# **Policies and Frameworks for**

# Internet Exchange

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Posts and Telecommunications Department Ministry of Transport and Communications The Republic of the Union of Myanmar

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#### Interpretation

"CDN"	Content Delivery Network
"Committee"	The Executive Committee
"EC Member"	A member of the Executive Committee
"ICP"	Internet Content Provider
"ISP"	Internet Service Provider
"IX"	Internet Exchange
"IXP"	Internet Exchange Point
"OTC"	One Time Charges
"Member"	A Member of IXP
"MOTC"	Ministry of Transport and Communications, Myanmar
"Myanmar"	Republic of the Union of Myanmar
"MRC"	Monthly Recurring Charges
"NIX"	National Internet Exchange
"PTD"	Posts and Telecommunications Department, Ministry of Transport and
	Communications

# Article I. Objectives

- 1. IXPs make the Internet more socially and economically beneficial to a country, and assist in long-range connectivity planning as more local content businesses develop. IXPs
  - reduce International connectivity requirements (bandwidth);
  - improve the speed and reliability of Internet access for local users;

Additionally,

- Local traffic shall be kept local.
- More local service hosting and local content development;

- better online experience to consumers;
- In-country content providers can offer consumers a better online experience;
- 2. PTD considered it was necessary that all Local Traffic should be kept local, so as to minimize incidences of Local Traffic being tromboned via a longer, indirect path overseas, which may affect the quality of Internet services. Internet Exchange Providers ("IXPs") in Myanmar is important role to support the growth of Myanmar's Internet traffic. In the Internet ecosystem, IXPs serve as a connectivity platform for a variety of Internet players including: ISPs, research and education networks, universities, and content providers, among others.
- 3. IX shall be formed as Non-profit organization, owned by industrial. In order to further enhance interconnectivity among Internet players in Myanmar, PTD shall regulate the National Internet Exchange of Myanmar.
- NIX shall be National Internet Exchange. To strengthen NIX development and systematically grow, MOTC shall actively support NIX. NIX members, themselves, shall manage and operate NIX National Internet Exchange.
- 5. To promote contents hosting locally, PTD shall consider excluding local traffic from usage caps and throttling.

# Article II. Policies for IX

# IX Model

- 6. IX must be formed as a non-profit association by the Network Operators, content providers and other related corporations and individuals.
- 7. IX shall be a cost-based, open and neutral Internet Exchange platform designed to facilitate the exchange of Internet traffic amongst operators, thereby improving traffic routing efficiency in Myanmar. IX shall be established under global best practices. IX shall ensure operationally reliable, scalable and sustainable.

#### Services

8. IXP shall provide peering infrastructure service. If necessary, IXP may provide their members with other facilities that can reduce connectivity requirements (bandwidth) and improve the speed and reliability of Internet Access for End users subject to the decision of the Executive Committee. IX shall inform PTD of the approval of such facilities.

9. IX shall be almost always provider neutral and shall not compete with ISPs in providing services to End-users. IX shall not give services directly to End-users.

#### Cost

10. Members shall share the setup and operations costs. Shall define pricing structure such as one-time cost (OTC), Monthly Recurring Cost (MRC), Annual Fee and so on.

#### **IX Members**

11. IXP's peering members shall be Network Operators such as ISPs, ICPs, CDNs and any entity that needs to exchange traffic with the other IXP members and IXP's principal member shall have the telecom license of Myanmar.

#### Regulator

12. PTD shall participate in NIX as Advisory Role to define and issue policies and guidelines. NIX shall follow policies and guidelines in force from time to time by PTD.

#### Neutral location and management

13. IXP location and management should be as neutral as possible and agreed upon by the Executive Committee.

# **Physical Infrastructure**

14. IXPs can be located in a number of different locations agreed upon by Executive Committee.

# Peering with IX

15. Local non-traditional members should be able to join the IX, such as Government networks, VOIP providers, gaming service providers, content providers, research and education networks as long as they have sufficient local IP traffic with the approval of the Executive Committee.

# Article III. Policies for Peering Members

16. Nationwide Mobile Network Operators and all IGW license holders must connect to IX in order to localize traffic. For other Network Operators, connecting to IX is optional. To be traffic localization, IGW license holders shall responsible for their downstream traffic at their best effort.

- 17. Peering Partners shall effort designing their networks under global best practices. Local traffic should pass through Internet Exchange or direct peer link instead of Transit link. Peer partners have to adjust network design and setting to be the best to meet that requirement.
- 18. Peering Partners shall not play traffic not to be smoothness via Internet Exchange in order to sell traffic to other Network Operators via IP Transit link.