SUBMISSIONS TO THE PARLIAMENTARY COMMITTEE ON THE ELECTRONIC COMMUNICATIONS AND TRANSACTIONS BILL (ECT)

2002/05/08
INDEX:

1. INTRODUCTION ........................................................................................................................................... 3

2. DOMAIN NAME SERVICES (DNS) – A BRIEF TECHNICAL INTRODUCTION ............................................ 4
   a) The Internet (TCP/IP) ............................................................................................................................. 4
   b) IP Addresses (Technical information) .................................................................................................... 4
   c) Domain Name System (DNS) ............................................................................................................... 5
   d) Graphically ............................................................................................................................................. 6

3. BACKGROUND TO THE ZA ccTLD ........................................................................................................... 7
   a) The Delegation of ccTLDs and the ZA domain in particular ................................................................. 7
   b) The Delegation of the CO.ZA domain and the relationship between the ZA Administrator and UniForum SA ......................................................................................................................... 8

4. UNIFORUM SA, THE CO.ZA ADMINISTRATOR: ..................................................................................... 9
   a) Company Structure .................................................................................................................................. 9
   b) Links to the International UniForum Association ............................................................................... 10
   c) Technical Responsibilities of the CO.ZA domain Administrator: 
      i) General ........................................................................................................................................... 10
      ii) ISO 9002 accreditation ..................................................................................................................... 11
   d) Social and Financial Responsibility
      i) Education Initiatives ....................................................................................................................... 11
      ii) Access to information ...................................................................................................................... 11
      iii) Accounting Reports ......................................................................................................................... 12
   e) Staffing ................................................................................................................................................. 12
   f) ICANN participation and attendance .................................................................................................. 13

5. EVENTS PRIOR TO THE PUBLICATION OF THE ECT BILL .............................................................. 14
   a) Private Sector Initiatives ....................................................................................................................... 14
   b) Public Sector Initiatives ....................................................................................................................... 14

6. HOW OTHER GOVERNMENTS HAVE APPROACHED THE ccTLD ISSUE: ..................................... 15
   a) General ................................................................................................................................................. 15
   b) Australia (.AU) .................................................................................................................................... 15
   c) Japan (.JP) .......................................................................................................................................... 17

7. COMMENTARY ON THE ECT BILL ........................................................................................................ 19
   a) General ................................................................................................................................................. 19
   b) Part 1 of Chapter X (Domain Names - The ZA authority): ................................................................... 19
   c) Part 2 of Chapter X (Domain Names - Governance / Staffing): ......................................................... 22
   d) Part 3 of Chapter X (Domain Names - Functions): ............................................................................ 23
   e) Part 4 of Chapter X (Domain Names - Finance and Reporting): ....................................................... 24
   f) Part 5 of Chapter X (Domain Names - Regulations): ......................................................................... 25
   g) Part 6 of Chapter X (Domain Names - Dispute Resolution): ............................................................... 26
   h) Chapter V (Cryptography Providers) .................................................................................................. 26
   i) Chapter VII (Consumer Protection) .................................................................................................... 26
   j) Chapter VIII (Protection of Personal Information) ............................................................................. 27
   k) Chapter IX (Protection of Critical Databases) ..................................................................................... 27

7. EXECUTIVE SUMMARY ............................................................................................................................ 29
1. INTRODUCTION

UniForum SA is the current Administrator of the CO.ZA Internet domain. In the interests of conserving the independent and self-regulating nature of the Internet and Domain Name System (DNS) in South Africa, we deem it necessary to submit the following representations and commentaries in response to the publication of the Electronic Communications and Transactions Bill (ECT).

In essence we believe that in order to best support and maintain the current levels of positive growth, the local DNS industry should be protected from unnecessary external regulation. We certainly acknowledge the Government’s need to be involved in policy-making, but feel that the Bill as it currently stands goes too far in this regard.

We firmly believe that the implementation of the Bill as it currently stands will have serious negative repercussions on the operation of the ZA domain. We hope and trust that the honorable committee will seek guidance from our commentary, and will regard it as advice from experts who have actively participated in the local DNS for many years.

Although we would have preferred to immediately address our concerns, we feel it is prudent for us to first provide the honorable committee with an overview of the current DNS in South Africa. It is after all our view that many of the envisaged problems are rooted in a general misunderstanding of the functionality and capabilities of the DNS in general.

It is necessary to provide the committee with the following information:

- A brief introduction of the technical functionality and capabilities of the Domain Name System (DNS).
- The parties involved in the global DNS and the establishment of their rights and duties.
- The progress and successes attained by private sector initiatives.
- An objective commentary on the ECT Bill.
2. DOMAIN NAME SERVICES (DNS) – A BRIEF TECHNICAL INTRODUCTION

a) The Internet (TCP/IP)

To better understand the practical functionality of the DNS, one should first have an overview of Internet connectivity in general. In simple terms each computer connected to the Internet is identified by a unique set of numbers known as an IP address (Internet Protocol i.e. – 196.12.234.2). The proper functioning of the Internet depends on these IP addresses being unique.

The Internet prescribes a set of rules, or protocols, to allow for different computers to successfully communicate with each other over the ever-changing physical network. The protocol prescribed by the Internet is known as TCP/IP, and is dependant on the existence of unique IP addresses.

Essentially, through the existence of these unique IP addresses and the TCP/IP protocol, one computer can successfully communicate with an identifiable other over the Internet. It is therefore possible to retrieve a web page over the Internet by simply knowing its IP address.

Domain names, although not an absolute necessity to the functioning of the Internet, do assist in simplifying navigation. Instead of using a string of numerical characters (IP address) it is possible to rather use an easy to remember and identifiable name. This name will then alias or resolve to a specific IP address. In this way WWW.PARLIAMENT.GOV.ZA, should resolve to an applicable IP address where a web site is hosted.

The core component for a presence on the Internet is therefore not an Internet domain name, but rather an IP address.

b) IP Addresses (Technical information)

An IP address uniquely identifies a node or host connection to an IP network. System Administrators or Network Designers assign IP addresses to nodes. IP addresses are configured by software; they are not hardware specific. An IP address is a 32 bit binary number usually represented as 4 fields each representing 8 bit numbers in the range 0 to 255 (sometimes called octets) separated by decimal points. E.g.:

196.25.195.133

Since it is critical to the functioning of the Internet that IP addresses remain unique, it follows that the allocation of these addresses must be managed.
responsibly. Currently the task of allocating unique IP addresses is the responsibility of international organizations known as Regional IP Address Registries. These include:

- APNIC (Asia-Pacific Network Information Center)
- ARIN (American Registry for Internet Numbers)
- RIPE NCC (Réseaux IP Européens)

Members of the public who wish to obtain an IP Address can usually do so from their Internet Service Provider (ISP). ISPs obtain blocks of unique IP addresses from a Registry.

c) Domain Name System (DNS)

The general public perceives a domain name as being the online location for a company’s Internet web site or possibly the suffix to an email address. Although these perceptions are by no means false, they are not completely accurate. Domain names also fulfill a variety of other important technical and commercial functions.

The DNS is a mechanism that can be used for identifying and locating computers on the Internet. The DNS provides a system of easy to remember names that can be translated by the DNS into numeric addresses (IP addresses).

A domain name is hierarchical and often conveys information about the type of entity using the domain name. For example, domains in NET.ZA are normally Internet Service Providers, GOV.ZA are government entities, EDU.ZA are educational institutions, etc. Domain names at the same level of the hierarchy must be unique, for example there can be only one GOV.ZA at the second-level of the hierarchy, and only one PARLIAMENT.GOV.ZA at the next level.
The “root”
The root (the highest level) of the current DNS hierarchy is currently provisionally maintained and managed by the Internet Corporation for Assigned Names and Numbers (ICANN) on contract from the US Department of Commerce.

There are thirteen Servers that serve requests at the root of the DNS name space. These “Root Servers” know the IP addresses of the Name Servers for all the Top Level Domains (TLD), which includes Country Code Top Level Domains (ccTLD).

When any process needs to determine an IP address given a domain name, it calls upon a local Name Server to resolve the address. If a particular Name Server cannot resolve the address locally it will call upon a higher authority. Any DNS server will normally pass requests it cannot handle onto the Root. The Process then follows the hierarchy down until it reaches an Authoritive Name Server for the domain name it is looking for.

Local DNS
To obtain a domain name it is necessary to identify the applicable Administrator for that specific domain (i.e. UniForum SA = CO.ZA). What is then required is that an application is made to the Administrator in the prescribed manner containing the prescribed information. Conditions for acceptance may vary widely from sub-domain to sub-domain.
3. BACKGROUND TO THE ZA ccTLD

a) The Delegation of ccTLDs and the ZA domain in particular.

A selected extract from the ccTLD Constituency’s guidelines for the Re-delegation of ccTLD Managers (http://www.cctld-drafting.org/re_delegation.html):

“Starting in 1985, ccTLD managers received delegations to administer ccTLDs from IANA, or from Dr. Jon Postel as IANA's chief, based on informal criteria. Generally these managers were recognized as being an Internet authority within the territory described by the ccTLD code, either because of their technical expertise, their renown in the global Internet community, or because of their standing within Internet community in the relevant territory.

In 1994, Dr. Postel and others authored RFC 1591 (Request For Comment 1591 can be viewed at http://www.faqs.org/rfcs/rfc1591.html), which laid out criteria for the delegation of a ccTLD to a manager, and on this basis, all further ccTLDs were delegated to their managers. In either case, the two foundation stones of the delegation of any ccTLD from IANA to its manager were the stability of the technical functioning of the delegated zone, and service to the Internet community, both local and global. These dual tasks remain the major responsibilities of ccTLD managers to this day and into the foreseeable future.

In 1998, IANA was merged into the newly formed ICANN, and its tasks were subsumed under ICANN's larger remit. Due in part to the divergence between the principles of RFC 1591 on the one hand, and the practice of IANA on the other, the ICANN staff at its Berlin meeting in March of 1999 promulgated IPC-1 (The Internet Domain Name System Structure and Delegation or IPC-1, can be viewed at http://www.icann.org/icp/icp-1.htm), which set out the current practice of IANA. RFC 1591 and IPC-1, taken together, have been the documents from which ccTLD managers have, at least unofficially, taken their instructions.

In reality, however, the source of authority for ccTLD operations was Dr. Postel personally. His untimely death in 1998 left a void that ICANN, occupied with its main task of opening up the gTLD name space to competition, has not filled. Nor has ICANN garnered the trust from ccTLD managers that Dr. Postel enjoyed. In his last years, Dr. Postel was also much occupied with the gTLD fracas; and he did not turn his attention much to ccTLDs, which were largely stable and whose problems were not as troublesome to him.”
According to the best of our understanding, the ZA domain was first delegated to Vic Shaw, a South African citizen, in 1991. The responsibility of administering the ZA domain was subsequently passed onto Mike Lawrie, the current Administrator. The current Administrator is in the process of redelegating the administrative responsibilities of the ZA domain to a newly constituted non-profit organization known as Namespace ZA (for further information please consult http://www.namespace.org.za).

b) The Delegation of the CO.ZA domain and the relationship between the ZA Administrator and UniForum SA.

There should be no confusion: UniForum SA is not the Administrator of the ZA Domain, but is one of several second-level domain Administrators in ZA.

In 1995, at a summit meeting of Internet Service Providers (ISPs), it was decided that UniForum SA would take over the administrative responsibilities of the CO.ZA domain. UniForum SA was an appropriate entity for the CO.ZA domain as it was (and still is) regarded as a neutral third party having the necessary expertise, skills and infrastructure to fulfill the duties and responsibilities of a competent and equitable domain name Administrator.

It is also important to realize the technical relationship between a second-level domain Administrator (such as UniForum SA) and the Top Level Domain Administrator (ZA). As domain names are structured according to a hierarchy, the technical functioning of any domain name is absolutely dependant on the correct and proper functioning of all domain name levels higher than itself. In this regard the correct and proper functioning of the CO.ZA domain is absolutely dependant on the proper and correct functioning of the ZA domain.

Practically this means that should the ZA domain cease to function for whatever reason, all sub-level domains thereunder (i.e. GOV.ZA; PARLIAMENT.GOV.ZA; WWW.PARLIAMENT.GOV.ZA) will also cease to function. You will therefore appreciate that the well being of the ZA domain is of direct concern to both UniForum SA as well as every domain name Registrant who currently holds a domain name with a ZA suffix. In light of this technical characteristic, it is absolutely critical for UniForum SA to address issues directly relating to the ZA domain.

As is both historically and traditionally the case with Internet systems, the relationship between UniForum SA and the ZA Administrator is based largely on informal criteria. UniForum SA has been delegated the administration and management of the CO.ZA domain on the basis that it has the technical and administrative capability to properly administer this domain on behalf of the Internet community.
4. UNIFORUM SA, THE CO.ZA ADMINISTRATOR:

a) Company Structure:
UniForum SA is a company incorporated under section 21 of the Company's Act of 1973, under registration no 1988/04299/09. Section 21 of the Act relates to the incorporation of Associations not for gain, and reads as follows:

1. Any Association
   a. formed or to be formed for any lawful purpose;
   b. having the main object of promoting religion, arts, sciences, education, charity, recreation, or any other cultural or social activity or communal or group interests;
   c. which intends to apply its profits (if any) or other income in promoting its said main object;
   d. which prohibits the payment of any dividend to its members; and
   e. which complies with the requirements of this section in respect to its formation and registration, may be incorporated as a company limited by guarantee.

2. The memorandum of such association shall comply with the requirements of this Act and shall, in addition, contain the following provisions:
   a. The income and property of the association whencesoever derived shall be applied solely towards the promotion of its main object, and no portion thereof shall be paid or transferred, directly or indirectly, by way of dividend, bonus, or otherwise howsoever, to the members of the association or to its holding company or subsidiary: Provided that nothing herein contained shall prevent the payment in good faith of reasonable remuneration to any officer or servant of the association or to any member thereof in return for any services actually rendered to the association.
   b. Upon its winding-up, deregistration or dissolution the assets of the association remaining after the satisfaction of all its liabilities shall be given or transferred to some other association or institution or associations or institutions having objects similar to its main object, to be determined by the members of the association at or before the time of its dissolution or, failing such determination, by the Court.

From the above it should be evident that the members of UniForum SA have no vested financial interest in the company, but rather seek to promote the objectives of the company in the public’s interest. There is therefore no financial motivation to fulfill the company’s objectives, but rather a strong sense of social and technical responsibility to the Internet community. It is this very characteristic that has seen UniForum SA establish itself as one of the most revered and respected domain name Administrators in the world.
b) Links to the International UniForum Association

UniForum SA was initially established as a local chapter of the United States based UniForum Association. The principal objective of the UniForum Association is to promote open computing and systems, of which the Internet is the most successful example. The UniForum Association’s mission statement reads as follows:

"UniForum is an International vendor-independent not-for-profit association that promotes the use of open systems, based on shared industry standards. Central to this mission is the delivery of high quality educational programs, conferences, publications, online services and peer group interaction."

c) Technical Responsibilities of the CO.ZA Administrator:

i) General:

During the course of the early nineties, and indeed before that time, UniForum SA had been involved in developments surrounding the Internet and its associated systems and industries. UniForum SA and/or its constituents were often involved in pioneering initiatives relating to early Internet activities in South Africa.

UniForum SA has subsequently administered allocations of domain names under the CO.ZA namespace since 1995, at which time it has seen growth from approximately 400 registrations to a current level of approximately 111 000 registrations. UniForum SA has allocated up to 800 domain name registrations, and has effected up to 3000 updates within a single day.

It is our opinion, and it may very well be common cause, that the CO.ZA Namespace is by far the most widely used domain on the African continent. According to recent international statistics CO.ZA ranks as the 22nd most popular domain in the world. The CO.ZA name space is furthermore internationally respected and revered for its robust and professional administration. This is duly reflected in the number of CO.ZA registrations from large international companies.

Today CO.ZA is the prevalent domain used in South African Trade and Industry, with almost every company aspiring to have an Internet identity within the CO.ZA domain. The CO.ZA domain is without a doubt one of South Africa’s Internet success stories, and this is directly attributable to UniForum SA’s professional and equitable administration.
ii) ISO 9002 accreditation:
UniForum SA has attained ISO 9002 accreditation for the quality of its management systems and procedures. We are, to the best of our knowledge, the only domain name administrator in the world to hold such an accreditation. This is a reflection of the competent and professional manner in which the CO.ZA domain is administered.

d) Social and Financial Responsibility

i) Education Initiatives
The administration of a successful domain, such as CO.ZA, can be a very lucrative business. UniForum SA’s non-profit status requires that income derived must be applied in pursuit of the company’s objectives. As mentioned earlier, UniForum SA’s primary objective is the promotion of open systems and networks, and in this regard it has been actively involved in social upliftment projects together with various State organs, parastatals and private sector initiatives.

UniForum SA has initiated and funded a number of empowerment projects to develop computer and Internet skills amongst the youth and previously disadvantaged communities. Working closely together with the Department of Education (through the honorable Minister Kader Asmal), SchoolNet, DIMA, Western Cape Education Network and Gauteng Online, UniForum SA has funded large empowerment projects at National, Provincial and Local levels of education.

In particular, UniForum SA supports local open source initiatives to facilitate the growth of expertise and skills within South Africa. The benefit of these initiatives is that locally developed open source systems can be used to empower previously disadvantaged communities without having to rely on the international software community for donations.

ii) Access to information
The public generally interact with UniForum SA through its website located at http://co.za. With this in mind, we have recognized the need to address cultural and language diversities. We are one of the few South African organizations to have an extensive multi-lingual online presence. The official CO.ZA Website is available in 6 different languages including Afrikaans, English, Sepedi, Sotho, Xhosa and Zulu.

It has been our intention to promote access to valuable information on domain name registration rules and policies, by presenting this critical
information in the home language of many of its visitors. We are currently investigating further translations.

**iii) Accounting Reports**

Due to the natural monopoly of the CO.ZA domain, UniForum SA has always been subject to close scrutiny. In this regard UniForum SA has published financial reports on its website from time to time. It is extremely important for UniForum SA to account to the Internet public for funds it has received through CO.ZA Registrations, and how these funds are applied to various operations and projects.

e) **Staffing**

UniForum SA currently runs an operational staff compliment of 13. This includes 3 Support, 4 Technical Support and 5 Administrative personnel. It is our view that our current staff compliment is the minimum required to effectively and efficiently administer a second-level Domain containing over 111 000 registrations.

In appointing new staff, UniForum SA has been acutely aware of associated economic responsibilities to previously disadvantaged communities. In this regard UniForum SA is proud to say that it has a staff compliment that is a true reflection of our countries ethnic and cultural diversity.

![Figure 1 - UniForum SA's Operational Staff](image)

**Figure 1 - UniForum SA's Operational Staff**
f) ICANN participation and attendance
With the exception of a single meeting UniForum SA, has since ICANN’s inception, actively attended all meetings. It is also important to note that UniForum SA has been an active participant and contributor, and our attendance has not merely been token.

In particular UniForum SA has played a leading role in promoting and supporting issues raised by developing countries in ICANN forums and meetings. UniForum SA has on numerous occasions impressed upon the executive committee of the ICANN Board to consider the needs of developing Internet nations. UniForum SA has also made substantial contributions to the ccTLD best practices policy and other related working documents.

The honorable committee may also be interested to learn that UniForum SA has for the past 3 ICANN meetings extended an invitation to fund travel arrangements for a member of the South African government to attend. With the exception of the last ICANN meeting held in Accra, Ghana the Department of Communications (DOC) has not, much to our disappointment, taken up this offer.

UniForum SA has always believed that the South African government can play an important advisory role in various ICANN forums, including but not limited to the Government Advisory Committee. This would also serve a dual purpose in that representatives of the South African Government would become acquainted with the practices of other governments and their policies on Domain Name and Internet related issues.

In conclusion it should be mentioned that UniForum SA has played an integral role in initiatives that have started at ICANN gatherings. Some of these initiatives range from AFRISPA, AFRINIC and AFRICANN, which are in direct support of our honorable President’s views on the African Renaissance, and closing the digital divide between the African Continent and the rest of the world.

From the above you would have noted that UniForum SA has a clear and active understanding of the workings of ICANN, and has contributed to the development of Internet policy and initiatives applicable to the African Continent. UniForum SA is also widely known and respected by other delegates including ccTLD and Generic Top Level Domain Administrators as well as delegates from other Government Institutions.
5. EVENTS PRIOR TO THE PUBLICATION OF THE ECT BILL

a) Private Sector Initiatives
During the latter part of 1999, the current ZA Administrator (Mike Lawrie) felt that it would be in the best interests of the Internet community for the ZA domain to be delegated to a more suitable entity. Mr. Lawrie "mandated" the South African chapter of the Internet Society (ISOC-ZA) to establish a drafting committee to develop proposals on how to achieve this. The Terms of Reference for the committee are available at (www.isoc.org.za/tor.html).

The colloquial “DC process”, through extensive consultation with the Internet community, ultimately developed a proposal to incorporate a non-profit organization to assume the management of the ZA name space. It was a material condition of this proposal that the Board of Directors should be representative of the Internet Community, and that Government representation would be guaranteed.

At the inaugural, and well-publicized meeting of Namespace ZA, a Board of Directors was duly elected. One seat on the Board has specifically been reserved for a Government Official nominated by the Department of Communications. To date this seat has not been filled, notwithstanding the extension of an invitation to the Department. For further information refer to (www.namespace.org.za and www.isoc.org.za/dc)

Presently Namespace ZA is in the process of incorporating, and as we understand it will then apply to the necessary authorities at ICANN for the official re-delegation of the ZA domain. The proposed situation has the support of the South African Internet Community.

b) Public Sector Initiatives
The DOC has made several attempts at public consultation. Wherever possible we have attended all the sessions that we have been aware of. In particular, we have actively participated in sessions on the E-commerce debate, the results of which are no longer available at the designated addresses (www.ecomm-debate.co.za), as well as the DOC’s E-law conference held on the 20th and 21st April 2000.

It would appear that the prevailing recommendations put forward by these sessions has been ignored, especially in light of Chapter X.

The DOC’s policy documents, going back as early as October 1999, highlight their attitude towards the ZA domain. There can be little doubt that the DOC has had a pre-conceived agenda regarding the ZA domain. It has tended to follow this agenda throughout the entire “consultative” process all the way through to the eventual publication of Chapter X.
6. HOW OTHER GOVERNMENTS HAVE APPROACHED THE ccTLD ISSUE:

   a) General
   Other governments have approached the domain name issue with caution and foresight. Examples of how our Government should approach this issue can be found in the most recent applications to ICANN for re-delegation. These include the .AU (Australia) and .JP (Japan) ccTLDs.

   In both the above instances the national governments of Australia and Japan, have opted for a ccTLD model allowing for responsible private-sector regulation. The governments of these two very successful Internet nations have realized that the core element of a successful Internet involves responsible self-regulation.

   b) Australia (.AU)

   General:
   The Australian ccTLD model is based on the principles of private-sector self-regulation of the type that allow the Internet to flourish globally. Its structure reflects the principle that the Internet is best coordinated by private-sector efforts, with governments playing a supportive and generally non-intervening role. That principle is embodied in Australian Government policy, which endorses industry self-regulation.

   Senator Alston reaffirmed "that the Australian Government is committed to an industry self-regulatory regime being responsible for the management of the AU domain space, rather than a Government authority." Senator Alston's letter to ICANN also reiterated the Australian Government's endorsement of the newly formed authority (auDA) as the appropriate vehicle for that management and emphasized that the Australian Government took seriously its responsibility to ensure that authority (auDA) served the interests of the Australian Internet community:

ICANN re-delegation:

Subject: Request of the Domain Administrator (auDA) for re-delegation of the .au Top-Level Domain
Date: 31 August 2001
Ref: http://www.iana.org/reports/au-report-31aug01.htm (IANA report)

The following are brief extracts from correspondence sent by the Australian Government to ICANN regarding their endorsement for the
re-delegating of the .au TLD. We have highlighted important statements:

**Extract 1:**

Sender: SENATOR THE HON RICHARD ALSTON (Minister for Communications, Information Technology and the Arts Deputy Leader of the Government in the Senate)

Recipient: DR M STUART LYNN (President and Chief Executive Officer Internet Corporation for Assigned Names and Numbers)

Sent: 4 July 2001

Specific Reference: (http://www.iana.org/cctld/au/alston-to-lynn-04jul01.htm)

“The auDA Board comprises a good cross-section of the Internet community, deliberately having representation from the supply and demand side of the industry, representative associations and the Internet community in general. The Board has also appointed two Independent Directors, Mr Tony Staley and Mr Greg Crew. A representative from NOIE attends all auDA Board meetings as an observer and maintains a close working relationship with the auDA Board and its administrative staff.

In light of this I am confident that should a situation arise which would suggest that auDA is no longer operating in the interests of the global Internet community the Government would be made aware of this and actions would be taken to resolve the matter. Guidance would also be sought from ICANN on how best to deal with such a situation.

As a last resort the Australian Government could invoke legislation relating to the self-regulation of the domain name system. Under section 474 of the Telecommunications Act 1997, the Australian Communications Authority may 'declare' and 'direct' a manager of electronic addressing if that manager is behaving in a way that is anti-competitive, contrary to consumer protection, or otherwise unsatisfactory.

I would like to take this opportunity to acknowledge the significant contribution made to the domain name system by Mr Robert Elz, particularly with regard to his administration of the .au ccTLD. The Government’s endorsement of auDA as the appropriate entity to administer the .au ccTLD is not to be construed as criticism of Mr Elz. Rather it is recognition that the task at hand is now too great for one person and is better suited to an organisation which is representative of the Internet community and has been established with the appropriate resources to move Australia forward in the global world of the Internet with the full support of the Government.”

**Extract 2:**

Sender: SENATOR THE HON RICHARD ALSTON (Minister for Communications, Information Technology and the Arts Deputy Leader of the Government in the Senate)
I can confirm that the Australian Government is committed to an industry self-regulatory regime being responsible for the management of the .au domain space, rather than a Government authority. auDA was established as a result of work undertaken by a representative committee, which was facilitated by NOIE, to progress the creation of an industry self-regulatory regime. The Government’s subsequent endorsement of auDA as the appropriate entity to administer .au (which is reaffirmed) was contingent upon auDA demonstrating to Government its ability to meet a number of criteria, namely:

- operate as a fully self-funding and not-for-profit organization;
- be inclusive of, and accountable to, members of the Internet community including both the supply and demand sides;
- adopt open, transparent and consultative processes;
- aim to enhance benefits to Internet users through the promotion of competition, fair trading and provisions for consumer protection and support;
- establish appropriate dispute resolution mechanisms; and
- represent the Australian Internet industry interests in the Internet domain name system at national and international fora.

The Government’s ongoing endorsement is subject to auDA continuing to meet these criteria as well as operating within the provisions of its company constitution and recognizing that the management and administration of the au ccTLD is subject to the ultimate authority of the Commonwealth of Australia. Should the situation arise whereby auDA was no longer administering the .au ccTLD for the benefit of the Australian community, the Government would take the appropriate action to remedy this situation, and has the legislative authority to do so.”

c) Japan (.JP)

General

JPRS (Japan Registry Service Co., Ltd.) was established on 26 December 2000. Since then, JPNIC, JPRS and the Internet community have discussed the applicable policy for the management and administration of the .JP top-level domain.
The structure proposed by JPRS and endorsed by JPNIC and the Japanese Government is to have JPRS undertake management of the JP ccTLD under appropriate oversight of the Japanese Government, with the assistance of JPNIC, concerning national public-policy interests.

**ICANN re-delegation:**

Subject: Request of the .jp Domain Administration (JPRS) for re-delegation of the .jp Top-Level Domain

Date: 8 February 2002

Ref: http://www.iana.org/reports/jp-report-08feb02.htm (IANA report)

An extract from the Japanese Government’s letter of endorsement for the re-delegation of the JP TLD to a duly appointed and independent representative body known as “JPRS”.

**Extract:**

Sender: Yasuo Sakamoto (Director, Computer Communications Division, Telecommunications Bureau, Ministry of Public Management, Home Affairs, Posts and Telecommunications)

Recipient: DR M STUART LYNN (President and Chief Executive Officer Internet Corporation for Assigned Names and Numbers)

Sent: 30 January 2002


“...The process above has led the Japanese government to endorse JPRS as the appropriate entity for managing and administering the .jp top level domain under the provision that JPRS complies with the Memorandum in its management and administration activities. I trust that the ICANN will accept this letter of endorsement and begin procedures for the re-delegation of the .jp top-level domain to JPRS and the agreement with JPRS promptly. In addition, in response to the 12 November 2001 letter reporting the execution of the Memorandum between JPRS and JPNIC, I attach a copy of letters addressed to them, on this endorsement and of my acknowledgement of the Memorandum, as the governmental communications (See Attachment B). If you wish to discuss any aspect of the above endorsement of JPRS, please do not hesitate to contact either Kaori Ito of this ministry or myself.

Finally, I would like to conclude this letter by expressing my sincere respect for the dedicated involvement of current .jp administrator and an ICANN Director, Dr. Jun Murai, and my expectation of his continuing contributions to the development of the Internet in Japan and worldwide.”
7. **COMMENTARY ON THE ECT BILL**

a) General

- It is essential that all levels of Government be involved in the promotion and use of E-Commerce in this country. It is furthermore our vision that a strong partnership be created between Government and the private sector through which the fair and free use of the Internet is encouraged.

- Although we believe that certain portions of the Bill are motivated by good intention, in their current state, they do nothing to encourage an open and active relationship between the private sector and Government. This will rather force the Internet into seeking less regulated alternatives. We urge the honourable committee to take heed of our commentary and warnings as set out below.

- In order to be practical, we have formulated our commentary on a part-by-part basis, and have included alternatives or suggestions where applicable.

- We acknowledge and welcome the Government’s intentions to participate in the local DNS. We would however like to caution against an authoritarian approach, which has failed repeatedly all over the world.

b) Part 1 of Chapter X (Domain Names - The ZA authority):

*Commentary:*

- The Bill makes provision for the establishment of a new juristic person to take over the administration of the ZA Domain. This is unnecessary and counterproductive. The widely supported Drafting Committee Process (DC Process) has through an in-depth and representative consultative mechanism already established a suitable guardian for the ZA domain. This process has the full support of UniForum SA as well as the current ZA Administrator. **This model makes specific provision for government representation on the board of directors.**

- It would appear that the Department of Communications has ignored the advice and recommendations put forward to it by the Internet
We would object to any assertion that the Department of Communications has taken due and proper notice of the Internet community’s requirements and opinions. It would appear that the Department has instead opted to pursue another agenda, one that would effectively nationalise the ZA domain against public opinion.

- It is important to note that the Bill, as it currently stands, makes no provision whatsoever for compliance with ICANN re-delegation procedures and criteria. It is also evident that no regard has been given to established and well-publicised international ccTLD best practices and policies.

- An extract from RFC1591 – clause 3(6) reads as follows: “For any transfer of the designated manager trusteeship from one organization to another, the higher-level domain manager (the IANA in the case of top-level domains) must receive communications from both the old organization and the new organization that assure the IANA that the transfer is mutually agreed, and that the new organization understands its responsibilities. It is also very helpful for the IANA to receive communications from other parties that may be concerned or affected by the transfer.”

- In light of the above, it is critically important to note that IANA / ICANN will only consider the re-delegation of any ccTLD, if there is a consultative process involving the current administrator, the local Internet community and government. In light of the Bill as it currently stands, we believe that the current ZA Administrator will not support or encourage the re-delegation of the ZA domain in this manner. Furthermore, any such application to ICANN will not receive the supported of UniForum SA. It should therefore be absolutely clear that a formal re-delegation of the ZA domain will not be possible without the support of the local Internet community.

- Chapter X of the ECT Bill as it currently stands is destined to fail, as it does not have the buy-in or support of the local Internet community.
The tension between the Government and the local DNS community in attempting to enforce Chapter X, as it currently stands, will have dire repercussions for the stability of the ZA domain. This could subsequently have a detrimental effect on the administration and functioning of the CO.ZA domain as well as all other second-level domains. There is no doubt that any tension between government and the private sector will seriously affect both international and local confidence in the local DNS.

There are no clear and unequivocal assurances given to current domain name administrators for the continuation or protection of their rights and duties.

The DOC has not given due and proper notice to the interests and suggestions of the Internet community.

**Alternatives / Suggestions:**

> Chapter X cannot remain as it currently stands. It holds an unacceptably high risk for the irreparable damage and loss of confidence in the local DNS industry. We suggest that the South African Government should (as should all other Governments around the world), support an in-depth and detailed consultative process with the local Internet community.

> It is extremely important for the Government to have a thorough understanding of the technical functioning and capabilities of the DNS before any attempt at regulation is made.

> Government will be well advised to consult the re-delegation guidelines for ccTLD Administrators, as developed by the ccTLD constituency to ICANN. It is extremely important to remember that a ccTLD is administered on behalf of, and in the interests of, both the local and international Internet communities. In this regard a ccTLD Manager should be protected from shifting political winds, in favour of securing and stabilising local DNS. For more information please read: [http://www.cctld-drafting.org/re_delegation.html](http://www.cctld-drafting.org/re_delegation.html)

> Government should take cognisance of the processes undertaken by the private sector and recognise the establishment of Namespace ZA.
c) Part 2 of Chapter X (Domain Names - Governance / Staffing):

Commentary:

- It is disconcerting to see the creation of a bureaucracy for the administration of the ZA domain. The Bill prescribes a Board of up to 16 members to preside over a like number of domain names. At present there are approximately 19 domain name registrations in the ZA domain, and a director compliment of 16 would therefore be excessive, and a waste of money and resources. Interestingly enough the CO.ZA domain has over a 111 000 domain name registrations, and it has a complete staffing compliment, including directors, of 16 people.

- In light of the very limited number of registrations within the ZA domain, we seriously challenge the need to appoint a permanent staff compliment at all.

- It is absurd to believe that the entire Internet community may nominate a maximum of 2 (two) representatives to a total Board of 16 (sixteen) directors. It is even more absurd (if that is indeed possible) to accept that the Minister may at his/her sole discretion decide not to appoint the nominated persons. It further appears that the Minister reserves the right to appoint the remaining Board members based on very loose criteria. This potentially exposes the entire ZA management process to abuse.

- There are insufficient built-in mechanisms to control and monitor the Minister’s far-reaching discretionary powers in appointing Board Members.

Alternatives / Suggestions

- A Board of 16 (sixteen) directors is excessive and totally unnecessary to manage and administer the ZA domain. We suggest that a 5 – 8 member Board would be sufficient and reasonably representative to preside over policy decisions.

- Since the DNS is essentially a technical service, it should be compulsory that at least 2-3 seats on the
Board be reserved for people with the necessary technical expertise and experience. The local DNS community should be entitled to appoint these “technical directors”.

- The wide discretionary powers of the Minister must be limited and the process for the appointment of directors should be open and transparent, whilst the disqualification should be regulated as per the company’s act.

- It is our recommendation that the Board of Directors for the Authority should be appointed by the Internet community at large, but that certain positions (Technical and Government) should be reserved for qualified persons only.

d) Part 3 of Chapter X (Domain Names - Functions):

Commentary:

- This portion of the Bill is of particular relevance to UniForum SA, as administrators of sub-domains such as CO.ZA, are required to apply for a license.

- The Bill makes mention of prescribed criteria and conditions for obtaining a license but neglects to set these out for public comment and scrutiny. It would appear that this has been left to the discretion of the Minister. This scenario lends itself to potential abuse.

- The entire licensing process is both vague and open to abuse. Although we agree that a formal relationship should exist between the ZA administrator and all second-level administrators, we feel that this should be accomplished through an in-depth and active consultative process.

- The Bill does not take due and proper notice of existing constitutional rights. This may subsequently lead to constitutional challenges relating to the enforcement of the Bill.

- We are concerned to note that the proposed ZA administrator would be subservient to ICANN rules and policy. This is surprising as ICANN has, through its
current President (Stuart Lyn), announced that it requires major reformation and restructuring. An attempt to formally bind the ZA administrator to the whims of a private organization, which itself is going through structural and policy hardships, shows a complete lack of understanding of existing ccTLD / ICANN relationships.

Alternatives / Suggestions:
- A consultative process should be established between the ZA administrator and the second-level domain administrators in order to formalise the existing informal relationship.

e) Part 4 of Chapter X (Domain Names - Finance and Reporting):

Commentary:
- We note, with interest, that what is currently a successful self-funding process, could become a financial burden to Parliament in the future. There is absolutely no need to seek funding from any other source, but through revenue generated by local DNS initiatives.

- There appears to be a general misunderstanding as to the Authority’s technical and administrative duties and responsibilities. It is our view that there will be a minimum administrative and technical burden on the authority, and that the majority of the work will relate to the establishment and development of policy. The major administrative, technical and legal burden rests on the shoulders of the second-level domain administrators, and it is in this environment that most of the funds will need to be applied.

Alternatives / Suggestions:
- The Authority should be self-funding. Financial and accounting practices must be open and transparent. Existing Company and Financial legislation should prevail and any duplication or conflict in this Bill should be avoided.
f) Part 5 of Chapter X (Domain Names - Regulations):

Commentary:

- We would welcome any policy direction or recommendations by Government regarding Cultural and Ethnical matters. As you would have noted from the above, UniForum SA has responded admirably to its social responsibilities and currently allows access to its website in at least 6 official languages. UniForum SA has always had an open door policy on how to better address issues of ethnical and cultural diversity. To date we have had absolutely no input from the Government at all, and any existing policies and services have been implemented at our own initiative.

- The Minister appears to have wide discretionary powers to regulate the local DNS industry. Due to the technical nature of the DNS, uninformed or ill-advised decisions could have unforeseen detrimental effects on the confidence in the local DNS industry.

- The unlimited and wide-ranging discretion of the Minister to impose new regulations could potentially loan itself abuse. This will not be in the interests of the Internet community who have been involved in the creation and development of existing DNS policies and structures.

Alternatives / Suggestions:

- The local DNS industry has established its policies and rules based on the principals of bottom-up governance. The rules and policies have evolved with international trends and developments and can generally be described as international protocol. We would recommend that the Bill should oblige the Minister to comply with international best practices and that he/she should consult with and obtain the approval of the local DNS industry before introducing new regulations.

- Both Government and the private sector should develop an open communication channel or forum in which to ensure that concerns on ethnical and cultural diversities are addressed.
g) Part 6 of Chapter X (Domain Names - Dispute Resolution):

Commentary:

- In general the introduction of an independent and well-qualified mechanism to resolve domain name disputes is welcomed. The mechanism should be established on sound legal principals and procedures and should not be a forum where trade mark holders can arbitrarily bully domain name holders into submission.

Alternatives / Suggestions:

- Of primary focus for dispute resolution should be malicious or bad faith registrations. Trade mark disputes are not suited to this forum and should be referred to the Courts.

- The dispute mechanism should be operated totally independently from domain name Registrars. Registrars should not be called upon to make merit decisions. Complaints should be lodged directly with the Dispute Resolution mechanism.

h) Chapter V (Cryptography Providers)

Commentary:

- The terms “cryptography product” and “cryptography service” are defined too broadly. The use of cryptography services and products is essential in safeguarding and protecting the administration of the CO.ZA domain. Although this type of use may not be intended to form part of the definition, the wording of the Bill could lead to confusion.

i) Chapter VII (Consumer Protection)

Commentary:

- Whilst we suspect that Domain Name Services fall outside the ambit of this Chapter, we would nevertheless appreciate clarity on this issue.
Alternatives / Suggestions:
- DNS should expressly be excluded within this chapter.

j) Chapter VIII (Protection of Personal Information)

Commentary:
- It is established international policy that certain domain name information is made publicly available. This is generally facilitated through an online “whois” facility that provides the public with contact information for the Registrant of a domain name.
- It is necessary to clarify whether the application of this Chapter is indeed voluntary.
- There appears to be an unintentional error in section 51(2), where it refers to “…outlined in section 51…”. This should surely read “…outlined in section 52…”?

Alternatives / Suggestions:
- We suggest that Chapters of a non-compulsory nature should not be included in the Bill. We therefore recommend that Chapter VIII be removed in its entirety.

k) Chapter IX (Protection of Critical Databases)

Commentary:
- It would appear that certain DNS data could qualify as critical data in terms of the Bill. This will have the effect that Chapter IX would find direct application to certain CO.ZA records and the like.
- Although we understand that the Minister may prescribe certain minimum standards, we nevertheless feel that this should only be considered after a consultative process with the applicable Database Administrator. It should be re-emphasized that current policies and procedures have evolved through the course of time and form the basis for international best practices.
- There appears to be no appeal or de-registration process available to Database Administrators who wish to dispute the critical nature of their data. It appears that
the Minister has an absolute discretion, based on very loose criteria, to decide what data is critical or not. There are no safeguards to ensure the integrity and independence of Database Administrators, and this could lead to abuse.

- It should be kept in mind that it is internationally accepted that the ccTLD Administrator’s contact details must be made publicly available.

**Alternatives / Suggestions:**

- Due to the mission critical nature of domain name records we strongly suggest that any right to inspect or audit domain name records be excluded or at the very least severely limited. Inspectors should have the necessary technical expertise and must be compelled to work through and with the database administrator.

- It is essential that the Bill contains due administrative policies and procedures dealing with the certification of critical data, appeals against such certification and the declassification of critical data. The Ministers wide discretionary powers are inappropriate and should be curtailed through set policies and procedures.
7. EXECUTIVE SUMMARY
Chapter X of the ECT Bill, although disappointing, has not come as much of a surprise to the local DNS community. It has long since been evident that the DOC has, notwithstanding sound advice to the contrary, always been intent on controlling the ZA Domain. Chapter X goes against all sound advice and recommendation, and is generally out of sync with international practices.

We firmly believe that the DOC has a general misunderstanding of the technical and functional capabilities of the DNS. A domain name should not be equated with Internet access.

Chapter X reflects a lack of understanding of international best practices and policies. This includes the role that ICANN fulfills as well as existing policies and procedures for re-delegation. It is critically important for the success of any re-delegation process to have the full support of the local Internet community. Without public support, any attempt to officially re-delegate the ZA domain in terms of Chapter X will be met with disaster.

We recommend that the DOC sacrifices its personal agenda, and commits to working together with the private sector to establish a structure that is supportive of the Internet.

We urge the honorable committee to deny the progress of Chapter X. Government should recognize the existing industry initiative as represented by Namespace ZA. Failure to do so could have dire repercussions for the continued success of the Internet in South Africa.