Telecom Regulatory Authority of India

New Delhi May 28, 1999

In exercise of the powers conferred upon it under section 36 read with clauses (c) and (d) of subsection (1) of section 11 of the Telecom Regulatory Authority of India Act, 1997 to ensure effective interconnection between different service providers and to regulate arrangements amongst service providers of sharing their revenue derived from providing telecommunication services, the Telecom Regulatory Authority of India hereby makes the following Regulation.

* THE TELECOMMUNICATION INTERCONNECTION (CHARGES AND REVENUE SHARING) REGULATION 1999 (1 of 1999)

SECTION I

Title, Extent and Commencement

- 1. Short title, extent and commencement:
- i. This Regulation shall be called "The Telecommunication Interconnection (Charges and Revenue Sharing) Regulation 1999."
- ii. The Regulation shall cover arrangements among service providers for interconnection charges and revenue sharing, for all Telecommunication Services throughout the territory of India, as also those originating in India and terminating outside India.
- iii. The Regulation shall be deemed to have come into force with effect from May 1, 1999.

SECTION II

Definitions

- 2. In this Regulation, unless the context otherwise requires:
- i. "Act" means the Telecom Regulatory Authority Act of India, 1997.
- ii. "Authority" means the Telecom Regulatory Authority of India.
- iii. "Basic Telecommunication Services" mean services derived from Public Switched Telephone Network (PSTN).
- iv. "Ceiling(s)" mean(s) the upper limit(s) for interconnection charge for telecommunication services as may be specified by the Authority from time to time.
- v. "Domestic Long- Distance Telecommunication Service" or DLD means the telecommunication services required to connect one local area of a public telecommunication network to another within the territorial limits of India so as to allow for transmission of voice and non-voice signals across different geographical areas.

^{*}The Telecommunication Interconnection (Charges and Revenue Sharing) First Amendment Regulation, 1999 (3 of 1999) has been quashed by the High Court *vide* its Civil Writ Petition No. 6543 of 1999 and CW No. 6483 of 1999, dated 17.1.2000.

- vi. "Floor" means the lower limit of interconnection charges for a telecommunication service as may be specified by the Authority from time to time below which such charges may not be offered.
- vii. "Forbearance" denotes that the Authority has not, for the time being, notified any interconnection charge or revenue sharing arrangement for a particular telecommunication service and the service provider is free to fix any charge for such service.
- viii. "Interconnection" means the commercial and technical arrangements under which service providers connect their equipment, networks and services to enable their customers to have access to the customers, services and networks of other services providers.
- xi. "Interconnection Charge" means the charge for interconnection by an interconnection provider to an interconnection seeker.
- x. "Interconnection Provider" means the service provider to whose network an interconnection is sought for providing telecommunication services.
- xi. "Interconnection Seeker" means the service provider who seeks interconnection to the network of the interconnection provider.
- xii. "International Long-Distance Telecommunication Service" means telecommunication services required to connect a local area of a public telecommunication network within India to a local area of a public telecommunication network in another country so as to allow for the transmission of voice and non-voice signals.
- xiii. "International Subscriber Dialing" or ISD means direct interconnection between an end user in India with another end user in another country by means of direct dialing through public networks.
- xiv. "Leased Circuits" mean telecommunication facilities leased to subscribers or service providers to provide for technology transparent transmission capacity between network termination points which the user can control as part of the leased circuit provision and which may also include systems allowing flexible use of leased circuit bandwidth.
- xv. "Non-discrimination in interconnection charge" means that service providers shall not, in the matter of interconnection charges, discriminate between service providers except on the basis of substantial cost-differential, and that too only to the extent justified by such cost differential.
- xvi. "Order" means the Telecommunication Tariff Order 1999.
- xvii. "Originating Network" means the network to which an originator of a telecommunication message is proximately connected to.
- xviii. "Originating/Transit/Terminating Service Provider" means the service provider whose network is used for originating/transit/terminating a telecommunication message.
- xix. "Port Charges" mean charges payable by the interconnection seeker to the interconnection provider for terminating the interconnection links on the network interface of the interconnection provider.
- xx. "Regulation" means The Telecommunication Interconnection (Charges and Revenue Sharing) Regulation 1999.
- xxi. "Reporting Requirement" means the obligation of a service provider to report to the Authority at least 45 working days before implementing any new interconnection charge and revenue sharing arrangement for telecommunication services under this Regulation and any changes thereafter.

xxii. "Set Up Costs Of Interconnection" means the initial cost of any engineering work needed to provide the specific interconnection facilities requested.

xxiii. "Subscriber Trunk Dialing" or STD means direct interconnection between two end users within India by means of direct dialing through public networks.

xxiv. "Terminating Network" means the network to which a receiver of a telecommunication message is proximately connected to.

xxv. "Transit Network" means the network through which telecommunication messages from originating networks or other transit networks are transited and delivered to terminating or other transit networks.

xxvi. "Usage Charge" means the charge by a service provider for carriage/delivery/collection of telecommunication messages in its network.

xxvii. Words and expressions used in this Regulation and not defined but defined in the Act shall have the same meanings respectively assigned to them in the Act.

SECTION III

3. Interconnection Charges

- i. Interconnection charges shall be cost based, unless as may be specified otherwise.
- ii. For determining cost based interconnection charges, the main basis shall be "incremental or additional" costs directly attributable to the provision of interconnection by the interconnection provider.
- iii. No service provider shall discriminate between service providers in the matter of levying of charges for interconnection.

Provided that a different charge may be levied if justified on the basis of a substantial difference in costs incurred for providing that particular interconnection.

iv. No service provider shall be charged for any interconnection facility it does not seek or require.

Provided that if interconnection facility cannot be provided in the form that is sought or required by the interconnection seeker, the issue may be decided mutually between the seeker and provider of interconnection. In case such mutual agreement is not possible, the matter may be reported to the Authority for a decision. The interconnection provider shall inform the interconnection seeker within 45 days of the request for interconnection facilities whether the facilities can be provided in the form sought or required by the interconnection seeker.

- v. Charges for certain elements of the network used to provide interconnection are specified in the Schedules to this Regulation. Interconnection charges in respect of leased circuits and internet port charges shall be the same as the tariffs for these services specified, respectively, in Schedules IV and VI of the Telecommunication Tariff Order 1999.
- vi. Unless specifically so provided, the Authority has forborne with respect to interconnection charges.
- vii. Where the Authority has, for the time being, forborne from specifying interconnection charges, interconnection seekers and providers shall mutually decide on such charges.

- viii. Inter-connection charges mutually agreed among interconnection seeker and provider shall be based on the principles enunciated in this Section.
- ix. Where mutual agreement for interconnection charge cannot be reached within three months of initiating such a process for charges with respect to which the Authority has forborne, the Authority may intervene to settle the matter *suo moto* or on the application of either party.

SECTION IV

4. Revenue Sharing Arrangements

- i. Any revenue sharing among interconnection seeker and interconnection provider shall take place out of the proceeds of the amount payable by the subscriber for obtaining the service which involves the usage of the network of the interconnection provider.
- ii. Unless specifically provided in the Schedules to this Regulation, the Authority forebears with respect to revenue sharing arrangements.
- iii. Where the Authority has, for the time being, forborne from specifying revenue sharing arrangements for any telecommunication service or part thereof, service providers shall mutually decide on such arrangements.
- iv. Where mutual agreement for revenue sharing cannot be reached within three months of initiating such a process for revenue sharing with respect to which the Authority has forborne, the Authority may intervene to settle the matter *suo moto* or on the application of either party.

SECTION V

5. Reporting Requirement

- i. All service providers shall comply with the Reporting Requirement in respect of interconnection charges and revenue sharing arrangements specified for the first time under this Regulation, as also all subsequent changes. This includes interconnection charges and revenue sharing arrangements that are decided on a mutual basis among service providers.
- ii. The service provider may implement the proposed interconnection charges and revenue sharing arrangements after the mandatory notice period of 45 working days, unless the Authority within such period directs otherwise.

Except that an additional period of 45 days is provided for interconnection charges and revenue sharing arrangements to be reported to the Authority for the first time after the implementation of this Regulation.

- iii. When an interconnection provider informs the interconnection seeker that it cannot provide interconnection as sought for by the latter, the interconnection seeker, within 45 days of being so informed, may approach the Authority for seeking its intervention.
- iv No service provider shall alter any interconnection charge or revenue sharing arrangement, or any part thereof, without complying with the Reporting Requirement.

SECTION VI

6. Review

- i. The Authority may, from time to time, review and modify an interconnection charge and/or revenue sharing arrangements.
- ii. The Authority may also at any time, on reference from any affected party, and for good and sufficient reasons, review and modify any interconnection charge or revenue sharing arrangements.

SECTION VII

7. Explanatory Memorandum

This Regulation contains at Annex A, an explanatory memorandum to provide clarity and transparency to matters covered under this Regulation.

SECTION VIII

Residuary Clauses

*8. Over-riding Effect

Provisions of this Regulation in respect of interconnection charges and revenue sharing shall have overriding effect over the terms and conditions of the license of a service provider, as also any conditions or charges prescribed by an originating/transit/terminating service provider.

9. Interpretation

In case of dispute regarding interpretation of any of the provisions of this Regulation, the decision of the Authority shall be final and binding.

(HARSHA VARDHANA SINGH) ECONOMIC ADVISER

^{*} Reg. 8 has been quashed by the High Court vide its Civil Writ Petition No. 6543 of 1999 and CW No. 6483 of 1999, dated 17.1.2000.

SCHEDULE I INTERCONNECTION CHARGE AND REVENUE SHARING

ITEM	REVENUE SHARING FOR BASIC SERVICES	
**(1) Date of Implementation	01 May, 1999	
(2) Coverage	Calls originating in a basic service provider's network and transmitted	
	through or terminated in another basic service provider's network.	
(3) Local calls	Bill and keep for each service provider.	
(4) Domestic long distance	The originating/transit service provider to pay Rs. 0.48 per calls (STD calls) unit of measured call for traffic delivered from its network to the network of the transit/terminating service provider for the call units measured at the point of interconnection for its further carriage from the point of interconnection to destination, based on the STD pulse rate.	
	Provided no such charge shall be payable if the point of Inter- connection is at the destination Short Distance Charging Area (SDCA) and also provided that no such charge will be payable if the terminating service provider requests that the call be handed over by the originating/transit service provider at an SDCA other than the destination SDCA.	
(5) International Calls	The originating service provider to pay 0.66 per unit measured call to the transit service provider (at present the Department of Telecommunications), for the call units to be measured at the point of interconnection.	
	Notes: a. "Local calls" are calls which originate from subscribers of a service provider's network/exchange system in a SDCA and terminate either (i) within the same SDCA or (ii) in the contiguous telephone exchange system of the adjacent SDCA, provided these are delivered/handed over to another service provider's network in the destination SDCA only.	
	b. For domestic long distance calls, number of units of calls for payment at Rs. 0.48 per metered call to be calculated based on the STD tariff pulse for the radial distance between the point of interconnection and the Gateway Tax where the call is subsequently delivered for further carriage/termination.	
	c. No revenue is to be shared between basic service provider and cellular mobile service provider for calls originating from the former's network.	
	d. The Schedule does not address revenue sharing arrangement between Videsh Sanchar Nigam Limited and the Department of Telecommunication or between Indian and Foreign Carriers of International Calls."	

^{**} Subs. by the First Amendment Regulation, 1999, Reg. 2 (w.e.f. 17.09.1999), as "(1) Date of Implementation 01 November 1999" and quashed by the High Court *vide* its Civil Writ Petition No. 6543 of 1999 and CW No. 6483 of 1999, dated 17.1.2000. Schedule I so quashed by the Hon'ble High Court is before the Index to Explanatory Memorandum.

SCHEDULE II INTERCONNECTION CHARGE AND REVENUE SHARING

ITEM	REVENUE SHARING FOR CELLULAR MOBILE	
* (1) Date of	01 May, 1999	
Implementation		
(2) Coverage	Calls originating in a cellular mobile service provider's network and transmitted through or terminated in another service provider's network.	
(3) Local calls from cellular mobile to basic service subscriber	Payment to basic service provider at the rate of Rs. 1.20 per metered call, with number of metered calls measured at the pulse rate applicable to a basic service local call.	
(4) Domestic Long distance calls from cellular mobile to basic service subscriber	Payment to basic service provider at a rate applicable to domestic long distance calls. The charge shall be Rs. 1.20 per metered call, with the number of metered calls measured at the pulse rate applicable to basic service long distance calls, with the chargeable distance equal to the distance of the call carried by the basic service provider for an equivalent STD from point of interconnection to destination.	
(5) International calls from cellular mobile	Payment to basic service provider at a rate applicable to inter-national calls. The charge shall be Rs. 1.20 per metered call, with the number of metered calls measured at the point of interconnection at a pulse rate applicable to an equivalent international call made by a basic service subscriber.	
(6) For calls from cellular mobile to cellular mobile	For local/domestic long distance calls carried (partly) by basic service provider, an amount to be paid to basic service provider at a rate applicable to local/domestic long distance call. The amount to be calculated on the basis of the corresponding conditions specified in Item 3/Item 4 above, i.e. Rs. 1.20 per metered call, pulse rate applicable to basic service local/long distance calls, and for long distance calls the chargeable distance equal to the distance of the call carried by the basic service provider for an equivalent STD call from point of interconnection to destination.	
	Notes:	
	(a) The definition of "local calls" to ascertain revenue sharing with basic service providers for calls carried by them is the same as in note (a) in Schedule I.	
	(b) For domestic long distance calls from cellular mobile to basic service subscriber, number of units of measured calls for determining the amount of revenue payable to basic service provider to be calculated as the number of such calls measured at the basic service provider's Gateway TAX up to the destination Short Distance Charging Area (SDCA).	
	(c) For domestic long distance calls from cellular mobile to cellular mobile carried by basic service provider, number of call units to be paid to the basic service provider at Rs. 1.20 per metered call to be	

_

^{*} Subs. by the First Amendment Regulation, reg. 3 (w.e.f. 17.09.1999) and quashed by the High Court *vide* its Civil Writ Petition No. 6543 of 1999 and CW No. 6483 of 1999, dated 17.1.2000. Schedule II so quashed by the Hon'ble High Court is before the Index to Explanatory Memorandum

calculated based on the radial distance between the Gateway TAX at the point of interconnection where the call is accepted for further carriage and the Gateway tax of the service provider to whose network the call is subsequently handed over.
(d) For calls originating from cellular mobile, revenue sharing arrangement among one basic service provider and another basic service provider to be as specified in Schedule I.
(e) This regulation does not specifically address any revenue sharing arrangement among cellular mobile service provider for calls from subscribers of any cellular mobile service provider.

SCHEDULE III INTERCONNECTION CHARGE AND REVENUE SHARING

ITEM	P	ORT CHARGES
(1) Date of	01 May, 1999	
Implementation		
(2) Coverage	Charges for ports provided by service providers (other than the	
	port charges for internet	t, which are specified in Schedule VI of
	the Telecommunication	Tariff Act 1998.)
(3) Port Charges	-	
	-	
	Number of PCMs	Annual Charge
		(Ceiling of Rs. per port)
	Up to 8	37,000
	Above 8 and up to 32	16,000
	Above 32	9,000

[The following Schedules were substituted by the First Amendment Regulation, 1999 (w.e.f. 17.09.1999) and have been quashed by the High Court vide Writ Petition (C) No. 6543 of 1999 and CW No. 6483 of 1999, dated 17.1.2000]

SCHEDULE I

ITEM	REVENUE SHARING FOR BASIC SERVICES
*(1) Date of	01 November, 1999
Implementation	
(2) Coverage	Calls originating in a basic service provider's network and terminating in: • a cellular mobile network, either directly or after transiting through another/other basic service network/networks; • another basic service network either directly or after transiting through another basic service network.
(3) Local calls (see note a bis)	
(3.a)To cellular mobile subscriber (for calls directly handed over to the terminating network)	For each answered call, the originating service provider to charge (MTC) to the terminating cellular mobile network as follows: Duration of the answered call (Rs.) Less than 60 seconds 1.60 60 seconds or more, but 2.40 less than 120 seconds Each subsequent unit of An additional 60 seconds
(3.b) To cellular mobile subscriber (for calls handed over to the terminating network through a transit network)	For each answered call, the originating service provider to pay to the transit network as follows: (a) An amount for MTC as specified in Item (3.a) above And (b) An amount for usage charge to the transit network as follows: • Rs. 0.40 for duration of the answered call less than 60 seconds, and • Rs. 0.20 for each subsequent unit interval of 60 seconds calculated from 60 seconds onwards.
(3.c) Calls to basic service subscriber	Bill and keep for each service provider.
(4) Domestic long-distance calls	
(4.a) To cellular mobile subscriber (for calls directly handed over to the terminating network)	For each answered call, the originating service provider to pay a mobile termination charge (MTC) to the terminating cellular mobile network, as specified in Item (3.a) above, i.e.: Rs. 1.60 for the duration of the answered call of less than 60 seconds, and Rs. 0.80 for each subsequent unit interval of up to 60 seconds calculated from 60 seconds onwards.
(4.b) To cellular mobile subscriber (for calls handed	For each answered call, the originating service provider to pay to the transit network as follows:

over to the terminating network through a transit network)

- (a) An amount for MTC as specified in Item (3.a) above, i.e.
 - Rs. 1.60 for the duration of the answered call of less than 60 seconds, and
- Rs. 0.80 for each subsequent unit interval of up to 60 seconds calculated from 60 seconds onwards.

AND

- (b) An amount for usage charge to the transit network as follows:
- Rs. 0.48 per unit of measured call for traffic delivered from its network to the network of the transit basic service provider with the call units measured at the point of interconnection for its further carriage from the point of interconnection to destination, based on the STD pulse rate applicable to calls from basic to basic service subscriber.

The MTC as specified above shall be handed over by the transit network to the terminating cellular mobile network, or in case of additional transit networks being involved MTC to be passed on via these transit networks to the terminating cellular mobile network;

Rs. 0.48 per unit of measured call for traffic delivered from its network to the network of the transit basic service provider for the call units measured at the point of interconnection for its further carriage from the point of interconnection to destination, based on the STD pulse rate.

(4.c) Calls to basic service subscribers

Provided no such charge shall be payable if the point of interconnection is at the destination Short Distance Charging Area (SDCA) and also provided that no such charge will be payable if the terminating service provider requests that the call be handed over by the originating/transit service provider at an SDCA other than the destination SDCA.

Notes:

(a.bis) For calls from basic service subscriber to cellular mobile, "local calls" are calls for which the basic service portion of the call is within the same charging area as for the calling party.

(5) International Calls

The originating service provider to pay 0.66 per unit measured call to the transit service provider (at present the Department of Telecommunications), for the call units to be measured at the point of interconnection.

Notes

- a. "Local calls" are calls which originate from subscribers of a service provider's network/ exchange system in a SDCA and terminate either (i) within the same SDCA or (ii) in the contiguous telephone exchange system of the adjacent SDCA, provided these are delivered/handed over to another service provider's network in the destination SDCA only.
- b. For domestic long distance calls, number of units of calls for payment at Rs. 0.48 per metered call to be calculated based on the

STD tariff pulse for the radial distance between the point of interconnection and the Gateway Tax where the call is subsequently delivered for further carriage/termination.

- c. No revenue is to be shared between basic service provider and cellular mobile service provider for calls originating from the former's network.
- d. The Schedule does not address revenue sharing arrangement between Videsh Sanchar Nigam Limited and the Department of Telecommunication or between Indian and Foreign Carriers of International Calls.".

SCHEDULE II

"(1) Date of Implementation	01 November, 1999	
(2) Coverage	(a) Calls originating in a cellular mobile service	provider's network
(2) coverage	and transmitted through or terminated in another network;	
	(b) Calls, other than those covered under (a) abov above, that terminate in a cellular mobile network.	e or in Schedule I
(3) Local calls from cellular mobile to:		
(3.a) Basic service subscriber	Payment by originating service provider to basic servate of Rs. 1.20 per unit of metered call, with the realls measured at the point of interconnection us applicable to a local call by basic service subscriber.	number of metered
(3.b) Cellular mobile subscriber (for calls directly handed over to the terminating net-	ubscriber (for calls mobile termination charge (MTC) to the terminating cellular irectly handed over to network as follows:	
work)	Duration of the answered call (seconds) (Rs.)	to be paid
	Less than 60 seconds	1.60
	60 seconds or more, but	2.40
	less than 120 seconds	0.00
	Each subsequent unit of An additional 60 seconds	0.80
(3.c) Cellular mobile subscriber (for calls handed over to the terminating network through a transit	For each answered call, the originating service protransit network as follows: (a) An amount for MTC as specified in Item (3.b) ab • Rs. 1.60 for the duration of the answered calls.	ove, i.e.
network)	 seconds, and Rs. 0.80 for each subsequent unit interval of calculated from 60 seconds onwards. 	up to 60 seconds
	And	
	(b) Usage charge at a rate applicable to local cal subscriber, the amount to be calculated on the basis of metered call, with number of metered calls measure interconnection.	of Rs. 1.20 per unit
	The MTC specified above shall be handed over by to the terminating cellular mobile network, or in transit networks being involved MTC to be passed networks to the terminating cellular mobile network.	case of additional on via these transit
(4) Domestic Long distance		

calls from cellular mobile to:

(4.a) Basic service subscriber

The originating service provider to pay the basic service provider at a rate applicable to domestic long distance calls. The charge shall be Rs. 1.20 per unit of metered call, with the number of metered calls measured at the pulse rate applicable to long distance calls to basic service subscriber, and the chargeable distance equal to the distance of the call carried by the basic service provider for an equivalent STD measured from point of interconnection to destination.

(4.b) Cellular mobile subscriber (for calls directly handed over to the terminating network)

For each answered call, the originating service provider to pay an amount for MTC as specified in Item (3.b) above, i.e.

- Rs. 1.60 for the duration of the answered call of less than 60 seconds, and
- Rs. 0.80 for each subsequent unit interval of up to 60 seconds calculated from 60 seconds onwards.

(4.c) Cellular mobile subscriber (for calls handed over to the terminating network through a transit network)

For each answered call, the originating service provider to pay:

- (a) A mobile termination charge (MTC) to the terminating cellular mobile network as specified in Item (3.b) above, i.e.:
 - Rs. 1.60 for the duration of the answered call of less than 60 seconds, and
 - Rs. 0.80 for each subsequent unit interval of up to 60 seconds calculated from 60 seconds onwards.

And

(b) Usage charge at a rate applicable to local call by basic service subscriber, the amount to be calculated on the basis of Rs. 1.20 per unit of metered call, with number of metered calls measured at the point of interconnection.

The MTC specified above shall be handed over by the transit network to the terminating cellular mobile network, or in case of additional transit networks being involved MTC to be passed on via these transit networks to the terminating cellular mobile network.

(5) International calls from cellular mobile

Payment to basic service provider at a rate applicable to international calls. The charge shall be Rs. 1.20 per unit of metered call, with the number of metered calls measured at the point of interconnection at a pulse rate applicable to an equivalent international call made by a basic service subscriber.

(6) International calls to cellular mobile subscriber

The terminating cellular service provider to receive:

- Rs. 1.60 for the duration of the answered call of less than 60 seconds, and
- Rs. 0.80 for each subsequent unit interval of up to 60 seconds calculated from 60 seconds onwards.

The payment of this amount is to be made by the service provider handing over the call to the terminating cellular mobile network.

Notes:

(a) The definition of "local calls" to ascertain revenue sharing with

basic service providers for calls carried by them is the same as in notes
(a) and (a.bis) in Schedule I.

Notes:

- 1. Call-forwarding to be treated as two call-components, one from calling party to called party prior to call being forwarded, another from called party to the point where call is forwarded. Revenue sharing in this Regulation to apply to each of the two components separately, as if they are two different calls.
- 2. Roaming to be treated as two calls, similar to call-forwarding. One is from calling party to the called party, prior to the transfer of the call (if any) to the called party in case of roaming. The other, in case of roaming, is from the home location of the called number to the roamer. Revenue sharing in this Regulation to apply to each of the two components separately, as if they are two different calls.
- 3. This Order contains at Annex A, an Explanatory Memorandum -1 that explains the reasons for this amendment to the Telecommunication Tariff Order 1999.