Construct CPIP, Implement Five Key Projects, and Promote Urban Informationization in Beijing

----Idea and Practice of Urban Informationization in Beijing

I. The Promotion Of Modernization Through Informationization ---- Opportunity And Responsibility Endowed By The History

II. Overall Framework Of Urban Informationization In Beijing

III. Construction Of CPIP(Capital Public Information Platform)

III. Key Technologies

IV. The Implementation Of Five Key Projects
I. The Promotion Of Modernization Through Informationization —— Opportunity And Responsibility Endowed By The History

In order to realize modern management, Beijing, as a metropolis in the world, is in need of powerful informational promotion. The informationization is under the direct leadership of the state. Conforming to the directive and overall plan of the state informationization construction, Beijing aims to realize the interconnection of information networks and the social sharing of information resources so as to speed up the capital economic development and the process of urban modernization through the application of modern information technologies into all fields of economic and social development, as well as the intensive exploitation and broad utilization of information resources.

II. Overall Framework Of Urban Informationization In Beijing

The following figure shows the Overall framework of urban informationization in Beijing:

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Based on the existing network resources like telecom network and CATV network, Capital Public Information Platform is to realize network interconnection and information exchange. The system structure includes network exchange platform and information exchange platform, providing public service infrastructure for all kinds of informationization application projects.

According to the plan of capital informationization, key informationization application projects include:

- e-Government
- e-Commerce
- Science & Education Information Network
- Labor/Social Security & Community Service Information Network
- Cyber BJ

Policies, laws and rules, and technology standards are the basic environment and important guarantee for the urban informationization.

III. Construction of CPIP

CPIP is the hinge where capital public information gathers, is the gateway where private information networks interconnect, is the main exit where the capital exchanges information with outside, and is also the main part of infrastructure in Capital Informationization. CPIP promotes the interconnection of network resources and information sharing, providing supporting system for all applications and social and commercial information services according to the idea of “Great Beijing”.

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At present, CPIP is taking its shape. On the basis of the main nodes in Beijing Telegraph Office and CCTV Tower, CPIP has constructed a high-speed node in Zhong Guan Cun recently.

The connection of CPIP with other public networks and private networks is as the following figure:

Based on CPIP, a huge network covering the city level, district level, street level, and community level networks is forming. Related technical supports for key informationization application projects are described in the following figure:
IV. Key Technologies

- **High-Speed And Intelligent Online Searching Technology**
  CPIP has equipped high efficient and general Chinese search engine, providing high speed of information retrieval for lots of Chinese websites and all kinds of governmental, commercial, and public information connected to the CPIP, showing CPIP’s retrieving and navigating function. Facing the e-Commerce application, CPIP also provides featured shop guiding service for customers besides the commodity data and manufacturer information retrieval, comparative selling, and intelligent customer services.

- **Security Technology In E-Commerce Transaction**
  Security services in e-Commerce transaction include identification service, integration service, Confidentiality service, Non-repudiation service, and access control service. To certain commerce modes(mainly B to B transactions), perfect responsibility mechanism and arbitrary mechanism are required. Besides, security services also include security strategy making and secure management.

- **Remote Multimedia Interactive Transmission Technology**
  E-Government, e-Commerce, and community service information network are all involved in the long distance coordination via communication networks. They provide all participants with the means of exchanging ideas, and coordinate the activities of all participants. This technology also involves the coordinate application model in virtual environment such as virtual organization, virtual enterprise, virtual community, virtual laboratory, and so on. Especially to the feature of multi-user and distributive structure, related distributive computing environment research should be conducted. And the establishment of coordinate working system with multi-participants(buyer, seller, credit service provider, banks, business administration, taxation organization, custom, notarization, and arbitrary.) becomes important.

  With the support of “863” plan of the state, we have made some achievement in overcoming the above technologies. We have been realizing the industrialization, promoting value-added online service and IT industry development, and forming the new growth point of the capital economy.

- **Broadband And Multimedia Access Technology**
  With the surprising increase of the processing capacity of connected computers, applications
which are sensible to bandwidth(such as long distance education, distant medicare, TV conference, Video on demand, and so on) have raised higher requirement for the network bandwidth while the single information form and single service are developing toward the integrated business and multimedia form in which data, language, and video come into one. In such occasions, the “last mile ” becomes the bottle neck which has to be broken through. Broadband and multimedia access technologies such as HFC, xDSL, and wireless access are in intense competition.

V. The Implementation of the Five Key Projects

The Capital Informationization Development Plan stipulates: during the Ninth Five-Year Plan period, great importance should be attached upon the following five key informationization application projects:

- **e-Government Project**

  The Capital e-Government Project consists of two levels: the first level is government online. By the end of Year 1999, Beijing Municipal People’s Congress, Beijing Municipal Political Consultative Committee, Beijing Municipal High Court, 18 district and county governments and 120 municipal government committees, offices, bureaus and other organizations have established their own websites based on “Beijing-China” (www.beijing.gov.cn). Through the web sites, the administrative systems and procedures have been made public, policies and laws propagandized, the transparency of the government enhanced, and new channels of intercourse between government and citizens established. The second level is governmental-network interconnection. On the basis of CPIP, Virtual Private Networks are set up for city level and district level governmental organizations, avoiding disperse construction and investment repetition, thus to save operational cost and guarantee network security. The construction of governmental networks help to increase the work efficiency and scientific decision capacity, promoting the computer application capacity of governmental officials, which promotes the social informationization.

- **e-Commerce Project**

  As a complicated social systematic project, e-Commerce involves links such as CA, security configuration, payment means, physical distribution, network platform, legal environment, other related infrastructure and cooperative working system. Now the framework has been initially set up, and support has been provided for the over 200 domestic and foreign enterprises and merchants based on the Capital Electronic Commerce City to carry out nationwide and worldwide e-Commerce activities. Recently, the online large-volume payment has also been fulfilled successfully, which is very significant for further promoting B2B e-Commerce. Practice shows that the e-Commerce City which embodies the economy of integration is a successful mode of e-Commerce, and it will attach great influence on the network new economy based on knowledge.

- **Technology & Education Information Network Project**

  The task of Beijing Technology & Education Information Network is to build an online market for professionals and technologies, a web site for all kinds of patent information and education, and a resource library for all kinds of science and education information, to assist the Capital science and education system in carrying out online education, achievement publish, resource sharing and cooperative working, and also support remote medical treatment, especially to the backcountry.

- **Labor/Social Security & Community Service Informationization Application Project**

  The municipal government has decided to build a combine-five-insurance-into-one social security information system based on the Capital Public Information Platform. Now the municipal
government is to use the medical insurance system as a breakthrough to drive the construction of the municipal labor and social security system. The whole medical insurance system involves 500 graded hospitals, 5000 medical organizations, 1000 drugstores and 6,000,000 policyholders. During Year 2000, the design, configuration and installation of the software and hardware needed for the system, as well as the experimental operation among 2,000,000 policy holders have to be accomplished.

The community information network based on the Capital Public Information Platform will closely combine the service demands from thousands of households in various fields and on various levels with the social resource available, and enable the average persons to enjoy the benefits brought about by informationization. The target for Year 2000 is: to set up and interconnect community service information network centers of the districts and their subordinate street administrations; to set up a municipal unified community service central web site so as to standardize the information format and user interface for all levels of community service web sites and provide navigation and intelligent search engine service for better use of the Capital information resource; based on the street-level hotline service station, to set up service support system for the community service information network. And a batch of multi-access informationization demo communities will also be constructed this year.

- **Cyber BJ Project**

Geographical Information System (GIS) is the technological basis for the Cyber Beijing Project, the application goal of which is directly related to the city planning, city monitoring and city resource allocation. It is planned that during the “Tenth Five-Year Plan” period a citywide broadband multimedia information network will be set up based on the Capital Public Information Platform. And the Capital Space Data Infrastructure and Huge Database will be established based on the former so as to fulfill the information sharing needed by the concerted development between Beijing’s resource environment and social economy, as well as to enable the Cyber Beijing Project to offer rich and perfect information service for the city leaders, government departments, enterprises and public.

Recently, the State Council has sent down “The Official and Written Rely to the Issues about the Construction of Zhongguancun High-tech Park”.

As an important part of the construction of the whole Park, informationization construction means technological innovation and support environment to attract the top high-tech professionals. The recent goal of informationization construction for Zhongguancun High-tech Park is to extend the key projects to Zhongguancun. The informationization construction for Zhongguancun High-tech Park shall be combined together with the Capital informationization, making full use of its resources, becoming a forerunner demo area and featuring highlight of the Capital informationization as well as a window for Beijing and China to show their informationization level to the world.

The construction of the five key projects is the basic thought and content of Beijing’s urban informationization construction. Several years’ practice proves that these thoughts accord with the objective situation of the Capital. Despite the progress, we will double our efforts to carry out the Capital information construction and further promote the cross-century development for the Capital’s modernization.

Thank you!