Consultation Paper on the Review on Administration and Assignment of Internet Domain Names and Internet Protocol Addresses in Hong Kong

Information Technology and Broadcasting Bureau
The Government of the Hong Kong Special Administrative Region

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Purpose

This Consultation Paper invites comments from the public on the future arrangements for the administration and assignment of Internet domain names and Internet protocol addresses in Hong Kong.

Background

Internet domain names and Internet protocol addresses

2. Every computer connecting to the Internet has a unique Internet protocol (IP) address. IP addresses are also assigned to servers, workstations and other network equipment/components connected to the Internet. An Internet domain name is a character-string representation of an IP address which provides an easy-to-remember and convenient-to-find location for a web site on the Internet. All Internet domain names can be broadly categorised under either the generic top level domains (such as .com, .org, etc.) or the "country-code" top level domains (such as .hk, .cn, .au, etc.).

3. There are currently seven generic top level domains (gTLDs), namely, **.com** for commercial entities, **.org** for non-profit making organisations, **.edu** for academic institutions, **.net** for network providers, **.gov** for the United States (US) Government, **.mil** for the US military and **.int** for international databases or organisations established by international treaties. Companies accredited by the Internet Corporation for Assigned Names and Numbers[1] (ICANN) may act as registrars and provide registration services for the .com, .net and .org gTLDs. There are currently over 100 such accredited registrars.

4. "Country-code" top level domains (ccTLDs), on the other hand, are assigned to local Internet communities according to the two-letter codes in the ISO 3166-1 standard, "Codes for the Representation of Names of Countries and Their Subdivisions". Under the ccTLD, there

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[1] The Internet Corporation for Assigned Names and Numbers (ICANN) is a non-profit making organisation established to takeover, by September 2000, the responsibility for IP address allocation, protocol parameter management, domain name system management and root server system management currently undertaken by the Internet Assigned Numbers Authority (IANA).

are often a number of second-level domains by generic description. In the case of Hong Kong, there are five second-level domains under .hk, i.e. .com.hk, .org.hk, .net.hk, .edu.hk and .gov.hk. At present, the Hong Kong Network Information Centre (HKNIC) under the Joint Universities Computer Centre[2] (JUCC) is the only organisation which provides registration service under these domains.

Recent global developments on Internet domain names and IP addresses

5.   The Internet Assigned Numbers Authority (IANA) was set up by the US Government in the 1970s to manage Internet domain names and IP addressing systems. The IANA derived its authority under a contract from the US Government, which financed the original research network, ARPANET, from which the Internet has developed.

6.   The need to internationalise the governing of the Internet led the US Government to recommend the establishment of the ICANN as a global entity independent of governments to manage the systems and protocols that allow the Internet to develop. In October 1998, the ICANN was formed as a non-profit making corporation that will take over, by September 2000, the responsibility for IP address allocation, protocol parameter management, domain name system[3] (DNS) management and root server system management currently undertaken by the IANA.

7.   The Board of Directors of the ICANN (19 directors in total with the President and Chief Executive Officer of the ICANN as an *ex officio* director) is to be elected through an open and global election process so as to ensure its representation of the geographically diverse Internet user communities. Under the ICANN Bylaws, no government official may serve as a director in the ICANN Board. This notwithstanding, the ICANN has set up a Governmental Advisory Committee[4] (GAC) to consider and advise on the activities of the ICANN as they relate to the concerns of governments, particularly on matters where there may be an

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[2]   The Joint Universities Computer Centre (JUCC) is jointly run by the Computer Centres of the eight tertiary institutions funded by the University Grants Committee in Hong Kong.

[3]   The domain name system is the computer system in which Internet domain names are stored and translated into IP addresses which can uniquely identify a computer on the Internet.

[4]   There are currently two Advisory Committees under the ICANN, namely the GAC and the DNS Root Server System Advisory Committee. Advisory Committees have no legal authority to act for the ICANN, but will report their findings and recommendations to the Board.

interaction between ICANN's policies on the one hand and local laws and international agreements on the other. The Director of Information Technology Services represents the Government of the Hong Kong Special Administrative Region (HKSAR) on the GAC.

8. Since its establishment in October 1998, the ICANN has passed a number of resolutions, mostly related to organisational issues and the setting up of its supporting organisations. Of these, two[5] have a general bearing on the administration of domain names worldwide. One relates to the registrar accreditation policy and the other to the uniform dispute resolution policy for gTLD registrars. The ICANN is also actively addressing important issues such as policies relating to the creation of new gTLDs and policies pertaining to the delegation and administration of ccTLDs.

Administration and assignment of Internet domain names in Hong Kong

9. In April 1990, the University and Polytechnic Computer Centre, the predecessor of the JUCC, registered the country-code top level domain, i.e. ".hk", for Hong Kong. This is a reflection of the historical development of Internet usage in Hong Kong, which was confined to the academic sector in the early days. The assignment of second level domains under .hk (i.e. .com.hk, .net.hk, .edu.hk, .org.hk and .gov.hk[6]) is at present administered by the HKNIC, whose technical operations are undertaken by the Computer Services Centre of the Chinese University of Hong Kong (CUHK). The HKNIC does not currently register domain names under the gTLDs such as .com, which is the responsibility of the registrars accredited by the ICANN.

10. The HKNIC charges a one-off fee of $200 for each application for registration of new domain names or modification of existing domain names. It does not charge any annual fee or renewal fee. As of April 2000, the number of domain names ending with .hk is around 37 000 whereas the number of monthly new applications exceeds 2 000. Currently, it takes about two working days to register a new domain name and seven working days to modify an existing domain name.

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[5] The two policies are applicable to .com, .org and .net top-level domains.
[6] The HKNIC will refer applications for third level domain names under .gov.hk to the Information Technology Services Department for comment before an assignment is made.
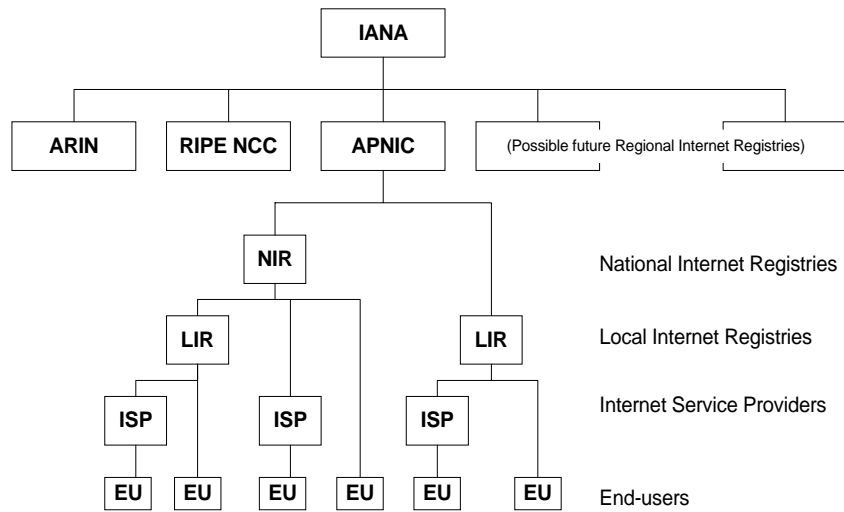
11.   The HKNIC normally receives applications for domain names via Internet Service Providers (ISPs) to ensure that the essential technical services for the end-users are catered for. Only organisations registered with a public registry in Hong Kong (e.g. a company/business registered with the Companies Registry, an educational institution registered with the Education Department, etc.) are eligible for application. Each organisation may register only one domain name and registration by individuals is not allowed.

12.   Currently, the HKNIC registers .hk domain names on a first come, first served basis. Before approving a domain name registration application, the HKNIC will only check that the application is made by a company or an entity from the relevant category and that the domain name has not been registered before. It does not screen the domain names being applied for to determine whether they may infringe upon the rights of a third party. In case there is a dispute related to the use of the trademark or service mark of a third party, the HKNIC will request the domain name owner to provide evidence of ownership of the trademark or service mark. Under HKNIC's dispute resolution policy, the authority for resolving disputes on the use of domain names rests with the courts of Hong Kong. There is no established mechanism for invoking an alternative dispute resolution procedure (e.g. mediation or arbitration) to resolve disputes concerning domain name registration in Hong Kong.

13.   There is a wide recognition for the pioneering work carried out by the JUCC on the administration of Internet domain names in Hong Kong. However, with the rapid development of the Internet and electronic commerce locally, there are views as to whether the JUCC is able to adequately represent the interests of different sectors in Hong Kong in carrying out this function. There are suggestions that greater flexibility should be allowed in the domain name registration system in Hong Kong to facilitate the development of the Internet and electronic commerce locally.

Allocation of IP addresses

14.   In the area of IP address space allocation, the IANA/ICANN is responsible for allocating blocks of IP addresses to all users via the three regional IP registries (i.e. the American Registry for Internet Numbers (ARIN) in North America, Réseaux IP Européens (RIPE) in Europe and the Asia Pacific Network Information Centre (APNIC) in the Asia Pacific Region).   National IP registries and local IP registries (which are generally ISPs) apply for a subset of the IP addresses allocated by the IANA to the regional IP registries, which in turn distribute this subset of IP addresses to smaller ISPs and the end-users.   This arrangement is illustrated by the following diagram –

Source: Asia Pacific Network Information Centre

15.   At present, the HKNIC is not involved in the allocation of IP addresses. The Hong Kong members of the APNIC, which are mainly ISPs, obtain IP addresses directly from the APNIC and distribute them to smaller ISPs and the end-users in Hong Kong.

Chinese domain names

16.	In December 1999, i-DNS.net International, a Singapore-based company, announced its capability to register multi-lingual domain names on the Internet. Two Hong Kong companies partnered with i-DNS.net International in January 2000 to offer generic top-level Chinese domain name registration service for .公司, .組織 and .網絡. As the multi-lingual domain name system maintained by i-DNS.net International is not implemented on a global and international basis, only those Internet subscribers of ISP partners of i-DNS.net International are able to access Internet sites registered with Chinese domain names.

17.	In a separate development, the China Internet Network Information Centre (CNNIC) launched a test-bed project in January 2000 for a period of six months on the registration of Chinese domain names ending with the country-code top-level domain .中國. The Taiwan Network Information Centre (TWNIC) also offered similar services as a test-bed for six months starting from May 2000. Both services operate on a different basis from that of i-DNS.net. In May 2000, a Chinese Domain Names Consortium was formed by the CNNIC, TWNIC, HKNIC and the Network Information Centre of Macau to coordinate the administration and technical development of Chinese domain names, and to facilitate liaison and cooperation with the ICANN.

18.	Based on the developments to date, the operation of Chinese domain names is still at an experimental stage. Whether it will gain wide acceptance in the global Internet community and whether a single international standard will emerge remain to be seen.

Review on the administration and assignment of Internet domain names and IP addresses in Hong Kong

19.	In view of the foregoing and having regard to the initiatives and directions set by the ICANN, a Task Force was set up under the Information Infrastructure Advisory Committee[7] (IIAC) in October 1999 to review the administration and assignment of Internet domain names

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[7]	The Information Infrastructure Advisory Committee (IIAC) was established in August 1998 to advise Government on the ways and means to promote the development of Hong Kong into a leading digital city. It is chaired by the Secretary for Information Technology and Broadcasting, with members drawn from a wide cross-section of the industry, businesses and academia.

and IP addresses in Hong Kong with a view to recommending a framework of arrangements which best suits Hong Kong's needs. The terms of reference of the Task Force are at <u>Annex A</u>. Its membership is at <u>Annex B</u>. Having regard to overseas practices[8] and the latest developments in the ICANN (a summary table on the organisation and practices of the surveyed network information centres and the ICANN is at <u>Annex C</u>), the Task Force has drawn up a list of proposals and has submitted them to the IIAC for examination in May 2000. The IIAC has endorsed the publication of these proposals, which are set out in the following paragraphs, for public consultation.

Proposed Institutional Arrangements

<u>Policy-making and administrative function relating to Internet domain names</u>

20. To address the views set out in paragraph 13 above, the **Task Force is of the view** that the future policy-making and administrative body in the administration and assignment of Internet domain names and IP addresses should have a wide representation from different sectors of the community. The Task Force has examined several possible options with reference to current overseas practices, i.e. maintaining the status quo, adopting a Government-led model or a non-profit making and membership-based model. The Task Force considers that the first two options may not be able to meet the call for greater participation by the industry while the last option is widely adopted overseas. The **Task Force is, therefore, of the view** that a new non-profit making body, with membership open on a subscription basis to ISPs, the commercial sector, academia, the Government as well as other organisations and individuals with an interest in the development of the Internet, should be set up to assume the overall responsibility for Internet domain name administration in Hong Kong.

21. There are two possible options to establish this new policy-making and administrative body, namely, setting up a dedicated statutory

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[8] In conducting the review, the Task Force has made reference to the practices of eight other economies. They are Australia, Singapore, Japan, the United Kingdom, the Mainland of China, Taiwan, Canada and Finland.

body for the purpose or establishing a non-statutory corporation with support from the Government through some form of "endorsement".

22.   A statutory body is a legal person. As a statutory body, the identity, authority and functions of the proposed policy-making and administrative body will be clearly defined under law. It will have a very clear mandate to exercise its functions and to represent Hong Kong in the international Internet community. Provisions can also be built into the legislation establishing the statutory body to deal with issues such as the legal liabilities of the body arising from the infringement of intellectual property rights.

23.   However, the shortcoming of this approach is that the establishment of a statutory body will take time and may not be able to meet the requirement to establish a body quickly to take over the work of the JUCC. Moreover, there is also a concern that the statutory body arrangement may be too rigid to cope with the rapid development in the Internet world.

24.   Alternatively, a non-statutory set up in the form of a non-profit making corporation has the advantages of flexibility. It can also be set up quickly. As the Internet has now become business and community-driven, an industry-led and self-regulatory corporation may be a more responsive institutional arrangement.

25.   While the status of a corporation without formal legal backing may be less prominent and there may not be a clear mandate for it to exercise the designated functions and to represent Hong Kong in the international Internet community, these concerns can be addressed through some form of "endorsement" from the Government like an agreement between the Government and the corporation. The arrangement can also formalise the relationship between the Government and the policy-making and administrative body.

26.   The **Task Force is, therefore, of the view** that the new policy-making and administrative body should be in the form of a non-statutory corporation. The option of a statutory body can be further considered at a later stage in the light of operational experience.

27.   If a non-statutory and non-profit making corporation is to be set up, another issue which needs to be addressed is which party will take the lead in establishing the corporation. The Government should facilitate its formation but the lead, however, should be taken by the industry and the academia. One possible option which can be explored is to build upon the existing structure, e.g. whether it is appropriate for the JUCC to be "transformed" into the new policy-making and administrative body. With JUCC's experience in administering .hk domain names, the **Task Force is of the view** that building upon it may be the most expedient and effective way to set up the policy-making and administrative body.

28.   The **Task Force is also of the view** that a Board of Directors should be appointed to exercise the policy-making function. To provide input pertaining to public policies, the Government should be represented on the Board of Directors. To facilitate the expedient and effective establishment of the new policy-making and administrative body, the JUCC may be asked to consider spinning off another company with an interim Board comprising directors from the academia, the industry and the Government. This new company will then gradually transform into the proposed membership-based body with its directors elected from its members, with membership open on a subscription basis to ISPs, the commercial sector, academia, the Government as well as other organisations and individuals with an interest in the development of the Internet. The Government should continue to be represented on the Board of Directors on a permanent basis to provide input pertaining to public policies. This policy-making and administrative body will operate on a self-financing basis and may derive its income from fees collected from its members and domain name registration.

Policy-making function relating to IP addresses

29.   As mentioned in paragraph 15 above, the HKNIC is not involved in the allocation and distribution of IP addresses. This approach is widely adopted by most network information centres overseas as they do not see any value-added benefit in assuming an intermediary role in the IP addresses distribution process. The existing procedures for the allocation of IP addresses from the APNIC to Hong Kong have been operating smoothly and are well received by the ISPs and other related organisations in Hong Kong. The **Task Force is of the view** that these

arrangements should continue. Nevertheless, if there are policy issues concerning IP addresses which may arise in the international arena in future and which may have implications to Hong Kong, the policy-making and administrative body responsible for domain names administration should be involved.

Administrator of the ccTLD registry

30.　　For easy management and to avoid overlap in the assignment of domain names, there is normally a single ccTLD registry for all the domain names allocated within the same local community. In most places, the body responsible for policy-making for the ccTLD assigns the management of the ccTLD registry to an organisation or a subsidiary body with the necessary technical expertise to carry out the task. The **Task Force is of the view** that the existing arrangement for a single registry in Hong Kong should continue. The proposed policy-making and administrative body may decide whether or not the management of the registry should be outsourced or performed in-house.

Registrar and agents

31.　　Currently, the Computer Services Centre of the CUHK is the only registrar for .hk domain names in Hong Kong. While it is generally agreed that competition and private sector involvement in the local domain name registration business would be desirable, there is a need for a consistent registration policy to be applied if multiple registrars are allowed. Moreover, in view of the comparatively small population in Hong Kong, the number of domain names ending with .hk may not be very large and the market may not be able to accommodate several registrars at the same time, at least initially. Furthermore, the administrative burden on the policy-making and administrative body to ensure compliance by multiple registrars with the standard registration policy may become unduly heavy.

32.　　Against the above background, a number of possible improvements to the existing arrangements have been identified. Currently, the HKNIC will refer applications for third level domain names under .gov.hk to the Information Technology Services Department

for advice before making an assignment. To streamline this procedure, the **Task Force is of the view** that the Government should take over the registrar responsibility of the .gov.hk domain. Separately, the JUCC, which currently manages the registration and assignment of Internet domain names in Hong Kong under .hk, has expressed an interest in continuing to provide registration services for the .edu.hk domain[9] in future. The **Task Force is of the view** that JUCC's role in this respect should continue if the public generally supports the approach.

33.   As regards domain names ending with .com.hk, .org.hk and .net.hk, **the Task Force is of the view** that initially we should maintain the existing practice of having a single registrar. However, the registrar may engage agents (such as ISPs) to perform some of the routine registration work (e.g. preliminary checking of registration details). The registrar will need to sign an agreement with its agents to ensure that the latter will adhere to the same set of registration practices and procedures as required by the registrar. The registrar may offer benefits in the form of volume discounts, etc. to its agents. We should review the need for multiple registrars at a later stage in the light of operational experience.

Domain Name Registration for .hk Domain Names

<u>The guiding principles</u>

34.   The **Task Force is of the view** that appropriate registration policies should be drawn up to strike a balance between encouraging the development of electronic commerce in Hong Kong and guarding against cybersquatting. A number of guiding principles have been identified as of critical importance for the registration of domain names ending with .hk. They are -

    (a) the ccTLD ".hk" is a public resource of the HKSAR and as such should be administered in a way that would maximise the benefits to the local community;

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[9]   At present, tertiary institutions in Hong Kong, educational institutions registered with the Education Department and other educational bodies such as the University Grants Committee can apply to register under the .edu.hk domain.

(b) the structure of .hk domain names (e.g. the character set allowed for a domain name, the maximum number of characters in a domain name, etc.) should adhere to international standards so that domain names ending with .hk can be used globally;

(c) registration of .hk domain names should be on a need basis and the domain names are not for trading;

(d) the application procedures should be simple to allow efficient processing;

(e) domain names applicants should avoid infringing upon the intellectual property rights of a third party; and

(f) domain name registrants are responsible for any legal liabilities arising from the use of .hk domain names and should comply with the prevailing dispute resolution policy adopted by the responsible authority.

35.   In the light of the above guiding principles, some broad registration and dispute resolution guidelines have been formulated to serve as a reference for the new policy-making and administrative body responsible for the administration of .hk domain names in drawing up the detailed registration policies for .hk domain names. These guidelines are set out below for public comment.

Registration guidelines for .hk domain names

(a) Reserved list

36.   Some of the network information centres of the surveyed economies, such as the Canadian Internet Registration Authority (CIRA) of Canada and the CNNIC of the Mainland of China, have adopted a reserved list of well-known names, country names, trademark names, etc. to minimise the chance of cybersquatting. These lists are maintained and

approved by the appropriate authorities of the ccTLD administration.

37.   Having regard to overseas practices and the latest developments in the ICANN in tackling cybersquatting of prestigious international names, the **Task Force is of the view** that the registration authority in Hong Kong may draw up a reserved list of well-known international trademarks, service marks and brand names and make it available for public reference on the Internet. In drawing up this list, reference could be made to the reserved lists prepared by other ccTLD registration authorities. Apart from well-known international names, consideration may be given to reserving also the following -

(a)   all second-level domains under .hk and all gTLDs (e.g. com.com.hk) in order to avoid confusion. This is the practice of some of the surveyed economies, e.g. the United Kingdom, Canada and Taiwan;

(b)   all 2-character and 3-character country codes (e.g. hk.com.hk and chn.com.hk) as defined in ISO 3166; and

(c)   in relation to domain names to be registered under .gov.hk, words which consist of or contain a reference to the word "Government" or related wordings and such use is likely to connote that the web site carries the authority of the Government.

As a general principle to protect Internet domain names from indecency, words which are obscene, scandalous, indecent, and contrary to law or morality should not be registered. While it may not be possible to draw up an exhaustive list of such words, domain name applications should be assessed on a case by case basis.

(b) Format and business nature of a domain name

38.   The current practice of the HKNIC allows the registration of a domain name bearing no similarity to the corresponding company name.

This allows flexibility but may encourage cybersquatting. In some of the surveyed economies, e.g. Australia and Canada, there is a requirement that a requested domain name must resemble the name of the company or its products/services, the rationale being that a domain name is primarily intended to provide a clear and convenient Internet address to facilitate access to a web site of the concerned company or its services/products. Such an arrangement also helps to minimise cybersquatting.

39. The **Task Force is of the view** that in the case of Hong Kong, the second-level domain category being selected for a particular domain name application (i.e. .com.hk, .org.hk, .net.hk, .edu.hk and .gov.hk) should similarly correspond to the business nature of the applicant with documentary proof from the relevant registry in Hong Kong as appropriate.

(c) *"First come, first served" principle*

40. Most domain name registrars worldwide adopt the "first come, first served" principle in their registration process. The domain name registrar will check that the requested domain name has not been previously registered, but it will not determine whether the requested name infringes upon the right of a third party, for example, the rights pertaining to registered and unregistered trademarks.

41. For unregistered marks, they are protected by passing-off action through the operation of the common law. As regards registered trademarks, the domain name registrar could in theory conduct a search for identical or similar marks in the Trade Marks Registry, which in Hong Kong is maintained by the Intellectual Property Department. However, it is envisaged that the following difficulties will arise -

    (a) if the registrar assumes the duty to check the Trade Marks Registry, it may become legally liable to the domain name applicant and/or the relevant trademark owner for any errors or omissions in the process;

    (b) for a domain name holder to infringe upon the rights of a

trademark owner, it has to be proven that the registered domain name is identical or confusingly similar to a registered trademark. However, registered marks and domain names have quite different representations: the former are represented either graphically or textually while the latter are in textual form. Moreover, the determination of whether a requested domain name is confusingly similar to a registered mark is a highly technical matter involving complicated issues of law;

(c) as goods and services in respect of which marks can be registered are divided into 42 classes in Hong Kong, the same mark could be registered in different classes whereas a domain name is unique in nature; and

(d) if trademark searches are to be performed on the 42 classes of registered marks in Hong Kong, the registration process will inevitably be prolonged. Moreover, the searching cost incurred by the registrar will most probably be transferred to the applicant.

42. In view of the above difficulties and the proposal to adopt a reserved list which would help to discourage cybersquatting, the **Task Force is of the view** that domain names should be registered on a "first come, first served" basis and that the registrar should not assume the responsibility for checking whether a domain name being applied for may infringe the rights of a third party. To reaffirm the principle that the domain name applicant bears all legal liabilities arising from the use of a particular .hk domain name, the **Task Force is of the view** that the applicant should be asked to declare when making an application that to its best knowledge, the domain name applied for does not infringe upon the intellectual property rights of a third party.

(d) Multiple domain names per registrant organisation

43. Under the current registration policy, a company is allowed to apply for only one domain name. This policy is considered too restrictive as it prevents businesses from obtaining additional names to market their

products or services. Experience in other places shows that a restrictive registration policy will encourage registration of domain names under the gTLD instead of the ccTLD. The **Task Force is of the view** that each organisation should be allowed to register more than one domain name under .hk to enable local companies to use different .hk domain names for their products and services.

(e) Transferability of domain names

44.   Under the current policy of the HKNIC, domain names cannot be transferred from one company to another. This policy is also considered too restrictive as there are many valid reasons for the transfer of a domain name, particularly when registration of products and services names are allowed. The **Task Force is of the view** that the transfer of domain names on valid grounds (e.g. the ownership or distribution right of a company, its products or services has been transferred*)* should in principle be allowed.

(f) Local presence

45.   As the cyberspace has no geographical boundaries, consideration may be given to opening up the registration of domain names under .hk to interested parties outside Hong Kong (e.g. in the United Kingdom, both local and foreign companies are eligible to register under the .co.uk domain). Such a policy would attract more domain name registrations under .hk. On the other hand, ".hk" is a public resource of Hong Kong. It also denotes a geographical association. The network information centres of most surveyed economies allow only local companies or multinational organisations with a local presence to register a domain name under their ccTLDs. On balance, the **Task Force is of the view** that initially only companies and organisations registered or incorporated in Hong Kong should be allowed to register domain names ending with .hk. The policy-making and administrative body should review this restriction in the light of operational experience and the development of the Internet both globally and in Hong Kong.

(g) Domain names for individuals

46.   It is noted that the network information centres of Taiwan and Singapore have both introduced domain names for individuals recently. Australia also allows registration by individuals. The **Task Force is of the view** that individual residents of Hong Kong should be allowed to register domain names in a new second-level domain category under .hk. Domain names for individuals should be derived directly from the names appearing on their Hong Kong identity cards. It would also need to be considered further by the policy-making and administrative body as to how identical domain names for individuals ought to be differentiated. For simplicity and easy management, each individual resident should be allowed to register only one domain name under this category.

(h) Renewal of domain names

47.   .hk domain names are a public resource of Hong Kong. We should ensure that they are used to the greatest benefit for the local community and are used by those with a genuine purpose. Domain names which are no longer required for their original purpose should be made available for registration by others. The **Task Force is of the view** that all .hk domain names should be subject to renewal and that renewal fees should be charged to cover the administrative cost involved and to enable the registration authority to operate on a self-financing basis. Charging a renewal fee is the current practice in most of the surveyed network information centres.

Dispute Resolution for .hk Domain Names

Dispute resolution guidelines

(a) Registration authority to maintain a neutral role

48.   It is a common practice in the surveyed economies that their network information centres would not be involved directly in the handling of disputes arising from the registration or use of domain names.

This arrangement would maintain the policy-making and administrative body's position as a neutral organisation when a dispute arises.

(b) *Alternative dispute resolution mechanism*

49.   To facilitate early resolution of domain name disputes, one option is to establish a tribunal specifically for the purpose. However, having regard to the small number of domain name disputes at present (less than one case a month on average according to the latest statistics), the establishment of a tribunal may not be cost-effective. Another option is to follow ICANN's alternative dispute resolution procedure for handling disputes which involve domain names that are shown to have been registered in abusive attempts to profit from others' trademarks (i.e. cybersquatting).   The ICANN has engaged the World Intellectual Property Organisation (WIPO) and three other service providers to provide a dispute resolution service for .com, .org and .net gTLDs. In the light of this, the **Task Force is of the view** that we may consider a similar arrangement as set out below -

(a)   the registration authority may appoint organisations which provide arbitration and mediation services (whether local or overseas) to act as domain name dispute resolution service providers. The registration authority and the dispute resolution service providers will agree on a stipulated service level (e.g. turn-around time, availability of qualified panelists to serve the arbitration panels, factors to be taken into consideration in deciding disputes, etc).

(b)   the dispute resolution procedure will be invoked if the claimant is able to produce the following evidence to one of the service providers -

(i)   the registered domain name is identical or confusingly similar to a trademark or service mark to which the claimant has rights;

(ii)   the registrant has no rights or legitimate interests in respect

of the domain name; and

(iii) the registered domain name is being used in bad faith.

(c) The dispute will be handled by an independent arbitration panel provided by the dispute resolution service provider. The registration authority and the registrar will not be involved in the arbitration process.

(d) The arbitration panel will inform the disputed parties once a decision has been made. In the event that the registrant loses, an appeal against the decision may be made to the courts in Hong Kong within a specified period. If no appeal is made within the stipulated period, the domain name of the registrant will be deleted from the domain name database.

(e) The domain name registrar receiving complaints against domain name will take no action until it receives instructions from the registrant or an order of a court or a dispute resolution service provider handling the concerned dispute. This balances the registrant's needs and the claimant's intellectual property rights.

(f) Notwithstanding the establishment of an alternative dispute resolution procedure as set out in (a) – (e) above, parties involved in domain name disputes may go to the court to resolve their dispute before the alternative dispute resolution procedure commences or to contest the result of the dispute resolution.

Summary

50. In summary, the **Task Force** has set out its views in this Consultation Paper on the administration and assignment of Internet domain names and Internet protocol address in Hong Kong as follows -

(a) a non-profit making and non-statutory corporation should be set

up to assume the overall responsibility for Internet domain name administration in Hong Kong;

(b) the corporation should operate on a self-financing basis;

(c) the corporation should be spun off from the JUCC initially, with an interim Board comprising directors from the academia, the industry and the Government;

(d) the corporation should gradually transform into a membership-based organisation with its directors elected from its members;

(e) the authority of the corporation should be formalised through some form of "endorsement" from the Government, e.g. an agreement with the Government;

(f) the existing arrangements for IP address allocation in Hong Kong should continue;

(g) the existing arrangements for a single domain name registry in Hong Kong, with duties assigned by the body responsible for .hk domain name administration, should continue;

(h) the Government should take over the registrar responsibility in respect of the .gov.hk domain;

(i) the JUCC should continue to provide registration services in respect of the .edu.hk domain;

(j) the existing practice of having a single registrar for domain names ending with .com.hk, .org.hk and .net.hk should continue;

(k) the registrar responsible for .com.hk, .org.hk and .net.hk domain names may engage agents to perform some of the routine registration work;

(l) a reserved list of domain names consisting of well-known international trademarks, service marks and brand names as

well as some other names which are of restricted use, making reference to the reserved lists prepared by other ccTLD registration authorities, may be drawn up;

(m) the second-level domain category being selected for a particular domain name application should correspond to the business nature of the applicant;

(n) domain names should be registered on a "first come, first served" basis;

(o) the domain name applicant should declare, when making an application, that to its best knowledge, the domain name applied for does not infringe upon the intellectual property rights of a third party;

(p) each organisation should be allowed to register more than one domain name under .hk;

(q) the transfer of domain names on valid grounds should be allowed;

(r) only companies and organisations registered or incorporated in Hong Kong should be allowed to register domain names ending with .hk initially;

(s) each individual resident of Hong Kong should be allowed to register one domain name in a new second-level domain category under .hk;

(t) domain names should be subject to renewal at a fee;

(u) the body responsible for .hk domain name administration should maintain a neutral role in the handling of disputes arising from the registration or use of domain names ending with .hk; and

(v) an alternative dispute resolution mechanism should be developed in Hong Kong to facilitate early resolution of .hk domain name disputes.

Consultation period and means for submitting comments

51.   Comments on this Consultation Paper should be sent to the Information Technology Services Department by **16 July 2000** through –

Post	Information Technology Services Department
	(Attn: Senior Systems Manager (E)22)
	8/F, Shui On Centre
	6-8 Harbour Road
	Wanchai
	Hong Kong
Fax	(852) 2189 2525
E-mail	digi21@itsd.gcn.gov.hk

52.   The Government intends to make public all or parts of any submissions made in response to this Consultation Paper, unless there is a specific request to treat all or part of a response in confidence. If no such request is made, the Government will assume that the response is not intended to be confidential.

Information Technology and Broadcasting Bureau
June 2000

**Task Force on the Review on Administration and Assignment of
Internet Domain Names and Internet Protocol Addresses in Hong
Kong**

Terms of Reference

(a) to review the existing policy and arrangements related to the
administration of the country-code top level domain (ccTLD) of
Hong Kong, i.e. .hk;

(b) to review the existing policy and arrangements related to the
administration of Internet protocol addresses used by the
community of Hong Kong;

(c) to review the existing system and procedures for assigning and
managing Internet domain names and Internet protocol addresses
in Hong Kong; and

(d) to make recommendations on how the existing arrangements and
procedures can be improved to the best advantage of the Hong
Kong community having regard to international and regional
developments.

INFORMATION INFRASTRUCTURE ADVISORY COMMITTEE

TASK FORCE ON THE REVIEW ON ADMINISTRATION AND ASSIGNMENT OF INTERNET DOMAIN NAMES AND INTERNET PROTOCOL ADDRESSES IN HONG KONG

Membership List

Chairman

Professor Charles Kao

Deputy Chairman

Mrs Jessie Ting (up to 24 April 2000)
Mr Alan Siu (from 25 April 2000)
Deputy Secretary for Information Technology and Broadcasting

Members

Professor Francis Chin,
Professor, Department of Computer Science, HKU

Dr N Ng,
Director, the Joint Universities Computer Centre

Mr Cheng Che-hoo,
Chairman, the Hong Kong Network Information Centre

Mr Charles Mok,
Chairman, the Internet Service Providers Association

Mr Adrian Watt,
Member, the Internet Service Providers Association

Mr Victor Hung,
Chief Trade Practices Officer, the Consumer Council

Dr Y S Cheung,
Assistant Director for Operations, the Hong Kong General Chamber of Commerce

Mr Joseph Yu,
Committee Member, the Chinese General Chamber of Commerce

Mr Anthony Au,
President, the Hong Kong Information Technology Federation

Mr Simon Chan,
Chairman, the Hong Kong Telecommunications Users Group

Mr K H Lau,
Director of Information Technology Services

Mr Lawrence Kwan,
Chief Telecommunications Engineer, Office of the Telecommunications Authority

Mr Peter Cheung,
Deputy Director of Intellectual Property

Secretary

Mr Victor Lam,
Senior Systems Manager, Information Technology Services Department

Comparison Table on the Organisation and Practices of Network Information Centres

	ICANN[10]	Singapore Network Information Centre (SGNIC)	.au Domain Administration (auDA) of Australia	Japan Network Information Centre (JPNIC)	Nominet UK	China Internet Network Information Centre (CNNIC)	Taiwan Network Information Centre (TWNIC)	Canadian Internet Registration Authority (CIRA)	Telecom- munications Administration Centre (TAC) of Finland	Hong Kong Network Information Centre (HKNIC)
History	Set up in 1998 after institutional review.	Set up in 1995.	Set up in 1999 after institutional review.	Set up in 1993.	Set up in 1996.	Set up in 1997.	Set up in 1994.	Set up in 1998 after institutional review.	Set up in 1997.	Set up in 1990.
Type of Entity	ICANN is a non-profit making organisation formed from the global Internet community	SGNIC was established as a not-for-profit organisation. It is a wholly owned subsidiary of the Infocomm Development Authority of the Government of Singapore.	auDA is a self-funding and not-for-profit organisation. The formation of auDA was facilitated by the National Office for the Information Economy of the Australian Government.	JPNIC is a non-profit association. It was incorporated as a government authorized association in March 1997.	Nominet UK is a non-profit company limited by guarantee.	CNNIC is a wholly owned subsidiary of the Government of the People's Republic of China. It is a non-profit organisation.	TWNIC is a non-profit organisation funded by the Ministry of Transportation and Communications and the Computer Society of Taiwan.	CIRA is a non-profit private corporation with Government endorsement.	TAC is an agency under the Ministry of Transport and Communications (MTC).	HKNIC is a non-profit making organisation under the administration of the Joint Universities Computer Centre (JUCC).

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[10] ICANN is responsible for the international governance of the systems and protocols that keep the Internet going. As such, it is not directly comparable to the local NICs included in this table.

	ICANN[10]	Singapore Network Information Centre (SGNIC)	.au Domain Administration (auDA) of Australia	Japan Network Information Centre (JPNIC)	Nominet UK	China Internet Network Information Centre (CNNIC)	Taiwan Network Information Centre (TWNIC)	Canadian Internet Registration Authority (CIRA)	Telecom-munications Administration Centre (TAC) of Finland	Hong Kong Network Information Centre (HKNIC)
Governance	Board of Directors elected from the three Supporting Organisations and the At-large Membership, together with an *ex officio* Chief Executive Officer.	Board of Directors consisting of government officials and representatives from the three licensed ISPs. Government official serves as chair.	12 Directors elected from the members: • 3 persons elected by the Supply Class Members; • 3 persons elected by the Demand Class Members; • 3 persons elected by the Representative Association Class Members; • 2 persons elected by the Members voting together as a whole; • The CEO of auDA as a non-voting member of the board.	Managed by the Board of Trustees. Fifteen-member Board of Trustees elected from and by the membership. Board appoints chair from its own members. Twenty-member steering committee appointed by the Board of Trustees. Committee appoints chair from its own members.	Steering committee elected from and by the membership. Board of non-executive directors appointed to six-member council of management by steering committee. Fifteen-member policy advisory board, partly elected by membership and partly appointed by council. Advisory board chair appointed from its own members.	The housekeeping responsibility of CNNIC is undertaken by the Chinese Academy of Science. As for its business functions, CNNIC is under the leadership of the Ministry of Information Industry.	TWNIC is run under a steering committee composed of 24 commissars representing the industry, government, computer societies, and academia.	Ten directors elected by members serving staggered two-year terms. No maximum number of terms. One director appointed by the board as chair. Government has permanent, non-voting, *ex officio* seat on board.	The board members are appointed by the MTC for three years at a time.	Board of Management of the JUCC.

	ICANN[10]	Singapore Network Information Centre (SGNIC)	.au Domain Administration (auDA) of Australia	Japan Network Information Centre (JPNIC)	Nominet UK	China Internet Network Information Centre (CNNIC)	Taiwan Network Information Centre (TWNIC)	Canadian Internet Registration Authority (CIRA)	Telecommunications Administration Centre (TAC) of Finland	Hong Kong Network Information Centre (HKNIC)
Membership	The At-Large membership is open worldwide.	No membership.	3 classes of members from the Internet community: • Supply: Any Legal Person that is a Registry Administrator or is engaged in the provision of domain names within .au as a major or regular business activity. • Demand: Any Legal Person that does not qualify for Supply Class membership may apply to be a Demand Class Member. • Representative Associations: any association having at least 100 members, or representing at least 30 organisations	Members are mostly with knowledge and experience on computer networking operations.	Open membership. No membership categories.	No membership.	Members include non-profit making organisations, ISPs, commercial companies, government offices, universities and research organisations.	Every domain name holder automatically qualifies for membership. Members elect the board on an annual basis. No membership categories.	No membership.	No membership.

	ICANN[10]	Singapore Network Information Centre (SGNIC)	.au Domain Administration (auDA) of Australia	Japan Network Information Centre (JPNIC)	Nominet UK	China Internet Network Information Centre (CNNIC)	Taiwan Network Information Centre (TWNIC)	Canadian Internet Registration Authority (CIRA)	Telecom-munications Administration Centre (TAC) of Finland	Hong Kong Network Information Centre (HKNIC)
Sources of Income	Fees collected from – Registry (outsourced to Network Solutions, Inc. (NSI)); Registrars; ccTLD Registries	Fees collected from – End-users	Fees collected from – Members; Registrars (under discussion)	Fees collected from – Members; Registrars (per domain name registration); End-users	Fees collected from – Members; Registrars (per domain name registration); End-users	Fees collected from – End-users Registrars (which collect registration fees from end-users on behalf of the NIC)	Fees collected from – Registrars (which collect registration fees from end-users on behalf of the NIC)	Fees collected from – Registrars (when the registration scheme is open for private sector participation as registrars).	Fees collected from – End-users	Fees collected from – End-users
Registry	Outsourced to NSI.	An operation of SGNIC.	Different organisations for different second level domains.	An operation of JPNIC.	An operation of Nominet UK.	An operation of CNNIC.	An operation of TWNIC.	An operation of CIRA.	An operation of TAC.	Assigned by the JUCC to the Computer Services Centre of the Chinese University of Hong Kong.

	ICANN[10]	Singapore Network Information Centre (SGNIC)	.au Domain Administration (auDA) of Australia	Japan Network Information Centre (JPNIC)	Nominet UK	China Internet Network Information Centre (CNNIC)	Taiwan Network Information Centre (TWNIC)	Canadian Internet Registration Authority (CIRA)	Telecom-munications Administration Centre (TAC) of Finland	Hong Kong Network Information Centre (HKNIC)
Registrar	Accredited registrars all over the world.	SGNIC (Single registrar, no designated agent)	Different organisations/ persons for different second level domains.	JPNIC. Application can be made to JPNIC direct or through its ISP members.	Nominet UK. Application can be made to Nominet UK direct or through its ISP members.	CNNIC through authorised agents.	TANet (an ISP) is in charge of .edu.tw and .gov.tw. HiNet and SEEDNet (ISPs) are in charge of commercial users. The three ISPs act as handling organisations to provide registrar service. Commercial application can be made to HiNet and SEEDNet direct or via other ISPs who are members of TWNIC to HiNet and SEEDNet.	CIRA for an initial period of around 1 year and will be open to other registrars afterwards.	TAC (Single registrar, no designated agent)	HKNIC (Single registrar, no designated agent)
Responsible for IP addresses allocation policies and procedures	No	No	No	Yes	No	No	Yes	No	No	No

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Domain name structure	The five most common domains (i.e. .com, .org,. net, .edu and .gov), .int for organisations established by international treaties, or international databases, .mil for the US military.	The five most common domains, .per.sg for individuals and a .sch.edu.sg third level domain for schools.	The five most common domains, .id.au for individuals, .info.au for informational resources, .asn.au for associations, .conf.au for conferences and a few other specific domains for Australia.	The five most common domains with some variations in the nomenclature, geographical domains (e.g. .tokyo.jp) and a few other specific domains for Japan.	The five most common domains with some variations in the nomenclature, .ltd.uk for UK limited companies, .plc.uk for UK public limited companies, .sch.uk for UK schools and a few other specific domains for the UK.	The five most common domains, .ac.cn for scientific research institutions, and geographical domains (e.g. .bj.cn).	The five most common domains, .idv.tw for individuals and .mil.tw for use by the Ministry of National Defense.	Structured according to political geography with entities registered at appropriate level - l. national organisation (e.g. xyz.ca) 2. local/provincial organisation (e.g. xyz.on.ca) 3. residential/ municipal organisation (e.g. xyz.toronto.on.ca).	No predefined second level domains.	The five most common domains.

	ICANN[10]	Singapore Network Information Centre (SGNIC)	.au Domain Administration (auDA) of Australia	Japan Network Information Centre (JPNIC)	Nominet UK	China Internet Network Information Centre (CNNIC)	Taiwan Network Information Centre (TWNIC)	Canadian Internet Registration Authority (CIRA)	Telecom-munications Administration Centre (TAC) of Finland	Hong Kong Network Information Centre (HKNIC)
Allow multiple domain names for an applicant	No restriction.	Allow multiple domain names applications for an applicant, but one-off registration fee is more expensive (S$120) for additional name(s) applied (S$60 for 1st domain name).	One domain name for each registered name.	One domain name per organisation.	1. No limitation on number of domain names that may be applied for the co.uk domain. 2. Others : one domain name per organisation.	No limitation on number of domain names that may be applied under the same registered licence/certificate.	One domain name per applicant.	CIRA will not limit the number of domain names a registrant may register.	In most cases, registration of more than one domain name for the same organisation will not be considered.	In most cases, registration of more than one domain name for the same organisation will not be considered.
Allow registration by individuals	No	Yes, registered under .per.sg starting from 1 May 2000	Yes, registered under .id.au	No	No	No	Yes, registered under .idv.tw starting from 1 May 2000	Being planned	No	No
Allow registrations from overseas	Not applicable	No	No	No	co.uk allows registration of commercial and non-commercial entities outside the UK.	No	No	No	No	No

	ICANN[10]	Singapore Network Information Centre (SGNIC)	.au Domain Administration (auDA) of Australia	Japan Network Information Centre (JPNIC)	Nominet UK	China Internet Network Information Centre (CNNIC)	Taiwan Network Information Centre (TWNIC)	Canadian Internet Registration Authority (CIRA)	Telecom-munications Administration Centre (TAC) of Finland	Hong Kong Network Information Centre (HKNIC)
Reservation of domain names not allowed for registration	No	There is a list of reserved per.sg domain names.	Words that are representative commercial categories or sectors (e.g. cars, accounting, etc.)	No	No	Well-known names of other countries or regions, foreign location names and names of international organisations.	No	CIRA maintains a list of domain names not available for registration under .ca. The list is regularly updated and approved by the Board.	No	No
An alternative dispute resolution procedure	Resolve by dispute resolution service providers accredited by ICANN.	No	Refer the dispute to a commercial dispute centre.	JPNIC has formed a Task Force to formulate a dispute resolution policy based on that of ICANN.	Resolve by independent experts (a list of experts is maintained by Nominet UK).	No	No	CIRA has recently proposed an 'Alternative Dispute Resolution' method. Public consultation was just conducted.	No	No