## Panel on Information Technology and Broadcasting

**Extract from minutes of the meeting held on 11 June 2007** 

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IV. Report on the review of administration of Internet domain names in Hong Kong

(LC Paper No. CB(1)1831/06-07(03) -- Paper provided by the Administration

LC Paper No. CB(1)1831/06-07(04) -- Press release issued by the Office of the Government Chief Information Officer on 4 May 2007)

### Presentation by the Administration

- 7. At the invitation of the Deputy Chairman, the <u>Deputy Government Chief Information Officer (Operation) (DGCIO(O))</u> took members through the Administration's paper (LC Paper No. CB(1)1831/06-07(03)). Members were briefed on the background leading to the six-week public consultation conducted from 4 May to 15 June 2007 on the administration of Internet domain names in Hong Kong and related issues, as well as the major recommendations set out in the consultation paper issued on 4 May 2007. He highlighted the major points as follows:
  - (a) The Incorporation of the Hong Kong Internet Registration Corporation Limited (HKIRC)

Following public consultation in 2000 which found general support to transfer the Internet domain names administration functions from the Joint Universities Computer Centre (JUCC) to a new non-statutory and non-profit making corporation. The HKIRC was incorporated in December 2001 to take up the overall responsibility for ".hk" Internet domain name administration. In March 2002, the HKIRC acquired the Hong Kong Domain Name Registration Company Limited (HKDNR), a wholly-owned subsidiary of the JUCC, responsible for the administration of ".hk" Internet domain names. In April 2002, the Government and the HKIRC signed a Memorandum of Understanding (MOU) in which the Government designated the HKIRC to manage and administer all Internet domain names under the ".hk" country-code top level domain (ccTLD). The HKIRC was governed by a Board of 13 non-executive, part-time directors comprising members from six member classes, namely User

Class, Service Provider Class, Information Technology (IT) Industry Class, Commerce and Industry Class, Tertiary Institution Class and Government Class. Except for the Government Class the director of which was appointed by the Government Chief Information Officer (GCIO), directors of the remaining five member classes were elected by the HKIRC Members of the corresponding class for a term of three years.

# (b) Consultancy study

In the light of the latest international and regional developments in the administration of Internet domain names, GCIO commissioned a consultancy study in 2006 to review the institutional framework and corporate governance for the administration of ".hk" Internet domain names that had been in operation for a number of years.

(c) Major recommendations set out in the public consultation paper issued in May 2007

Taking into consideration the consultant's recommendations, as well as the overall information and communications technology strategy in Hong Kong, the Administration had issued a public consultation paper on 4 May 2007 setting out the following recommended changes to the institutional framework and corporate governance for the administration of ".hk" Internet domain names:

- (i) The current governance arrangements, i.e., delegation by the Government of the domain name management function to the HKIRC, should be retained;
- (ii) The HKIRC should establish a new Consultative and Advisory Panel (CAP) comprising a Government representative and other members invited by the Government from a broad set of stakeholders to advise the Board on major ccTLD domain issues and to facilitate the Board's interaction with stakeholders in general and also with specific interest groups;
- (iii) The make-up of the HKIRC Board should move to a mix of appointed and member-elected non-executive directors and the total membership would be reduced to seven;
- (iv) The HKIRC should introduce, following consultation with all interested stakeholders, a "registry-registrar" model, whereby appropriate bodies might provide ".hk" users with registrar services on an equal and competitive basis with the HKIRC;

- (v) The HKIRC should establish a comprehensive Corporate Governance Framework in collaboration with the Government and through stakeholder consultation; and
- (vi) The HKIRC should develop and publish a Five-year Strategic Plan to take forward the above recommendations to be followed by a formal review of the MOU in collaboration with the Government five years after its execution.
- 8. <u>DGCIO(O)</u> said that after the completion of the six-week consultation on 15 June 2007, the Administration would finalize the proposed changes and arrangements for the administration of ".hk" Internet domain names in the light of the comments and suggestions received.

# Discussion

# Allocation of Internet domain name

- 9. Mr Howard YOUNG noted that while some jurisdictions including Hong Kong had two-alphabet Internet domain names such as ".uk" for the United Kingdom (UK), ".cn" for the Mainland China and ".hk" for Hong Kong, there were cases where three alphabets were used, with examples including ".hkt" for Phuket of Thailand and ".hkg" for the Hong Kong International Airport. He sought information on how the Internet domain names were allocated. He also enquired whether a three-letter domain name would be used in the event a two-letter domain name would not sufficiently cater to the rapid development in technologies and communications and, if such was the case, whether there was a need for Hong Kong to secure the use of ".hkg" in advance.
- In response, DGCIO(O) advised that Internet domain names, Internet 10. Protocol (IP) addresses and IP numbers were assigned on the basis of a region and/or a jurisdiction, not a city and/or a town. The allocation of the 200 plus ccTLD domain names currently in use throughout the world was managed by an international non-profit corporation, the Internet Corporation for Assigned Names and Numbers (ICANN), which was responsible for, inter alia, IP address space allocation, protocol identifier assignment, and ccTLD domain name system The allocation list on Internet domain names had been published There was no question of any other jurisdiction adopting ".hk" which worldwide. was already allocated to Hong Kong. He added that non-ccTLD domain names for commercial or other uses were allocated under a separate application and registration mechanism and an ".asia" domain name was recently approved. stressed that domain name application and registration were subject to a rigorous vetting process and a prudent and comprehensive approval mechanism. Individual city or town could not just adopt any domain names at will.

#### Corporate governance mechanism

- 11. <u>Ms Emily LAU</u> supported the move towards enhancing corporate governance which she considered should be introduced much earlier to ensure effective strategic and operational management. She then sought elaboration on the recommended changes to the Board composition and the establishment of the new CAP.
- 12. In reply, <u>DGCIO(O)</u> stressed that the Administration had all along attached great importance to enhancing corporate governance of the HKIRC. He said that the MOU, signed between the Administration and the HKIRC way back in April 2002 to provide for the HKIRC to manage and administer ".hk" Internet domain names, was a simple and general document. Having considered the consultant's recommendation, the Administration decided that the time had come to conduct a formal review of the MOU in the light of the five-year operational experience with a view to identifying areas for further improvement. <u>DGCIO(O)</u> pointed out that under the proposed new governance regime, a formal review of the MOU would be conducted every five years and a formal institutional framework would be put in place for the Board to maintain regular communication with the new CAP to receive the industry's and users' views and suggestions on issues relating to market developments and service quality.
- On the membership of HKIR Board, DGCIO(O) said that at present, the HKIRC was member-based with its non-executive directors elected by the HKIRC members from six different member classes. The consultant, having conducted extensive research on the domain name administration regimes across more than a dozen countries, recommended the reduction of the number of member classes to three, i.e., Supply Class, Demand Class, and Representative Association Class. As regards the representation of relevant stakeholders, the consultant recommended the setting up of a new CAP comprising a Government representative and 13 other members invited by the Government from the Internet community, including users, industry, academia and the Government as well as renowned and independent organizations and individuals to ensure that the interests of all stakeholders in the Hong Kong Internet community were represented and to facilitate the interaction of the Board with the stakeholders and specific interests groups on domain name issues. With the strategic engagement of key stakeholders to be undertaken via the new CAP, the number of non-executive directors of the future Board was recommended to be reduced from 13 to seven. He added that as the HKIRC was not a large corporation, a Board with too many members might reduce efficiency in operation and management.
- 14. <u>Ms Emily LAU</u> noted from the Annex to the Administration's paper (LC Paper No. CB(1)1831/06-07(03)) that of the seven non-executive directors, four were to be appointed by the Government, including the Board Chairman who would also be appointed by the Government. She sought explanation on the rationale for such an appointment arrangement, and enquired from which sectors the four directors to be appointed by the Government would come from.

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- 15. <u>DGCIO(O)</u> explained that the consultant recommended that the Board should move to a mix of appointed and member-elected non-executive directors to allow the Board to expand the available talent pool from those who solely had a strong interest in ccTLD issues to a wider set of qualified, professional non-executives. He said that the Administration did not have any specific sectors in mind from which to appoint the four directors. Nevertheless, the objective was to engage people of suitable calibre and experience from various sectors through the existing government boards and committees appointment mechanism. As regards the recommendation for the Chairman of the Board to be appointed by the Government, <u>DGCIO(O)</u> explained that in view of the high mobility and turnover of representatives from the industry in general as shown by past experience, the proposed appointment arrangement had the advantage of helping to ensure continuity.
- 16. Noting that apart from the one Government representative nominated by GCIO, the remaining members of the new CAP would be invited by the Government from the Internet community, including end users, industry, academia and the Government as well as renowned and independent organizations and individuals, Ms Emily LAU queried why the members were not nominated by the industry instead. She pointed out that members who were appointed in their personal capacity were under no obligation to consult or report to the industry whereas representatives nominated by the industry would be held accountable to the organization/industry that they represented. DGCIO(O) said that the Administration would closely liaise with the industry, academia and end users when inviting representatives to the CAP. He said that past experience showed that a non-executive director representing sector-specific interests might sometimes hold up decision-making on a particular issue, and this would not be conducive to the overall development of the Board. The new CAP with broad representation from the industry and community to advise the Board would facilitate interaction of the Board with a broad set of stakeholders.
- 17. <u>Ms Emily LAU</u> pointed out, however, that to smoothen the process of decision-making by eliminating divergent views through government appointing members to the CAP and the Board was a backward move in corporate governance. She added that she had no objection to reducing the Board membership to seven non-executive directors to simplify the membership structure for more effective management. However, she had reservation on the proposed appointment arrangements as that would result in undue Government influence and control in the operation of the Board and the CAP. She urged the Administration to consider allowing the industry to elect more representatives to the Board and for the industry to nominate members for appointment to the CAP so as to increase the industry's representation at both the Board and the CAP level. <u>DGCIO(O)</u> noted the suggestion for further consideration.

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18. In response to <u>Ms Emily LAU</u>'s further enquiry on whether the proposed changes and arrangements were consistent with international best practice, <u>DGCIO(O)</u> said that the consultant had conducted extensive research on the administration regime on more than a dozen economies including the United States,

the UK, Australia and Canada, etc, the details of which were set out in Annex A to the Administration's paper. From the international research, the consultant concluded that it was not possible to define a single set of best practice and had instead identified four to five organizational and governance models for reference. He added that the existing approach was considered a viable one with a track record of success in a number of economies that could be further improved to the best advantage of Hong Kong.

# Enhancing transparency and accountability

Ms Emily LAU enquired what measures would be devised to enhance the transparency and accountability of the future the HKIRC Board. DGCIO(O) pointed out the HKIRC Board, in all its decision making, would be duty-bound to take full account of the guidance of the CAP which represented the interests of a wide spectrum of Internet community. A transparent mechanism would be put in place for the Board to account for any of its decisions that were inconsistent with the advice of the CAP. He added that currently, a summary of the proceedings of some meetings held was posted on the HKIRC's website for public information. The new MOU would further set out in details the information and reports to be regularly published by the HKIRC. He also took on board Ms LAU's suggestion that the Administration would request the HKIRC to post, as far as practicable, relevant papers and minutes of meetings on non-commercially sensitive issues on its website to enhance transparency and accountability. Ms LAU added that the Administration should also request the HKIRC to conduct open meetings where possible. DGCIO(O) took note of Ms LAU's suggestion and assured members that the HKIRC would be requested to conduct its activities in an open and transparent manner to ensure easy public access to all relevant information. In this regard, he undertook that the Administration would regularly report development of related issues to the Panel.

### Registry-registrar system

20. On the proposed introduction of a "registry-registrar" system to bring in market competition, Ms Emily LAU asked how the system would operate and whether any market analysis had been conducted to estimate how many competitors the current market could support. In response, DGCIO(O) said that the management and administration of ".hk" Internet domain names at present was undertaken solely by the HKIRC. Citing the example of the telecommunications industry in which a number of retailers/ service providers were engaged in marketing and service provision, he said that competition among accredited registrars in providing registration service was expected to help promote the growth of the ccTLD size and enhance the standard and quality of service. He advised further that it was envisaged that at least a few retailers such as mobile telecommunications companies/users as well as educational institutions and academia engaged in science research projects would be interested.

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- 21. The Deputy Chairman enquired about the financial position of the HKIRC. He was particularly concerned whether the introduction of the registry-registrar model to bring in competition would strain the HKIRC's financial position and result in added pressure for a fee increase. In response, DGCIO(O) said that the HKIRC was currently financially healthy and self-financing. With close to 140,000 registered domain names which was its main source of income, the HKIRC had recorded an operating surplus for the past two to three years and had accumulated a reserve for future capital investment. He recalled that the credit line of \$6 million approved by the Finance Committee for the HKIRC which was unused had been terminated in 2004. He added that domain name registrations had increased steadily from 60,000 to 140,000 over the past few years and was expected to register a continued steady growth in the future. As such, he envisaged that at the present fee level, the HKIRC would remain financially sound with a steady revenue stream.
- 22. The Deputy Chairman cautioned that financial soundness of the accredited registrars in providing registration service was an important consideration. He opined that apart from a review of the institutional framework and corporate governance, it was important to also examine the financial implications as well as assessing the financial viability of the registry-registrar option. He asked whether the Administration had ever conducted any financial analysis to assess the possible impact of increase competition on the HKIRC's financial position. He further enquired as to why the consultant was not requested to also assess the financial implications of the registry-registrar model.
- While acknowledging that future fee level might be adjusted downwards due to competition, DGCIO(O) said that the Administration had not conducted any financial analysis to assess the possible financial impact as no mechanism was in place for the Administration to regulate the fee level. He pointed out that the consultancy study commissioned in 2006 was mainly focused on the review of the institutional framework and corporate governance for the administration of ".hk" Internet domain names. Nevertheless, from the operational point of view and having regard to the series of changes recommended in the consultation paper, the HKIRC had the responsibility to make the necessary financial assessment to analyze the impact on the financial position and market condition brought about by opening up domain name registrations to competition. DGCIO(O) said that subject to the approval of the recommendations as set out in the consultation paper, the Administration would require the HKIRC to submit a Five-Year Strategic Plan no later than the start of the 2009 term of the Board to take forward the recommendations, including conducting an in-depth market analysis and assessing the financial implications and the methods of recruiting service providers. He assured members that the Administration would ensure that the HKIRC would undertake the necessary financial assessment and market analysis and would regularly update the Panel on developments in this respect.

24. Referring to the dilemma of competition, the Deputy Chairman pointed out that while competition that eliminated market monopoly would lower the costs, increase consumer choice and satisfaction, and in theory be conducive to market

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development, competition might at the same time reduce the profit margins of market players, resulting in financial stringency. On the recently reported cases of Internet fraud in which a number of companies had registered their domain names and set up phony phishing sites posing as reputable companies in Hong Kong to prey on unwary overseas residents such as those in the United States and Canada, the Deputy Chairman remarked that to eradicate these fraudulent activities which would negatively impact on Hong Kong's reputation, action should be taken to tighten up the registration and vetting procedures. However, a more vigorous vetting mechanism would inevitably lead to higher operating cost and indirectly reduce profit margins. Noting the dilemma in adopting a reasonably strict vetting procedure while keeping the operating cost down and sustaining growth in business volume, he enquired what measures the Administration would draw up to address the dilemma and to tackle the problems of phishing sites. In reply, <u>DGCIO(O)</u> said that the Administration and the HKIRC were well aware of the unscrupulous activities of Internet piracy. The Administration, in collaboration with the HKIRC, the Police and the Hong Kong Computer Emergency Response Team Coordination Centre, had in the past few months made concerted efforts to look into the causes of The HKIRC had tightened the vetting of applications for registration and to streamline the procedures for more efficient deletion of domain names in breach of the registration rules. He said that the situation was under control and the HKIRC was reminded to further step up the relevant registration procedures and technical capability for enforcement.

25. Responding to the Deputy Chairman's concern about measures to ensure that the HKIRC had the technical competency to respond robustly to new technological and market developments which might impact on domain name registration, DGCIO(O) said that the consultancy study had highlighted the need to reinforce technical competency in the provision of service. In this regard, a Technology Committee had been set up to oversee the development and the quality of the technical standard to ensure competency to abide by the requisite technical requirements necessary for preserving the integrity and security of the system.

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