

Methodology of calculating Telecom Service Price Index (TSPI)

Product basket of telecom services has been grouped into two broad categories: data services and non-data services (voice services etc.) for the compilation of Telecom service price index.

BASE YEAR:

The base year is 2015-16.

PRICES:

For data services: Unit price is estimated by dividing the revenue accruing from data services by the total quantum of data consumed in GB.

For non-data services: Unit price is estimated by dividing the revenue accruing from non-data services by the total talk time consumed in minutes.

Unit value indices are computed by dividing the unit prices by unit prices of base year and Index is compiled using weighted average of unit value index of data and non-data services, the weights being the respective share of revenue accruing from data and non-data services.

Details of the methodology are as follows:

$$1- \text{Unit Price for Voice Service} = \frac{\text{Total revenue (in INR million)}}{\text{Total duration (in million minutes)}}$$

$$2- \text{Unit Price of Data Service} = \frac{\text{Total revenue (in INR million)}}{\text{Total data consumed (in million GB)}}$$

$$3- \text{Index for voice service} = \frac{\text{Unit price of voice service in a given quarter} * 100}{\text{Unit price in that quarter of the base year}}$$

$$4- \text{Index for data service} = \frac{\text{Unit price of data service in a given quarter} * 100}{\text{Unit price in that quarter of the base year}}$$

5- Weight for voice service = $\frac{\text{Revenue from voice service in base year}}{\text{Total revenue from both voice \& data service in base year}} * 100$

6- Weight for data service = $\frac{\text{Revenue from data service in base year}}{\text{Total revenue from both voice \& data service in base year}} * 100$

7- TSPI = $\frac{(\text{Voice price index} * \text{its weight}) + (\text{data price index} * \text{its weight})}{\text{Sum of weights of voice \& data service}}$