

# A fertile environment for hi-tech growth

► Administrator says HSP to strengthen ties between academia and industry

By Fu Shouqing

Crucial to the nation's first State-level hi-tech development zone, Zhongguancun Haidian Science Park (HSP) became known as "China's Silicon Valley" after it was founded 20 years ago, and is now home to more than 16,000 technology-based enterprises.

HSP has had the most influence and success of Zhongguancun's 10 parks and one science zone, generating 394.1 billion yuan and about 50 percent of Zhongguancun's overall revenue.

As its capacity for innovation and technological advancement continued to improve, HSP became the leading science park in China.

It has also facilitated cooperation among universities, research institutes and industrial enterprises in Beijing and throughout the country over the past two decades.

Yet the renowned park faces many challenges as its leading companies are not always competitive in the international market and rival science parks in China have proliferated.

Today HSP plans to maintain its leading position by creating a more favorable environment for hi-tech businesses.

The experience and lessons of hi-tech parks worldwide show the importance of a favorable environment for the sound development of enterprises.

Business and nature both need

a favorable environment — with competition and cooperation much like that in an ecological chain.

## An ecological chain

Hi-tech enterprises in HSP form a kind of ecology that requires nurturing new growth, competition for resources and synergy to survive.

On the top of the chain are the multinationals and famous domestic hi-tech companies.

Multinationals such as Microsoft, Google, France Telecom, Ricoh, AMD, Novo Nordisk, Sony and Hitachi, have established regional headquarters, R&D centers and marketing centers in HSP, which now has the largest number of multinationals of any hi-tech park in China.

A group of homegrown enterprises with international influence, such as Lenovo, have also developed in HSP. In 2004, Lenovo purchased the global PC service of IBM, becoming the third-largest PC manufacturer in the world, and in 2008, it joined the list of Fortune 500 companies.

HSP is home to a dozen of independent industrial centers, such as Zhongguancun Software Park, Shangdi Information Industry Base and Zhongguancun Pilot Base for Creative Industries. Enterprises in the various centers have relationships based on supply and demand, with many small firms providing services to the large enterprises.

Other important parts of the

"ecological chain" in HSP are the relations among service providers, R&D entities and production enterprises. In recent years, HSP has increased its support to the information service, financial service and R&D industries.

HSP has a large number of R&D institutes. There are over 500 research institutes, including 40 R&D centers established by 37 multinationals and 69 R&D facilities of Chinese enterprises. These facilities have offered strong support for the hi-tech development in the park as well as the entire city of Beijing.

## The government's role

In the "ecological chain" of HSP, the local government also has an important role to play.

Key elements influencing the environment for hi-tech industries are financial services, the park's level of internationalization, government services and university-industry-research cooperation.

The administrative committee of HSP has a clear recognition of the four elements and has devised specific measures to create a sound environment for hi-tech industries to promote their mutually beneficial relations.

Deepening university-industry-research cooperation is among such measures.

Currently, the cooperation among industrial enterprises, universities and research institutes in Zhongguancun are far from close.

The administrative committee expects to further promote such cooperation through conducting studies and research and establishing a database and information network



The Shangdi Information Industry Park, an important part of Haidian Science Park.

for university-industry research cooperation.

A demonstration base for university-industry-research cooperation is also expected to be set up in HSP, with preferential policies in place to encourage partnerships between universities and science parks and promote technology transfer.

Promoting the development of enterprises by perfecting financial services is also an important task of the local authorities.

The authorities' efforts including offering startup businesses financial

assistant by establishing special funds, setting up special institutions to help enterprises get listed on stock markets, helping small and medium-sized enterprises grow through mergers, acquisitions and restructurings, and offering credit guarantees.

In addition, the administrative committee is also endeavoring to attract international financial institutions to open operations in HSP.

Over the past 20 years, one of the main reasons HSP has become

stronger is that the local government has emphasized on provision of good services for businesses.

In the years to come, the government will continue to improve services, through strengthening cooperation with various social organizations and improving transparency of administration and decision-making.

Fu Shouqing is the deputy director of the Administrative Committee of Zhongguancun Haidian Science Park

## HSP: From bucolic neighborhood to hi-tech powerhouse

By Zhao Bian

With a small brook running through it and served only by a two-lane road, it was a neighborhood that was home to some of the nation's top universities.

Such was the scene of Zhongguancun in the 1980s.

Today the bucolic image is only a sweet memory to long-time locals. Gone is the serenity that embraced the area for half a century.

But even the most nostalgic can still take pride. The past two decades brought great changes that include much more traffic and frenetic development, but also profound energy as the sleepy enclave became a powerful hi-tech engine for the entire country.

Home to the first State-level hi-tech zone in China — and still at the very top in the nation — the area is now called Zhongguancun Haidian Science Park (HSP).

It evolved from the Zhongguancun electronics street in the mid-1980s when a number of traders dominated the scene. Quite a few small tech firms then emerged, tentative operations begun by nearby universities, research institutes and even individuals.

Today the booming electronics trade is still there, but it is now housed in the high-rise Hilong and Dinghao buildings.

And some of the fledgling tech firms have developed into internationally renowned names such as Lenovo.

In May 1988 the predecessor



Past and present: Construction along Zhongguancun Street that began 20 years ago resulted in a modern urban development specializing in hi-tech industries.

of HSP — approved by the State Council as Beijing New Technology Industrial Development and Experimental Zone — was founded in the Zhongguancun electronics street and its nearby neighborhoods to become the first State-level hi-tech zone in China.

## 20 years of growth

In 1997, the zone was named the Haidian Experimental Zone of Beijing New Technology Development Zone.

In 1999, when the Beijing New Technology Development Zone was expanded to cover five industrial parks in several districts in Beijing, the name was changed to Zhongguancun Hi-tech Zone.

The Haidian Experimental Zone was then renamed Haidian Science Park, the

core of Beijing's hi-tech development plans.

Covering a 133-sq-km core area in Zhongguancun and 300 sq km of adjacent area, today's HSP has a dozen industrial parks, including the Zhongguancun eastern section, Zhongguancun Science Town, Tsinghua University Science Park, Peking University Science Park, Zhongguancun Software Park, Zhongguancun Environmental Technology Park and Shangdi Information Industry Park.

During the past two decades, HSP has maintained average annual growth of more than 30 percent.

In 2007, the total business revenues in HSP reached 407.7 billion yuan, 5.1 times more than 1999. Its total industrial output value hit 108.8 billion yuan, growth of 180 percent

from 1999.

Its local companies like Lenovo and Founder are expanding their global businesses, while 42 Fortune companies including IBM, Microsoft, Intel, France Telecom, AMD and Google have established operations there, including regional headquarters and research and development (R&D) centers.

Its pillar industries, such as software development, integrated circuit design and network communications, all lead in the country. The output value of software development and integrated circuit design comprise one-third of the totals in those industries in the nation.

HSP is also renowned for its human resources. In 2007, among all its 514,000 employees, 43 percent held

bachelor's degrees, 9.9 percent had master's degrees and 1.6 percent had PhDs.

It is also a favored site among returning overseas Chinese scholars to develop their careers and start up their own businesses. In 2007, HSP was home to 7,448 returning scholars, accounting for 1.4 percent of the workforce.

In May this year, the Zhongguancun Hi-tech Zone was approved by the State Council to build the national model innovation base. HSP is at the core of the base, an initiative that marks yet another new era in HSP's development.

## New era of development

As model for all the hi-tech development zones and parks in China, HSP is expected to foster a number of champions in industries and nurture a range of homegrown enterprises with globally renowned brands and

international competitiveness.

HSP will launch a series of experiments including financial reform oriented to hi-tech industries, governmental reform in public services, the establishment of a national technology transfer center, a technology intermediary services center and a hi-tech human resources development center.

The technology transfer center — a trading and exhibition venue for new technologies and products — is expected to facilitate cooperation between the nation's R&D operations

and all kinds of production enterprises.

Using the park's R&D of the innovation capacity, HSP expects to further promote the development in electronics, computer chips, software, next-generation communications, next-generation Internet, digital TV, biomedicine, new materials, environmental technology, alternative energies and creative industries. Plans call for a number of large projects in these fields.

Local authorities also expect new industrial associations to play a bigger role in this initiative. New associations include technology, standards, industrial and marketing alliances among enterprises, higher learning institutions and research institutes. Such associations are tasked to set national and international industrial standards.

Aiming to build an international science park, the authorities will also give support to local enterprises' globalization initiatives. Local government's support will include organizing international forums, exhibition, trade fairs, sponsoring international research programs and helping enterprises to attract international professionals.

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Hotline for corporate affairs: 96181  
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www.investhaidian.gov.cn  
Website of Zhongguancun: www.zhongguancun.com.cn,  
www.ibridge.com.cn



The lakeside software industry park is home to a number of the nation's top IT companies.