

In exercise of the powers conferred upon it under Section 27 (3)(o) of the Bhutan Information, Communications and Media Act 2006 (" the Act"), the Bhutan InfoComm and Media Authority ("the Authority") hereby makes the following Order further to amend the Telecommunication Tariff Order, 2009.

1. This Order shall be called the **Telecommunication Tariff (First Amendment) Order, 2009.**
2. It shall come into force on the **1st day of July, 2012.**
3. All sections in the Telecommunication Tariff Order, 2009 shall remain unchanged.
4. The schedules I and II in the Telecommunication Tariff Order, 2009, shall be substituted by these amended new schedules I and II.
5. The Explanatory Memorandum explains the objects and reasons for the Telecommunication Tariff (First Amendment) Order, 2009.
6. This Order mandates detailed publication of the tariff applicable for each of the services covered under this Order, including the mark-up and the lease rentals being paid to international carriers by any Bhutanese operators.

BY ORDER:



(Director)

Bhutan InfoComm and Media Authority

Thimphu



EXPLANATORY MEMORANDUM ON THE REVISION

Background

1. Hon'ble Minister for Information and Communications Ministry vide letter no. MoIC (M)/2A/2011/ dated August 17, 2011 has directed the Authority to revise the Telecommunication Tariff Order 2009 and implement the revised Order with effect from **November 01, 2011**.

The main objective of this revision is to make ICT and media services universally accessible at affordable prices throughout country particularly in the rural and remote areas.

2. The Royal Government of Bhutan (RGoB) is determined to connect the people of Bhutan through ICT services, facilitate them to access better services and enhance economic and employment opportunity within an ICT enable knowledge based society. In order to achieve this objective, the RGoB had issued two consecutive Executive Orders (first on June 18, 2009 and then on December 31, 2010) for creating conducive environment for making ICT services easily accessible at an affordable rate by the people of Bhutan.
3. The Executive Order of 2011 highlights on the importance of "Achieving Gross National Happiness (GNH) through ICT" by aspiring to creating 2,500 jobs by 2013; brand Bhutan as Hi-Tech ICT destination by 2013, and facilitating local participation.



4. The first (June, 2009) Order focuses on nationalizing the fibre networks owned by Bhutan Telecom Ltd. (BTL) and Bhutan Power Corporation Ltd. (BPC) for creating level playing field for the various business involved in the ICT Sector.

The RGoB believed that nationalizing all telecommunication backhaul (Fibre) network would bring down the cost of accessing such network (fibre); make such fibre accessible by any individual dwelling; and conducting business within the Kingdom of Bhutan.

5. The second (December, 2010) Order directed Ministry of information and Communications (MoIC) to market and to promote Bhutan for creating demand for ICT/IT foreign firms to invest in Bhutan and facilitate local partnerships for these firms. Along with BPC, they have also been directed to ensure parity with Indian telecom bandwidth rates to IT/ITES businesses.

6. Foreign firms interested in investing in the Bhutanese ICT sector are of the opinion that the cost of connectivity is high compared with neighbouring India. To dispel such concern and to make cost off connectivity comparable with the neighbouring countries, the MoIC, as per the Executive Oder of the RGoB, directed the Authority to review the existing Telecommunication Tariff Order 2009 and make revision based on the following :

- a) Rate of Return (RoR) on fibre = 0 %
- b) Deprecation = 0 %
- c) Operation and Maintenance (O&M) cost = 0 %

7. Based on the Directive of the Ministry, the Authority amended the Telecommunications Tariff Order 2009. It was made public in March 2012 with the intent to implement from 1 April, 2012. However, the Authority received a joint-



appeal from Bhutan Telecom Ltd. (BTL) and Tashi InfoComm Ltd (TICL) against the Tariff determination on 24 April, 2012.

8. In order to understand the difficulty in implementing the Authority's Tariff determination, a consultation with BTL and TICL was conducted on 25 April, 2012. It was then agreed to set-up joint taskforce to review and then to submit comprehensive counter proposal to Authority.



Methodology of fixation of Cost based ceiling tariff for Dark Fibre

1. The pricing model for fibre was based on cost based approach as discussed and agreed during the previous consultation held in the year 2009.
2. Contrary to the previous consultation, a top-down cost model for arriving at annual lease rental of dark fibre has been adopted.
3. The fixed cost component of Nu. 100,000 (entry fee paid by the licensee during the time of acquiring the licence) and the variable costs (depreciation, rate of return, and operation and maintenance) in the provision of dark fibre arising from the CAPEX recovery have been excluded as per the Directive of the MoIC.
4. Based on the above explanations, the cost per pair of fibre is zero and the MoIC decides the allocation of the dark fibre.
5. For those fibre which are funded by individual licensed ICT facility operators, the cost of pair of dark fibre per annum per kilometre will be same the rate determined in the Telecommunications Tariff Order 2009; that is **Nu. 10, 220.00**



Methodology of fixation of cost based ceiling Tariff for Domestic Leased Circuits

1. The Authority has chosen to adopt the cost-based methodology using bottom-up approach that captures the current market realities. This bottom-up approach used costs of disaggregated network elements to derive annual rental value. The capacity of the network assumed for the purpose of cost calculations is STM1.
2. Two broad cost components have been used for calculating the cost of domestic bandwidth; capital and operation and maintenance cost.

2.1 Capital/fixed cost: The equipment cost including infrastructure cost (shelter, power, land, and tower) and civil work cost are taken as the capital/fixed cost. The total cost of STM 1 System was taken as **Nu. 0.72 Million**. This cost includes the cost of equipments, accessories, installation and power system.

The cost of infrastructure was taken as **Nu. 2.81 Million**. This cost includes the cost of shelter, power equipments, land and civil work.

A sum of **Nu. 0.18 Million** was also taken as Import duty and taxes; 15 percent (10 percent import and 5 percent sale) tax.

The total capital cost is around **Nu. 4.92 Million** per site. However, only fifty percent (50 %) of the Capital Cost of infrastructure was factored for E1 Costing; **Nu. 2.5 Million**.



