M1'S RESPONSE TO IDA'S CONSULTATION PAPER ON SINGAPORE'S INTERNET PROTOCOL TRANSIT AND PEERING LANDSCAPE

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Introduction

1. M1 is a leading info-communication company in Singapore, providing mobile and fixed services to close to 2 million customers. Established in 1997, M1 has made significant inroads into the info-communications market and achieved many firsts, including the first operator to offer nationwide 4G service, as well as ultra high-speed fixed broadband, fixed voice and other services on the Next Generation Nationwide Broadband Network (NGNBN). With a continual focus on network quality, customer service, value and innovation, M1 links anyone and anything; anytime, anywhere.

2. M1 welcomes the opportunity to submit our views and comments to IDA for its consideration in the study on Singapore's Internet Protocol transit and peering landscape.

IDA's IP Transit and Peering Study

3. ISPs seek peering primarily to reduce transit costs and improve service performance (lower latency). The comparison between IP peering and IP transit as illustrated in Figure A1 of IDA's study presumes that all ISPs are able to adopt the business model that best suit their needs, based on their respective traffic and cost considerations. In reality, due to the significant difference in market share, the incumbent ISPs wield the market power to decide whether or not to peer, the peering criteria or alternate interconnect terms with the smaller ISPs, taking into account their own business interests. Traffic and investment asymmetry are usually expressed as the main disincentives to peer with smaller networks. Consideration of regulatory measures to facilitate and improve the market outcome towards achieving fair and equitable traffic exchange arrangements will be beneficial to the industry.

4. In IDA's study, the price comparison among Asian countries is based on IP transit price only. While IP transit prices do continue to decline throughout the world, more can be done to provide for direct traffic exchange which will help to further reduce costs and improve efficiency of operations. The price comparison shown in the study also does not present the full picture on the transit cost to the smaller ISPs in Singapore in the absence of peering arrangements. Whilst local traffic exchange in Hong Kong is settlement-free, the smaller ISPs in Singapore need to further pay incumbent ISPs for delivery of local traffic. The additional local traffic cost impacts the ability of the smaller ISPs to offer more competitive retail prices to the public

Advantage of Open & Settlement-Free IP Peering

5. M1 is of the view that settlement-free IP peering arrangement is desirable towards creating a level playing field for big and small ISPs, thereby allowing the players to focus and compete on innovation, content and service delivery. The success of the NGNBN model is a testament to effective regulatory intervention as a means to address industry challenges. The Government's NGNBN initiative opens the door for small and new RSPs to purchase bandwidth connectivity at non-discriminatory and non-exclusive prices and compete on a level playing field to provide competitive and innovative services to end-users. The disadvantages of company scale and limitations on infrastructure are minimized so that competition in the market is increased, and consumers are able to enjoy more options and better services at lower prices.

6. A similar regulatory approach to ensure open, fair and transparent access to IP connectivity will be beneficial to the industry. With the Government's Smart Nation initiative, the volume of local Internet traffic can be expected to increase exponentially. With consumers' growing demand for services with increasing bandwidth and lower tolerance for latency, the ability to localise Internet interconnections will be key to improving quality of service and reducing delivery costs. Free and open peering is a strong imperative for creating an affordable and efficient Internet market. As the operational costs of local traffic exchange are recovered by charges to content providers, settlement-free IP peering will not bring about unfair costs to the incumbent ISPs. Such cost savings will, in turn, encourage and allow the ISPs to differentiate their service offerings in the competitive end-user market.

The Current landscape

7. Key points in relation to the Singapore market environment are as follows:-

    a. Today, not all ISPs in Singapore have been able to establish IP Peering arrangements with each other for routing of local traffic, particularly with the incumbent ISPs;
    b. To overcome the latter, many ISPs have to purchase IP Transit as an alternative for inter-operator connectivity;
    c. The incumbent ISPs are compensated by the respective businesses that hosted their local websites with them. With further local transit cost to the ISPs for access to those local websites, there is double compensation to the incumbent ISPs. Local traffic charges that are imposed are also not mandated on a cost recovery basis; and
    d. The Singapore Internet Exchange (SGIX) is established as a neutral Internet exchange for both local and international IP traffic. The absence of the key incumbent ISPs at SGIX is clearly a lost opportunity for reciprocal settlement-free peering arrangement.

Regulatory Support

8. Given the current market landscape, so long as IP peering remains voluntary, it is unlikely that there will be a motivation for the incumbent ISPs to peer or move towards improved interconnection arrangements. Without recourse through regulations, Smaller and new ISPs could seek alternative approaches to achieve greater cost efficiencies in traffic routing, but all traffic and revenue still leads to the incumbent ISP networks, solely because they have the power position based on a captive customer base. Regulation will improve on the unregulated market's solution, given the actual environment characterizing the market.

9. Nevertheless, if it is deemed that there is no strong justification for mandating IP Peering arrangements at this juncture, IDA can lend its support towards fostering a conducive wholesale environment through continued funding for SGIX to build on its growth and enhance its market position in offering an affordable and efficient central point for traffic exchange. With attractive rates and better connection quality, the SGIX can build a critical mass of member ISPs and leverage the combined market power towards gaining improved terms of interconnection, and help change an unsustainable situation where tromboning of local traffic remains more economical than exchanging traffic locally or regionally.