„The Introduction of the Internet into China and International Cooperation in Science and Technology"

Madame Hu Qiheng, Chairwomen of the Internet Society of China

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Good morning!

I would first like to thank the conference hosts for providing me with the opportunity to take part in this Sino-British forum on the Internet. Such discussions are mutually beneficial for both the British and Chinese sides. Fifteen years have passed since China was fully connected to the Internet. In my talk today, I would like to take a look back at the past to describe how China was connected to the Internet; a process I was engaged in personally.

The Internet was introduced into China against the background of the Reform and Opening-up policy. After Mr. Deng Xiaoping ushered in the new policy, the Chinese scientific, technological and educational communities were extremely excited. They had a clear idea about the development of the Internet in the rest of the world and were very eager to get connected. The main motives for connecting to the Internet, at that time, were the needs of scientific research and international cooperative exchanges. The principal incentive to get connected to the Internet was to lower the cost of exchanging scientific data and information.

Before the *country's* full connection to the Internet, Chinese scientists, technologists and educationalists had carried out a number of individual initiatives. For example, Professor Wang Yunfeng of the Northern Information Research Institute and his team had established a partnership with Karlsruhe University in Germany; and the Institute of High Energy Physics at the Chinese Academy of Sciences had collaborated with the Stanford Linear Accelerator Center (SLAC).

A major landmark came in September 1987, when Wang Yunfeng and his colleagues sent an email entitled "Go beyond the Great Wall to the World" to Karlsruhe University. This was the first email ever sent from a Chinese computer network. In 2008, when the Internet Society of China chose the date for an annual "Chinese Netizens Cultural Festival," the day the first Chinese email was sent was selected in an online poll.

Another major contribution of Wang Yunfeng and his team was to register, on behalf of China, the top-level country domain name ".cn", making China the 77th country to register on the Internet. Since, at the time, China was not able to host a top-level domain name server, the Chinese country name server was operated by the network information center at Karlsruhe University. Professor Werner Zorn, director of the center, was entrusted to take care of it.

Today, we can say with certainty that the first real Chinese Internet connection was implemented in April 1994 on the network of the National Computing Facility Center (NCFC), in Zhongguancun district, Beijing. Set up with a World Bank loan, the NCFC was originally aimed to establish a super-computer

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center to be shared by Tsinghua and Peking universities and the Chinese Academy of Sciences. When the NCFC network was almost complete in 1993, responding to a clamor of requests from its users, the NCFC Administration Committee unanimously agreed to connect it to the Internet.

The NCFC's choice of network protocol was much easier than those of its European counterparts, because the Internet had obviously become the best option by the time the NCFC project was implemented; there were very few differences in opinion among us. The key to getting connected to the Internet was sufficient funding. Thanks to crucial financial support from the Ministry of Science and Technology, the State Planning Commission (the present National Development and Reform Commission), the National Natural Science Foundation, and the Chinese Academy of Sciences, as well as the World Bank loan, the decision was carried out.

The next major issue to be settled before connecting to the Internet was to obtain approval from the United States. To this end, many scholars and networking experts, at home and abroad, including from Europe, made enormous efforts, by including "China's participation" into conference agendas and repeatedly arguing for accepting China into the Internet at international scientific and technological conferences.

Meanwhile, Chinese networking experts contacted the communications company Sprint, which was authorized by NSFNET to implement international connections, to discuss the technical details of the connection. They made detailed technical preparations for the connection and were notified that the connection would be available very soon. Testing began in March 1994 and lasted for a fortnight. But it seemed that non-technological obstacles – and some hidden interference – still existed.

In April 1994, a routine meeting of the China-US Joint Committee on Science and Technology was held in Washington D.C. I was a member of the Chinese delegation, as well as Director of the NCFC Administration Committee. Before leaving for the United States, I reported on the issue of Internet connection to the State Council, China's cabinet, and got consent from the leadership, including Vice Premier Zou Jiahua. In Washington, I paid a special visit to Doctor Neal Lane, Chairman of the US National Science Foundation (NSF), to express our hope that he would understand the need of the Chinese scientific and technological community to connect to the Internet. At the time, the NSF displayed a completely positive attitude toward connecting China to the Internet.

Finally, on April 20, 1994 China was connected to the Internet with full functionality. The connection was listed as one of the top ten scientific and technology events of the year. With the support of the Chinese government, the Chinese scientific and technological community, and the world scientific and technological community, and, in particular, network specialists, China had taken its place on the world Internet stage.

Later in 1994, with the help of Professor Werner Zorn, the top-level domain name server, with the ".cn" suffix, was relocated to China and officially installed at the Chinese Academy of Sciences.

Soon afterwards, the China Internet Network Information Center (CNNIC) was set up. In May 2001, the Internet Society of China, a civil society group on the Internet, was established. In 2002, China successfully hosted the world Internet conference (2002 ISOC Conference). Over the past 15 years, the Internet has developed rapidly in China, permeating traditional economic sectors to an ever greater

degree, and playing an increasingly important role in economic growth, social advancement, and people's lives.

Today China has the largest number of Internet users in the world. We will continue to work hard to contribute to the further development and improvement of the Internet.

Caption:

In September 2007 Prof. Werner Zorn organized a Symposium in Potsdam to look back at the early days of the Internet. On behalf of the Internet Society of China, I presented souvenirs to Prof. Zorn and other specialists, to express our gratitude for their help to facilitate the launch of the Internet in China.

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http://china.org.cn/business/2009-07/23/content_18187813.htm