

MARCH 2010

MEDIA FACTSHEET

Singapore Internet Exchange (SGIX)

To promote Singapore as a major infocomm hub for the region, the Singapore Internet Exchange (**SGIX**) established as a neutral Internet exchange offers an efficient central point of Internet traffic exchange for domestic and international telecoms carriers, Internet service providers, and content and games providers. As a neutral exchange, it will offer its members interconnection services on a fair and non-discriminatory basis.

With the improved connectivity for Internet service providers and international carriers, the Internet exchange will catalyse the growth of Singapore's infocomm industry by encouraging content hosting and traffic exchange, and related developments such as the establishment of data centres.

As bandwidth-intensive applications become prevalent, the SGIX will allow Internet users faster access to such services with efficient network connectivity. This will improve the overall broadband experience of Internet users especially where latency-sensitive applications for human-to-human interaction, voice-over-IP and online gaming are used.

SGIX was incorporated in September 2009 with founding members from the industry, including domestic and international telecoms carriers, Internet service providers, and content and games providers.

BENEFITS OF SGIX

Benefits to Local Internet Service Providers (ISPs)

Lowers Interconnectivity Costs: Interconnectivity among local and foreign ISPs is vital to enable users within a country to contact other users or access data anywhere in the world seamlessly on the Internet. Currently, apart from having connectivity with international carriers, Singapore's ISPs incur additional costs in establishing multiple links to interconnect with one another in order for their customers to access local contents directly. As most ISPs already have connectivity arrangement with common international carriers, they would exchange traffic with one another overseas rather than incur additional costs for multiple local interconnections. Consequently, local Internet traffic would be routed abroad first, before users here can access the local content.

With the establishment of the SGIX, it provides a central point for the ISPs to exchange traffic with one another directly instead of routing through international carriers before reaching a local ISP. In addition, this arrangement enables customers

of the ISPs to access local contents from the other ISPs even when cable outages, such as those caused by earthquakes, occur on the international network. Using a local exchange like SGIX would help to cut connectivity cost and improve the resiliency of their networks. Ultimately, it would also improve the speeds their customers can experience when accessing local contents.

Benefits to International Service Providers

Region Reach: Given Singapore's proximity to the regional markets and extensive global connectivity, SGIX is well-positioned as a central traffic exchange in the region to serve the international carriers and content service providers. This is because carriers from around the world can exchange traffic effectively without having to establish multiple international connections across the region. This provides a good opportunity for them to aggregate their international traffic from the region resulting in greater cost-savings, such as reducing the need to use international circuits to route regional traffic.

The content providers can also leverage on SGIX as a gateway to reach out to the growing market in the region without the need to establish multiple connectivity links or presence across the region as well. Content providers will find it more appealing to consolidate their regional content centrally and it significantly lowers the overall cost of content delivery to the regional users.

Benefits to Singapore Economy and Consumers

Boosting Singapore's Infocomm Hub: An efficient traffic exchange eco-system will enhance Singapore's attractiveness to overseas investment from players such as content service providers, data centre players and ISPs through catalysing the growth of data centres and content-hosting here. The economic benefits will arise through direct investments from foreign content service providers where it will also generate indirect economic benefits that flow down to the broader Singapore economy.

A neutral Internet exchange in Singapore will provide efficient local routing of traffic and address the peering issue of today where local traffic leaks overseas and local traffic is dependent on overseas networks.

Enhanced Online Experience for Consumers: With the trend towards higher bandwidth applications, having such content hosted within Singapore would allow consumers here to enjoy improved broadband experience. This includes faster access to content such as videos, games and software in the "Cloud". Latency may also be significantly improved as local Internet traffic need not be routed overseas first. By improving the overall broadband experience, ISPs and content service providers can also increase customer satisfaction and loyalty. The increased demand for high bandwidth broadband applications could in turn also further drive the demand for more locally-hosted contents and create business opportunities for more online application developments. Consumers, including those from the region, will eventually benefit as more "international" content gets hosted within Singapore.

ABOUT SGIX

SGIX was incorporated on 4 Sep 09 with 11 founding members from all levels of the industry, including the domestic telecoms carriers, international telecoms carriers, Internet service providers, and content and games providers.

SGIX will establish a new and neutral Internet exchange point with the objective to promote efficient interconnectivity for the traffic exchange eco-system in Singapore. The SGIX infrastructure is build on two separate nodes where these sites are carrier neutral and have excellent facility qualities. In addition, the diverse locations also provide a redundancy option for service providers who require high network availability and uptime.

SGIX operates as a not-for-profit organisation and offers its services at lowest fee possible on a cost recovery basis. The equal and shared ownership of the SGIX facilitates self-regulation by the members that ensures the Internet exchange aligns to the members' interests and fair treatment of the members.

SGIX held its First Extraordinary General Meeting on 23 Oct 09 and elected the First Board of Directors.

SGIX Board of Directors
Malcolm Rodrigeus - Nucleus Connect (Chairman)
Leong Peng Ham – Starhub
Mak Wei Seng – SingTel
Patrick Scodeller – MobileOne
Yow Tau Keon – 1-Net
Tan Jin Siong – PacNet

Members of SGIX

As of Feb 10, SGIX has 14 members and they are as follows:

Members of SGIX
1-Net Singapore Pte Ltd
Deutsche Telekom Asia Pte Ltd
France Telecom Long Distance (S) Pte Ltd
Infocomm Asia Holdings Pte Ltd
LGA Telecom Pte Ltd
MobileOne Ltd
New MediaExpress Pte. Ltd
Nucleus Connect Pte. Ltd.

PacNet Global (Singapore) Pte Ltd

Singapore Advanced Research and Education Network (SingAREN)

Singapore Telecommunications Ltd.

Starhub Ltd

Tata Communications International Pte Ltd

Voxel Inc

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