# Rules and Regulations for Licensing and Operation of Internet Service Providers in Bhutan



নহ্বশ্নন্দ্র্বিশ্বস্থান্দ্রিশন্দ্রেশন্দ্রের্বিদ্রিশন্দ্রের্বিদ্রিশন্দ্রের্বিদ্রিশন্দ্রের্বিদ্রিশন্দ্রের্বিদ্রিশন্দ্রের্বিদ্রিশন্দ্রের্বিদ্রিশন্দ্রের্বিদ্রিশন্দ্রের্বিদ্রিশন্দ্রের্বিদ্রিশন্দরের্বিদ্রিশন্দ্রের্বিশন্দ্রের্বিশন্দরের্বিশন্দ্রের্বিশন্দরের্বিশন্দ্রের্বিশন্দ্রের্বিশন্দ্রের্বিশন্দ্রের্বিশন্দ্রের্বিশন্দ্রের্বিশন্দ্রের্বিশন্দ্রের্বিশন্দ্রের্বিশন্দ্রের্বিশন্দ্রের্বিশন্দ্রের্বিশন্দ্রের্বিশন্দ্রের্বিশন্দরের্বিশনের্বিশন্দরের্বিশন্দরের্বিশন্দরের্বিশনের্বিশনের্বিশন্দরের্বিশনের্বিশনের্বিশনের্বিশনের্বিশনের্বিশনের্বিশনের্বিশন



#### **CHAPTER 1: PRELIMINARY**

#### 1.1 Legal basis

These Rules and Regulations are issued as per Sections 90 to 118 and 459 of the Information, Communications and Media Act of Bhutan, 2018 by the Bhutan InfoComm and Media Authority for granting licences for the establishment and operation of Internet Service Providers in Bhutan.

#### 1.2 Title and Commencement

#### 1.3 Repeal

With the commencement of these Rules and Regulations for Internet Service Providers, any provision related to Internet Service Providers under the Rules and Regulations for ICT Facilities and Services in Bhutan is hereby repealed.

#### 1.4 Scope of Application

These Rules and Regulations shall apply for the establishment and operation of Internet Service Providers in the country.

#### 1.5 Amendment

Amendment to these Rules and Regulations shall be made according to the needs and changes in national priorities, policies and industry trends. The amendment of these Rules and Regulations by way of addition, variation or repeal may be effected by the Authority as and when required.

#### 1.6 Interpretation

The power to interpret these Rules and Regulations shall be vested with the Authority who may issue such instruction as may be necessary to give effect to and carry out the provisions of these Rules and Regulations.

#### 1.7 Rules of Construction

In these Rules and Regulations, unless the context indicates otherwise, the masculine gender shall include the feminine gender and the singular shall include the plural and vice versa.



#### 1.8 Definitions

In addition to the following terms, or unless the context requires otherwise, the words and terms used in these Rules and Regulations shall have the same meaning as assigned in the Act:

Alternative Dispute Resolution Centre means the Bhutan Alternative Dispute Resolution

Centre established as per the Alternative Dispute Resolution Act 2013.

**Authority** means the Bhutan InfoComm and Media Authority established as per the provision of the Information, Communications and Media Act of Bhutan 2018.

Autonomous System means a group of IP networks operated by one or more network operator(s) that has a single and clearly defined external routing policy. Exterior routing protocols are used to exchange routing information between Autonomous Systems.

Autonomous System Number means a globally unique number, an AS Number, associated with an Autonomous system. This number is used both in the exchange of exterior routing information (between neighboring Autonomous Systems) and as an identifier of the AS itself. There are two types of AS Numbers: Public AS Numbers and Private AS Numbers.

Border Gateway Protocol means the routing protocol for the Internet. The BGP protocol specifies a TCP-based communications method for establishing routed peering between Autonomous System (AS) border routers (ASBRs) that facilitate the exchange of information about routable IP prefixes. BGP peering exists between all active Internet Autonomous Systems.

Communication System means facilities, equipment or components which are used for the emission, transmission or reception of messages by any wire, cable, radio, wireless, microwave, laser, satellite, optical or other electromagnetic system; provided the facilities, equipment or components are located in Bhutan.

Contention Ratio means the number of users sharing the same data capacity.

**Digital Subscriber Line (DSL) means** a modem technology that uses existing telephone lines to transport high-bandwidth data, such as multimedia and video, to service subscribers.

DSL provides dedicated, point-to-point, public network access.

Dzongkhag Center means in and around the Dzongkhag administration and Thromde.

ICT License Holder means an entity holding a consolidated license of ICT Facilities and Services.

## CHAPTER 2: GENERAL PROVISION

#### 2.1 Requirement of the License

- 2.1.1 Any person intending to establish and provide an Internet Service in the country shall obtain a valid licence from the Authority.
- 2.1.2 Any Internet Service established or equipment installed by a person for the sole purpose of personal, private or internal organization use are exempted from obtaining a licence, provided such equipment does not:
  - a. Interfere with the operation of licensed ICT facility or ICT service, or
  - Amount to using licensed spectrum identified for allocation to the licensed ICT facility or ICT service provider.
- 2.1.3 All licenses granted under this Rules and Regulations shall be non-exclusive and non-transferable unless approved by the Authority.

#### 2.2 Eligibility of License

- 2.2.1 Any person who:
  - a. Is citizen of Bhutan or owns a registered legal entity in Bhutan,
  - b. Is of sound mind,
  - c. Is not a political party,
  - d. Has not been, under the laws of Bhutan, declared insolvent, and/ or found guilty of a criminal offence concerned either under the Act or any other Act, or his reputation has been restored through due process of the law,
  - e. Owns less than 5% of shares in any other media licenses issued by the Authority.
- 2.2.2 The Authority shall determine the majority share holding of the applicant based on the size of the investment and type of market of the company.
- 2.2.3 Any Foreigen Direct Investment in Internet Service Providers (ISP) may be allowed as per the FDI Policy.
- 2.2.4 The application for Internet Service Provider (ISP) license shall be submitted to the Authority along with a detailed project proposal (DPR). The format for DPR shall be as per Annexure 4 of these Rules and Regulations.
- 2.2.5 The Authority shall review the application and require the applicant to make a presentation on their proposal. The presentation shall be part of the assessment of the application.

- 2.2.6 The Authority shall, either reject the proposal or seek additional information in the event if the information submitted is found to be insufficient.
- 2.2.7 The Authority shall intimate the decision in writing to the applicant within seven (7) working days.
- 2.2.8 In the event, if the Authority considers not granting the license, it shall notify the applicant with reasons accordingly.
- 2.2.9 Every applicant for a licence to provide Internet Service shall disclose to the Authority the following information:
  - a. The name and addresses of the persons holding shares or ownership or other beneficial interests therein.
  - b. Financial information and business plan relevant to the application.
  - c. Infrastructures and technological deployment, and
  - d. Any other information as determined by the Authority.
- 2.2.10 The Authority shall where necessary, before granting an In-principle License, take into account whether the:
  - a. Applicant possesses the technical and financial competency required for obtaining the licence,
  - b. Competition among the ISPs are promoted,
  - c. National and public interests are safeguarded.
- 2.2.11 The Authority shall grant an In-Principle License valid for a period of six months to establish the infrastructure for provisioning internet service prior to issuance of the ISP License.
- 2.2.12 The ISP License shall be granted only after complete establishment and upon fulfillment of the criteria specified in the In-Principle License.

## CHAPTER 3: TYPE OF LICENSE AND ITS SCOPE

#### 3.1 Types of License

- 3.1.1 The Authority shall issue two different types of ISP licenses as follows:
  - a. Class A: For those applicants who wish to provide internet service in all 20 Dzongkhag centers.
  - b. Class B: For those applicants who wish to provide internet service only in a few selective Dzongkhags. However, if the licensee intends to extend the service beyond the designated area of operation, then a prior approval shall be sought from the Authority.
- 3.1.2 The ISP License shall be used solely for establishing, installing and maintaining its system in Bhutan for provisioning of public internet access services and other valueadded services, as approved by the Authority.

#### 3.2 Term of License

- 3.2.1 Class A license shall be issued for a period of Five (5) years.
- 3.2.2 Class B license shall be issued for a period of Five (5) years.

#### 3.3 License Fee

The Licensee shall pay the following fees to the Authority:

- 3.3.1 Initial license fee amounting to Ngultrum One Hundred Thousand only (Nu. 100,000) for Class A with International Gateway.
- 3.3.2 Initial license fee amounting to Ngultrum Seventy Five Thousand only (Nu.75,000) for Class A without International Gateway.
- 3.3.3 Initial license fee amounting to Ngultrum Fifty Thousand only (Nu. 50,000) for Class B only.
- 3.3.4 One percent (1%) of the Annual Adjusted Gross Revenue or Ngultrum Ten Thousand (Nu.10,000) for Class A with International Gateway, whichever is greater as an annual license fee.
- 3.3.5 One percent (1%) of the Annual Adjusted Gross Revenue or Ngultrum Seven Thousand Five Hundred (Nu.7,500) for Class A without International Gateway, whichever is greater as an annual license fee.
- 3.3.6 One percent (1%) of the Annual Adjusted Gross Revenue or Ngultrum Five thousand (Nu.5, 000) for Class B, whichever is greater as an annual license fee.

3.3.7 The annual license fee shall be paid on or before the issuance date. In the event, the Licensee fails to pay the fee within this stipulated time, a penalty of Nu.50 shall be levied for a maximum period of 90 days after which the licence shall be cancelled.

#### 3.4 Obligations of the Licensee

#### 3.4.1 General Obligations

#### The Licensee shall:

- a. Ensure to protect the data and maintain privacy of its customers.
- b. Install in its ISP system the required certified cybersecurity systems to ensure resilient cybersecurity features.
- c. Provide the Authority with any document or information within its knowledge, custody or control which the Authority may by notice or direction require for the exercise of its functions and duties under the Act and these Regulations.
- d. Not show undue preference towards or exercise undue discrimination against any person or class of persons on, inter alia, the price and performance characteristics of the services provided and conditions under which the services are provided.
- e. Not enter into any agreement or arrangement whether legally enforceable or otherwise, which in any way prevent or restrict competition in relation to the operation of the system or provision of services by the licensee or any other telecommunication system and/or services licensed by the Authority.
- f. Resolve the dispute with its customers relating to its services and billing internally. If such an arrangement fails, the Authority may determine the matter as per the provision of the Act.
- g. Comply with any directions, which the Authority may from time to time issue, in administration of the license and in exercise of its powers, functions or duties under the Act.
- h. Be liable in accordance with general laws of Bhutan for any content produced or created by them, and which may be made available for public access.
- i. Be solely responsible for installation, networking and operation of necessary equipment and system, treatment of the subscriber's complaint, issue of bills, attending claims and damages arising out of his operation except damages resulting from force majeure.
- Negotiate the wholesale rate with the ICT License holder until the Authority fixes such rate.

- k. Be allowed to provide last mile connectivity through authorized Local Cable Operators without additional licensing subject to the Rules and Regulations for the Operation of Cable Television Service as modified from time to time and prior approval from the Authority.
- The Licensee shall implement accounting separation between its facilities and services by maintaining separate costs and charges for different services it offers.
- m. In order to monitor the Licensee's compliance with the conditions of the License, the Authority may also direct the Licensee to arrange at its own cost for a separate and independent audit of its activities. The Licensee shall, at the Authority's request, submit the Authority the audited accounts and reports prepared for inspection.
- n. Not distribute internet services similar to that of Cellular Mobile Internet Service.

#### 3.4.2 Class A Licensee

#### The Licensee shall:

- a. Lease wholesale internet from the ICT License holders or establish their own international gateway.
- b. The Licensee shall be allowed to provide both wholesale and retail internet services.
- c. Submit the complete proposal for rolling out their service to 20 Dzongkhag centers within three years from their inception date.
- d. Be eligible for allocation of government fibre.

#### 3.4.3 Class B Licensee

#### The Licensee shall:

- a. Lease wholesale internet from the ICT License holder.
- b. Not be allowed to provide wholesale internet services.
- c. Submit an agreement with the service providers or other such parties to the Authority before the commencement of the services.
- d. Submit their Expression of Interest if the licensee intends to upgrade to a Class A.



# CHAPTER 4: RENEWAL, MODIFICATION AND TRANSFER OF LICENCE

#### 4.1 Renewal of License

- 4.1.1 The ISP license shall be renewed on or before the expiry of its term as per the form prescribed in Annexure 3 of these Rules and Regulations.
- 4.1.2 A fine of Ngultrum fifty (Nu. 50) per day shall be levied for late renewal after the expiry of the grace period of 30 days and up to a maximum period of 90 days after which the license shall be automatically cancelled.

#### 4.2 Non-Renewal of License

- 4.2.1 The Authority may not renew the licence if the licensee has engaged in the conduct that materially contravenes or contravened the Act, Rules and Regulations, Directives issued by the Authority or any condition of the licence terms and conditions. The Authority shall convey its decision in writing within ten working days of its intention not to renew the licence.
- 4.2.2 The licensee shall be given thirty days to make written representations to the Authority in respect of the refusal to renew a license under section 4.2.1 of this Rules and Regulations.
- 4.2.3 The Authority shall, within fifteen days of the receipt of the submission, consider any written representations made under section 4.2.2 of this Rules and Regulations, and inform the licensee of its decision on the matter.
- 4.2.4 If aggrieved by the decision under section 4.2.3 of this Rules and Regulations, the licensee may appeal before the Alternate Dispute Resolution Centre within ten working days from the date of the decision.

#### 4.3 Modification of the License

- 4.3.1 The modification of the license shall only be made by the Authority on the following conditions:
  - a. Where the Authority and the Licensee, by agreement in writing, agree to modify the licence, or;
  - b. On the directive of the Ministry based on the national interest and security of the country.

- 4.3.2 In the event of section 4.3.1 (b.) above, the Authority shall give to the licensee a written notice that:
  - a. Sets out the proposed modification.
  - b. States the reasons for the proposed amendment.

#### 4.4 Transfer of License

- 4.4.1 The Licensee shall not assign, transfer, sublet or otherwise dispose of its rights, duties, liabilities, obligations and privileges under this License to any person or persons except with the prior approval of the Authority.
- 4.4.2 The Licensee wishing to transfer the licence shall apply to the Authority in writing.
- 4.4.3 The Authority may approve such transfer subject to terms and conditions, which the Authority at its discretion may impose.



## **CHAPTER 5: INTERNATIONAL GATEWAY**

#### 5.1 General

- 5.1.1 Only the Class A licensees may establish gateways.
- 5.1.2 The Licensee shall submit the intent to connect to international gateway services if they wish to establish their own International gateway.
- 5.1.3 The Licensee shall use the gateway solely for carrying Internet Traffic.

#### 5.2 Monitoring

5.2.1 The Licensee shall connect each router or switch of the ISP by the LAN operation at the same speed as the router or switch and the monitoring equipment shall be connected to this network.

## CHAPTER 6: TECHNICAL REQUIREMENTS

#### 6.1 Technical Conditions

The licensee shall:

- 6.1.1 Provide to the Authority on demand, the details of the technology deployed and proposed to be deployed for operation of the service.
- 6.1.2 Submit to the Authority the information and technical data of all telecommunication infrastructures, technology and any telecommunication equipment which are part of the system and which are to be connected to the public telecommunication networks.
- 6.1.3 Establish or provide any telecommunication links outside the licensee's premises, whether by wire, cable, radio, fiber optics or otherwise, connecting the system to any other telecommunication system or equipment without the prior approval of the Authority.
- 6.1.4 The details including but not limited to the following must be provided:
  - a. Backbone link from
  - b. CACHE BOX for internet Caching
  - c. Bandwidth Management Server
  - d. Firewall and Security Server
  - e. Network Switch
  - f. Wi-Fi Broadcasting Tower
  - g. Transit Router Specifications
  - h. Transit router

Sk/

#### 6.2 Network Interconnection and access

- 6.2.1 The licensee shall be a member of the regional Internet address registry (RIR) which is recognized by the Authority for the Asia-Pacific region.
- 6.2.2 The licensee shall submit a block of global IP addresses and Autonomous System (AS) Numbers to the Authority.
- 6.2.3 The licensee shall use IP (internet protocol) in conjunction with transmission control protocol (TCP) and shall meet the interface requirements of the ISP to whose network its node is connected.
- 6.2.4 The Licensee shall have access and shall provide access to the systems operated by other telecommunication licensees including other internet service providers in Bhutan. The terms and conditions of the interconnection and access shall be commercially negotiated between the licensee and other internet service providers. In the event if the parties cannot reach an agreement, the matter shall be determined by the Authority as per the provision of the Act.

#### 6.3 ISP Peering Technical Requirements

- 6.3.1 The licensee shall interconnect with Bhutan Internet Exchange directly or through their upstream provider.
- 6.3.2 A network looking to peer shall have:
  - a. A public Autonomous System (AS) number assigned by a Regional Internet Registry (RIR) without which the network does not have a unique "identity" on the Internet for the purposes of routing traffic.
  - b. At least one block of public IP addresses (independent of any upstream provider assigned by an RIR.
  - c. A network edge router capable of running the BGP protocol, and the technical capability to configure and manage BGP interconnections.

## CHAPTER 7: TARIFFS AND QUALITY OF SERVICE

#### 7.1 Tariffs and Schemes

- 7.1.1 The licensee shall charge tariffs for the service as per tariff orders, Regulations and directions issued by the Authority from time to time.
- 7.1.2 The tariff shall be approved by the Authority before implementation.
- 7.1.3 File its schemes of services, including non-price terms and conditions for the provisioning of services and price schemes with the Authority before commercial launch or announcement of such services.

#### 7.2 Quality of Service and Standards

- 7.2.1 The licensee shall ensure quality of service (QoS) as prescribed by the Authority in Annexure 1. The licensee shall adhere to such QoS standards and provide timely information as required therein.
- 7.2.2 The licensee shall be responsible for:
  - a. Maintaining performance and QoS standards.
  - b. keeping a record of the number of faults and rectification reports in respect of the service, which will be produced before the Authority as and when, and in whatever form desired.
- 7.2.3 The licensee shall be responsive to the complaints lodged by its subscribers.
- 7.2.4 The Authority may carry out performance tests on the licensee's network and evaluate QoS parameters in the licensee's network to ascertain that the network meets the specified QoS standards.
- 7.2.5 The Licensee shall be required to meet the minimum Quality of Service Standards that corresponds to 99% of network availability.



# CHAPTER 8: OFFENCES, PENALTIES, APPEALS AND INDEMNIFICATION

#### 8.1 Offences and Penalties

- 8.1.1 Any person who owns and operates any Internet Service in the country without a valid license issued by the Authority shall be guilty of an offence and the Authority may impose a fine not exceeding three years daily minimum national wage rate along with other regulatory actions that may be imposed.
- 8.1.2 Any person involved in effecting any purported transfer of a licence other than in accordance with provision of these Rules and Regulations shall be liable for a fine not exceeding one year daily minimum national wage rate along with other regulatory actions that may be imposed.
- 8.1.3 Any person who contravenes any provision of the Act, Rules and Regulations, licence terms and conditions and the directives for which no penalty is specifically provided shall be guilty of an offence and shall be liable for a fine not exceeding one year daily minimum national wage rate along with other regulatory actions that may be imposed.

#### 8.2 Appeals

Any appeal against the decision of the Authority shall be made to the Alternative Dispute Resolution Center within ten (10) working days from the decision of the Authority.

#### 8.3 Indemnification

- 8.3.1 The Licensee shall indemnify, defend and hold harmless the Authority and its officials, agents, attorneys and representatives against any and at all costs, damages, expenses, claims, suits and actions, including but not limited to expenses for legal fees, whether suit brought or not, and disbursement and liabilities incurred or assumed by the Authority in connection with:
  - damage to persons or property, in any way arising out of or through the acts or omissions of licensee, its officials, agents, attorneys, representatives or employees.
  - b. request for relief arising out of the licensee's action or inaction which results in a claim for invasion of the rights of privacy; defamation of any person, firm or corporation; for the violation or infringement of any copyrights, trademark, trade name, service mark or patent; or of any other rights of any person, firm or corporation; or
  - any or all claims arising out of licensee's failure to comply with the provisions of these
     Rules and Regulations or any other law, or Rules applicable to the licensee.

# ANNEXURE 1: QUALITY OF SERVICE STANDARDS

S.l no Parameters		Benchmark	
1	Provision of internet access once the application is received	In less than 5 working days subjected to technical feasibility  90% by next working day and 100 % within 3 days	
2.	Fault repair		
3.	Customer care (Promptness in attending customer request)  a. Shifting b. Closure c. Additional facilities	< 3 day <24 hrs <24 hrs	
4.	Response time to the customer for providing assistance	% of calls answered  a. Electronically  - Within 20 secs= 80%	
		- 49 Seconds= 95%  b. Operator - Within 60 secs= 80% - Within 90 Secs=95%	
		Within 70 Sees 7570	
5.	Customer Perception of Services  a. % satisfied with provision of service  b. % satisfied with billing	> 95 > 90	
	c. % satisfied with help services d. % satisfied with network performance, network reliability and network availability e. % satisfied with maintainability	>90 >95 >95	
	f. Overall Customer satisfaction	>95	



## ANNEXURE 2: APPLICATION FORM FOR NEW ISP LICENCE

- i. Complete all the information as required and submit it along with the Internet Service Provider (ISP) Project proposal.
- ii. The Authority may reject the application in the event, if the information is not submitted as per the format, or if the information submitted is incomplete.
- iii. The applicant should be familiar with the relevant provisions of the Information Communication and Media Act of Bhutan 2018 and ISP Rules and Regulations 2020.

#### A: Details of the Applicant:

Name:		
	(a) (a) (b) (b) (c) (c) (d) (d)	
Citizen ID no. :		
Village:		
2.74 W. areaste V		
Gewog:		
The state of the s		
Dzongkhag/ Dungkhag:		
Business Address (PO Box):		
Present address:		
Contact number:	1. 2.	
a) Fixed/Mobile number:	pulline in ethi herweddy	
b) Fax number:	A Control of Control Person and Local	
Email address:		
MAINUS.		

B: Details of the Establishment:

11	Proposed type of ISP  License		
	Proposed name of the Internet Service Provider:		
	Details of the personnel  a) Manager		
general control of the control of th	<ul><li>Name:</li><li>CID No.:</li><li>Qualification:</li></ul>	atministration to the second	
2.	b) Technicians  1. Name:  CID no.		
	Qualification:  2. Name:  CID no.:	2 (1 max) 1	
of a grant throws	Qualification: Use separate sheet, if		
3.	Intended Area of Operation:		
4.	Expected number of Customers:		

#### C: Technical details:

1.	Location of Server room:	
	24.711	
2.	Type of Backup:	
3.	Type of fibre used:	***
1.	DNS server address:	

	4 49354 5g. + 566 492 1*	
5.	International Gateway used:	
D: Det	tails of the documents to be submitted:	
1. Cop	y of Citizenship Identity Card	
2. Cop	y of the Security clearance	
3. One	passport size photograph	
4. Inter	met Service Provider project Proposal	
F: Dec	laration	
/We he	ereby declare that:	
i.	The details provided above are correct and factual. In t	he event if the any of the
	information provided above are found to be incorrect,	the Authority shall have the
	right to reject the proposal; and  Do not own or operate any other ISP services.	
	Do not own of operate any other 151 services.	
		Andread revision 1: )
		· · · · · · · · · · · · · · · · · · ·
Signatu	re of Applicant	Affix legal Stamp
Date:		

# ANNEXURE 3: APPLICATION FORM FOR RENEWAL OF INTERNET SERVICE PROVIDER

#### A. Details of the Licensee

1.	Name of the Internet Service Provider:
2.	License Number:
2.1	Date of Issue:
2.2	Date of renewal:
3.	Name of the Owner:
4.	CID No:
5.	Security Clearance
6.	Tax Clearance
7.	Area of Operation:
8.	Number of subscribers:
9.	Contact Details
9.1	Fixed/mobile no:
9.2	Email address:

a.

#### B. Declarations

I/We hereby declare that:

The details provided above are correct and factual. In the event if any of the information provided above are found to be incorrect, the Authority shall have the right to reject the renewal.

Signature of licensee		
	9	
Date:	*	
	t that you	
		Affix legal Stamp



# ANNEXURE 4: GUIDELINE FOR THE PREPARATION OF DETAIL PROJECT REPORT –DPR BY THE APPLICANT

The detail project report must include the following information:

#### a. Organisation and Corporate information

- i. Details of the applicant: Name of the applying individual/ group of individual or company, contact telephone number, facsimile number, e-mail address, and name and designation of a contact person within the application's organization.
- ii. Details of the shareholders including their profile.
- iii. Comprehensive curriculum vitae of the applicant including details of the applicant's current activities.
- iv. Name of the proposed organization (company).

#### b. Project Management and Implementation Plan

- Location of the International gateway and its interconnection plan with other service provider.
- ii. Implementation and management plan including implementation schedule in Gantt chart.
- iii. Management strategy and its future plan for first three years.

#### c. Financial Information and Business Plan

The financial information should include:

- i. Projected capital and operating expenditure.
- ii. A breakdown of the proposed capital expenditure and working capital requirements for the first five years of operation.
- iii. Documentary evidence to prove that the applicant has the financial capacity to meet the capital investment required in carrying out the activity proposed including the proposed source of funds.

The Business Plan information should include:

i. Comprehensive business plan.

- ii. Projected volume of business, indicative prices for the services and market share for the first five years of operation.
- iii. The forecast internal rate of return and payback period of the investment.
- iv. The segment of the market (specific geographical area) that the applicant will target.
- v. Distribution, marketing and promotion strategy.
- vi. The service roll-out for the next five years including description of the activities that will take place in a given time framework such as pre-commencement and post commencement of services.

#### d. Infrastructure and Technologies

The infrastructure and technology details should include:

- i. Details of the proposed technology used for delivery of services.
- ii. Details of Location of the facility to host the servers (For Internet services only).
- iii. Detail on the Internet backbone connectivity (For internet services only).
- iv. Details on transmission including the location of transmission and geographical coverage.
- v. Type of infrastructure that would be shared with other facility/ service providers.
- e. Network Configuration: Refer to the overall infrastructure and the components of the networks to enable the provision of the services. This should include, where relevant the network management capabilities, routing plan, transmission plan, signalling plan and diversity plans.
- f. Network coverage: The planned locations and technical details of stations, exchanges, radio base station sites and other equipment to be installed and frequency spectrum to be used.
- g. Service Coverage, Capacity and Improvement: The planned geographical coverage of the network upon launch of services and the network capacity expansion plans for the first 5 years of operation; and commitments for improvements to infrastructure facilities for the next 5 years.
- h. Network Interconnection: Technical proposals for interconnections with existing network of the licensed service providers the interconnection configuration, point of interconnection interface requirements and diversity arrangements.
- i. Network Code of Practice, Security and Protection: Network performance with an indication of the minimum standards and details of network security, IT/system security and physical network protection.



j. Network technologies: Technologies employed for the systems to deliver services with the rationale for the choice of technologies selected.

#### k. An Impact Report

An impact analysis report on the following subject:

- i. How the applicant's operations will benefit/impact the development of the ICT services.
- ii. Strategies that will be employed to compete effectively in the Bhutanese ICT sector.
- iii. Details of any initiatives that would be undertaken towards sharing of infrastructures.

# ANNEXURE 5: APPLICATION PROCEDURE FOR ESTABLISHMENT OF INTERNATIONAL GATEWAY

#### 1. Application Procedures

The application must be submitted the following documents along with detail project report (DPR) in the format mentioned below.

- Copy of the Citizen ID Card
- Security Clearance

#### 2. Information required for licence application

To facilitate easy assessment of the application, the applicant shall submit DPR in the following format and order of information:

#### 2.1 Organization, Corporate information and experience

- i. Name of the applying individual/ group of individual or company, contact telephone number, facsimile number, e-mail address, and name and designation of a contact person within the application's organization.
- Comprehensive curriculum vitae of the applicant including details of the applicant's current activities.
- iii. Name of the organization (company) proposed.
- Detailed information on the proposed company, its corporate and shareholding structure.
- v. Detail information on its experience/knowledge of the company or its shareholders, directors, employees, partners in the field of telecommunications business including its Management, Financing and marketing.
- vi. Diagrammatic representation of the management reporting structure as well as general organization chart indicating the distribution of function within the organization.

#### 2.2 Project Management and Implementation Plan

The applicant shall submit detail information on:

 Location of the International gateway and its interconnection plan with other service provider.



- Implementation and management plan including implementation schedule in Gantt chart.
- iii. Management strategy and its future plan for first three years.

#### 2.3 Infrastructure and Technologies

Among other information, infrastructure and technology details should include:

- i. Detail block diagram of system network with descriptions.
- ii. Technical system configuration including technical specification of the major equipment.
- iii. Network connectivity with other service providers.
- Quality of Service Obligation fulfilment plan including Monitoring and compliance detail.
- v. System arrangement to identify, block and eliminate illegal traffic.
- vi. Network security including risk identification and risk respond strategy and plan.

#### 2.4 Financial Information and Business Plan

The financial information should include:

- Projected operating and capital expenditure.
- A breakdown of the proposed capital expenditure and working capital requirements for the first five years of operation.
- iii. Sufficient documentary evidence to prove that the applicant has the financial capacity to meet the capital investment required in carrying out the activity proposed. Additionally, include details of proposed financing structure including proposed source of funds.
- iv. Financing from the foreign sources shall be a cause for rejecting an application.

Among other things, Business Plan information should include:

- Comprehensive business plan including service (internet) expansion plan, in phasewise, to all 20 Dzongkhags.
- Projected volume of business, indicative prices for the services and market share for the first five years of operation.
- iii. Projected profit and loss account including details of revenue (the method of calculation should be clearly outlined), balance sheet and budgeted cash flow statements, showing the amount of capital to be invested on an annual basis for five years. All assumptions

used (asset depreciations policies, annual increase/decrease in operation expenditure) shall be clearly explained.

- iv. The forecast internal rate of return and payback period of the investment.
- v. The segment of the market that the applicant will target (e.g. specific geographical area, activity, viewership or other service providers).
- vi. Distribution, marketing and promotion strategy.

#### 2.5 An Impact Report

An impact analysis report on the following subject must also be submitted:

- i. How the applicant's operations will benefit/impact the country, people and ICT sector.
- ii. Strategies that will be employed to compete effectively in the Bhutanese ICT Sector.
- iii. Details of any initiatives that would be undertaken towards sharing of infrastructure.

