

TELECOMMUNICATION SERVICE PRICE INDEX - CONCEPT PAPER

I Definition of product and its sub-elements:

The Indian telecom industry is one of the fastest growing markets in the world. The country has been divided into 23 telecom circles for service accounting purposes. The services that are currently being offered in this sector can be categorized under the following 5 major segments

- Fixed Telephone Services
- Mobile services
- Wireless Local Loop (WLL) services
- Internet services
- Other Value Added Services
 - Public Mobile Radio Trunk Service (PMRTS)
 - Very Small Aperture Terminal (VSAT)
 - Packet Switching Data Network (PSDN)
 - Integrated Service Digital Network (ISDN)

These services are broadly grouped in four types for the purpose of Index compilation which account for nearly 80 percent of the total market value.

- Fixed telephone Services
- Mobile services
- WLL services
- Internet and Broadband services

Each player in the telecom industry offers different types of services. On the basis of services provided by each group they are further classified into 33 subgroups which serve as the item basket.

Name of Group	Name of Subgroup	Name of item
Fixed Telephone	Local	Fixed to Fixed
		Fixed to Mobile
		Fixed to WLL
	STD	Fixed to Fixed
		Fixed to Mobile
		Fixed to WLL
	ISD	Fixed to Fixed
		Fixed to Mobile
		Fixed to WLL

Mobile	Local	Mobile to fixed
		Mobile to Mobile
		Mobile to WLL
	STD	Mobile to fixed
		Mobile to Mobile
		Mobile to WLL
	ISD	Mobile to fixed
		Mobile to Mobile
		Mobile to WLL
	SMS	Local
		National
		International
Roaming	Incoming	
	Outgoing	
WLL	Local	WLL to fixed
		WLL to Mobile
		WLL to WLL
	STD	WLL to fixed
		WLL to Mobile
		WLL to WLL
	ISD	WLL to fixed
		WLL to Mobile
		WLL to WLL
Internet & Broadband		Internet & Broadband

II Price of the product:

Components of price can be divided into two categories: Fixed and Variable component. Fixed component mainly consists of installation charges, registration charges/ Deposit charges, rental charges etc., whereas variable component includes call charges, SMS/MMS charges and Internet & Broadband charges.

Only Flexible Prices are taken into consideration for index compilation which have been converted to a standard unit (Rs. /Min for call charges, Rs/SMS for SMS services and Rs/MB for internet and broadband services). Different prices are charged by different service providers even for the same service. The unique price of each item of the basket is computed in two steps.

- (i) Simple average of all prices of any service at service provider level
- (ii) At item level, weighted average of the prices at (i) above, is computed by attaching respective weights to different service providers

Weights assigned to different service providers under each group are given in the Annexure.

III Methodology and weighting diagram:

Laspeyre's formula shall be used for index compilation. The base year will be 2004-05.

$$P_{ot} = \frac{\sum P_t Q_0}{\sum P_0 Q_0} \times 100$$

P_0 - Base year price; P_t - Current year price Q_0 - Base year weight

The index is compiled at an item level, sub group level, group level and at the national level. The basis of selection of an item (service) is its share in the revenue generated by the particular service group. The items included in the basket are those which account for substantial fraction of the overall telecom sector revenue. Weights have been assigned on the basis of the share of the estimated revenue of each item to the total revenue generated.

Weighting Diagram

Group	Weight (%)
Fixed Telephone	55.30
i) Local	30.11
ii) STD	19.01
iii) ISD	6.18
Mobile	38.88
i) Local	15.19
ii) STD	8.91
iii) ISD	3.09
iv) SMS	3.41
V) Roaming	8.26
WLL	3.38
i) Local	1.76
ii) STD	1.15
iii) ISD	0.47
Internet & Broadband	2.46
Total	100

IV Source of Data:

The Telecom Service Price Index shall basically utilize the rates/ tariffs charged by those telecom service providers, whose specific tariff plans have been selected for providing the price data for

various items in the item basket. Presently there are 25 selected tariff plans of major telecom service providers which serve as the source of price data.

V Frequency of release of the index:

The proposed Index for Telecommunication is proposed to be released on monthly basis.

VI Nature of potential fluctuations and reasons thereof:

It is observed that prices of telecom services are sensitive to the market conditions and technological innovations, changes in tariff take place very often. As such variations are envisaged in telecom services price index in shorter interval, fluctuations are expected to be seen in the Index.

VII Substitution/Quality changes:

Sources of price data shall be changing as continuity of tariff plans of a service provider depends upon their commercial viability. If a particular tariff plan is taken off the market temporarily then the last reported price can be repeated for the short duration of its non-existence. However, if a plan goes out of existence for a longer duration or goes out permanently then a suitable tariff plan comparing the originally specified plan should be priced to ensure continuity of price availability. However, in case of non-availability of any comparable plan to serve as a substitute to the missing original plan the technique of splicing or linking the price of the new plan with the price of missing original plan should be applied.

VIII Limitations

- Combo plans, special discounts in terms of free SMS, free calls etc provided by service providers from time to time have not been included in the purview of the Index.
- All the major services in the above list account for nearly 80 percent of the total market value. However, 20 percent services provided by telecommunication industry still remain unidentified.

NOTE: KINDLY POST YOUR FEEDBACK/COMMENTS TO SMT. HARMEET M. KUMAR,DEPUTY DIRECTOR , Email ID : harmeet.kumar@nic.in

Annexure

Plan no.	Group/Service Providers	Tariff Plans	Weights
Group -1 : Fixed Telephone			100
1	BSNL	All India – Postpaid –General Plan	81.45
2		All India- Postpaid - Sulabh	1.13
3	MTNL	Delhi-Postpaid-Plan 250	13.81
4	Tata Teleservices Ltd.	Tata Tele-All India-Postpaid-ATP Basic Wireline	0.33
5	Reliance Communications Ltd.	All India- Postpaid- Plan 250	0.15
6	Bharati Airtel	All India- Postpaid- Talk 499	1.89
7		All India- Postpaid- STD PCO	1.23
Group II : Mobile			100
8	BSNL	All India – Prepaid –General	15.82
9		All India – Postpaid –Plan 325	10.92
10	MTNL	Delhi – Prepaid- Trump Youth	1.90
11	Tata Teleservices Ltd.	Postpaid-Business silver	1.37
12	Reliance Communications Ltd.	Chennai-prepaid-Freedom	4.47
13		Maharashtra-Postpaid-NJP 124	12.18
14	Bharati Airtel	Delhi-prepaid-Airtel Bharati	26.40
15		Karnataka-Postpaid-Airtel One 150 plan	11.19
16	Idea Cellular	Madhya Pradesh-Prepaid-Idea chitchat regular Plan	11.23
17		Maharashtra-Postpaid-Buzz 175	4.53
Group III : WLL or Walky			100
18	BSNL	All India-Postpaid-WLL Tarang	15.84
19	MTNL	Delhi-Postpaid-Economy 289	5.00
20	Tata Teleservices Ltd.	All India-Postpaid-Ws-Walky Life	24.55
21	Reliance Communications Ltd.	Kerala-Postpaid-FW150	54.61
Group IV : Internet + Broad Band			100
22	BSNL	All India-Postpaid-Account free Internet dial up access based on CLI (128 Kbps)	31.49
23	MTNL	Delhi-Mumbai-Postpaid-DSL 250 MB USB	15.56
24	Reliance Comm	Tata Com-All India-Postpaid DSL 250 MB USB	36.87
25	Sify Ltd	All India-Data transfer 256 kbps 400 MB-1 month	16.08