

Terms of Reference

ITU-T Focus Group on costing models for affordable data services (FG-CD)

The ITU-T Focus Group on costing models for affordable data services (FG-CostingData) will work towards studying and exploring the various costing models for providing affordable data services.

Participation in FG-CostingData is free of charge and open to all.

Parent group: ITU-T Study Group 3

1 Rationale and scope

The pricing of data is complex, and market driven. The costs involved in managing the lengthy supply chain to provide Internet are being recovered predominantly by directly charging the customers. There is a need to have a focused study on the pricing mechanisms and how the cost recovery should be articulated. There are a range of factors which are considering while costing the services such as competition, consumer demand, buying capacity, willingness to pay, etc.

The supply-chain of telecom/ICT is long, complex, and varying. There are multiple cost models such as Fully Allocated Cost Models (FAC), Long Run Incremental Cost Models (LRIC), Total Service Long Run Incremental Cost (TSLRIC+), Bottom-Up (BU), Building Block Model (BBM), Top-Down (TD) cost models, hybrid cost models used for pricing of Internet services. The cost modelling used for legacy network must undergo significant changes to incorporate the changed scenarios of the ecosystem such as shared networks, new technologies, etc. There are also various pricing strategies used such as value-based pricing, competitive pricing, cost-plus pricing, dynamic pricing etc.

ITU-T Study Group 3 is the lead study group dealing with costing principles and methodologies. It also deals with fostering collaboration among its participants with a view to the establishment of rates at levels as low as possible consistent with an efficient service and considering the necessity of maintaining independent financial administration of telecommunications on a sound basis.

The relevant extract of the mandate of ITU-T SG3 is shown below:

“ITU-T Study Group 3 is responsible, inter alia, for studying international telecommunication/ICT policy and economic issues and tariff and accounting matters (including costing principles and methodologies), with a view to informing the development of enabling regulatory models and frameworks. To this end, Study Group 3 shall in particular foster collaboration among its participants with a view to the establishment of rates at levels as low as possible consistent with an efficient service and taking into account the necessity of maintaining independent financial administration of telecommunications on a sound basis.”

Considering the prime importance of affordable Internet, it is becoming increasingly imperative to study the various aspects involved in the costing of data which involves various dimensions such as policy, economic and social. As the telecom/ICT sector is expanding and transforming at a rapid pace, the principles adopted for costing methodologies should also travel together. There is also a dire need to balance the commercial interests and public interest. These aspects should be incorporated at the stage of costing itself. The factors such as competition, demand, technology, cost optimisation, pricing strategies, billing models, accounting separation, settlement mechanisms and regulatory compliances play considerable role. This calls for the need to conduct quantitative cost analysis for the provision of international Internet connectivity (IIC) under the various technical and business models, aimed at enhancing service affordability and digital inclusivity.

The development of a cost model is an onerous task and this is evidenced by the slow progress of the development of IIC cost models. Hence, a Focus Group presents an opportunity to study the matter, holistically, with other important stakeholders.

2 Objectives

The key objectives of the Focus Group may include, inter alia, the following:

1. Identify and understand the components of the internet value chain that affect the cost of data services;
2. Benchmark best practices that could help the stakeholders in framing a costing/pricing model for efficient and affordable provision of data services which are commercially viable;
3. Collaborate with stakeholders in evaluating the prevalent costing and pricing methodologies and study the possibilities of arriving at innovative ways to make them affordable and ubiquitous;
4. Provide an open global platform for individual experts and standard development organizations (SDOs) to join hands and work together;
5. Identify standardization opportunities that balance the interests of relevant stakeholders in the domain of data services;
6. Incorporate the factors such as competition, demand, technology, cost optimisation, pricing strategies, billing models, accounting separation, settlement mechanisms, and regulatory and tax compliances, including import duties, to develop models of costing data;
7. Facilitate the development of standard cost models for the provision of IIC based on the various technical and business models. This is aimed at enhancing the affordability of Internet services across the globe to bridge the digital divide;
8. Produce relevant report(s) of the FG activities.

3 Structure

FG-CostingData may establish sub-groups if needed.

4 Specific tasks and deliverables

Tasks and deliverables developed by FG-CostingData may include, but are not limited to the following:

4.1 Specific Tasks

- **Requirements gathering and study of existing policy and economic measures**
 - Collect and document information on current policy and economic measures taken by various stakeholders for providing affordable data services;
 - Ascertain the costs of elements involved in various layers, including methods of costing used for cost accumulation and techniques used for cost optimization;
 - Recommend economic and fiscal incentives for proliferation of affordable data services;
 - Collate information on various frameworks of cost accounting standards, cost ascertainment and reporting, as they relate to Internet provision.
- **Policy and economic analysis and conduct a gap analysis**
 - Analyze and identify the policy, economic, regulatory and standardization gaps related to cost models for affordable data services, taking into consideration the activities currently undertaken by other ITU groups, various SDOs and forums;

- Analyze and identify the supply chain of telecom/ICT infrastructure related to cost models for affordable data services;
 - Analyze the costing elements of components involved in various layers leading up to provision of Internet data services and suggest possible methodologies for provision of affordable connectivity in line with the ITU goals;
 - Analyze the impact of convergence in the telecom/ICT domain on the costing of data services;
 - Develop a roadmap related to cost models for affordable data services, where needed.
- **Best practices and use cases analysis**
 - Gather information on initiatives, projects, and use-cases pertaining to cost models for affordable data services; to identify existing standards, best practices/findings as well as challenges for the adoption of the same.
 - **Collaboration and partnerships**
 - Identify, invite, and liaise with relevant stakeholders;
 - Reach out to relevant stakeholders and facilitate networking opportunities with experts to seek cooperation and facilitate inclusive and informed deliberations;
 - Organize thematic workshops and forums on costing and pricing of data services, open to all stakeholders, to promote the FG-CostingData activities and encourage both ITU members and non-ITU members to jointly contribute on this work.

4.2 Deliverables

1. Hold workshops that bring together stakeholders and experts;
2. Compile terminology and taxonomy of the supply chain of telecom/ICT infrastructure related to cost models for affordable data services, and suggesting clarification on related terms and concepts, if needed;
3. Draft technical reports on the policy, economic, regulatory and standardization aspects related to cost models for affordable data services, including best practices of cost assessment methodologies and economic models being used. The reports should also analyze the existing and emerging business/pricing models in the provision of data services;
4. Explore the possible development of a web-based tool that regulators and policy makers could use for costing of data services provisioning;
5. Create a comprehensive report, once FG-CostingData has achieved the aforementioned tasks, which summarizes these accomplishments and provides suggestions for future directions.

5 Relationships

This Focus Group will work closely with relevant Study Groups in ITU (ITU-R, especially ITU-R Study Group 1, Working Party 1B; ITU-T, especially ITU-T Study Group 2 (Lead Study Group on telecommunication/ICT service definition); and ITU-D, especially ITU-D Study Group 1, Question 4/1) including co-located meetings when possible.

Furthermore, FG-CostingData will collaborate (as required) with other relevant groups and entities, in accordance with Recommendation ITU-T A.7.

These include governments, policymakers, regulators, international and regional organizations, non-governmental organizations (NGOs), financial and accounting experts, economists, ICT service providers, manufacturers, OTTs, FinTech, civil society and consumer organizations, SDOs, industry forums and consortia, companies, academic institutions, research institutions and other relevant organizations.

6 Parent group

The parent group of FG-CostingData is ITU-T Study Group 3 “Tariff and accounting principles and international telecommunication/ICT economic and policy issues”.

ITU-T Study Group 3 is responsible, *inter alia*, for studying international telecommunication/ICT policy and economic issues and tariff and accounting matters (including costing principles and methodologies), with a view to informing the development of enabling regulatory models and frameworks. To this end, Study Group 3 shall in particular foster collaboration among its participants with a view to the establishment of rates at levels as low as possible consistent with an efficient service and taking into account the necessity of maintaining independent financial administration of telecommunications on a sound basis. Additionally, Study Group 3 will study the economic and regulatory impact of the Internet, new and emerging technologies, convergence (services or infrastructure) and new services, such as over-the-top (OTT), on international telecommunication services and networks.

7 Leadership

See clause 2.3 of Recommendation ITU-T A.7.

8 Participation

See clause 3 of Recommendation ITU-T A.7. A list of participants will be maintained for reference purposes and reported to the parent group.

It is important to mention that the participation in this Focus Group has to be based on contributions and active participation.

9 Administrative support

See clause 5 of Recommendation ITU-T A.7.

10 General financing

See clauses 4 and 10.2 of Recommendation ITU-T A.7.

11 Meetings

The Focus Group will conduct regular meetings. The frequency and locations of meetings will be determined by the Focus Group management. The overall meetings plan will be announced after the approval of the Terms of Reference (ToR).

The Focus Group will use remote collaboration tools to the maximum extent, and collocation with existing ITU Study Group(s) meetings is encouraged.

The meeting dates will be announced by electronic means (e.g., e-mail and website, etc.) at least four weeks in advance.

12 Technical contributions

See clause 8 of Recommendation ITU-T A.7.

13 Working language

The working language is English.

14 Approval of deliverables

Approval of deliverables shall be taken by the method of consensus.

15 Working guidelines

Working procedures shall follow the procedures of Rapporteur group meetings.

The FG will exchange draft deliverables and other outcomes on a regular basis with its parent group, to ensure efficient transfer of deliverables to streamline future standardization (see ITU-T A.7 Appendix I).

No additional working guidelines are defined at this stage.

16 Progress reports

See clause 11 of Recommendation ITU-T A.7.

17 Announcement of Focus Group formation

The formation of the Focus Group will be announced via TSB Circular to all ITU membership, via the ITU-T News log, press releases and other means, including communication with the other involved organizations.

18 Milestones and duration of the Focus Group

The Focus Group lifetime is set for one year from the first meeting but extensible, if necessary, by decision of the parent group (see ITU-T A.7, clause 2.2).

19 Patent policy

See clause 9 of Recommendation ITU-T A.7.
