

Mongolia Internet Exchange Marks Another Stage of Internet Development

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By Mark Heard

On April 20, Mongolia saw the installation of an Internet exchange, signaling that another step had been taken in the country's adoption of the Internet and information and communications technology (ICT) as tools for development.

The Mongolia Internet Exchange, a project implemented by InfoCon Co., immediately improves the country's future capacity for the use of e-commerce, reduces costs for Internet service providers (ISPs) and increases connection speed for Mongolians.

"The idea of an exchange is a natural evolution in Internet development," says B. Narantsetseg, general director of InfoCon.

An Internet exchange is a method for ISPs, Internet content providers and business Internet users to interconnect locally, allowing for higher performance in the transfer of digital information.

Currently in Mongolia, there are five ISPs serving clients, but the transfer of information between them can be a complicated affair. Because they are not interconnected in Mongolia, a user of one ISP trying to access information hosted by another ISP would be routed through a possible host of international gateways. For example, a Magicnet user wishing to perform an e-commerce transaction with a client of Bodicomputer, might have to access Bodicomputer by way of gateways in Hong Kong and California, increasing costs and decreasing performance. Considering the two clients could conceivably be in the same building—the routing of information through various international hubs seems extravagant.

Until two years ago, the idea of an exchange for Mongolia was irrelevant. “Up until the start of 1999, there was only one ISP—Magicnet,” says Narantsetseg. “There is obviously no need for an exchange with one ISP, but starting from that point, several others started operating—Bodicomputer, MiCom, and then by June 1999, the Computer Science Management School joined in. This market grows so quickly, and then we had several ISPs and we had to think about this.”

John Savageau is the project’s manager—an American who has been working with Mongolia in the field of ICT on and off since 1994. He came to Ulaanbaatar on April 19, taking time off from his company Pihana Pacific, to oversee the installation of the exchange and the training of InfoCon’s network engineer who will be maintaining the connections and equipment. To boot, he’s doing it all free of charge, saying he just wants to see Mongolia succeed in the field.

“About 30 per cent of all traffic is originating and terminating in Mongolia,” says Savageau, meaning that out of all the Internet users accessing information from Mongolian ISPs, 30 per cent are actually in Mongolia. Performance will be improved because this 30 per cent of traffic will be interconnected through the exchange, and will no longer have to travel on long, expensive and unnecessary international links.

“This adds a hell of a lot of value to that international link, and it gives the opportunity to have a business-to-business Internet environment in Mongolia,” says Savageau. “They couldn’t do it in today’s environment, it simply wouldn’t work.”

Savageau also says that a higher performing interconnected Internet in Mongolia will keep Mongolian customers where they belong—in Mongolia. “People here are hosting their web sites on Yahoo in America, and Mongolia is losing money,” he says. “You’re giving your money to someone else’s economy. My proposal last year was that for a small amount of money I could build an Internet exchange.”

Savageau and Narantsetseg presented their project for the exchange to the five Mongolian ISPs—Magicnet, MiCom, Bodicomputer, Erdemnet, and MobiCom—in January. Concerns of one ISP benefiting more than another by not connecting to the exchange had to be addressed, and the exchange’s mutual benefits to everyone in the ICT community were promoted.

Following the presentation, all five ISPs signed a Memorandum of Understanding (MoU) to make use of the exchange, and not charge each other for receiving traffic coming from competing ISPs. “We presented the MoU as that it was going to reduce costs for the Mongolian community, and recover costs from people who were going outside of Mongolia,” says Savageau.

Mongolian ISPs and their customers should see two benefits from the exchange: they will save money on expensive international Internet bandwidth and they will see increased speed for local traffic.

“Once we start talking about e-commerce, business-to-business and business-to-customer e-commerce transactions, we will need faster local connections,” says Narantsetseg.

“Once we start these services, customers will need fast response from ISPs. If Bodicomputer offers e-commerce transaction capability, only Bodicomputer ISP users can get the fastest service. How will they reach other customers? This kind of problem will be addressed by the exchange.”

Another important component is that the exchange is located at a neutral site—the Mongolia Telecom. Office—alleviating concerns of competing ISPs. “Your competitor’s content is your content,” Narantsetseg tells them. “Your competitor’s customers are your customers.”