Legislative Council

of the

Hong Kong Special Administrative Region

Panel on Information Technology and Broadcasting

Report of the Delegation to Study
the Information Technology and Related Sectors in
the Republic of Korea

February 2003

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CHAPTER 1 - INTRODUCTION

Background

1.1   The Panel on Information Technology and Broadcasting has all along monitored closely policy measures and initiatives seeking to enhance Hong Kong's competitiveness in the development of an information and knowledge-based economy.   It has also noted a number of issues which are important for the information economy to thrive, including the development of high-capacity information infrastructure, the level of the community's information technology (IT) readiness, the exploitation of technologies in related sectors such as the film and games industry, as well as the information policy pursued by the government.

1.2   In this connection, members of the Panel have considered it useful to study the informatization experience of overseas countries.   At the Panel meeting held on 8 April 2002, members endorsed a proposal to conduct a duty visit to the Republic of Korea in late September 2002.   The Republic of Korea has been chosen for the visit in view of the spectacular growth of its IT and related sectors in the wake of the Asian financial turmoils which dealt a heavy blow to most Asian economies.   The proposed duty visit to the Republic of Korea was approved by the House Committee on 31 May 2002.

The visit

1.3   A delegation comprising the following six Members took part in the visit to the Republic of Korea which lasted from 23 to 27 September 2002 :

> Hon SIN Chung-kai, Panel Chairman (Leader of delegation);
> Hon Howard YOUNG, Deputy Panel Chairman (Deputy leader of delegation);
> Dr Hon David CHU Yu-lin;
> Hon CHAN Kwok-keung;
> Hon MA Fung-kwok; and
> Hon Fred LI Wah-ming (Non-Panel Member)

Miss Polly YEUNG, Clerk to the Panel, accompanied the delegation on the visit.

1.4   The purpose of the visit is to acquire first-hand understanding into the rise of Korea's IT and related sectors, focusing attention on the current state of development in the IT landscape, as well as the government's policy and initiatives in promoting the IT and related sectors and in creating an environment conducive to their growth.

1.5   In this regard, the delegation has considered it necessary to examine the institutional framework for the formulation and promotion of IT and telecommunications policies, the respective roles of government agencies and related bodies in taking forward IT initiatives, the exploitation of technologies in related sectors such as the film and games industries, as well as the importance of the IT sector in Korea's economic development and its transition into an information economy.   During the four-day programme, the delegation visited the relevant ministries, the relevant Standing Committee of the National Assembly, regulatory bodies, industry organizations and leading market players.

The report

1.6   This report is organized into five chapters.   The key issues and findings relating to IT and telecommunications services, the film and games industries and the use of IT in community are presented in Chapters 2 to 4. Summing up the visit, members of the delegation have made a number of concluding observations which are highlighted in Chapter 5.   The detailed programme of visit is at **Appendix I** and the persons whom the delegation has met is listed in **Appendix II**.   A list of reference materials acquired from the visit and related information which the delegation has considered in drawing up its observations is at **Appendix III**.

Acknowledgements

1.7   The delegation would like to express its thanks to the Consulate-General of the Republic of Korea in Hong Kong for co-ordinating the visit programme in collaboration with the relevant authorities in Seoul, Korea. Members also wish to record their appreciation of the Seoul Office of the Hong

Kong Tourism Board for their kind and timely assistance in making various logistical arrangements.   The delegation also expresses its thanks to staff of the Secretariat for providing logistical and research support and for preparing this report.

CHAPTER 2 - TELECOMMUNICATIONS AND INFORMATION TECHNOLOGY SECTORS

Key indicators

2.1　　In considering the position of the Republic of Korea in the global IT map, members have taken note of a number of key indicators relating to usage and penetration.　As at end 2001, the number of personal computers (PCs) per 100 persons reached 44.　In terms of the number of Internet users, Korea ranks fifth in the world with some 25.65 million (52% of the population) users.　The country tops the world in terms of the penetration rate of broadband Internet service with some 9.21 million households subscribing to broadband service as at end June 2002.　Korea is among the top countries with 58 telephone lines per 100 persons and about 30 million mobile phone subscribers.

2.2　　On the economic importance of the IT sector, members note that in 2001, the GDP per capita of the Republic of Korea was US$8,919 and the country's GDP was US$422.2 billion in which 12.9% was contributed by the IT industry, as compared to only 9.3% in 1998.　In 2001, the value of exports and imports was at US$150.4 billion and US$141.1 billion respectively.　For the same period, the exports and imports of the IT industry reached US$38.4 billion and US$27.86 billion respectively, enabling trade surplus from the IT sector to make up for the deficits in other sectors.

Institutional framework

2.3　　Policy responsibility for telecommunications and IT development rests with the Ministry of Information and Communication (MIC) which is in turn underpinned by a number of government agencies, government-sponsored bodies and research institutes.　Relevant policy issues and bills relating to telecommunications and IT are considered by the Science, Tech, Information & Telecom Committee of the Korean National Assembly.　The respective roles and functions of some major players are briefly described in the ensuing paragraphs.

Ministry of Information and Communication

2.4   Given the growing convergence of telecommunications, broadcasting and IT, the MIC assumes an overall and integrated responsibility to steer, co-ordinate and formulate policies on telecommunications, broadcasting, IT and postal services in Korea.   It has promulgated as its objectives the acceleration of informatization, the promotion of IT industry, as well as the liberalization of the telecommunications service market.   An organization chart of the MIC is at the Annex of this chapter.

2.5   Apart from MIC, it should be noted that IT development receives very high level government attention.   The Prime Minister himself chairs an Informatization Promotion Committee comprising all Ministers to review the progress of various Master Plans for Informatization Promotion. The Informatization Strategy Meeting chaired by the President identifies strategic directions on national IT policy by co-ordinating policies among the Ministries.

Science, Tech, Information & Telecom Committee of the National Assembly

2.6   The Science, Tech, Information & Telecom Committee of the Korean National Assembly is one of the 17 Standing Committees stipulated under Article 37 of the National Assembly Act to consider issues and bills under the purview of the Ministry of Information and Communication and the Ministry of Science and Technology.   Its Chairman is elected from among members of the Committee.

Korea Information Society Development Institute

2.7   The Korea Information Society Development Institute (KISDI) was established in January 1988 as a government-sponsored research institute specializing in policy studies on information and communications issues.   It has a research capacity of some 300 staff, about 70 of whom are engaged on a part-time basis.   The Institute may also engage the service of overseas experts/consultants on a need basis.   KISDI has conducted extensive research on the trend of IT industry, the transformation of the traditional economic structure in the emerging information society and the regulatory framework for a competitive telecommunications market.

2.8   KISDI's research focuses on economic-based analysis.   The key function of the Institute is to generate policy options for the consideration of MIC and other government agencies in formulating policies to sustain and advance the information economy.

Electronics and Telecommunications Research Institute

2.9   Established in 1976, the Electronics and Telecommunications Research Institute (ETRI) is a non-profit-making government-affiliated research institute specializing in technological researches.   Located in Taejeon city, some 2½ hours' ride from Seoul, ETRI is made up of three Divisions responsible for information security research, strategic planning and administration, six research laboratories and one affiliated organization (the National Security Research Institute).   ETRI has 1 905 staff, 1 656 of whom are research personnel. Over 90% of the research staff hold master or doctoral degrees.   The bulk of ETRI's income for 2002 (US$267 million) is made up of funding by the Government (US$230 million) and the industry (US$27 million). ETRI's research budget for the next five years stands at US$381 million.

2.10   Over the years, ETRI has successfully developed the digital exchange technology, high-density semi-conductor and mini-super computer system. To cater for future needs, its research and development is now focusing on the development of the Fourth Generation mobile communication technology, next generation technologies on Internet server and active network system for information security.

2.11   While KISDI researches on policy options, ETRI conducts technological researches.   ETRI determines its own research agenda but its work is subject to audit by the government.   Both the industry and the Government use the service of ETRI.   ETRI is a main supplier of innovative technologies to small and medium-sized companies.   It also conducts national research projects for the government.

2.12   ETRI is also equipped with an exhibition centre where visitors can view demonstrations on state-of-the-art technologies and products such as bone-conduction telephone, speech translation system and 3D geographical information system.

National Computerization Agency

2.13   The National Computerization Agency (NCA) is a statutory agency established in 1987 to spearhead the deployment of IT in the Korean government and the public sector.   Its main responsibilities include the construction and promotion of the Korean Information Infrastructure (KII), developing and maintaining information systems for public information sharing, establishing IT standards, evaluating and auditing IT projects and systems and providing IT consulting services to ministries or government agencies.   NCA also updates the "informatization index" annually to forecast and compare Korea with 50 other leading nations in the level of informatization.   The index is announced in the annual White Papers on Informatization published by NCA.

2.14   NCA plays an important role in assisting to draw up a series of Master Plans for Informatization Promotion, the latest being the "e-Korea Vision 2006" to map out the strategy to enhance Korea's position as a leader in informatization.

2.15   On the implementation of E-government initiatives in Korea, members note that a total of 11 key E-government projects relating to innovation and productivity increase in government services have been identified for completion by end 2002.   NCA monitors these projects and submits progress reports once every two weeks. At present, all government tendering is done electronically and the conventional mode of submitting tenders is no longer used.   According to NCA, the requirement to switch to e-tendering has not been met with opposition from the business sector.

Promising Information and Communication Companies Association

2.16   The Promising Information and Communication Companies Association (PICCA) was set up in 1997 as a non-profit-making organization with the official authorization of MIC.   The Association comprises IT-related small and medium-sized venture companies in Korea and at present, has a membership of some 1 500 Korean companies.   PICCA's source of funding comes from both MIC and membership fees of member companies.   Its mission is to strengthen support to small and medium-sized ventures. PICCA's Sectional Committees play a more active role in discussing relevant

issues and submitting proposals on IT policies to the government. A PICCA Venture Investment Company will be established to support IT start-up companies in both finance and management. The MIC will also strengthen PICCA's consulting capacity in offering information on accounting, laws and overseas markets. Other initiatives of PICCA include the quarterly exercise of sending PCs to students in the underdeveloped areas.

Industry player

2.17   Apart from meeting with the relevant government and regulatory bodies and related organizations, the delegation has paid a visit to SK Telecom, a major mobile service operator in Korea, with a view to acquiring better understanding into its operating experience and the general market situation.

2.18   Established in 1984 under the name of Korea Mobile Telecommunications Services Co., Ltd, SK Telecom is now Korea's leading mobile communications service carrier with a subscriber base of some 16 million. As at 31 December 2001, SK Telecom had a market capitalization of approximately US$19.23 billion (23.9 trillion Won). With a market share of 53%, the company holds a dominant position. The other players in the Korean mobile services market include LG Telecom and KT Freetel.

2.19   When the Korea Fair Trade Commission approved SK Telecom's acquisition of Shinsegi Telecom in April 2000, it has mandated a condition that the combined market share of SK Telecom and Shinsegi Telecom be reduced to below 50% by June 2001. SK Telecom took this opportunity to improve subscriber quality by promoting a gradual attrition of the subscribers with inferior credit rating. As a result, overall subscriber quality has been greatly enhanced. After the restriction was lifted in the second half of 2001, SK Telecom's market share gradually rose again to over 50%.

2.20   SK Teletech, a subsidiary company of SK Telecom, is Korea's leading cellular handset manufacturer. Under the brand name of SKY, the company has already launched customer-oriented mobile and multimedia products in the market. As part of its plan to expand into the China market, SK Telecom has concluded a Memorandum of Understanding on technology and network

operations with China Unicom, China's second largest mobile network operator.

2.21   One of the latest services launched by the company is its wired and wireless integrated Internet multimedia service called "NATE".   To encourage wireless Internet usage, the company is working closely with content providers to create attractive content and to implement an affordable packet-based pricing system.

Policy issues of concern

2.22   In the course of exchanging views with representatives from the public and private sectors on telecommunications and IT policies, the delegation has taken an active interest in a number of issues which are of widespread concern.

<u>Liberalization of the telecommunications market</u>

2.23   Having regard that full liberalization of the fixed telecommunications network service market will be implemented in Hong Kong with effect from 1 January 2003, members of the delegation are very interested in Korea's experience in liberalizing its telecommunications market and whether it has encountered problems such as low market shares achieved by new entrants and the difficulty in breaking the incumbent operator's dominance.

2.24   In re-affirming its policy on market liberalization and promoting competition, MIC informs the delegation that laws have been passed to privatize state-owned corporations such as Korean Telecom, and to raise the limits on foreign ownership in the telecommunications sector.   There is no limit on the number of telecom licences to be issued as long as the operators can fulfil the necessary requirements.   MIC recognizes that it may take some time before new entrants can compete on equal footing with incumbent operators.   At present, new entrants are entitled to greater flexibility in their fee structure in that they are free to determine the level of their subscription fees while the fees charged by incumbent operators are subject to an upper and a lower limit.

Regulatory issues

2.25   On whether it is the Korean government's policy to require new licensees to roll out their own networks instead of utilizing the existing networks of incumbent operators through interconnection arrangements, MIC maintains that it has always been the government's objective to encourage facilities-based competition.   However, to avoid overlapping of network investment in some cases, the government also considers it important to develop an effective and efficient interconnection regime.   The Telecom Business Act enacted in December 2000 requires incumbent facilities-based operators to provide their unbundled elements to their competitors.   The MIC has also finalized the detailed unbundling arrangements, including the pricing scheme, in December 2001.

2.26   On competition issues and how far the telecommunications sector in Korea is subject to regulatory control, members note that the telecommunications sector, like other economic sectors, is subject to the over-arching Fair Trade Act administered by the Fair Trade Commission.   The MIC, as the industry regulator, keeps a close watch on market developments and competition.

2.27   Referring to the serious telephone traffic congestion caused by an increase of more than six times the normal peak hour traffic when Hong Kong was under the attack of a typhoon in September 2002, members of the delegation have enquired about Korea's experience when it was hard hit by a typhoon sometime in August.   The Ministry informs members that there has not been any problem with network capacity.   However, the typhoon did cause some damage to the hardware equipment.

IT Infrastructure and support

2.28   Members are aware of the importance of the provision of a solid IT infrastructure in the pursuit of informatization at the government, community and household levels. In this connection, the delegation has noted with interest the KII project implemented by the government in 1995.   A high-speed broadband network connecting 144 call areas was built and came into operation in 2000, two years ahead of schedule.   In addition, a 2-Mbps Internet access is available to 10 482 elementary, middle and high schools and 36 689 lines have

been supplied to the public sector including government offices, research institutions and libraries etc.   It is the Korean government's target to provide 20 Mbps broadband communication service to 84% of Korean households by 2005.

2.29   On financial assistance, the Information Society Promotion Fund (ISPF) has been set up to finance activities conducive to the development of IT in Korea.   In essence, the source of funding for ISPF includes levies on the revenue of major industry players and the spectrum utilization fees for Third Generation (3G) mobile service.   The ISPF and the related funding arrangements are provided for in legislation.   Members of the delegation has noted that the Korean government and related bodies are determined and confident in their informatization efforts.

Role of the legislature

2.30   During the brief meeting with the delegation, the Chairman of the relevant parliamentary committee, (the Science, Tech, Information & Telecom Committee) has pointed out that due to the relatively technical nature of information and communication issues and a consensus which has emerged over time about the paramount importance of IT development for the country, there has not been any sharp disagreement among committee members although they are from different parties representing different political interests. The Committee has therefore been able to focus its deliberative efforts productively on information and communications issues per se.

2.31   In discussing the remarkable growth of Korea's IT sector, the Committee Chairman has attributed much of the success to the very active role played by the government through measures such as investment in information infrastructure and in IT education, implementation of master plans and strategies, provision of support to IT start-ups and ventures.   In the wake of the Asian financial crisis in late 1997, the IT industry has become the main driving force and the key to revitalizing the national economy.   Some analysts have further linked the success of the country's informatization to the national culture or characteristics of the Korean people which have a preference for innovation and a determination to meet challenges and succeed.

Organization Chart of the Ministry of Information and Communication

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                                 │        │       Officer         │
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                          │ Vice Minister│
                          └──────┬───────┘
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        │  International    │─────┤
        │ Cooperation Office│     │
        └──────────────────┘     │        ┌──────────────────────┐
                                 ├────────│  Inspector General    │
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Planning & Management Office	Informatization Planning Office	Information & Communications Policy Bureau	Telecommunication Business Promotion Bureau	Radio & Broadcasting Bureau	General Service Division

Central Radio Monitoring Office	Radio Research Laboratory	Korea Communications Commission	Office of Postal Service

Source : www.mic.go.kr

CHAPTER 3 - THE GAMES AND FILM INDUSTRIES

3.1   The delegation has noted that the development of IT and the availability of the necessary IT infrastructure in Korea have contributed to the growth of other sectors.   This chapter gives an overview of Korea's games industry, which has benefited from the full development of a broadband media market; and the film industry where the use of technologies have also played an important role.   The functions and roles of the government and related bodies in providing impetus to the industries will also be outlined.

Policy responsibility

3.2   Policy responsibility for the games industry and the film industry rests with the Ministry of Culture and Tourism (MCT).   The MCT has undergone a series of restructuring until it was re-organized from the former Ministry of Culture and Sports in February 1998.   MCT consists of eight Offices/Bureaux and one Division responsible for different programme areas.   An organization chart of the MCT is at the Annex to this chapter.   Issues and policies relating to the development of the games industry and the film industry fall under the purview of the Culture Industry Bureau (CIB) and one of its key responsibilities is to help develop the culture industry with a view to transforming it into a key factor in the country's economic growth in coming years.

Games industry

Current development

3.3   According to a survey conducted in 2001, 82% of the Koreans engaged in some form of interactive entertainment.   In 2001, there were about 2 100 games companies employing some 24 000 employees.   The industry is growing at an annual rate of 50% and the number of games company start-ups in 2002 doubles that of last year.

3.4   Korea's games market shows the greatest potential among all its cultural contents markets, and computer games is now one of the country's dominant industry.   The industry posted revenue of US$2.5 billion in 2001,

while the export of Korean games, valued at US$130 million in 2001, grows at an annual rate close to 30%.   Today, Korea has become renowned as home of NCsoft's blockbuster role-playing game "*Lineage"* which is now the world's largest subscription-based on-line game, with more than 4 million active subscribers worldwide.

Policy measures

3.5   The MCT, through its CIB, formulates and implements policies on the games industry by way of improving related laws and systems, accelerating private investments in the games industry and training specialized personnel. MCT implemented a Five-year Plan for the Development of the Cultural Content Industry in 1999 and have launched projects such as "Content Korea Vision 21" and "Culture Contents Industry Vision" which have improved the viability of Korea's cultural contents industry and helped lay the foundation for its growth.   A full-scale policy relating to the games industry was implemented following amendments to the Sound Records and Video Products and Game Products Act in June 1996 which made games a new media product and the object of MCT's active promotion policy.

3.6   With the Korean games industry entering into its "take-off" phase, the focus of the policy is now on the development of games technology, the incubation of games companies and the training of a specialized workforce.

3.7   Since October 2002, it has been mandatory for all types of computer games to be rated by the Korean Media Rating Board.   There are three tiers of rating, namely, suitable for all ages, for ages 18 and above, and for 15 and above.   In 2001, 1 043 games passed the rating inspections by the Board and eight were put on hold.   81% of these games were rated suitable for all ages.

Korea Game Development and Promotion Institute

3.8   Founded by MCT in 1999 under the name of Korea Game Promotion Centre, the Korea Game Development and Promotion Institute (KGDPI) now operates as a core support infrastructure of Korea's games industry.   The capital cost for the KGDPI in the region of 20 billion Won and its annual

recurrent cost are borne by the government. The Institute operates on the 30th to the 36th floors of a high-rise building in downtown Seoul. Apart from a floor for administration offices, all other floors are designated for use by games developers and games developing companies, including one floor which houses studios with state-of-the-art technologies for various stages of games production. As the delegation has observed, the building is under a high level of security surveillance.

3.9　　As part of the government's effort to nurture the development of the games industry, KGDPI has an important role to play in "incubating" games companies. At present, a number of promising companies which lack the necessary capital have been selected by KGDPI for incubation. They are provided office accommodation at the Institute's premises for an initial rent-free period of two years which can be extended to three years. These "incubatees" are only required to meet their own other overhead costs and can use the facilities available at KGDPI at a very low charge. The objective of the incubation programme is to facilitate the start-off of innovative games developers which may not possess the necessary resources and funding to take forward worthwhile projects.

3.10　　The KGDPI also operates the game investment association which seeks to promote development of the industry by actively investing in promising games companies specializing in on-line or off-line games. At present, the association has an investment capital fund of 35 billion Won, from which 12 billion Won has already been invested in start-up games companies. There is no prescribed ceiling on the investment into each company but the average ranges from 0.5 billion to 1.5 billion Won. The rate of return is not yet known at the present stage, but the delegation has been informed that some of the new games companies are very successful.

3.11　　On the supply of trained manpower for the games industry, KGDPI operates a Game Academy for training personnel in each games related area. It also operates a remote education system. Other forms of support and assistance include the provision of an information library, researches on overseas market and publication of data on the trend of domestic games industry, statistics and analysis.

Film industry

Current development

3.12   The appeal and popularity of Korean films has grown remarkably in recent years, not only in Korea but also overseas, as evidenced by a number of Korean films which are box-office hits in Hong Kong.   Members have been informed that revenue from exporting Korean films stood at US$12 million in 2001 and the figure for the first half of 2002 was US$11.5 million.   As for the domestic market, Korean films at present accounts for about 50% of the market share, as compared to some 40% at end 2001.

Policy measures

3.13   In an effort to boost international competitiveness of Korean films, CIB has formulated various policies with the purpose of expanding the infrastructure for the production of movies, animated films and videos, as well as other high value-added cultural sectors.   The MCT has declared that it is the government's policy to provide an environment conducive to the development of the film industry.

Korean Film Commission

3.14   The Korean Film Commission (KOFIC) is a government-supported and self-administered body tasked to promote and support Korean films both in Korea and overseas.   Originally established as the Korean Motion Picture Promotion Corporation in 1973, the organization was restructured in May 1999 and granted a wider mandate to promote and support the film industry.   At present, there are three regional film commissions in Korea, namely the Seoul Film Commission, the Jeonju Film Commission and the Buson Film Commission.

3.15   KOFIC is currently administered by a group of nine commissioners comprising academics, filmmakers, and other industry representatives appointed by MCT.   A chairman and vice-chairman head KOFIC and work in conjunction with the other commissioners to formulate and implement film policies. KOFIC offers a wide spectrum of promotional and support

programmes to the Korean film industry ranging from research and training of new filmmakers to providing financial, technical and marketing assistance to local filmmakers.

3.16   On financial support, the Promotion Department of KOFIC administers a number of Funds to support the industry.   They include -

- ♦ *Fiction Film Development Support Fund* provides financial support of up to 10 million Won (US$7,700) per film for feature fiction films, up to 14 per year.   The *Feature Animation Development Support Fund* provides funding of up to 50 million Won (US$38,000) per film to support the production of animated films in development, up to four per year.   Should the awarded films secure funding for production, the amount supplied by the Fund is the first to be repaid.

- ♦ The *Production Support Fund for Fiction Films* provides support to three art films and four low-budget films chosen each year. Art films and low-budget films may receive up to 30% and 50% of their total production cost.   After release, should revenue exceed production costs (minus the amount supplied by the Fund), then, KOFIC's contribution is the first to be repaid.

- ♦ The *Digital Feature Film Distribution Support Fund* provides 60 million Won (US$46,000) per film up to four films each year so that they can acquire the technological support to be released in conventional cinemas.   The grant needs not be repaid but a technical and marketing report is required of all recipients.

- ♦ Loans for fiction films up to 600 million Won (US$460,000) or 50% of overall production costs per film may be granted using the film rights as collateral.   Repayment is due within two years of the loan date.

3.17   In exchanging views with KOFIC on film production capital, members are aware of the "film investment funds" first launched in 1999 which are similar to mutual funds.   Investment companies, individuals and

institutional investors such as the Small Business Corporation and the KOFIC come together to raise a certain amount to invest, and the executing co-partner (in most cases, the investment companies) invest around 50% to 70% of that amount in films, the profit of which is to be divided among the investors according to their respective share five years later.   At present, there are 15 such investment funds with some 250 billion Won in total value and each fund has its own fund manager.
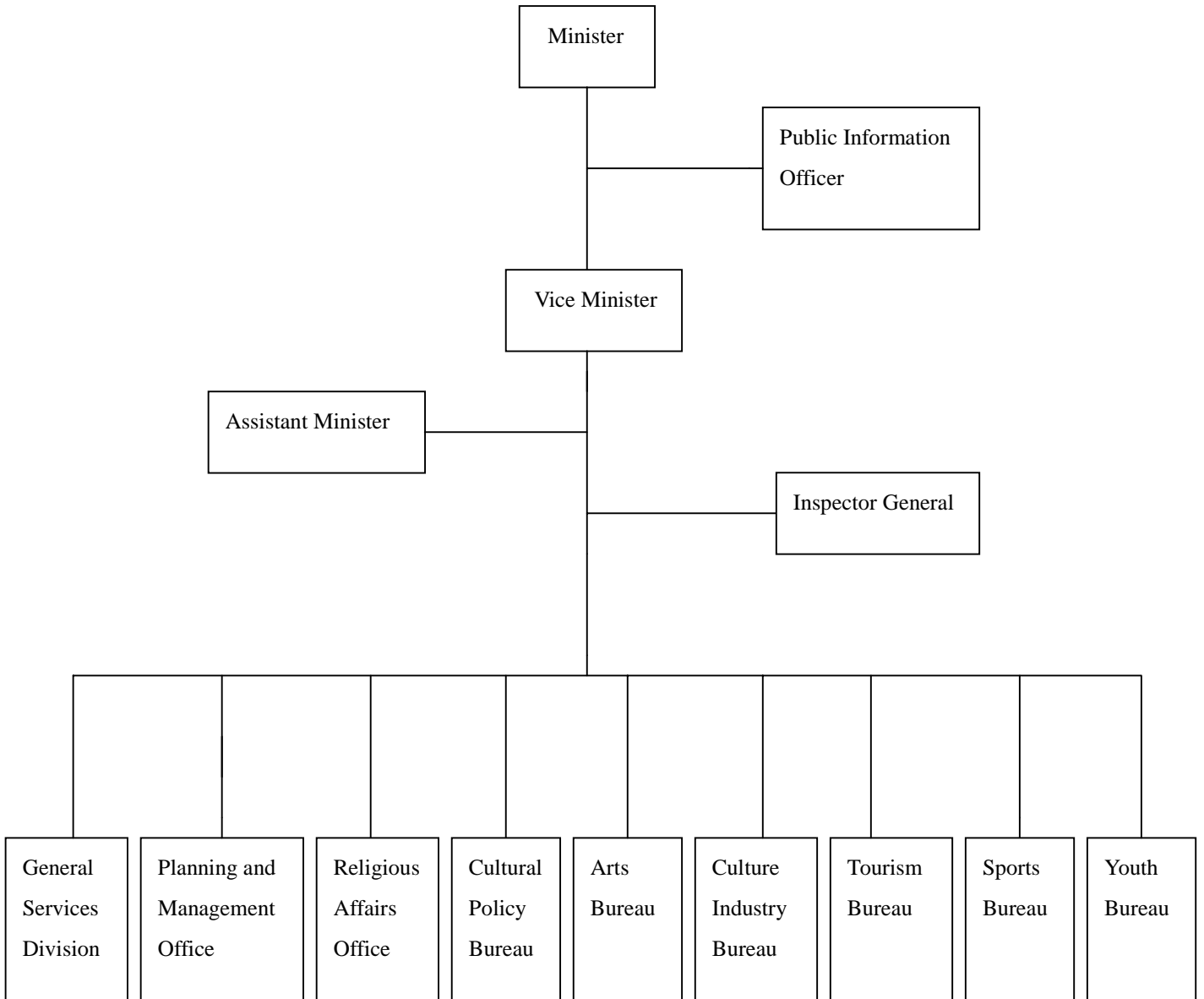
3.18   KOFIC also operates the Korean Academy of Film Arts & Animation Arts which is equipped with high-tech equipment and professional instructors and provides training for visual-related professionals.   To strengthen the competitiveness of Korean films, high quality scenarios are a must.   To this end, KOFIC holds bi-annual screenplay contests.   KOFIC also hosts the annual Korean Indie & Short Film Festival to encourage short film productions. On the international front, KOFIC is actively involved in promoting Korean films overseas and in supporting Korean films to participate in international film festivals.

Seoul Studio Complex

3.19   The Seoul Studio Complex (SSC) is a major infrastructure built by the government and currently under the auspices of KOFIC to provide the necessary facilities for film making.   SSC is considered a vital asset of the Korean visual industry and a mecca for visual production.

3.20   Located at some 40 minutes' ride from downtown Seoul, the Complex occupies an area of about 1 323 100 square metres and comprises six film studios (including special effect and cutting-edge recording studios), a historical drama set, a courtroom set, the Film Support Hall to assist shootings, and the Film Hall for post production.   The SSC is also equipped with props and costumes, cameras, lighting and other high-tech film equipment. Filmmakers may rent and use the studios, equipment and various services by paying a fee.   For the film industry, SSC serves as a "one-stop" location for film-making, from shooting to completion.   SSC is open to the public at an admission fee and has now become a tourist attraction for both local and overseas visitors.

Organization Chart of the Ministry of Culture and Tourism

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                          │Vice Minister│
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        │ Assistant Minister│────┤
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General Services Division	Planning and Management Office	Religious Affairs Office	Cultural Policy Bureau	Arts Bureau	Culture Industry Bureau	Tourism Bureau	Sports Bureau	Youth Bureau

Source : www.mct.go.kr

4.1　　　While the Korean government and related organizations have put in a lot of resources and spearheaded many initiatives to transform the country into a leading information society, the level of the community's IT readiness and the extent to which IT is exploited to enhance the quality of living are also important indicators of how far a society has progressed in the direction of informatization.　In this connection, the delegation has noted with interest a number of important developments in Korea's IT landscape, namely, the establishment of Information Network Villages, the rapid growth of PC Bangs (Cybercafes) and the permeation of IT in day-to-day life.

Information Network Villages

4.2　　　Apart from advanced infrastructure and state-of-the-art technologies, the Korean government attaches great importance to bringing IT to the general households and closing the digital divide confronting disadvantaged social groups such as the disabled, elderly and low-income earners.　Against this background, the Closing the Digital Divide Act was enacted in January 2001 to provide opportunities for utilization of IT by those sectors of the population who are disadvantaged by economic, physical and social conditions. Moreover, an Information Network Village project has also been launched by the Ministry of Government Administration and Home Affairs.

4.3　　　An Information Network Village is a village designated by the government where the residents utilize the Internet in their daily activities and transactions.　Local communities located in different parts of the country and engaging in different economic activities such as farming, fishing are selected based on their degree of remoteness, their unique characteristics and the IT capability of their residents.　Up to May 2002, there are a total of 20 Information Network Villages nationwide and the government has plans to set up more such villages.

4.4　　　Regarding government support, each Information Network Village is equipped with high-speed Internet connection to enable inexpensive access to the Internet.　High-performance PCs are also given to each household free of charge.　A kiosk where residents can obtain most of the government services on-line is also provided in each village.　Furthermore, free IT training is

provided to the residents at a training centre equipped with state-of-the-art educational facilities. Each Information Network Village also sets up its own Operating Committee whose office-bearers are residents of the village to manage the Village Information Centre and maintain the homepage of the village. It is also possible to use the website of each village to promote regional attractions and indigenous products and conduct e-commerce.

4.5 The delegation paid a visit to the Gaehwa Village which is the only Information Network Village in the Seoul metropolitan area. The village comprises over 400 households and all residents are required to transact their business on the Internet. The delegation was told that residents conduct meetings through video conferencing. The IT facilities provided at the Gaehwa Village require an operating cost of some 2 million Won per month which is borne by the government. During their informal meeting with the delegation, the residents, most of whom are housewives, have expressed interest and pride in being members of the Information Network Village.

PC Bangs (Cybercafes)

4.6 The boom of the PC Bangs in Korea in the last few years has been regarded as a distinctive feature of the Internet culture in Korea. Playing on-line games is the most common activity that customers engage in at PC Bangs. The rapid increase in the number of PC Bangs can be attributed to the popularity of a PC game called "*Starcraft*" among teenagers. As at 2001, the number of PC Bangs has reached 23 000.

4.7 Most of the PC Bangs are equipped with fast-speed PCs and other highly advanced information equipment offering on-line games, information searching, on-line chatting, on-line securities trading and e-commerce. Generally, the capacity of a PC circuit ranges from 256 kbps to the exclusive E1 circuit depending on the size of the PC Bang concerned. Rates are usually charged on an hourly basis ranging between 1,000 Won to 2,500 Won per hour. Extra fees have to be paid for services such as printing and scanning. PC Bangs are open 24 hours a day. Starting from May 2002, smoking is prohibited in PC Bangs. In order to protect children and young people, web

content that contains violent or pornographic material is made inaccessible to users.

4.8   Some members have referred to a fire at a Cybercafe in Beijing earlier on which killed many young people and the question currently raised in Hong Kong about whether a regulatory framework should be introduced for Cybercafes.   Given the great popularity of PC Bangs in Korea, members are interested in knowing the regulatory regime, if any, in Korea.   The government officials whom the delegation have met have acknowledged the growth and importance of PC Bangs in fostering the IT culture and games industry.   PC Bangs in Korea have to comply with certain structural and fire safety requirements applicable to public places.   However, there is no specific legislation targeting PC Bangs as the subject of regulation.

Application of IT in daily life

4.9   Apart from studying the core issues relating to IT, telecommunications, film and games sectors, members of the delegation have also taken the opportunity to experience and observe the widespread usage of IT and related technologies in day-to-day life during their stay in Korea.

4.10   Walking along the busy streets of Seoul, one will see many large TV plasmas broadcasting news or some entertainment programmes.   The delegation has been told that these plasmas have been erected at the time of the World Cup Games for broadcasting the games live.   The traffic lights at main road junctions are computer-operated with voice count-down to remind crossing pedestrians.

4.11   Of great interest to members is the availability of free access to the Internet at some major tourist attractions and tourist information centres in downtown Seoul.   Visitors to Korea in particular are impressed by the service as they can continue to be globally connected while in a foreign country.   In the departure lounges at the Incheon International Airport, passengers can also use of the many PCs provided in the premises to access the Internet free of charge, send and receive e-mails.

CHAPTER 5 - CONCLUDING OBSERVATIONS

5.1   Members of the delegation in general agree that the four-day visit has achieved its intended purpose of acquiring first-hand knowledge into the fast growing information economy of the Republic of Korea.   They cherish in particular the opportunity to meet representatives from the public and private sectors and exchange views with them on issues of mutual concern.   Although the Korean experience may not be directly or readily applicable to Hong Kong, members have made a number of observations which may serve as useful reference for policy makers and legislators in the pursuit of an advanced information economy.   The observations are in the following aspects :

   (a)   The role of the government in supporting IT development;
   (b)   Collaborative effort in promoting IT;
   (c)   The inter-relationship between the IT sector and other economic
         sectors; and
   (d)   Hong Kong's competitive edge.

The role of the government in supporting IT development

5.2   One striking feature which the delegation has noticed is the highly active role taken by the Korean government in promoting economic development, as well as the huge resources it is prepared to put into the development of IT and related sectors.

5.3   In terms of institutional arrangement and strategic planning, members note that the Korean government has restructured the government organizations responsible for informatization, enacted relevant legislation, set up high-level committees such as the Informatization Promotion Committee chaired by the Prime Minister, equipped itself with strong research arms such as ETRI and KISDI, formulated a series of master plans like CYBER KOREA 21, e-Korea Vision 2006 and Korea Internet White Papers.   Numerous targets, including the construction of advanced information infrastructure, building up a digital government, developing key technologies and enhancing computer literacy of the population, are set for achievement against a time-frame.   Members note that IT development receives very high-level attention and tops the government's policy agenda.

5.4   Quite contrary to the case of Hong Kong where the Government does not normally provide direct assistance to support a particular industry, the Korean government has taken active measures in providing assistance to the IT and related sectors in various forms.   Through government-sponsored organizations such as PICCA, small and promising IT start-up companies can obtain financial assistance and other support services.   For the film industry, the massive Seoul Studio Complex constructed by the government provides infrastructural support to filmmakers.   The "incubation" scheme available at KGDPI to help games developers start up their business is another initiative indicating the government's readiness to direct resources to industries which it considers to be important and promising.

5.5   Members recognize the importance of the IT sector in the Korean economy.   They appreciate that one of the factors leading to the rapid rise of the IT, telecommunications, film and games industries in Korea is the active policy steer and support by the government.   Members are also impressed by the determination and readiness of the government and the community at large to transform Korea into an information and knowledge-based society within a short span of time. However, on the wider issue of the role of the government in economic activities, members have not formed any common view as to how far a government should be involved in promoting the growth of particular industries.   They agree in principle that in deciding whether and how support should be provided by the government, it is necessary to take into consideration all relevant factors, such as consultation with the stakeholders, public expectation, benefits to the community, resources implications of support measures and the need to observe fairness and transparency.

Collaborative effort in promoting IT

5.6   Members are aware that to promote an e-society, from provision of the necessary infrastructure to application of technologies and improving computer literacy, the active involvement of different ministries/agencies is vital. Apart from the work of the Ministry of information and Communication in formulating, coordinating and spearheading various policy initiatives, the active roles played by other ministries in taking forward the necessary policies and programmes are crucial to the building of an information society.

5.7   The delegation notes that parallel to the Ministry of Information and Communication's efforts, the Ministry of Culture and Tourism is actively involved in promoting the development of the games and film industries which have been greatly enabled by advanced information infrastructure and the exploitation of technologies.   On community user support, an Information Network Village programme seeking to enable inhabitants in faraway villages to lead an information-oriented daily life has been launched by the Ministry of Government Administration and Home Affairs.   In the context of Hong Kong, members consider that while the Commerce, Industry and Technology Bureau assumes primary policy responsibility for IT developments, individual bureaux and departments should continue to take forward worthwhile IT initiatives and programmes within their policy purview.

Inter-relationship between IT and other economic sectors

5.8   Members note that IT is not a standalone economic activity.   Instead, it fuels the growth of other sectors of the economy.   A thriving IT sector will facilitate the development and competitiveness of other economic sectors, as evidenced in the case of Korea.   The provision of an advanced broadband infrastructure, for example, has laid a solid foundation for the growth of various Internet-based businesses such as on-line games, animation, and on-line trading services, thus generating considerable economic benefits.   The Korean games industry now witnesses an annual growth rate of 50% and accounted for some US$130 million in export value in 2001.   Other industrial and non-industrial sectors have benefited from an increase in productivity resulting from the exploitation of information technologies.   IT is being utilized extensively in economic or social activities including financial transactions and health administration.   According to published information, the popularity of on-line financial transactions has risen with 11.31 million subscribers of Internet-based banking services.   As at December 2001, about 67 % of the total monetary value of stock trades are handled via the Internet. The setting up of numerous IT ventures has helped to create job opportunities, with the number of IT personnel increasing from 1.01 million in 1997 to 1.16 million in 2001.

5.9   Based on the observations during the Korean visit, members share the view that a well-developed IT sector is like a catalyst for economic growth. Therefore, when considering the cost and benefits of informatization, its macro and enabling effects on the economy should not be overlooked.

Hong Kong's competitive edge

5.10   In the course of exchanging views with various parties during the visit, members are pleased to note that Hong Kong's achievements in IT and related sectors in recent years are recognized.   A number of Korean hosts have made reference to Hong Kong's top score among other economies in the mobile/Internet index included in a report entitled "Internet for a Mobile Generation" published by the International Telecommunication Union in September 2002.   The index seeks to measure how an economy is performing in terms of the development of information and communication technologies and its ability to take advantage of these technologies in future.

5.11   Many of the parties whom the delegation has met express great interest in the Mainland market.   They have frequently referred to the vast potentials of the Chinese market for IT and telecommunications products and related services. For example, China is one of the major markets for the export of Korean on-line games, with "*Lineage"* being the most popular export item. Most of the parties whom the delegation has met show high regard for Hong Kong's open economy, sound financial infrastructure and legal system which they consider a solid foundation for Hong Kong's competitive strength.   They also consider that another important factor for Hong Kong's competitiveness is the English literacy of its population, given that English is regarded as the primary language of the global information economy and the language for the Internet.

**LegCo Panel on Information Technology and Broadcasting
Overseas duty visit to Republic of Korea
(23 - 27 September 2002)**

Visit Programme

23 September 2002
  (Monday)
   Evening   Delegation arrived at Seoul

24 September 2002
  (Tuesday)
   A.M.   Visit Promising Information and Communication Companies Association

                    Visit C & S Technology Incorporation

   P.M.   Visit SK Telecom

                    Meeting with Chairman of Science, Tech, Information & Telecom Committee of the National Assembly

25 September 2002
  (Wednesday)
   A.M.   Visit Electronic Telecom Research Institute in Taejeon city

   P.M.   Visit National Computerization Agency

                    Visit Information Network Village

26 September 2002
  (Thusday)

    A.M.   Meeting with the Culture Industry Bureau, Ministry of Culture and Tourism

                       Visit Korea Film Commission

    P.M.   Visit Korea Game Development and Promotion Institute and other related companies

27 September 2002
  (Friday)

    A.M.   Meeting with Ministry of Information and Communication

                       Meeting with Korea Information Society Development Institute

    P.M.   Delegation departed Seoul for Hong Kong

List of organizations and individuals whom the delegation has met

Ministry of Information and Communication
Mr KIM Tae-Hyun
Vice Minister

Ministry of Culture and Tourism - Culture Industry Bureau
Mr YOO Jin-Ryong
Director-General
Culture Industry Bureau

Mr SHIN Yongeon
Director
Cultural Industry Policy Division

Mr LEE Hae-Don
Deputy Director
Cultural Industry Policy Division

Mr PARK Kwang-Moo
Director
Publication & Newspaper Division

Mr YOO Ki-Sun
Director
Film & Video Division

Mr PARK Min-Gwon
Director
Game & Music Industry Division

Science, Tech, Information & Telecom Committee of the National Assembly
Mr KIM Hyong-O
Chairman of the Committee

Korea Information Society Development Institute
Mr OH Jung-Taik
Senior Research Fellow & Executive Director
Planning & Coordination Office

Electronic and Telecommunications Research Institute
Mr OH Gil-Rok
President

Mr HAN Ki-Chul
Vice President
Mobile Telecommunication Research Laboratory

National Computerization Agency
Mr SUH Sam-Young
President

Mr HWANG Jong-Sung
Vice President
Information Policy Division

Information Culture Centre of Korea
Mr SEO Seung-hee
Department of Information Culture Promotion

Promising Information and Communication Companies Association
Mr H. G. PARK
Senior Manager

Mr Tom (Dong-sup) OH
Manager
Overseas Affairs

C & S Technology Incorporation
Mr LEE Huen-Joo
Executive Vice President

S K Telecom
Ms Lorraine KIM
Internal Public Relations Team
Public Relations Office

Korea Film Commission
Mr LEE Choong-Jik
Chairman

Korea Game Development and Promotion Institute
Mr CHUNG Young-Soo
President

Mr JAY WOO
Manager
Overseas Business Department

List of reference materials acquired from the visit and related information which the delegation has considered in drawing up its observations

<u>Publications</u>

1. IT Korea Guide
    - A Great Power of Knowledge and Information

2. Korea Internet White Paper 2002

3. National Computerization Agency

4. Informatization White Paper 2002
    - Global Leader e-Korea

5. e-Korea Vision 2006
    - The Third Master Plan for Informatization Promotion (2002-2006)

6. IT Korea 2002
    - The Vision for Constructing a Creative, Knowledge-Based Society

7. IT Sector in Korea : Successes and Challenges

8. Information Network Village

9. Open your e-life

10. Electronics and Telecommunications Research Institute Annual Report 2002

11. S K Telecom Annual Report 2001

12. Korea Film Observatory (Summer 2002)

13. Korea Film Commission

14. Seoul Studio Complex

15. The Rise of Korean Games
    - Guide to Korean Game Industry and Culture

16. Korea Game Promotion Centre

17. Korea Game Development & Promotion Institute

Websites

1. About Korea (www.korea.net)

2. The National Assembly of the Republic of Korea (www.assembly.go.kr)

3. Ministry of Information and Communication (www.mic.go.kr)

4. Cultural Industry Bureau, Ministry of Culture and Tourism (www.mct.go.kr)

5. National Computerization Agency (www.nca.or.kr)

6. Electronic Telecom Research Institute (www.etri.re.kr)

7. Information Network Village (www.invil.org)

8. Information Culture Centre of Korea (www.icc.or.kr)

9. Promising Information and Communication Companies Association (www.picca.or.kr)

10. S K Telecom (www.sktelecom.com)

11. The Korean Film Commission (www.kofic.or.kr)

12. Korea Game Development & Promotion Institute (www.gameinfinity.or.kr)

13. Korean Film Observatory (www.cjent.co.kr)