

ITU-T Focus Group on Costing Models for Affordable Data Services
(FG –CD)

Session 2: Best Practices for cost Models for data
services

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What it is ?

Best Practices for cost Models for data services

Cost of data services vary across different regions. This session will discuss the different cost modelling techniques used for data services in different regions, the cost components used in the cost models, **impact of different economic incentives** provided by governments and the **lessons learnt**.

Where we have to go ?

1. Digitally inclusive society and Digitally empowered individual
 2. Universal Connectivity: to ensure access to mobile connection/internet
 3. Meaningful Connectivity at both individual as well as societal level
- ITU has set itself a new benchmark to provide Universal Meaningful Connectivity

“Universal connectivity” means connectivity for all. “Meaningful connectivity” is a level of connectivity that allows users to have a safe, satisfying, enriching and productive online experience at an affordable cost.

“Meaningful Universal Connectivity” means that anyone, anywhere, regardless of geographic location, socio-economic status, race, gender, or any other differentiating demographic, has access to affordable services and devices to connect to reliable and safe internet.

“Linking everyone is no longer enough. Universal and meaningful connectivity, the possibility for everyone to enjoy a safe, satisfying, enriching, productive, and affordable online experience, has become the new imperative for the 2020-2030 decade.” - ‘Global Connectivity Report 2022’ by International Telecommunication Union (ITU)

Where we have to go ?

- The International Telecommunication Union (ITU) has set several goals for achieving universal connectivity. These goals are part of the ITU's Connect 2030 Agenda, which aims to achieve universal and affordable access to broadband internet by the year 2030.
- UN targets for universal and meaningful digital connectivity.

Universality:

- a) In the world of 2030 envisaged in the plan, everyone aged 15 or older uses the Internet, all households have Internet access, all businesses use the Internet, and all schools are connected, while 100 per cent of the population is covered by the latest mobile networks, and everyone 15 or older owns a mobile phone.
- b) Among those people, over 70 per cent would possess basic digital skills (like being able to send e-mails) and over 50 per cent would have intermediate digital skills (like installing new software or apps).
- c) Another universality target is digital gender parity, with women and men using the Internet, owning and using mobile phones, and possessing digital skills in equal proportions.

Where we have to go ?

Technology:

- a) By 2030, all fixed-broadband subscriptions should be 10 megabits per second (Mb/s) or faster, every school should enjoy minimum download speeds of 20 Mb/s and 50 kilobits per second (kb/s) available per student, and every school should have a minimum 200 gigabytes (GB) of data allowance.

Affordability:

- a) In 2030, broadband Internet should be affordable for all, and meet the UN Broadband Commission affordability target of an entry-level broadband subscription to be less than 2 per cent of monthly gross national income per capita. A second affordability target states that the cost should not exceed 2 per cent of the average income of the bottom 40 per cent of the population.

Where we are : The Indian experience

Coverage and connection

- A country of continental proportion with 1400 mn population inhabiting in 8000+ urban settlements and 600,000+ villages
- As of now, there is near universal mobile/data coverage in urban areas and rural areas but for remotely located and sparsely populated villages. Currently, Government funded mobile coverage scheme is on for the uncovered villages.
- We have one of the largest mobile network and robust telecom infrastructure
- 1176 mn Telecom subscribers.
- 846 mn Broadband subscribers.
- Per subscriber monthly data usage is 17GB .
- Tariff wise we compare most favourably internationally and cost of data service wise , we are in the list of five least expensive countries.
- From Affordability perspective tariff for data services are close to target of an entry level broadband subscription as percentage of monthly per capita income.

Where we are : The Indian experience

Details of Telephone Subscribers (in million)

	As on 31.08.2023	As on 31.03.2015
Wireless	1146.25	969.89
Wireline	30.61	26.59
Total	1176.85	996.49

Details of Broadband Subscribers (in million)

	As on 31.03.2023	As on 31.03.2015
Wired	33.49	15.52
Fixed Wireless	1.09	0.44
Mobile Wireless	811.98	83.24
Total	846.57	99.20

	As on 31.03.2023	As on 31.03.2015
Average wireless data usage per subscriber per month	17.36 GB	99.46 MB

How did we reach here ?

Competition and Coverage

Institutional arrangements :

1. Department of Telecom, Ministry of communication
2. Telecom Regulatory Authority of India
3. Telecom Disputes Settlement and Appellate Tribunal (TDSAT)

Legal framework :

Telecom Regulatory Authority of India Act 1997 with amendments

Indian Telegraph Act 1885 with amendments

Statutory provision related to Tariff: Section 11(2) of the Act,

The Authority may notify the rates of telecom services within and outside India.

How did we reach here ?

Competition and Coverage

Tariff under forbearance but for tariff for leased circuits, national roaming, MNP, and rental for rural wire line connection etc. since 2004.

The present regulatory stance of forbearance means that telecom service providers are free to design and offer tariffs for different telecom services as per their understanding of market condition and in their best commercial interest. However, there is a tariff reporting requirement to ensure regulatory oversight. Tariffs on offer have to be in conformity with regulatory principles and framework.

Principles of Tariff assessment:

- (i) Transparency
- (ii) Non- discrimination
- (iii) Non- Predation

The policy of forbearance has led to proliferation of innovative tariff products catering to requirements of different segments of subscribers.

How did we reach here ?

Competition and Coverage

- **Calling Party Pays** introduced in 2003.
- **Mobile Number Portability** in 2009.
- **Infrastructure Sharing** : It began in 2007 with the sharing of mobile towers for co-hosting of BTS, a project which was funded by Universal Service Obligation Fund of DoT, Govt. of India. Now, it has become industry wide practice wherein mobile towers and other passive infrastructure is shared among different telecom service providers.
- The Policymakers and regulators has ensured that everything possible is done to ensure early **adoption of new technology**.
- **5G rollout** has been fast .In a very short time we have close to 100 mn 5G subscribers .
- **Rationalisation of levies** like license fee and spectrum usage charges
- License conditions, entry fee and other charges have meant easy entry. Spectrum assignment through auction. Recent telecom reforms and policy initiatives has ensured **ease of doing business**.

How did we reach here ?

Competition and Coverage

Universal Service Obligation Fund (USOF) : A Statutory body to provide telecom services to rural and remote areas at affordable and reasonable rates.

- USOF has been the force behind establishing of high-quality network infrastructure, enabling non-discriminatory access to high speed and affordable mobile and digital services, across the rural and remote terrains of the country. The source of the fund is the License Fees (LF) charged from the Telecom/Internet licensees.
- USOF has been providing necessary financial support in the form of either Viability Gap Funding (VGF) and Cost-plus basis for covering the rural and remote areas.
- Over USD 8.5 Billion has been spent till date .

What could be the key takeaway from Indian experience ?

Competition and coverage

- Policy and Regulatory intervention has ensured efficient functioning of market for telecom service sector.
- In case of gap in connectivity, direct intervention through policy and projects to provide connectivity.
- Regulatory oversight has been effective and has ensured affordable data services. However, in a fast changing landscape of the telecom service sector in the face of constant disruptive technological change there should not be any room for complacency.

As In 2030, broadband Internet should be affordable for all, and meet the UN Broadband Commission affordability target of an entry-level broadband subscription to be less than 2 per cent of monthly gross national income per capita. A second affordability target states that the cost should not exceed 2 per cent of the average income of the bottom 40 per cent of the population.

Costing Model for Affordable Data Services have to draw on best practices all across the globe and our experience deserves to be factored in, and our experience based on competition and coverage deserves due attention.