	**Total**	**0.45**	**0.64**	**0.99**
6	**Ceiling tariff**	**0.45**	**0.65**	**1.00**

21. Accordingly, the ceiling tariffs for incoming voice call, outgoing local voice call, outgoing STD voice call while on national roaming may be fixed as Re. 0.45 per minute, Re. 0.65 per minute and Re. 1.00 per minute respectively.

22. It would not be possible to compute similar cost-based ceiling tariffs for outgoing SMS while on national roaming since no cost components for carrying outgoing SMS while on national roaming except for the termination charge have been determined by the Authority. In the review of tariffs for national roaming services in 2013, the Authority had observed that the work done for an outgoing SMS while on national roaming is, at

best, only marginally higher than the work done in case of an outgoing SMS from HSA. Since the prevailing average revenue realization per SMS in HSA is about Re. 0.16 per SMS, it appears reasonable to fix ceiling tariffs for SMS while on national roaming as below.

(i) Ceiling tariff for outgoing local SMS while on national roaming
= Re. 0.20 per SMS

(ii) Ceiling tariff for outgoing long-distance (inter-circle) SMS while on national roaming
= Re. 0.25 per SMS

23. In view of the above, the Authority intends to revise ceiling tariffs for voice calls and outgoing SMS while on national roaming as below.

Table-5: Proposed revisions in the ceiling tariffs for national roaming services

Item	Tariff
Charge for outgoing local voice call while on national roaming	Ceiling of Re. 0.65 per minute
Charge for outgoing long distance (inter-circle) voice call while on national roaming	Ceiling of Rs. 1.00 per minute
Charge for incoming voice call while on national roaming	Ceiling of Re. 0.45 per minute
Charge for outgoing local Short Message Services (SMS) while on national roaming	Ceiling of Re. 0.20 per SMS
Charge for outgoing long distance (inter-circle) Short Message Services (SMS) while on national roaming	Ceiling of Re. 0.25 per SMS

24. The remaining items of national roaming services would remain unchanged. The proposed revisions have been incorporated in the Draft Telecommunication Tariff (60^{th} Amendment) Order, 2015.

The stakeholders are requested to furnish their comments on the proposed tariff regime for national roaming services.