Additional Questions from ICANN for DotAsia Bid (Technical Section)

June 22, 2004

TECHNICAL

re: Policy

1. Please elaborate on the framework for potential future policy that has an impact on technical operations. For example,

a. In the event a registrant is found in violation of the sponsored TLD policy, explain the process for addressing a violation, including what steps are taken to communicate with the registrant, and what technical actions will be taken.

In the event a registrant is found in violation based on a CEDRP or UDRP result, the DotAsia registry will facilitate the corresponding resolution by providing a registry system that is capable of provisioning for these resolutions via the sponsoring Registrar as is done today in gTLDs for UDRP resolutions.

For example, upon the initiation of a UDRP challenge, the complainant may, through the selected arbitrator, ask the current sponsoring registrar to place the domain in question on "Lock Status." This will be supported by the registry system via EPP. Upon the conclusion of the UDRP, the sponsoring registrar will process the resolution via the EPP registry interface. The DotAsia registry will not participate in the administration or conduct of any proceeding before a Panel (assigned by the selected arbitrator) for domain disputes.

For a CEDRP challenge, the current sponsoring registrar for the domain in question will be responsible, upon a decision by a qualified arbitrator, to provide instructions to the registry. This may include placing the domain on "Lock Status," subsequently releasing it or proceeding with the cancellation of the domain. Note: based on the CEDRP, as adopted by ICANN, the remedy available to a Complainant pursuant to any proceeding before a Panel (assigned by the selected arbitrator) shall be limited to the cancellation of the domain in question.

b. If there are plans to allow 3rd level registrations, please explain the selection process for these names, and the policies for registering them.

There are no current plans to offer 3rd level registrations. Should the market demonstrate a demand for such registrations in the future, the DotAsia Organisation will conduct a thorough bottom-up policy development process, and coordinate closely with ICANN to

investigate the feasibility, value and appropriateness of offering ssssuch 3rd level registrations at that time.

c.   Will there be a policy on what eligible registrants may register in their domain? For example, on delegations? Will certain domain names be disallowed?

There are no current plans to restrict either the names that may be registered in the ".Asia" domain, or the content those registrants may publish. The registry system will require at least 2 delegation name servers for each registered 2nd level name before it may be published into the TLD zone file. Furthermore, the format of the domain name chosen as the hostname for delegation NS records will be required to comply with technical standards (e.g. each label has a maximum of 63 octets, etc.).

Should ICANN or the community subsequently determine that there is a need to place restrictions on further delegations or registrations under the 2nd level domain (that has been delegated to the registrant), the DotAsia Organisation will explore the means, feasibility and scope of incorporating such restrictions into our policies.

2.   How will the reserved list that ICANN specifies be implemented? How, and when, is the reserved list used during the registration process? What happens if the reserved list is changed?

In the 2001 round of new TLDs, there were several types/lists of reserved names. Reserved names for the DotAsia registry may include the following, in addition to others:

1. Names reserved from registration: See
    http://www.icann.org/tlds/agreements/unsponsored/registry-agmt-appk-26apr01.htm
    for a representative ICANN contract and list. Either ICANN or the registry operator
    is listed as the registrant, as appropriate. These names include:
    a. ICANN and IANA-related names
    b. single-character and two-character labels
    c. registry operations names (e.g. nic, whois, www)
    d. TLD labels (e.g. aero, arpa, biz, com, etc.)
    e. country names.

2. Registry Operator's domain names: See
    http://www.icann.org/tlds/agreements/info/registry-agmt-appx-11may01.htm for a
    representative ICANN contract and list. The registry operator is listed as the
    registrant.

3. Additional Community Relevant Reserved Domains. The DotAsia Organisation will
    maintain a set of reserved domains that is relevant to the sponsored community.

Domain names in categories 1a, 1c, 1d, 1e, 2 and 3 may be reserved (i.e. created) in the registry before commencement of the Sunrise Period, making them unavailable in the SRS.

Names in category 1b can be prevented from being registered by setting the registry system to reject one- or two-character registrations.

Our service provider, Afilias, successfully implemented ICANN-reserved lists using these methods before the launch of the .INFO TLD.

If a different reservation implementation is desired, or should ICANN introduce a new type of reserved name that cannot be adequately reserved using the above methods, our service provider Afilias has implemented a "registration restricted" filter in its registry software. This filter prevents a list of given domains from being registered in the registry system.

Changes to a reserved list before the commencement of Sunrise registrations pose no known problems. Changes to a reserved list after the registry is opened for business (i.e. after the commencement of Sunrise registrations) could present issues. The most serious potential issue surrounds a previously registered name being placed on the intended reserved list. In such a case, the registry operator will rely on ICANN's guidance regarding the state of the current ownership. If the existing registration is allowed to persist, the "registration restricted " filter noted above would preclude the name from being re-registered should it ever complete a deletion cycle. Our service provider, Afilias, successfully managed the implementation of a similar "post-opening" ICANN-reserved list of country names resulting from ICANN Board Resolution 01.92 (see http://www.icann.org/minutes/prelim-report-10sep01.htm).

---

re: Registry

3.   Please provide a technical description of how communication with the external validator will work, including details on the protocols that will be used, state machines, and what happens if the validator does not respond within specified time period.

The DotAsia Organisation intends to contract with a competent provider to verify trademark claims during the Sunrise period. The DotAsia Organisation will require that the organisation have experience in: 1) domain registrations and disputes, 2) reviewing and verifying mass trademark information, and 3) policy issues surrounding the cancellation and redistribution of names that have presented false or inaccurate trademark information.

All registrations will be submitted via accredited Registrars to the registry EPP servers. Prior to the opening of registration, the DotAsia registry will provision the collection of trademark / service mark information by making specific EPP extensions available in the Registrar Toolkit (RTK). Registrars may use the RTK or the extension specifications to

pass certification tests that will ensure their familiarity with these extensions. Additional extensions will be provided for the proof-of-presence requirements, enabling a registrant to self-certify their eligibility.

Upon the receipt of a registration request, the EPP server will follow the Offline Review of Requested Actions specified in the EPP standards and place the domain object on "pending create." The intellectual property claim will be forwarded to the validation provider for review before the application will be granted and the name is registered.

After receiving the information from the DotAsia registry, the validation provider will manually verify the submitted data by various means, including but not limited to searching of trademark databases, requesting copies of trademark certificates, etc. The validation provider may also attempt to contact the registrant directly to obtain clarifications required to complete the verification process.

The result of the verification process will be submitted back to the DotAsia registry, manually, via a Web-assisted interface, or an EPP / XML based API, for the registry to further process the registration request. The registrant, through its sponsoring registrar, may monitor the status of the registration by polling the registry EPP server.

If the verification is successful, the domain will be placed on "active" status and will become resolvable (if requirements for inclusion in the zone file are also met). If the verification fails, the EPP server will notify the registrar that it has failed to create the domain due to the registry's inability to verify the trademark or proof-of-presence claims. During the Sunrise Period, multiple applications for each domain will be allowed, and all applications will be processed on a First-Come-First-Serve basis.

As explained in our proposal, it is anticipated that the Sunrise period would run for 60 days followed by a Quiet period of 30 days. All registrations that are successfully verified will begin to resolve, while all domains that have failed the verifications will be released back to the available pool (or in the case where another pending application for the domain is in the queue, it will be processed). For applications that have not completed the verification process within the specified time, they will remain in "pending create" status until the claim has been resolved. Should the name be cancelled and redistributed following the availability of public registration, standard deletion policies and redistribution procedures will apply.

> 4.   What is the technical setup of the DNS, Whois and EPP servers? For all of these elements, please specify how the setups fulfill the requirements of up time from ICANN?

Detailed information on the technical setup of the DNS, Whois and EPP servers are provided in the application.

Fault-Tolerant EPP Servers

EPP is a load balanced application service provided against multiple stateless application servers. The application servers in use are either SUN or IBM Enterprise UNIX servers, and may be a combination of both. This approach permits the registry to maintain live EPP servers at all times with a minimum capacity of N+1 service availability in the primary data center. The EPP application interacts with the primary database instance for the registry, which resides in an N+2 data layer environment using IBM Enterprise UNIX servers. Afilias has architected the primary data servers in the registry with a redundant hot standby RS6000 server solution - based on IBM's HACMP technology and a shared fibre disk array configured as Raid 1+0 with multiple hot spares. This failover will be initiated automatically upon machine failure. Each primary database server is replicated in real-time to a completely separate data server and dedicated fibre disk array both within the Primary Data Center and also to a completely separate data server and dedicated fibre disk array at the Secondary Data Center. This solution allows the registry to maintain both rapid (minutes) catastrophic failover capability, as well as the ability to minimize permitted service outages during maintenance periods.

Redundant Whois Servers
Whois is a load balanced application service provided against multiple stateless application servers. The application servers in use are either SUN or IBM Enterprise UNIX servers, and may be a combination of both. This approach permits the registry to maintain live Whois servers at all times with a minimum capacity of N+1 service availability in the primary data center. The EPP application interacts with multiple secondary database instances for the registry. In the unlikely event all secondary dataservers fail at both the primary and secondary datacenters, the Whois application is designed to automatically fail interactions over to the primary data database instance. Afilias has architected the primary data servers in this registry with a redundant hot standby RS6000 server solution - based on IBM's HACMP technology and a shared fibre disk array configured as Raid 1+0 with multiple hot spares. This failover will be initiated automatically upon machine failure. Each primary database server is replicated in real-time to a completely separate data server and dedicated fibre disk array both within the Primary Data Center and also to a completely separate data server and dedicated fibre disk array at the Secondary Data Center. This solution allows the registry to maintain both rapid (minutes) catastrophic failover capability, as well as the ability to minimize permitted service outages during maintenance periods.

Global DNS Server Constellation
DNS services as provided by UltraDNS are architected in a highly redundant and geographically distributed manner. The core registry system will maintain redundant 100 megabyte per second encrypted VPN connections to the UltraDNS injection servers from both the Primary and Secondary DataCenters. DNS updates are streamed in near real-time through a dedicated SSL encrypted XML based API and propagated globally throughout the UltraDNS leafnodes in seconds. Multiple, geographically dispersed API injection points are maintained at all times, during rare full maintenance events on the API system, DNS updates continue at the core registry system and are queued for later submission to UltraDNS.

UltraDNS applies an Anycast Network Strategy, automatically limiting DOS and DDOS attacks to the announced routes (and therefore local environs) of individual nodes of the DNS distribution system. Name servers answer IP DNS queries based on authoritative DNS data. The name server at each node shares a global IP address, and each server has two addresses. If one address becomes un-routable, the user will fall over to the second. By injecting a BGP route from each node, the system routes user queries to a topologically nearby node, resulting in reduced network latency for DNS transactions, fewer queries that are routed to distant servers and fewer dropped query packets. Should a name server fail to answer for any reason, the routing announcement for that node is withdrawn, removing it from the "reach" of an end user.

UltraDNS servers are distributed strategically, and will grow to meet scalability demands and geographic coverage in line with the growth of network traffic.

- Verio Inc: JP
- Metromedia Fiber Network Inc (AboveNet): UK
- Switch and Data: CA & VA, USA
- Equinix Inc: CA, VA and Chicago, USA
- USC Information Sciences Institute (ISI): CA, USA

Peering is in place in geographically dispersed locations as follows:
- Japan Telecom
- KDDI
- Telefonica International
- MAE East, West and Los Angeles
- Switch and Data (formerly PAIX), East and West
- Equinix East, West and Chicago
- AADS Chicago

The DNS Server Constellation employed by UltraDNS on behalf of Afilias has maintained 100% uptime resolution record since inception, and has permitted a near real-time streamed DNS update capability unique amongst TLD registries. We expect this performance to exceed ICANN standards.

The DotAsia registry has no plans to use wildcard DNS records at the TLD name servers.

The ".Asia" domain will implement the sTLD in a manner consistent with the best practices currently in place at ICANN sTLD and gTLD registries. The ".Asia" zone will conform to global Internet standards.   Our chosen Registry services provider, Afilias, is an experienced and skilled organization with significant operational experience in the management of the DNS.

For the NS records of the ".Asia" TLD, we plan to have them in more than one zone, with at least one that would exist inside the ".Asia" sTLD zone. The glue record for the hostname chosen for the NS record(s) within the ".Asia" zone will also be published at the TLD zone so that there will be no need to "chase" for it. For hostnames chosen that are not within the ".Asia" sTLD zone, we plan to use hostnames that are already published in the immediate TLD zone to avoid having to further "chase" the NS record. The DotAsia registry will work closely with Afilias during the technical negotiations with ICANN to finalize the hostnames to be used for the NS records of the ".Asia" TLD zone to ensure stability, security and performance.

For second level registrations within the ".Asia" TLD, the registry will publish glue records for the hostnames within the ".Asia" TLD (e.g. if a domain utilizes an "in-zone" hostname as a name server: "dns.example.asia"). Because we will be leveraging the Afilias infrastructure, other zones that may be managed within the same set of name servers will also effectively enjoy the direct publishing of glue records for hostnames within those TLD zones, further reducing the need to "chase" for the NS records. For "out-of-zone" (domains in a different TLD) hostnames used as NS records, the ".Asia" TLD will not be able to authoritatively publish the glue records.

All second level registrations will be located within the sTLD zone. However, because of the distributed, delegated nature of the DNS, the registry itself does not control the depth of the zone. For example, if the domain example.stld is registered, the registrant could create many levels below this zone, such as a.b.c.d.e.f.g.h.example.stld. This behaviour is supported within the DNS, and beyond the control of the registry.

Disaster Recovery (DR) Plan procedures are fully componentized between various registry services. Registry Staff enacts staging or dry run DR events on multiple services or components quarterly. Each service is included in at least two DR staging or dry run events each year. Further to these efforts, the registry intends to include registrars in an annual cooperative full failover exercise from geographically dispersed primary to secondary data centers.

Full failure of a primary data server is an unlikely event as the registry will be deploying IBM RS6000 enterprise class UNIX servers at the data layer. This equipment has redundant and multiple occurrences of key components, and has been specifically designed to decommission failing components on a live server without ceasing services.

Afilias has architected the primary data servers in this registry with a redundant hot standby RS6000 server solution - based on IBM's HACMP technology and a shared fibre disk array configured as Raid 1+0 with multiple hot spares. This fail-over will be initiated automatically upon machine failure.

(i) In the event of a full disaster at the Primary Data Center, EPP service would be out for a maximum of 5 minutes for read only access and 30 minutes for full service. WHOIS service would be out for a maximum of 5 minutes, and DNS service would be unaffected.

(ii) Notifications of unscheduled service outages are provided upon detection and confirmation of service unavailability. Transactions logs are provided to registrars within the EPP client server session at all times, as well as in a downloadable report generated every four hours. In the event of a fail-over when the client has not received either a success or failure notice for an outstanding transaction, the registrar will be able to refer to the downloadable transaction report for final state of the transaction. Alternatively, the client can query the current state of the registry object upon service restoration.

(iii) Bandwidth allocation planned for the interconnection of data centers and primary injection point of the Name Servers for synchronization is 100 megabytes per second.

The DotAsia registry has plans to support IPv6 glue records at launch, but we do not anticipate that all necessary IPv6 components outside the registry's control will be ready at launch. We will work in close coordination with various service providers to ensure that the support of IPv6 glue is useful.

The .Asia registry endorses the adoption of DNSSEC. Based on our understanding from our registry technology provider, the current DNSSEC "standards track" document being discussed at the IETF allows any user of the DNS to "walk the zone" (using considerable resources on the server). This ability, as currently proposed, poses privacy and availability issues, which could prohibit the registry from using DS records. Some work has been done to eliminate this problem but, to date, no standard has been adopted to resolve the issue.   Once the problem of "walking the zone" is resolved, the registry plans to incorporate DS (or its replacement) records.

Although DNSSEC is not a standard at the time of this writing, the DotAsia registry, together with Afilias, is evaluating signing the DotAsia TLD zone. Considerable work needs to be done in the area of key rollover and announcement. Once this work is completed in cooperation with the Internet community, the TLD zone will be signed.

CRISP is not currently an IETF standard. Our provider, Afilias, is a participant in the IETF CRISP Working Group. When the IRIS protocol standard is finalized, the DotAsia Organisation will evaluate it in the light of its adopted privacy policies to ensure that the use of the standard does not in any way infringe or impact the privacy of its registrants.

Additional Questions from ICANN for DotAsia Bid (Business/Financial and Sponsorship)

June 24, 2004

CONFIDENTIALITY: Please note that the DotAsia Organisation requests that the confidentiality of the questions and answers for these sections, where possible, be maintained.

BUSINESS/FINANCIAL

(Please Note: We are asking these questions to provide you an opportunity to demonstrate the existence of a well-developed business model, rather than to judge whether this information constitutes a "fail-safe" business plan.)

1. What is the basis for the projections of the number of domain names expected to be registered?

The projections of the number of domain names expected to be registered are based on available market data from the Pan-Asia and Asia Pacific region (as defined by ICANN), including domain registration statistics from gTLDs and ccTLDs.

Our market size estimates are based on the following:

1. COM/NET reported results: In a March 2004 report (http://www.verisign.com/nds/naming/newsletter/2004/march.html#1) published by VeriSign, 12% of all .COM and .NET registrations are reported to come from the Asia Pacific region (not including the Middle East), for a total of about 3.8 million registrations.

2. INFO/ORG analysis: DotAsia Organisation's analysis of .INFO and .ORG registrations show 7-9% are from the Pan-Asia and Asia Pacific region, representing about 333,600 total registrations.

3. ccTLD estimates: Regional data on ccTLD registrations obtained through ccTLD Web sites and other informal survey and statistics sources, including Web sites such as DomainWorldwide.com indicate an estimated 2.85 million ccTLD domain names registered in the region as of June 2004.

Altogether, our study estimated a total of about 7 million domain names registered in the region.

Our target demand projection is based on a 5% penetration (335,600 domains) rate in the first year, growing to 10% by Year 3 and assumes a 10% annual growth of the overall market. The Low-Demand projection is based on a 3% penetration (201,500 domains) rate, growing to 5% in Year 3, while the High-Demand projection is based on a 7% penetration (489,000 domains) rate, growing to 16%.

Although our projections are conservative, the introduction of a new TLD may help grow the overall market by attracting new customers. For example, a comparison of the development of .INFO in parallel with .DE and .UK growth shows that .INFO appeared to have no negative impact on ccTLD growth in the German and UK markets, respectively.

Beyond the existing business, however, is even larger potential growth. As stated in Lovells' June 2004 Domain Name Newsletter – Anchovy: "Current estimates suggest that Asia Pacific has by far the largest total number of Internet users at 223 million, followed by North America (175 million) and Europe (173 million). However, these figures, as a total of each area's population, represent 6%, 55% and 22%, respectively. It is, therefore, clear why many analysts feel that the greatest scope for development and opportunity in the Internet domain name and IT sector currently lies in Asia… ."

We believe our volume estimates are reasonable based on both the demonstrated existing market and its anticipated future growth.

> 2. Please provide us with more details on your plans to market the domain name, and what the marketing budget will be spent on.

The marketing plan for the launch of .ASIA will focus in two areas which we believe provide the greatest leverage for the registry: 1) sales programs to support the distribution channel; and 2) Public Relations (PR) support to stimulate awareness and demand.

As seen in the launch of various "proof of concept" TLDs in 2001, major investments in marketing to directly stimulate demand are not effective or sustainable at the registry level. The .ASIA registry will impact results by ensuring that: 1) the domain is properly positioned; and 2) this positioning is communicated to the proper audiences.

To support the distribution channel, DotAsia will allow accreditation to both ICANN-accredited registrars and participating ccTLD registries. Distributors will have access to marketing material that can help guide their own launch and ongoing promotion activities. In addition, DotAsia will offer cooperative marketing programs designed to reimburse advertising dollars, stimulate and reward growth, and support customised sales programs. Cooperative initiatives may also include bundling packages or co-marketing campaigns with ccTLD registries. These activities will support interest generated by the business potential represented by the large and growing demand in the community.

PR support will also help stimulate demand. The DotAsia registry will establish appropriate Public Relations resources in the region to support and stimulate press and general consumer awareness. We intend to focus on the geographies with the highest potential for growth and include press outreach and support activities, sponsorships to relevant regional conferences, speaking engagements, and outreach programs to

interested stakeholder groups. This public awareness campaign will aim to educate consumers and Internet users on .ASIA's value proposition and the benefits of owning a .ASIA domain.

Part of the marketing budget will also support outreach programs to further recruit DotAsia Organisation members to ensure its continuing ability to represent the dynamic community it serves.

3. Would operation of the proposed registry violate any laws concerning DNS management in jurisdictions covered by the geographic area, including the host jurisdiction of Hong Kong?

The DotAsia Organisation intends to be a membership-based, not-for-profit organisation incorporated in Hong Kong. We believe that our proposal is consistent with applicable laws in that jurisdiction. Insofar as 1) the .ASIA agreement with ICANN will be consistent with ICANN's agreements with other gTLD/sTLD operators, and 2) other ICANN domains have been operating in the Asia geography without significant legal issues, we believe our proposed approach does not entail any undue risk.

4. What is the minimal number of total registrations that are required for the Sponsoring Organization to sustain operations? What is the minimal number of total registrations that are required for the Registry Operator to sustain operations (in this case, you may include other TLDs under operation)?

The Low-Demand projections in the proposal (200,000 registrations) are sufficient for the DotAsia Organisation to maintain its operations. As an additional safeguard, the business plan provides for a further buffer (of about 70,000 registrations) below the Low-Demand projections in case revenues are below estimates.

Aside from initial staff expense, the DotAsia Organisation has a very low fixed cost base, providing a prudent level of flexibility to adjust to volume. Our arrangement with Afilias is entirely variable on a per-domain-year-registered basis with no upfront costs, which minimises risk associated with technology and operational costs. Since Afilias already operates large scale registry systems, it is not sensitive to .ASIA volume fluctuations.

In the worst case (as discussed in the registry failure sections of the proposal), Afilias is prepared to maintain domain operations should the DotAsia Organisation fail for any reason.

The DotAsia Organisation is financially designed to succeed within a wide range of volume projections, and has established adequate safeguards should demand fall outside our expected volume levels to ensure that the registry continues to be viable and can sustain operations in a reliable and stable manner.

If realised volume is below our lowest estimate of 130,000 domains, the DotAsia Organisation will initiate a contingency plan that will ensure the continued viability of the organisation. This is possible because aside from initial staff expense, the DotAsia Organisation has a low fixed cost base, and the technical and operational costs (Afilias) are entirely variable.

The DotAsia Organisation realises that it's primary motive of serving its sponsored community is dependent on continued viability. To this effect, we have explored the following options, without any binding commitment from the organisations mentioned below:

1. The DotAsia Organisation may be able to co-locate at a participating Sponsor Member's facilities, / Co-Sponsor Members' facilities, as well as to leverage the capacity among the Members to reduce fixed costs.

2. The DotAsia Organisation may be able to procure supplemental funding as a loan from its registry services provider, Afilias. Afilias has indicated that it would consider funding short-term revenue shortfalls.

In the worst case (as discussed in the registry failure sections of the proposal), Afilias is prepared to maintain domain operations should the DotAsia Organisation fail for any reason. Even if this happen, both the Board <u>and</u> governance of the Organisation would remain intact (they are voluntary positions), ensuring that the charter continues to be observed. The DotAsia Organisation Board will work with both ICANN and Sponsor Members to identify an appropriate successor organisation.

While the DotAsia Organisation is both the "Sponsoring Organisation" and the "Registry Operator" in the application, we assume this question relates to the registry services provider, Afilias.

Afilias Limited ("Afilias") is a privately held Irish Limited company. As a private company, Afilias does not report financial results publicly. However, certain information regarding the firm is available and may be helpful in illustrating the firm's long-term viability. Specifically:

- Afilias is a profitable company - Since inception, Afilias has been prudent in managing its business, and as a result, the company is both cash-flow positive and profitable.

- Afilias is an ICANN-authorised Registry-Since 2001, Afilias has met or exceeded the requirements to be an ICANN authorised provider of registry services for a gTLD. ICANN requires Afilias to provide regular reports regarding these responsibilities.

- [CONFIDENTIAL INFORMATION REDACTED]

- [CONFIDENTIAL INFORMATION REDACTED]

- Afilias also provides services to ccTLDs-Afilias is also the official registry services provider for the nations of Antigua (.AG), Burundi (.BI), Gibraltar (.GI), Honduras (.HN), Laos (.LA), Seychelles (.SC), St. Vincent & the Grenadines (.VC), and Singapore (.SG), and provides IDN services for Belize (.BZ) and Tuvalu (.TV).

As a global organisation, Afilias has offices in Dublin, London, Düsseldorf, Toronto, and Horsham, Pennsylvania (near Philadelphia). Afilias has established long-term service contracts with established multinationals such as IBM and DSI Technology Escrow Services, Inc. (Fort Knox / Iron Mountain).

While no company can guarantee its long-term viability, we believe that Afilias has established a track record that supports our confidence that it can support this domain reliably.

7. Do you believe you have adequate staffing for disputes arising during the Sunrise period? If there are more disputes than anticipated, how would you handle them?

The DotAsia Organisation believes it will have adequate staffing for disputes arising during the Sunrise period. The Organisation intends to outsource the core verification processes to a competent provider to avoid overloading its internal staff as well as supplementing its expertise.

The Organisation may also explore leveraging its relationship with participating ccTLDs (Sponsor Members), to seek necessary regional or local policy advice in administering Sunrise disputes. Because ccTLDs currently handle dispute resolution processes for their respective domains, they are deeply experienced in the management of registration disputes in the Asia Pacific region.

The DotAsia Organisation may be able to learn from the experience and resources of Afilias to assist in the handling of disputes arising from the Sunrise period. Afilias has demonstrated a reasonable competence and has significant experience in managing these types of disputes based on its experience during the launch of the .INFO registry.

> 8. How much money has been allocated in the budget to enable a smooth transfer of the TLD to another operator in the event of Registry Operator or Sponsoring Organization failure? (For example, has a reserve fund been established to cover any financial obligations associated with multi-year registrations or other registry/registrar/registrant obligations?)

To ensure a smooth transfer of the TLD to another operator in the event of financial failure, the Organisation will work closely with Afilias, which has committed to the following:

- Continuation of registry services (DNS, WHOIS, EPP, etc.) and fulfilment of obligations for multi-year registrations;

- Frequent and standards-based backup and data escrow practices; and

- Contingency and transition procedures and preparations.

Under normal operations, .ASIA registration fees will be paid upon registration, meaning multiyear registrations will be paid by registrars "in advance." Afilias will collect these fees from accounts that registrars maintain at Afilias. Under normal operations, Afilias deducts its service fees from the registration fees and remits the balance to the DotAsia organisation on a regular basis. Should the DotAsia organisation cease to exist for any reason, Afilias would continue to operate normally, escrowing the balance of registration fees until such time as a successor operator is appointed. Net, we believe funds will exist to support ongoing operations even if the DotAsia organisation fails.

The financial plans for all High / Medium (target) / Low-Demands include an allocation to a reserve fund for contingencies to be set aside and accumulated over time based on the surpluses from the DotAsia registry. This contingency reserve fund is envisioned for the DotAsia Organisation's emergency use (such as short term cash flow or revenue shortfalls) and not as a specific reserve fund to facilitate a registry operator transfer in the event of the failure of the Organisation.

Should it be necessary to transfer the domain to a new registry services provider, Afilias is prepared to assist as needed in migrating the data.

> 9. What other products or services, if any, do you intend to offer that could impact the new TLD? Please specify whether such products or services would rely upon the same, or different, staff and other resources.

No additional products or services other than those indicated in the sTLD application are currently planned. The DotAsia Organisation intends to work through its Registrars, in accordance with its financial and resource capability and market demands and trends, to offer secondary services intended to promote the usage of the domain.

The term "Asia" represents both the geographic boundary of the intended region that the .Asia TLD is expected to serve and as a signifier of the cultural and common characteristics shared by the intended registrant group. We have interpreted the question above as relating to the charter and eligibility restrictions of the proposed sTLD, rather than requiring an explanation for the selection of the TLD namestring itself.

As discussed in the proposal, the DotAsia Organisation will adopt the boundaries defined by ICANN (http://www.icann.org/montreal/geo-regions-topic.htm) for the Asia / Australia / Pacific (AP) region as a basis for its scope of eligibility. This provides for a clear definition of eligibility based on the economies represented within the region.

The DotAsia Organisation views "Asia" as a term that appropriately embodies the diverse and vibrant Pan-Asia and Asia Pacific community, and a TLD namestring that is representative, short, recognisable and conceptually viable. The DotAsia Organisation believes that "Asia" as a term used for a TLD has broad significance, clear and lasting value, and creates a new and differentiated space that enhances the diversity of the Internet namespace.

The DotAsia Organisation has received a total of 31 signed letters supporting its proposal for the creation of a ".ASIA" sponsored gTLD registry. These include organisations and individuals that are representative of different parts of the Pan-Asia and Asia Pacific community.

Sponsor Members: As explained in the application, a key support community for DotAsia are the ccTLDs (Sponsor Members) in the region. ccTLD managers sponsoring over 72% of the registered domains in the region have already signed a letter of intent to become a member of the DotAsia Organisation (source: DomainWorldwide.com; excluding .cc and .tv). We believe that the endorsement of ccTLD managers supports our belief that a .Asia domain will benefit the community and the individual registrants in their region.

Many of the ccTLDs in the region are also active promoters of the Internet in their own markets, with mandates not limited to the operation of the TLD registry. Furthermore, many maintain very close and positive relationships with their national governments. As

such, they are also representative of their local Internet community, especially in a governance role (as envisioned in the framework of the DotAsia Organisation) for a TLD registry.

Co-Sponsor Members: Augmenting ccTLDs in the governance and sponsorship structure are Co-Sponsor Members from Internet / IT / community groups in the region. Not only do Co-Sponsor Members represent a geographically and demographically diverse group, their experience in community based policy making provides them with a unique perspective on the benefits of a .Asia TLD. Among the groups that have provided official support letters are: APNIC, (www.apnic.net) the largest and most well established Internet community organisation in the region; APNG, (www.apng.org) one of the longest standing Internet community groups in the region; APTLD, (www.aptld.org) (email support letter through the ICANN public forum) the most representative domain name industry group in the region; and PAN, (www.panasia.org.sg) which has many ties with local governments and intergovernmental initiatives in the region.

Non-sponsor support: The DotAsia Organisation has received signed support letters from 15 Individuals and Non-Members. These include well respected individuals, end-user groups (e.g. HKTUG – Hong Kong Telecom User Group), ISP associations (e.g. PISO – Philippine Internet Services Organisation, HKISPA – Hong Kong Internet Service Providers Association), government departments (e.g. Invest Hong Kong, Hong Kong SAR Government), quasi-government organisations (e.g. HKPC – Hong Kong Productivity Council) as well as ccTLD accredited registrars and ICANN accredited registrars (e.g. IP Mirror, Web CC, Netpia) in the region.

All signed letters of intent to join DotAsia Organisation as members and all signed letters of support can be found at http://www.dotasia.org/letters/ (electronic hardcopies are also included along with this document). From the list, notice also the range and breadth of the organisations both in terms of functions as well as in geography, from the Middle East / West Asia (e.g. IRNIC, AINC), to South Asia (e.g. INNIC), South East Asia (e.g. SGNIC, VNNIC, ccTLD-ID, DotPH), the Pacific Islands (e.g. IUSN), Australasia (e.g. InternetNZ) as well as North and East Asia (e.g. CNNIC, JPRS, KRNIC, TWNIC, MONIC), that have expressed support and excitement towards the DotAsia Organisation.

There are also support emails to the public comments forums (http://forum.icann.org/lists/stld-rfp-asia/ and http://forum.icann.org/lists/stld-rfp-general/) from other organisations and individuals, including a young professional (end-user) group in North America (NAAAP – North American Association of Asian Professionals, Toronto) with a broader perspective on .ASIA's significance outside of those residing within the eligible region.

Based on our conversations with many individuals in their personal capacity as well as in their organisational capacities, we believe that the following are some of the main reasons for their support.

1. ".ASIA" is a TLD name that is recognisable and representative of the community.

2. ".ASIA" is a TLD registry "for Asians by Asians".

3. ".ASIA" will for the first time give a clear recognition of the region on the Internet and allow Asian individuals and organisations to express their identity online that is globally recognised and meaningful.

4. The DotAsia Organisation is a not-for-profit organisation with a community-based, bottom-up framework that invites and encourages stakeholders from all parts of the community to participate.

5. The financial construct of the DotAsia Organisation is sound and leverages the already available resources in the industry well. This ensures a low-risk, low cost approach, which in turn places no financial burden on its members or the community as a whole.

6. The surplus proceeds from the DotAsia registry operations will be re-invested back into the community to aid the sometimes struggling technical development initiatives and projects in the region.

Besides the official signed letters of support from the organisations, the following are emails we have received from respectable individuals in the community supporting the creation of the ".ASIA" domain, as well as their support for the framework of the DotAsia Organisation.

From: hotta@jprs.co.jp [mailto:hotta@jprs.co.jp]

Let me express my sincere support for .Asia TLD sponsored by DotAsia Organisation.

- the concept of .asia

I think the concept of .asia proposal is very attractive and sound.

First of all, Asia is a social space in the real world and is already established as a brand in itself. A lot of entities and activities exist associated with the concept of Asia, and their Internet usage is rapidly growing. Therefore, .asia TLD must be very useful for these entities and activities.

Secondly, various languages and cultures exist in Asia, and many people in this area are not familiar with English alphabets. So, the usage of IDNs under .asia, including non-ASCII representation of .asia, will greatly serve the proof of concept of IDN-related policies and best practices.

- organization structure

The governance structure of the sponsoring organization, DotAsia Organization, is sound. ccTLDs are the most appropriate organizations to lead this initiative, because they are tasked with serving the local community, knowing its needs very well.

Proposed structure of DotAsia Organization has a mechanism that can reflect community's interests by adopting ccTLDs as key players in making policies.

- conclusion

I believe, if approved, .asia as proposed by DotAsia Organisation will introduce a unique and sound mechanism to serve Internet users.

Best Regards,

Hiro Hotta
JPRS

From: Charles Mok [mailto:charles.mok@halogroup.com.hk]

DotAsia and the ".ASIA" domain will present a unique identity and great opportunities for the Asian Internet community. It will also be a forum for better and more concrete cooperation for various parts of the Asian Internet community.

DotAsia's suggested model allows for participation from the Asian Internet community. It has the chance to develop into a platform for regional cooperation and to arrive at a win-win situation.

I hope that DotAsia's bid with ICANN will be successful and Asia can work with the world in developing best Internet governance practices.

Charles Mok
President, Hong Kong Information Technology Federation

From: Sin Chung Kai [mailto:cksin@sinchungkai.org.hk]

The Internet has been considered as Western based for too long. .COM, .NET and .ORG give people impression of being used by western companies and organisations. A top level domain name specifically for Asians is long-awaited as Internet in Asia is getting bigger and bigger, soon to surpass North America and Europe. .ASIA will be a top level domain name that, for the first time, gives a clear recognition of Asia Region on Internet. Mostly importantly, it will be run by Asians for the Asians.

The sponsoring organisation of .ASIA will be a not-for-profit organisation based in Hong Kong with community-based, bottom-up structure which allows all stakeholders around Asia to participate. The surpluses of the operations will be re-invested back to the community which is very important to the Internet development in Asia. I think it is the most appropriate structure for running .ASIA. And, because Hong Kong is a truly international city in Asia, it is the perfect home for .ASIA.

Sin Chung Kai
Legislative Councillor (Information Technology Functional Constituency)
Hong Kong SAR

From: sstseng-twnic [mailto:sstseng@twnic.net.tw]

I am very excited about the initiative of .Asia, which is a strong symbol to represent the Asian Internet community as a whole. Asian online community is fast growing and for global Internet users, so .Asia will encourage them to reach Asian region more easily.

Best Regards,

Shian-Shyong Tseng

From: yang yu [mailto:leo@cnnic.cn]

We are aware of the rapid development of the Internet in Asia and the increasingly close cooperation among Asian countries and regions. There are so many multinational corporations or organizations in Asia are prefixed with "AP" DotAsia may help to classify their position and define their scheme. It's also a good idea for promoting IDNs within the biggest IDN market. We hope DotAsia could achieve broader representative and operate soundly under the registry's administration and become a valuable addition to the namespace.

Leo Yu

From: Paul Wilson [mailto:pwilson@apnic.net]

My experience is that there have been many calls over a substantial period of time (since before ICANN) for a gTLD which provides a natural home for organisations, brands, activities and enterprises that are Asian or wish to be associated with "Asia". These calls appeared to reach a peak with the establishment of the .eu domain, which is perceived to provide a similar facility in Europe.

I support the establishment of ".asia" because I believe that there is sufficient demand to justify the domain. I support the DotAsia bid because it is a strong, responsible and well-supported bid which will provide direct benefits to Internet development in Asia through the accountable distribution of the financial surplus to be generated by the registry.

I also support this bid because it will be the first gTLD to be run by Asians for Asians. It is important, even urgent, for ICANN to support any such bids that can help to correct the current imbalance in global distribution of DNS responsibilities, providing that they are sufficiently strong to demonstrate a high chance of success.

The essential value of a gTLD lies in the level of demand for names within it, and as stated above I believe that for .asia there is sufficient demand to justify the entry in the root zone file. Because .asia is unique, having no direct intersection with other gTLDs (as there is for instance between ".com" and ".biz") the demand for this gTLD should be sustained in the long term, beyond short-term market or trend based influences.

Furthermore, the value of any particular gTLD registry lies in the specific benefits which are "given back" to the Internet community through the operation of the gTLD. In the case of .asia there is a clear intent as well as accountable mechanisms to ensure that benefits do accrue, and are distributed efficiently and appropriately for the benefit of Internet development in Asia.

There is a great need for Internet developmental activities in many parts of the Asia Pacific region, in the areas of technical Internet operations training, Internet infrastructure support, building of indigenous research and development capabilities, and education in aspects of Internet governance (to name a few). In meeting these needs, it is very important for funding and decision-making structures to be based in the Internet community itself, rather than in Government, Intergovernmental, academic, international development sectors. The "DotAsia" bid represents such an outcome, and as such has great promise the uniquely address important regional needs.

The bid, being based in Asia itself, represents the first gTLD which could be run by Asians for Asians. As there is no other example, and since the bid is clearly of sufficient strength to be successful, I suggest that it is in fact urgent for ICANN to approve this bid, in order to start to redress the current imbalance in the location of gTLD registries throughout the world. I hope that in future there will be substantially more gTLDs based in Asia and in other underrepresented regions of the world - this will only strengthen ICANN's own position within current and future political debates.

Paul Wilson
Director General
APNIC

From: LIM_Choon_Sai@ida.gov.sg [mailto:LIM_Choon_Sai@ida.gov.sg]

DotAsia represents a collective effort of ccTLDs in Asia and Asia-based organisations interested in domain names developments. It's the first time a region-wide effort launched to bring together parties concerned with domain names developments. Not only it serves as a registry, it also serves as a forum for interested parties to exchange views and ideas on how domain name registrations can be further enhanced to bring benefits to the Internet community at large. We have seen effort that has been taking place in other regions (eg DotEU) to create awareness and promote registration of names on regional basis, it's timely for Asia to think of a similar effort to complement ICANN to enhance the outreach to the region. We see DotAsia as complementing the activities of ccTLD or gTLDs rather than a threat to them.

Asia is a fast growing area and if we can create a registry or forum with Asian characters, features and cultural links to serve business community while supporting ICANN broad objectives, it's a worthwhile effort and deserves serious consideration.

It's hoped that DotAsia can function and develop into trustworthy partner with other ICANN stakeholders jointly to promote missions and objectives of ICANN.

Best regards,

Choon Sai

From: yktham@umac.mo [mailto:yktham@umac.mo]

I support the DotAsia Organisation's proposal and application for the .ASIA TLD. The plan is well conceived, which will serve the needs and aspirations of the growing local Internet communities in Asia in years to come. .Asia will give Asia's Internet users a potent, relevant top-level identification and recognition on the Internet.

The DotAsia Organisation has achieved broad representation of the local Internet communities in Asia and I trust it will serve its constituencies well.

Yiu Kwok THAM
Administrative Contact
Macao Network Information Centre

From: Indra K. Hartono [mailto:indrakh@idnic.net.id]

Because it is created as a non-profit service to the community, and whatever excess money it has will be used to develop the internet community in the region. Moreover, DotAsia might be domain alternatives to Asian Countries. Therefore secure e-commerce platform can be improve and build by its communities among Asian Countries as well.

A pan-asia identity is good to strengthen the region's socio-economic development and DotAsia can be cooperative forum among ccTLDs in Asia region. Especially in order to overcome the lack of DNS security mutually. Acceleration of IDN and IPv6 implementation can be carry out by DotAsia and Asia is where most people in the world live with non ASCII character.

Hopefully this will help create cohesiveness in the region, a domain where people can work together regardless of nationality background. We do hope there will be mutual secure DNS and e-commerce transactions, as well as multinational business entities alternative domains. Development on IDN and IPv6 issues will be important role in DotAsia and internet communities in Asia region may also achieve significant improvement.

B. Rgds,
Indra K. Hartono, MMIS
Country Code Top Level Domain Indonesia (ccTLD-ID)

From: Kenny Huang [mailto:huangk@alum.sinica.edu]

I'd like to support DotAsia because it is needed. Global competition is forcing local industry to continuously improve their operations, technology and product quality. There are more and more e-business collaborations in Asia. The Internet naturally become the excellent platform for electronic data interchange. With DotAsia, that strengthens the bundle of business collaboration, and brings new value to Asia.

Kenny Huang, Board of PIR

From: Izumi Aizu [mailto:izumi@anr.org]

The reason I support DotAsia is that the objective and the mission of this new
domain/registry initiative:

As Asia and Pacific regoin has a very strong history of cooperation for the
development of Internet, this "regional" namespace approach rides on this tranditon
and will further extend this spirit of cooperation to the future.

And, as is stated in the proposal, the intention to use the surpluses of operation to
"reinvest" for the advancement of Internet initiatives of the region, is a very unique and
much needed approach for the region where many are still very poor and yet trying to
use the potential of ICT and that of Internet to the socio-economic development. If
approved, this approach will show a great precedence for the use of Internet resoruces
for the larger social development, which we believe will be an important component of
achieving the "Internet for all" objective we all share.

As is already demonstrated, this initiative, though first came out of Hong Kong, is now
gaining wider support from many ccTLD managers in the region, and I believe as it
develops it will further expand its support from most corners and islands of the vast
region of Asia Pacific.

Thank you for your consideration,

Izumi Aizu
Deputy Director, Institute for HyperNetwork Society
and a member of ALAC, from AP region

---

3. Which "non-participating ccTLDs" were invited to support your proposal? Please
   describe their reaction(s) to your request for support. Please also describe any other
   entities that were approached for support (other than those listed in your Application),
   including those that may have declined to respond or to provide support. Will it be
   possible for such ccTLDs and other organizations to participate as Sponsor Members
   and Co-Sponsor Members later?

As described in Question 1 of this Sponsorship section, the DotAsia Organisation is
committed to an inclusive approach for the entire Pan-Asia and Asia Pacific community.
As such, we have extended invitations to all of the ccTLDs associated with the 73
economies and regions identified by ICANN in the Asia / Australia / Pacific region. In
addition, we also contacted many regional internet organisations. These invitations were
distributed via e-mail.

Of those that have responded and for some of the Internet / IT / community groups in the region, we were able to engage in meaningful discussions with many of the individuals at these organizations. To augment electronic outreach, we visited about 10 ccTLDs and some of the local community groups, introduced the DotAsia concept at the APRICOT meetings in Kuala Lumpur earlier this year, and have presented our proposal at the AP* Retreat (http://www.apstar.org/kl/minutes.html) and APTLD meetings.(http://www.aptld.org/newsite/meeting/2004/20040226_APTLD_KL_AGM_Minutes.htm) The responses from the community have generally been encouraging.

The collective group of ccTLDs is not the "sponsored community" in itself. Nevertheless, these organisations represent their respective local communities in many cases. Furthermore, their expertise and experience in the governance and operation of a TLD registry or other public resources in the best interests of the community at large is a key element that the DotAsia Organisation envisions to leverage by inviting and encouraging them to participate and contribute to the governance of the Organisation. This in turn will ensure that the DotAsia initiative is operated in the best interests of the sponsored community.

Generally speaking, the following are some main reasons that we have heard from prospective Sponsor and Co-Sponsor Members who have not officially joined the DotAsia initiative:

1. Need more time – many of the organisations approached indicated that they would need more time to evaluate the level of commitment and benefits of their participation.

2. Beyond Mandate – some of the organisations and ccTLDs were not sure if their current mandate allows them to commit to participating in the governance of the DotAsia Organisation.

3. Competition – there is a worry from a select few ccTLDs that the ".Asia" TLD would bring further competition to their operations.

4. Wait and See – some organisations are concerned about the uncertainties of whether the ".Asia" TLD would be granted by ICANN, whether their organisation should align with Asia or the EU, or the future of the ICANN process in general.

5. Organization in flux – Some organizations were undergoing significant internal changes and were hence unable to engage with DotAsia Organisation at this time.

In summary, we believe that our outreach conducted to date has illustrated a broad and representative interest in the .Asia domain.   The organizations that have already expressed support represent a significant portion of the Internet users in the region, and some enjoy the endorsements of their governments as well.

Organisations that have signed on to support the initiative since our application was submitted in March, include:

- .IN - .IN ccTLD Registry

- .IR - .IR ccTLD Registry

- .KR - Korea Network Information Center (KRNIC)

- .NZ - InternetNZ

- .PH - PH Domain Foundation

- .SG - Singapore Network Information Centre (SGNIC)

- PAN - Pan Asia Networking, International Development Research Centre

- Asia Pacific Top Level Domain Association (APTLD)

- Netpia.com (ICANN-Accredited Registrar from Korea)

- Philippine Internet Service Organization (PISO)

The continued outreach and recruitment of Sponsor and Co-Sponsor Members is an important part of the mandate of the DotAsia Organisation. We believe that the diversity of the Membership would be very important to the continued relevance and viability of the Organisation. Sponsor and Co-Sponsor Members are welcome to join the initiative at anytime, and at a pace that they feel comfortable with.

Furthermore, the operational structure of the organisation does not place any financial burden on its Members, which means that ccTLDs and Internet / IT / community groups are encouraged to join without needing to worry about potential financial liabilities. The DotAsia Organisation has also allocated budget for outreach activities to continue to recruit Sponsor and Co-Sponsor Members through regional and international conferences (such as APRICOT, ICANN, APAN, APNG Camp, etc.), other gatherings and meetings as well as individual visits.

However, to address the concerns raised by the different organisations that have not yet endorsed the concept, the DotAsia Organisation will:

1. Continue to invite, outreach and keep its doors wide open for new Sponsor and Co-Sponsor Members at anytime and at the pace they are comfortable with

2. Work closely with participating ccTLDs to create win-win situations in the local market for the DotAsia registry as well as the ccTLD by focusing on market awareness and cooperative promotions

3. Continue to explain to prospective Members the vision and mission of the Organisation and how their degree involvement could be managed and defined by the Member themselves, and how their involvement would contribute to their local community, the regional community and the Internet community at large

4. Work closely with ICANN to complete the delegation of the ".Asia" TLD and demonstrate the viability of the registry

These are very important initiatives and are reflective of the commitment that the DotAsia Organisation has in operating the ".Asia" TLD in the best interests of the community it serves and the understanding and respect it has on the diversity of the Members it looks to include.

CAT

A) TECHNICAL

  re: Policy

  _____

  1. Is this TLD going to be "delegation only" (see, e.g.,
     http://www.isc.org/index.pl?/sw/bind/delegation-only.php)? If
     not, describe (i) other types you expect to support; (ii) how
     this will affect registrars' current processes; and (iii) what
     allowance you will make for technical difficulties in
     communicating with registrars?

     ---- Response: ----

     PuntCat does not currently intend to provide other resource
     records than NS RRs and the address RRs needed as glue records
     for IP numbers of name servers.

     In particular, PuntCat does not intend to use wildcards on second
     level.

     If this had to occur in the future, be that for use in future
     pplications or because it derives from an ICANN consensus policy,
     puntCAT would in that case implement those changes only after
     consultations with registrars and following ICANN-defined
     processes.

     ---- End of Response ---

  2. In the event a registrant is found in violation of the sponsored
      TLD policy, explain the process for addressing a violation,
      including what steps are taken to communicate with the
      registrant, and what technical actions will be taken.

     ---- Response: ----

     The following technical actions are available, among others, to
     support policy compliance verification and to act on suspected
     or proven policy violations.

     2.1. Change of Status of the domain name

     The change of the status of a domain is a formal action. It can
     be used as a form of communication with the registrant if the
     normal mode of communication (email) is not available.

     The SRS supports status flags for domain names and other registry
     objects such as contacts and hosts. A given object may have more
     than one status flag. If new requirements are discovered, new
     status flags can be defined as needed. Each available status flag
     has its own set of properties, such as whether it is published on
     the whois or not, or who can set or remove the flag (registrar,
     registry operator, sponsor, accredited policy compliance
     organization). Some status flags are purely informational, others

have an effect on registration or modification rights and/or on
the resolution of the domain. Each status flag can be one-to-one
to a translation in Catalan and any of the languages supported by
the SRS. The SRS stores the dates at which the status flags were
set and has the ability to cause these dates to be published on
the Whois.

The following status flags are planned to be available to support
policy compliance operations:
  - "under-investigation"
  - "under-dispute"
  - "pending-action"
  - "registry-lock"
  - "registrar-lock"
  - "transfer-prohibited"
  - "registry-hold"
  - "registrar-hold"

If a domain or contact object is placed on lock, the SRS
disallows changes. This can be used to prevent changes to domains
under investigation for policy issues. The measure can be
associated with a notification giving the registrant a deadline
for a response or, if applicable, measures to cure the policy
violation.

If a domain is placed on hold (e.g. registry-hold), it is no
longer delegated in the TLD zone. If case of registry-hold, set
by the registry or the sponsor, the registrar cannot remove the
hold flag.

The SRS allows the Sponsoring Organization to upload bulk
instructions for changes to status information. Alternatively,
the status can be changed using via the registry protocol and
over the web user interface made available to the Sponsoring
Organization.

A given registration can be associated in the SRS with a given
organization in charge of ENS for that name (ENS Organization or
ENSO). In this case, the respective ENSO can discharge its
compliance activities directly through the SRS on the basis of
permissions assigned by the Sponsoring Organization.

2.2. Deletion of Registrations

The Sponsoring Organization can cause a domain to be deleted on
the grounds of policy violation.

2.3. Updates to Automated Registration Rules

The SRS provides the sponsor with the technical ability to modify
the registration rules at any time.

If it is determined that a given domain name, or a given pattern
of domain names must not be registered, the Sponsoring
Organization can update the rules accordingly. In particular,

this may be the case if a name is deleted for policy violation
and the policy the re-registration should be inhibited from the
start.

2.4. Communications with Registrant

The registrant is required to maintain adequate contact
information including e-mail. In case of suspected or proven
policy violations, the Sponsoring Organization, or a body
performing that function by delegation, will contact the
registrant by e-mail. The SRS supports automated email
verification and notification functions, including the automatic
recording of confirmations via HTTP (proving that the registrant
has received the email and clicked on a link in it). Other means
of communications may be used in addition to e-mail as may be
justified.

The SRS supports the automatic setting-on-hold, after a deadline,
of domains where the registrant has not followed up on a
notification regarding suspected policy violations.

2.5. Status data provided to registrars (communication via
registrar)

Registrars can download the status information using the generic
data export function. This enables them to contact the
registrants through their own channels.

The communications via the registrar are no substitute for direct
notifications by the Sponsor, but provide additional security
against accidental communications problems (e.g. if the
registrant has lost his or her e-mail account, but maintains an
information channel via its registrar or a channel partner of
that registrar).

2.6 Relation to Dispute Policies and Mechanisms

Please bear in mind than the above points refer to the technical
options available in order to implement the Policies described in
our application (Please see Part B, point C Assurance of Charter-
compliant registrations and avoidance of abusive registration
practices, where the Charter Compliance Policy (CCP) is
described, and point D Assurance of adequate dispute-resolution
mechanisms, where the Charter Eligibility Dispute Resolution
Policy CERDP) is described on number 1, and the Compliance
Reconsideration Policy (CRP) is described on number 2).

CEDRP is a Dispute resolution Policy similar to those applying to
existing sTLDs. CCP is implemented by the Sponsor itself. In may
initiate either ex-officio (ie, following the routine checks
performed by the Sponsor) or through complaint from a third
party. In any case, the Sponsor will immediately sent out a
Notice of Compliance Check, and the name will be flagges us
"under investigation" (preventing transfers or DNS changes during

that time). If the Registrant fails to address the concrete claim
of Registration Policy violation during the following 30 days,
then the name could be either blocked (put on Registry-hold) or
removed (deletion), depending on the nature of the violation of
said Policy (which always would imply a period of registry-hold
status). Procedures for CERDP, CRP and UDRP will follow the
procedures and communication patterns followed by similar
policies on other gTLDs

---- End of Response ---

3. If there are plans to allow 3rd level registrations, please
explain the selection process for these names, and the policies
for registering them.

---- Response: ---

PuntCat does not intend to offer third-level registrations (as we
state on our Application, Part B; Naming and Conventions; First
sTLD choice, Naming conventions).

From a technical standpoint, the SRS has the ability to handle
3rd-level registrations and apply specific rules to them.

---- End of Response ---

4. Will there be a policy on what eligible registrants may register
in their domain? For example, on delegations? Will certain domain
names be disallowed?

---- Response: ---

4.1. No Technical Restrictions on Sub-domains

SLD holders are allowed to handle their sub-domains without
technical restrictions regarding the SLD zones imposed by the
.cat registry. puntCat recommends that they follow generally
accepted BCP recommendations.

4.2. Security Restrictions for Glue Records

Glue records ending in .cat can only be created in the .cat TLD
zone if a corresponding parent domain exists in the .cat zone
file. For example, the host ns.example.cat can only be created in
the SRS if example.cat exists.

Moreover, the creation or modification is only allowed to be
performed by the registrar in charge of the underlying parent
domain name. The registrar must apply equivalent security to
ensure that glue records are only created at the request of the
holder of the parent domain.

This restriction is current practice for all gTLDs.

4.3. Technical Ability to Apply and Change Registration Rules

From a technical standpoint, the SRS has the ability to require certain properties in the eligibility records (ENS Records) for any registration corresponding to a given pattern or lexical property. Pattern-based rule elements are defined using regular expressions. Lexical rule elements are defined using collections of strings (e.g. all reserved strings based on protocol names).

The actual policies are set by the Sponsoring Organization. Any changes are carried immediately.

4.4 Restrictions during Start-up Period

As described in our application (Part B, point C Assurance of Charter-compliant registrations and avoidance of abusive registration practices), during the Start-Up Period where some specially-qualified registrants can apply for .cat domain names, there will be rules restricting registrations to either the applicants' trademarks, registered names, corporate names, or other categories defined. For instance, writers will be able to register the names of works they have written (the list of such special entitlements and the procedure for compliance will be defined in a case-by-case basis with professional Guilds or associations).

4.5 Names reserved by the Sponsor

As it is the case in all gTLDs, the Sponsor will submit to ICANN a list of reserved names, which will fall under two different categories (as explained in or Application, Part B, Proposed Extent of Policy-Making Authority): a Reserved Names list (one- and two-characters; internet common protocols and applications; etc) and what we described as Community-assigned names, as defined in our Application, in Part B, dd New Value to the Internet Name Space

None of these lists is complete as of now.

---- End of Response ---

_re: DNS _

_ _

5. Does TLD plan to use wildcard DNS records? If so, explain what will be the use and the types of records used.

     ---- Response: ---

PuntCat has no plans to use a wild card in the TLD zone file.

In line with registrants' freedom to define the delegations within their domains, there are no policy requirements preventing SLD holders from placing wild card resource records in their own zones on third or lower level.

---- End of Response ---

6. In how many DNS zones are the NS records located? Is this zone in the requested sTLD or not? (I.e. how long will the chain of NS records be when chasing them?)

---- Response: ---

6.1. Allowed TLDs for Name Server Records

The Registry does not restrict the TLDs allowed for name server records other than to make sure, if need be, that those TLDs exist.

6.2. Glue Records Must End in .cat

The SRS does not allow the creation of glu records that do not end in the registry TLD (i.e. .cat).

6.2. Glue Records Required for Hosts Ending in.cat

Conversely, all host names ending in .cat are inserted as glue records in the .cat TLD zone.

In this respect, the security restrictions described under 4.2 apply.

6.4. Length of Chain of NS Records

As a result of the of the glue records restrictions for host names ending in .cat, the number of chain of NS records has a length of two for domains delegated to hosts whose names end in same domain.

If the hosts to which a domain is delegated do not end in the same domain, the length of the chain is not limited by any technical imposition from the .cat registry.

The TLD servers will be configured with standard methods to be configured to avoid inappropriate load due to erroneous DNS configurations, such as looping resolution paths.

This is the current practice in gTLDs. puntCat intends to follow the same practice because most gTLD registrars are used to it.

---- End of Response ---

7.   Is this sTLD a candidate for filtering based on the TLD? If so,
     what will be effects on the operation/survival of this TLD if it
     is locked-out (i.e., if a large ISPs return "NXDOMAIN" for all
     queries for it)?

     ---- Response: ---

     The .cat TLD is not a candidate for filtering based on the TLD
     string. This is neither its purpose nor a reasonable expectation.

     It is well-known that accidental lock-out effects exist on
     application level. Most of these accidental lock-out effects are
     due to programs based on inadequate verification criteria, such
     as requiring that TLD have a length of two characters or be part
     of an enumerated list stored in the application. In this context,
     puntCat will do its fair share of an effort to promote the use of
     adequate verification algorithms.

     ---- End of Response ---

re: Operations

8.   Please provide a statement about how often disaster recovery
     plans are practiced, and for which contingencies, including
     whether it operates over the Internet and what peers more
     exactly. Also: (i) in the event of a need for recovery from
     primary data server failure, would there be an interruption of
     service? If so, for how long? (ii) is Notification provided for
     failed transactions during a fail over? and (iii) what is the
     bandwidth allocation planned for the interconnection of data
     centers for synchronization purposes, and to the Name Servers
     serving the sTLD?

     ---- Response: ---

   8.1. Disaster Recovery Firedrills

     A disaster recovery firedrill is performed at the rate of one in
     6 months. The firedrills are performed on the evaluation systems
     and do not affect the production environment. The exercises are
     generally combined with other tests on the evaluation system, as
     the tests can be combined advantageously with the need to switch
     over between databases on the evaluation system.

     In addition to firedrills, switchovers between replicated
     databases systems have been performed to facilitate maintenance
     of the production environment. The successful switchovers
     demonstrate the viability of the concept.

8.2. Event of Primary Server Failure

In the event of a Primary Database Server Failure where the database were to have been corrupted, the techni al team at the main site can switch over to the replicated machine at the same site, or to a remote replicated machine. The preferred solution, if possible, is to switch over to the local replicated backup database.

It must be pointed out that the SRS is composed of fully mappable resources, i.e. separate storage-attached networks (SAN) can be mapped to servers which in turn can be swapped on the basis of purely logical instructions, without physical intervention.

In case the data itself on the main RAID array were to have become unusable, a switch-over is performed manually after consultation between the members of the technical teams.

8.2.1. SRS Service Availability in Case of Failover

A switchover from the primary database server to the replicated backup database server at the same location can be performed within minutes. However, given the residual risks, notably the possibility that the original cause of the crash could possibly have had an effect on replication before the crash occurred, a switchover will only be performed after proactive verification.

As a result, in the case of a Primary Database Server failure, the switchover will most likely involve two to six hours of during which registrations cannot be updated. CORE feels that in this respect, prudence is preferable to minimizing the SRS downtime at all costs and risks.

Of course any SRS downtime has absolutely no effect on the TLD servers' 100% availability.

In case the SRS needs to be switched over to a remote server. As the remote server runs on different IP numbers and IP numbers cannot be mapped to a remote system. In this case, the domain names are mapped to the new IP numbers.

Given the fact that the whois server is remote, users can still obtain the latest registration data even if the SRS is unavailable.

8.2.2. Failed Transactions in case of Fail-over

The SRS protocol provides synchronous responses to requests sent via a socket interface or HTTPS. If is down, the requests are not delivered and error messages are returned by the transport-level protocols. As a result, there are no backlogs of unprocessed requests. In case of requests sent by e-email, they will be queued on the mail server if the SRS does not process them. They will be forwarded to the newly activated backup system unless the registrar requests their deletion.

As a general rule, registrars only rely on transactions which returned a success message. The lack of a success message must be interpreted by the registrar to the effect that the request may have failed.

The registrar can absolutely rely on the success messages. A concept based on dispatching a list of "failed" requests could never be reliable because the system could have failed to send a failure message.

8.2.3. Bandwidth between Interconnected Data Centers

At the age of streaming video and high bandwidth to people's homes, bandwidth is no longer the limiting factor for database replication.

SRS and standby components are currently linked at bandwidths in excess of between 15 and 34 Mb/s. Peripheral system components such as Whois and Account servers have been tested to provide 2Mb/s in sustained throughput on the route from the main SRS or the remote backup SRS site.

It must be pointed out with respect to synchronization that this process occurs continuously, so that in the event of a crash there is not need to synchronize the central database tables. Additional, non critical data may be synchronized later.

8.4. Bandwidth to Name Servers Serving the TLD

All TLD servers are hosted at central locations with substantial available bandwidth in excess of 150Mb/s. The limiting factor is thus the route in-between the stealth primary server and the various TLD servers, or throttling on the respective servers' interfaces. CORE's statistics show that TLD server AXFRs take place at a speed of 2 Mb/s at least. Given the modest size of the zones currently transferred, the actual throughput is certainly much higher. Both figures are by far in excess of the highest imaginable requirements.

It can therefore safely be said that bandwidth to TLD servers is not an issue unless it is affected by causes totally unrelated to the registry operations.

---- End of Response ---

9. Do you - or your subcontractors - have plans to use recent standards developed by the IETF for DNSSEC and CRISP?

    ---- Response: ---

    ### 9.1. DNSSEC

    Both CORE and puntCAT are firmly committed to offering DNSSEC once the standard is fully operational. Recent discussions in the DNSSEC working group related to the danger of zone file mining

have raised fears that finalization may be delayed by another
year.

As CORE already runs the .aero SRS, it regards DNSSEC is a
central concern. Thanks to its running on the same technology,
.cat is likely to be one of the early adopters of DNSSEC.

puntCAT will offer to participate in the beta-testing of DNSSEC
as it evolves. We would supply plans for signing the sTLD zone
and we would certainly registeer DS records for registrants.

9.2. CRISP

Both puntCAT and CORE fully support the objectives of CRISP and
the endeavors to develop it. CRISP has a particularly important
role to play in view of the shortcoming of the Whois protocol and
the lack of standardization in the alternative methods to balance
privacy and authorized access.

However, neither CORE nor puntCAT nor anyone else can make the
use of CRISP a reality by decree, or simply by implementing it on
the server side. The objectives of CRISP are extremely ambitious,
as is its architecture - namely the use of a new transport
protocol (BEEP) with which the Internet community has little
experience to date. puntCAT and CORE therefore feel that
temporary alternatives to CRISP need to be offered as well, in
particular the option of access authentication and additional
request standardization in conjunction with the currently used
protocols (port 43 whois and web whois).

puntCAt will apply ICANN consensus policies related to Whois
access. It will actively participate in the elaboration of
recommendations to registries. CORE will ensure that the
recommended protocols, including CRISP if part of the
recommendations, are supported.

---- End of Response ---

10. Could you please clarify your position on IPv6 transport+glue and
    IDN, including mappings between non-ascii and ascii characters?

    ---- Response: ---

10.1. IPv6 Transport And Glue

It must be expected that for some time to come not all portions
of the Internet support IPv6 Transport. puntCAT therefore
recommends that in addition to IPv6 IP numbers, name servers have
also IPv4 IP numbers and that both types are reflected in NS
records and hosts provisioned in the .cat registry.

Moreover, as IPv6 IP numbers are partly dependent on the upstream
connectivity provider, a given name server may have more than one

IP number depending on the route through which it is reached.
Those IP numbers should be reflected in the glue records.

However, puntCAT does not currently intend to apply algorithmic
rules to this effect. Correct configuration is the responsibility
of the users.

10.2. IDN ascii/non-ascii Mapping

IDN is supported for characters appearing in the Catalan
language.

To minimize conflicting ownership of domain names perceived to be
equivalent in view, the SRS ensures that they are registered by
the same applicant. The verification is purely algorithmic: for
any IDN registration, the SRS verifies that the corresponding
ascii registration is registered to the same Registrant object ID
(handle). If the matching ascii registration does not exist, the
registration is rejected. If the matching ascii registration is
not attached to the same registrant object ID in the database
(registrant contact handle), then the registration is rejected.

The algorithm to discover the matching ascii variant is such that
for a given Catalan-language string only one ascii string is
found. The mapping is performed as follows:

```
1   à (U+00E0) "a" with GRAVE      : mapped to "a" (U+0061)
2   é (U+00E9) "e" with ACUTE      : mapped to "e" (U+0065)
3   ê (U+00EA) "e" with CIRCUMFLEX : mapped to "e" (U+0065)
4   í (U+00ED) "i" with ACUTE      : mapped to "i" (U+0069)
5   ï (U+00EF) "i" with DIAERESIS  : mapped to "i" (U+0069)
6   ò (U+00F2) "o" with GRAVE      : mapped to "o" (U+006F)
7   ó (U+00F3) "o" with ACUTE      : mapped to "o" (U+006F)
8   ú (U+00FA) "u" with ACUTE      : mapped to "u" (U+0075)
9   ü (U+00FC) "u" with DIAERESIS  : mapped to "u" (U+0075)
10  ç (U+00E7) "c" with CEDILLA    : mapped to "c" (U+0063)
11  Ela geminada (U+0140 "l" with MIDDLE DOT): mapped to "l-"
(U+006C U+002D)
11a Ela geminada as substring composed of "l","middle dot" and
"l" (U+006C U+00B7 U+006C):  mapped to "l-l" (U+006C U+002D
U+006C)
```

The mapping is performed on the lower-case letters. Registrations
are converted to lowercase before the analysis begins.

Punycode treats the letter U+0140 as equivalent to the string
U+006C U+00B7 . Example: xn--collegi-xma.cat

The ela geminada represented as the substring "l.l", though
perceived as a non-preferred substitute for the substring "l"
"middle dot" "l" (l U+00B7 l), is not mapped because the dot
period character is the separator for labels in domain names.

The apostrophe character is not allowed as it is excluded by
virtue of the IDN standards.

Any IDN domain in the .cat registry is thus recorded with a
pointer linking it the mapped ASCII domain. This link can be used
to prevent the deletion of the underlying ASCII domains without
the prior deletion of the dependent IDN domains.

No restrictions apply to the modification of ASCII domain, but
IDN domains can only be modified in a way that the resulting
records shows the same registrant handle as its underlying ASCII
domain.

From the Policy side, as we explain in our Application (Part B;
Add new value to the Internet name space), we won't allow IDN-
only (punycode) registrations and we will not until such time as
the vast majority of web-browsers support them natively (ie,
without user-installed plug-ins) and also a solution for mail is
found (and perhaps for some other DNS-reliant services, but the
two mentioned here are the minimum requirements). Allowing
independant non-ASCII names as of today could amount to a huge
level of frustration aomng users (registrants or not) as they
would be paying for a service thatn, in practice, cannot be used.
We offer to experiment with the easy translation table proposed
above, and test how people get used to cope with it. Furthermore,
in case IDNs as we know them today should be re-encoded (because
of new Unicode or protocol-related requirements) or abandoned
altogether, .cat registrants would already have a simple,
guesseble, smooth-transitioning alternative. This is something
that cannot be done when applying IDns to registries with
exisitng ASCII-only zones.

BUSINESS / FINANCE

2. Can you please provide (i) documentation (signature/ letterhead) of the loan guarantees [CONFIDENTIAL INFORMATION REDACTED]; and (ii) documentation (signature/letterhead) of the line of credit from the bank, which you mention.

--- Response ---

[This part was already sent in our responses to Part B) Business / Finance]

As agreed with the Independent Evaluation Process Project Manager, an extension of this question has been obtained (until Monday, June 28th, 16:00 UTC). We hope nevertheless to be able to provide such documents by Friday 25th (June 24th being a local bank holiday).

We would like to underline that, as we wrote in our Application, we haven't opened the line of credit as of now. The Association would face serious and unnecessary problems from the accounting and tax perspectives if that credit was made available on its bank accounts, given the nature of its current activities (only one: being a vehicle for the .cat application process). And in case of effective delegation of .cat, the Sponsor would be a yet-to-be-established Foundation, which is the designated beneficiary of both the credit and the linked guarantees. The documents we submit are therefore contingent upon ICANN's approval of .cat and the Foundation being set up. It does not mean that the line of credit would only be materialised upon signature of the contract between the Sponsor and ICANN (it would certainly happen before that). But given the accounting and tax constraints already mentioned, it only makes sense to enact it at a stage of the application process (to be determined in conjunction with ICANN).

[Annexes to be sent by Monday, June 28th]

[Part of Response added on Friday, June 25th, with annexes]

--- CONFIDENTIAL INFORMATION---

 [CONFIDENTIAL INFORMATION REDACTED]

SPONSORSHIP

1. Please provide signed letters that are representative of all parts of the Community that you propose to represent, detailing the particular reasons for their supportf. You should include similar letters from all supporters mentioned in your application (other than those covered under Business/Financial Q2 above). (Note: We wish to assess the breadth as well as the depth of support.) Please also describe any other entities (including regional or national governments) that were approached for support (including those that may have declined to respond or to provide support), and their reaction(s) to your request.

1.1 Letters from representative parts of the Community

Associació puntCAT is a membership non-for-profit association which only goal is to promote the establishment of a .cat TLD, and to help launching and managing it. This Association will not become the Sponsor of the .cat TLD, which would in that case be a yet-to-be-established Foundation (Fundació puntCAT). The Association is merely the vehicle of the application process, and an outreach tool.

As such, some decisions were taken: only legal entities, no individuals could be part of the Association. Membership came though invitation, and invitations came through proposals of current members. Three sectors were specially envisaged: entities promoting Catalan-language-related activities; entities promoting other aspects of Catalan culture; entities specially active on the Catalan Internet community (as the goal was the establishment of a TLD for precisely that community). Membership organizations would be preferred over individual entities, and we would look or the most representative ones in each area. Lots of membership requests have therefore been hold until such time as the Foundation is created.

Nevertheless, we have obtained express support (even if in online form, and not in more traditional signed letters) from an astonishingly large number of people (see 1.1.2 below).

1.1.1 Support from members of the Association

Associació puntCAT currently has 73 members. All of them (except the threee founding members, Institut d'Estudis Catalans, ISOC-CAT and CCRTV) have submitted a signed letter of application where they: accept the Association bylaws, which in article 2 say that the goal of the association is to promote the creation of a TLD and to manage it, and in article 6 establishes that member duties are to promote those goals and to financially support the Association, among others (see Annexes 1 & 2 to this question for the original Catalan version of the bylaws, and an unofficial English translation. Annex 5 & 6 contain the original Catalan text and the unofficial English translation of the membership request form. Annex 5 contains scanned versions of all the individual membership form).

In order to explain the relevance of each member, we have outlined in Annex 7 the nature and field of activity of each of the 73 members [Unfortunately we have only been able to complete the description for a small part of them, due to time constraints.]

We would like to draw the Evaluators attention to the fact that Associació puntCAT is by no means a generic-purpose association, but an entity created with the sole goal of this application process. Our membership came with this goal in mind, and with the commitments expressed in the Bylaws of the Association and those expressed on the bylaws of the future Foundation (approved by the General Assembly of the Association, annexed with numbers 7 & 8).

We are not claiming any indirect commitment or legitimacy. We do not pretend that all writers who are members of the Catalan Writers Association of the Catalan PEN Club have made those commitments, or are represented by Associació puntCAT. But we hold a strong and direct commitment to support the establishment, funding, technical operation and outreach of the Registry from each and every of those members. And collectively, our members represent a very significant part of our target community.

1.1.2 Support from non-members

During the Public Comment Period, Associació puntCAT launched a website and an online petition for support. The text of the petition (Manifest) is attached with numbers 9 & 10, again in its original Catalan version and its working English translation.

The answer from our community was overwhelming. Just with the help of the promotion made by our members and a single press realease (and a total marketing expenses for the Association of exactly 0 euros!) we received some 60.000 express statements of support. Each of them with name, email address, postal address, legal form and tax identification number for enterprises and national identity card or passport number for individuals.

The breakdown of the total number is as follows:

• Non-for-profit entities (all types): 790 (see Annex 11) • Corporations (commercial): 1,459 (see Annex 12) • Individuals: 58,022

The number of overall surprised us. Even more astonishing is the number of statements from commercial corporations , as companies are usually less likely to support online petitions than individuals.

[Unfortunately we cannot provide the Evaluators with the contents of the file regarding to individuals right away. Our domestic (both EU and Spanish) Personal Data Protection legislation require a specific procedure for exporting such data outside the EU, including formal representations and guarantees from the receiving end. We are certainly open to discuss the best way to do so, as we have already communicated to ICANN officials and the Project Manager.]

The reasons for supporting the initiative might be different for each statement. We only know that they have expressely supported the text of the Petition we attach as anexes 9 & 10. Some have offered to promote the Asociation, or the TLD when approved. Many have enquired about their involvement in the policy-making process (which is open to anyone, as outlined in our Appication and the bylaws of the Foundation

attached as annexes 7 & 8). Some have offered financial contributions. All respondents have expressed their support to the initiative and their willingness to obtain a .cat domain and to somehow be active in the process.

As for the reasons for support expressed in the comment area, there are certain common patterns. The most generally stated view is that .cat would reinforce the visibility and the long-term viability of Catalan-language. The Internet is seen as an area where our language is under-represented, and such a TLD stands as a tool to enhance its presence. Many insist in the need to have choices as to the types of TLDs that are available. Many supporters simply state that they find it a good idea, without further elaboration. The wider cultural aspect is less present than the linguistic one. Identity reasons, or political statements are also present, even if in a lesser proportion. The exclamation "And why not?" is a recurrent comment, indeed.

[We are unable, both in terms of time, human resources and finances, to translate or further analyse in a more sientific way the thousands of comments. Please take the above comments as the impressions gathered along the last three months by the people following the website, and a quick perusal of the comments during the last few days.]

1.1.3 Letters specifically written to address the question asked by the Evaluators

If the online petition described above and the membership campaign where absolute successes, the response to the request we made in order to obtain letters specifically for this purpose is of course slower. For one thing, many if not all of our members are Associations, Federations or other membership organizations which process for authorizing the issuance of public letters take longer than four working days. We should also express the negative reaction that some of them had when they were told that the letters as such would be made publicily available on the Internet. It is a fact that in some part of the world this is not usual at all (one thing being the very nature of the letter, and its content, and a very different one being the physical expression of the letter, and even more specially, of a signature).

In any case, we attach (numbered as annexes 13 to 18) letters from both members and non-members of our Association for this specific purpose, offering support in all areas, from technical support, to managerial to outreach and marketing.

1.2 Regional or national governments that were approached for support (including those that may have declined to respond or to provide support), and their reaction(s) to your request.

We are unfortunately unable to address this question under this form. We have requested that this answer be treated confidentially, and the response from the ICANN review panel has been rather inconclusive.

What we can say now and here is that we have only held some informal conversations with a series of Departments and officials in different

administrations and for different purposes. Most of them have been purely informative on our side. Some have explored the possibility of obtaining a grant for the future Fundació puntCAT, linked with the availability of such grants for activities/entities promoting Catalan language in specific areas. (As you know, most European admistrations are firm believers of "positive discrimination" in the cultural field, and this is specially so in the area of Catalan language, given its recent history of legal and social marginalization.) We hope to obtain such a grant in the future, but no commitment has been made by any Administration (and, as we explained in our application, no provision in this respect is included in our financial model).

No other kind of specific support has been discussed and, in any case, we do not have any right nor the permission to disclose the exact content of any of those conversations. It was certainly not possible to obtain formal permissions or statements in the last one-and-a-half working days, especially as it was clarified that this part of the responses was not to be treated confidentially as a whole.

We are absolutely confident that Associcació puntCAT and the Project Manager will find a way to communicate more precisely the names and offices with whom we have approached, now prevented by the short deadline provided. But Associació puntCAT will in no circumstance be the appropriate channel to express the position regarding .cat or any other ICANN-related affair from any Governmental agency. This can only be done by those Governments themselves.

--- End of Response ---

2. Do you have a plan for outreach to Catalan-interested organizations on a global scale?

--- Response ---

We have a plan, which is not finalised in all its details. It will mainly consists of three different approaches and phases.

2.1 Outreach through current Associació puntCAT's membership

As described now in other parts of these responses, the main choice of membership when designing Associació puntCAT was precisely the presence of those membership entities having a strong presence on the different fields of the Catalan cultural community (Academia, media, publishing industry, cultural promotion in Catalan-speaking areas and abroad, etc.). Our members are our own main tool for the outreach plan. A clear proof of their commitment and efficiency have been the nearly 60.000 expressions of support during the Application Public Comment period, already mentioned in question 1 above.

We cannot overstress the broad representativity of our membership. It will only increase once the Foundation has been set up, as the current base has been drawn mainly by individual invitation, based more on

rerpresentativity and diversity than exhaustive inclusion.

2.2 Awareness of the "rest of the Community"

As wide as the reach of our members alone could be, it will always be a fraction of the interested Community as such. We are currently setting up a list of alternative communications channels (be that online or offline media, meetings, events, Conferences,...) where the .cat TLD should be present or represented. We are also enquiring into the availability of our members, or third-parties, in order to help us gain presence and therefore increase awareness of the .cat TLD.

2.3 Outreach beyond the Catalan cultural and linguistic community

The .cat proposal is not just a proposal for the Catalan-speaking or Catalan culture related community. It is an identifier to be used both for that Community and for those interested in addressing that community
in order to offer their services or products (with the restrictions established in the Eligibility Policy). Therefore, in a later phase (certainly after the Start-Up Period, possibly by the end of the first year of operation), outreach effort will be extended to the Internet community in general. One of the objectives is to present the .cat TLD Community and explain what uses of .cat would be convenient for those willing to communicate with that community, and which ones would be encouraged, and allowed).

In order to do this, we first need to engage our own community. This is why the previous two points will have absolute preference in terms of time and resources.

--- End of Response ---

.jobs Response to Sponsorship Questions Promulgated on June 17, 2004

1.   Please provide signed letters that are representative of all parts of the Community that you propose to represent, detailing the particular reasons for their support. You should include similar letters from all supporters mentioned in you application. (Note: we wish to assess the breadth, as well as the depth, of support.)

> Answer:

Please see the attached .pdf file which contains a signed copy of each letter from the following:

Name	Position	Company
Lev Gonick, Ph.D.	Vice President for Information Technology Services/CIO	Case Western Reserve University
Scott DePerro	Managing Partner	Goldstar Holdings, Ltd.
John Graham	Chief Executive Officer	Nationwide Advertising Service
Ray Leach	President & CEO	JumpStart Inc.
Susan R. Meisinger, SPHR	President & CEO	The Society for Human Resource Management
Gary Rubin	Vice President Publications and New Media	The Society for Human Resource Management
Jamie Kellner	Chairman	ACME Communications, Inc.
Martin Pompadur	Chairman	News Corporation Europe
Raynor Dahlquist	Acting Vice President	VeriSign Naming & Directory Services
Ray Fassett	Vice President	Employ Media LLC
Thomas J. Embrescia	Chairman	Second Generation Ltd.
Scott Finerman	Treasurer	Second Generation Ltd.

Employ Media may supplement this list with additional letters of support, as agreed with Ms. Miriam Sapiro, until and including June 28, 2004.

2.   Please elaborate, consistent with the RFP criteria (concerning enhanced diversity of the Internet name space), how the new sTLD would create a new and clearly differentiated space, and satisfy needs that cannot be readily met through the existing TLDs.

> Answer:

> I.   Distinct Message

Current TLD's connote general business, commercial enterprise, non-profit organizations, educational organizations, museum organizations, cooperatives, airline industry enterprises, general information, individual countries, and individual users. With the exception (by design) of gTLD's, each has a diverse purpose or mission for existence in the DNS name space.

The .jobs TLD is to connote jobs. It is to be a name space for employers. Or more specifically, the Community of members tasked to carry out the very distinct organizational mission of communicating employment opportunities and benefits of the organization. This communication is a common mission that transcends size, location, products, services, or whether designated for-profit or non-profit. Jobs are the product that the Community needs to market on behalf of its employer. Community focus is not to market commerce, airports, museums, individual names, not-for-profits, or cooperatives. The focus is to bring jobs to the market place and the .jobs TLD provides an exact navigational identifier to provide employment related purposes not fulfilled by the intended mission or purpose of any other TLD. This message makes .jobs distinct and differentiated.

II.   Community Task and Opportunity

It is a function of every employer business to promote and otherwise make available employment opportunities. No existing TLD fits this distinct and differentiated mission. The strength of the diversity resides within the Community tasked to carry out this organizational mission. This Community has long established itself as one tasked with the responsibility to market jobs. People recognize, and rely upon, this Community for this diverse purpose. It is a differentiating factor.

In reality, the diversity of this Community is characterized by their shared goals, challenges, and objectives regardless of other business influences such as competitive pressures or physical geographic location. Recruitment is a main staple of this Community. No other Community is recognized for the same traits and focus as that of the HR Community. And this is what defines the diversity of this Community. Diversity of the name space is to be achieved from within the Community in the very same capacity it has historically proven capable through its use of media that long pre-dates the Internet.

The general populace (those seeking employment opportunities to the tune of over 5,000,000 per day) rely upon this Community for its distinct and differentiated purpose and mission on behalf of the employer organization. This reliance has translated to the Internet in a manner that has increased year-over-year. It is a distinct and differentiating factor. The opportunity for the name space, in its own evolution, is to translate this diversity through this mobilized Community vehicle via a focused TLD to serve this purpose and focus. No existing TLD maximizes this opportunity nor can one readily meet such purpose. DNS is a crucial communication tool of this medium. And the top level identifier is indeed a crucial point of differentiation.

The marriage of a TLD with the focus of employment recruiting offers differentiation for the employer organization, the distinct Community tasked with this mission, and the general Internet population that has historically relied upon this Community. The Internet medium has served to increase this reliance level in a manner unparalleled prior to. Diversity and differentiation of the name space will derive from the Community because it has proven this capability, or relationship with the labor market, long before the advent of the Internet, DNS and TLD's. It is a proven source. Again, the opportunity is for the TLD naming arena to take full advantage of this at a time it is able by way of willing, motivated, and very qualified participants – each expert in their respective fields of HR, technology, and promotion - that have come together to place this

application forward in a manner that conforms well to a myriad of complicated issues that have, in the past, proven elusive to its own evolution.

III.   Representing the Company Name

.Jobs is an innovative naming tool, to reside at the top level, to marry the company name directly to its employment opportunities that provides a resource locator far more closely related to the historical relationship of employer and job seeker. This marriage correctly falls under the jurisdiction and mission of the HR community, on behalf of the employer organization, and is the source job seekers would expect. This is a differentiating factor of the .jobs TLD as no existing TLD, standalone, provides or was created to provide, the job seeker this assurance.

The Community carries a distinct purpose and message within the Internet medium, commonly known now as e-recruiting. It represents the company name in the mission it is charged to carry out that includes the World Wide Web of which URL's remain an important source. Motivated job seekers, in the traditional sense, recognize the company name as an identifier. The basis of this motivation, for the job seeker, is for the specific purpose of employment related opportunities in relation to the company of interest. This naming relationship – of the two groups being employer and job seeker - is already well recognized and ingrained within the recruitment process and has been for decades. The Community has long represented the company name with little confusion but certainly for a differentiating reason and purpose.

Today, millions of employment URL's in existence represent the distinct purpose. Put another way, employers have employment URL's. But one is not going to confuse the purpose of an employment URL to that of a home page URL or, for that matter, the purpose of any other URL. This is a distinct and differentiating factor not be confused or inferred that current TLD's readily meet the need of this company name relationship between employer and job seeker. In fact, .jobs is an innovative top level approach to address a default evolution that is more of a derivative out of necessity for the Community to carry out its assigned task.

Today it is quite logical to reason the facilitating nature of exchange of the Net that has impacted, if not revolutionized, the relationship between employer and job seeker would produce a particular value equation for all concerned; a value equation that is increasingly maximized the more efficiently the Community can direct the labor market to the exact navigational destination of its employment opportunities. Tools or products that provide the Community this opportunity is a differentiating factor and purpose of the .jobs TLD.

IV.   Innovation

Innovation includes the improvement of products and services and is what drives differentiation. .Jobs is differentiation of the name space by way of innovation that is able to remain within the scope of DNS functionality in its most pure sense (i.e. the product of simple domain name resolution). Fragments of the Community have made an attempt to innovate under current naming constructs. One is example is the FBI that moved away from .gov to fbijobs.com as a method of differentiation to its jobs page.

The employer URL is representative of a Community purpose, or organizational mission, well understood by the labor market. The evolution of the companyname.jobs name space will be a mirror image that absolutely includes differentiation in a manner that is consistent to what this Community has historically proven to be representative of, including its more recent history of participation with DNS resource locators. People understand the purpose, mission, and differentiation of an employment URL, as confusing, absent of conformity, or long winded as these may be today within current default naming structures available. .Jobs is improvement of a product, in this case being employment URL's, to the benefit of the Community and job seeker relationship. It is innovation at the top level that inherently means differentiation to those that interact with it, potentially in the millions per day.

Community participation with employment URL naming schemes to date is further evidence that this differentiation will translate to the more simplified top level name space structure but is in reality simply consistent with the historical relationship this Community has shared with the labor market on behalf of the employer organization. .Jobs is to serve this purpose currently not satisfied, nor possible to be, by existing TLD's given the comparative purpose or differentiating factor for the existence of each. It is not reasonable to expect that TLD's created for entirely different purposes can satisfy this purpose for the Community it is intended to be created for in addition to the labor market it is obligated to communicate with. For reasons described here, .jobs is clearly an innovative, differentiation of the name space.

3.   Do you have a plan for outreach to less developed countries to make the sTLD more global? And how can the sTLD improve the use of the Internet in that part of the world?

Answer:

The search for a job (and related HR services) is an endeavor that has importance in every geographic region in the world, for every region has employers that need employees and potential employees who need a job. While the volume and/or density of employers/employees may be greater in more developed countries than in less developed countries, HR services (including job posting and searching) play an important role in every country, including less developed countries. In this light, the marketing and pursuit of jobs is truly global and generally spans all demographics, including those typified in less developed countries.

Employ Media believes that this solidifies Employ Media's vision that the Community has great breadth and depth. The fact is that the Community is not just limited to members in more developed countries; wherever there is employment, wherever an employer seeks employee(s), wherever the human element of an entity is managed, the Community exists. This is true in most, if not all, less developed countries.

Employ Media plans to promote the .jobs sTLD globally, to the entire Community, including representatives/members thereof in less developed countries. To the extent that entities and/or organizations exist which endeavor to promote employment and/or human resources in less developed countries, Employ Media will seek to work with such entities and/or organizations in order to promote the .jobs sTLD therein.

For example, it is anticipated that the initiation of the .jobs sTLD will begin with one or more start-up periods, the first of which is currently planned to be directed to employers who employ or are represented by Qualified Applicant(s) who are registered members of a Personnel Management Association (a "PMA"), such as a member of the World Federation of Personnel Management Association ("WFPMA"), of which SHRM is also a member. PMA's exist throughout the world, including representing Community members in less developed countries. Employ Media plans to promote the .jobs first start-up period by targeting such PMA members. To the extent Community members of less developed countries are represented in such a PMA (which is a near certainty in light of the global presence of PMA's), they will be specifically targeted by Employ Media.

In a further example, SHRM boasts membership in over 120 countries, including some which may be considered "less developed." Employ Media and SHRM anticipate particular outreach to all SHRM members in terms of .jobs sTLD promotion. Such an outreach will clearly extend to such members in less developed countries.

In still a further example, both Employ Media and SHRM are committed to and will promote openness and transparency in managing the .jobs sTLD and in policy making. See, Part B - Application Form (Openness and Transparency). This includes providing mechanisms, including internet forums, for soliciting Community input and disseminating .jobs sTLD information. All Community members of less developed countries, and indeed all people in less developed countries, will be invited to access such forums, receive the information and voice their opinion in .jobs-related matters.

The .jobs sTLD can improve the use of the internet in less developed countries by providing a simple, easy and intuitive way for potential employees to connect to prospective employers. A difficulty prevalent in less developed countries regarding the Internet is a lack of education in how to use the Internet. Users (potential employees) in less developed countries may be less likely to find a prospective employer's jobs-related postings because of the current complexity and lack of standards regarding how such job-related postings are located on the Internet (such as the disparity in job-related URL's -- see, Part B - Application Form, Part A (Add new value to the Internet name space)). Similarly, employers face the additional task of educating potential employees about how to get to their job-related URL's. These tasks will be greatly simplified by a registration in the .jobs sTLD, thus facilitating connection between the potential employee and the prospective employer.

Answers to ICANN's Questions regarding .Mail

Technical Questions ....

1. It seems that the zone run by the RO is "delegation only" (see, e.g., http://www.isc.org/index.pl?/sw/bind/delegation-only.php), but what about zones lower down the tree? Could you please confirm whether the RO zone is delegation only? If not, please describe (i) other types you expect to support; (ii) how this will affect registrars' current processes; and (iii) what allowance you will make for technical difficulties in communicating with registrars.

    As proposed, and as defined by ISC, the .Mail zone will be delegation-only. However, we would like to note a few salient points:

    A. There is no delegation for tld.Mail, where "tld" is one of the existing top-level domains. That is, there is no delegation for com.Mail, but there would be for example.com.Mail.

    B. All delegations in the .Mail zone are to the DNS servers of the XO, which are solely authoritative for the .Mail domain in question. All changes to records in the XO's DNS servers are made through the XO's secure DNS editing systems. In other words, neither the RO nor the XO will delegate control over individual .Mail domains. Indeed, this is one of the key components of the technical proposal: all .Mail domains are served only from name servers under the control of the XO, preventing forged or otherwise unauthorized records. Each zone contains both A records for the mail servers authorized to send mail under the .Mail domain for that subdomain, as well as TXT records to support one of a number of Sender Authentication Technologies. Additionally, we anticipate progress from the IETF MARID working group in defining new DNS record types for the purpose of authentication and spam control, which we would naturally implement.

    C. We deliberately chose to keep the RO's zone delegation-only in order to minimize the amount of additional work required on the RO's side.

2. The polling by the XO seems to build on use of Whois data from existing key. What impact will there be on limitations on Whois queries to Whois server for key?

    The impact will be limited for the following reasons:

        A. **Initial Whois check.** Few registrations are expected, at least initially. At the highest demand level, 4,000 domain name-years are expected over the course of the first year of operations. Assuming that worst case, instead of over the course of the year, 4,000 names were registered each month (twelve times more than highest anticipated), then:

a. Each of these key names requires a Whois lookup at either the registrar (for thin registry names) or either the registrar or the registry (for thick registry names) to initially validate the registrant's Whois information. Therefore 4,000 Whois lookups would be required each month, or 133 per day on average. This number is well below the number of transfers that a larger registrar performs on a daily basis (each transfer also requiring a Whois request for a domain), as some large registrars perform well over 500 (or 60 times the number required at the highest .Mail demand level anticipated) transfers per day. Therefore, since Whois requests demanded by transfer requests are below the limitations on Whois queries, so to would be Whois requests demanded by registering .Mail domains.

b. Additionally, registrars and registries have implemented Whois speed-bumps to prevent Whois data mining by limiting the number of queries possible from a single IP.

   i. The number of Whois lookup required for the key domain (133/day) is much below all registrars' thresholds which is on the order of 50 per minute.

   ii. Whois lookups could be performed by the XO from a number of different IP addresses instead of from a single IP address.

   iii. Whois lookups could be performed from a known IP address, given unrestricted access by the registries and registrars. Many registrars now offer this functionality as a courtesy to other registries and registrars. In this case, expected levels would be known by all parties.

B. **Change-of-registrant check.** If the registrant of the key domain changes, the key domain's Whois information needs to be re-verified. At 12 times the highest anticipated load, there would be 48,000 domains in the .Mail registry at the end of the year. Even if all these domains were looked up each day (to ascertain if the registrant had changed), according to Name Intelligence this would be below the number of Whois lookups performed by a single one of the larger Whois services providers such as Whois.sc, uWhois.com, and Whois.com that perform greater than 5,000 lookups per day per registrar for top-10 registrars (where probably most of the key domains will be registered) or per registry for thick-registry names.

a. If necessary, the Whois may not need to be performed each day, but only when certain domain events occur, such as a change in the name server information for the key domains. These changes can be easily

ascertained by examining the publicly available zone files for the key domain gTLD.

    b. If necessary, the number could be further reduced for thick registry names by splitting the load between the registry and the registrar.

C. **Registrar incentive.** If the key domain is at a registrar that prevents low query rate access to the Whois information by the Anti-spam Community Registry (.Mail registry), or disallows Whois queries entirely, then the registrant of the key domain will be unable to obtain the .Mail domain as long as the key domain is at that registrar. The key domain registrant would then ask the registrar to allow access to the registrant's Whois information from the .Mail registry or will likely choose another registrar. Therefore, registrars have a financial incentive to grant reasonable, limited, query rate access to their Whois servers for queries coming from the Anti-spam Community Registry. The registrars have another incentive in that the Anti-spam Community Registry is performing certain validation checks on the Whois information; therefore if the key domain is in the .Mail zone, the registrar would have high confidence that the Whois validation checks were passed and they may not have to duplicate those same checks for those key names, saving them money, therefore they have an incentive to allow the Anti-spam Community Registry reasonable query-rate access to the Whois information.

D. **New Whois Policies.** If the Whois policy changes so that only authorized entities have access to the required Whois information, then the Anti-spam Community Registry will seek to become an authorized entity. If that is not granted, registrants seeking a .Mail will be required to authorize the registrar of the key domain to grant access to the Whois information on an individual key-domain basis much in the same way as if the registrant was trying to obtain a certificate and the certificate authority needed to have access to the Whois information but was somehow not a Whois-authorized entity.

3. If the original key is in reality registered further down than directly below the TLD (for example foo.bar.tld, where bar is delegated from TLD, and foo is delegated from bar), how is the sTLD mail managing a request from foo to participate with foo.bar.tld.Mail?

    This type of delegation is outside of the scope of the operation of the .Mail proposal. In order for foo.bar.tld to be registered as foo.bar.tld.Mail, the registrant of bar.tld would first have to register bar.tld as bar.tld.Mail, and follow the procedures for such a registration. Once that registration was in place, they could then add foo.bar.tld.Mail to their .Mail zone by requesting the addition of the appropriate A records and TXT records with the RO, via the RO's procedures for DNS editing. Registrants will access this control via the account name and

password provided during the verification process. As all records exist in the .Mail zone maintained by the XO, such additions can be made in a verified and secure manner.

4. Please provide a technical description of how communication among XO, SO and RO will work, including timeouts, details on the protocols that will be used, state machines, and what happens if the validator does not respond within specified time period.

Its not that complicated. Initial requests for registration will be communicated to the RO by the registry in a manner consistent with existing EPP procedures. Upon the addition of the domain at the RO (using default delegation records which point to a "registration in progress" placeholder at the XO), the XO will be made aware of the registration by polling the RO. This polling consists of periodic checks of the RO's .Mail zone file for changes that indicate a registration (we will get the zone via ftp). Upon noticing a registration, the XO will signal to the SO that validation must proceed. This signal consists of a call, via a SOAP web service, to a server at the SO with the purpose of notifying the appropriate workgroup of individuals to perform the validation. Upon a successful validation, the procedures for which are outlined in our proposal, the SO will signal the XO, via a SOAP web service, that the domain has been approved. This web service will allow the XO to activate the account and password for the .Mail domain such that the registrant can immediately affect changes in order to add validated mail servers (A records, in this case) and appropriate TXT records. The XO will add MX records so that the XO will receive any abuse email messages (also as outlined in our original proposal).

We are unclear what is meant by "what happens if the validator does not respond within specified time period?" if this question is asking what happens if the registrant fails to respond to the SO's validation procedure, then that name will not be delegated by the XO's zone, in essence the registration would fail.

5. If a key which exists as key.Mail changes owner, is there some other mechanism of detection of this, apart from polling the Whois servers of data for key?

One method would be to have the registrar-of-record for the key domain inform the .Mail registry of this fact, but we deemed that not practical. Another method is to put the burden on the registrant to inform the .Mail registry directly that their Whois information has changed, but again that is not practical. For thick registries, it may be more practical to request the thick registries inform the .Mail registry. The poling may be reduced by only requesting the Whois information when the name servers change or when the IP address of a host in the key domain changes. This would require daily downloads of the key domain TLD zones and polling of name servers and websites which is not complicated and is also efficient. Regardless, daily or weekly poling is not complicated and will not tax the resources of the Whois system (see answer to Q2 above) even at ten times the high-level demand projection. More than a few organizations today provide commercial Whois monitoring/poling whereby if the Whois

```
        for a domain changes, they will notify their client. Examples
        include snapnames.com, completeWhois.com, nameprotect.com and
        checkmarknetwork.com
```

```
6. What is the technical setup of the DNS, Whois and EPP servers?  For
   all of these elements, please specify how the setups fulfill the
   requirements of up time from ICANN.
```

```
The setup will be the same as that for the other registries that the RO
operates and the setup will fulfill the requirements of up time from
ICANN in the same way.
```

General Availability – From Section a.

EPP Registration Systems: Production EPP traffic will be load-balanced as a normal mode of
operation. Load balancing provides extra capacity as well has a high degree of confidence (in
addition to formal testing) that the system will remain available in the event of a server failure.
Network and databases will also be configured to provide high availability and failover protection.

DNS Resolution Systems: Internet DNS is, by its very nature, quite robust, but this is no excuse
not to invest in and implement additional DNS functions to improve DNS reliability and security.
The number of DNS sites must be scaled to meet several demands for a TLD availability,
responsiveness, and capacity. VeriSign has made a substantial investment in the selection,
design, and operation of its 13 DNS sites to ensure optimal performance of the DNS
Constellation. To meet the DNS needs for the proposed sTLD, VeriSign will evaluate the global
demands to select the locations and scale of each site to exceed availability, responsiveness, and
capacity needs. VeriSign regularly reevaluates its DNS infrastructure to reposition and scale the
DNS Constellation as necessary to meet the most aggressive demand forecasts. Each
nameserver resolution site around the globe must adhere to strict facility standards. Beyond this,
however, VeriSign has developed operational processes and procedures that allow us to quickly
move DNS services from one site to another. We also maintain three DNS hot standby "swing
sites", where DNS traffic from any of the 13 resolution sites can be quickly redirected. The swing
site concept is a major element of our business continuity plan and supports transparent (from a
customer perspective) site maintenance.

DNS: From Section e:

The XO's proprietary DNS software will power each DNS server and BCP0040 and RFC 2870
(Root Name Server Operational Requirements) will be fully implemented on name servers in all
locations. The XO's DNS software is a modular service utilizing an extensible plug-in architecture
for name resolution and administration, and is in production, currently being used by the XO's
registrar operations. This software currently provides DNS service for over 2,750,000 domain
names with over 8 million host records (sub-domains) and has been in continuous production for
over three years. The DNS software is database-driven and relies on standard well-tested data
replication to deliver zone file updates.
Location of Nameservers

VeriSign has at its disposal a Constellation of 13 globally deployed DNS nameservers (see
Section E.1). Each site has multiple load-balanced DNS servers managed remotely over secure
VPNs and are monitored around the clock in four-second intervals. Each site also contains
multiple servers and a complete set of redundant hardware components to eliminate single points
of failure. Each site has a minimum of two Gigabit Ethernet connections and is served by at least
two separate Tier-1 network bandwidth providers. VeriSign selected these sites because of their
location at major Internet peering points.

Zone file publication and distribution requires extremely high levels of quality control. Even six sigma quality (99.9999 percent, or 3.4 defects per million units) means that a TLD with two million registrations will have seven that were not working properly at any given time.

WHOIS – From Section i:

Software and Hardware

Initially, the WHOIS service serving the .mail sTLD domain will be based on the existing VeriSign WHOIS software and servers used for .com and .net, with additions provided to include "thick" registry contact data (or as modified to support specific .mail sTLD requirements). This service is fully compliant with RFC 954 and is currently being provided via servers located in two separate facilities. The uptime rate currently exceeds that of the .com and .net registry database because not all database outages require a WHOIS outage. The current five servers process 30,000 transactions per minute.

Connection Speed

The current WHOIS software can be migrated to any Unix platform. The current architecture is load-balanced between multiple servers at each site, and balanced between multiple sites. This provides maximum reliability, and is highly extensible by adding more servers behind the load balancers. The presence of multiple servers, multiple facilities, and multiple network providers means that the current service is well protected in the event of an issue within the control of the registry provider, as well as for many events outside the control of the registry provider such as an outage of a major Internet bandwidth provider. The current servers are connected to the Internet by multiple network connections at each facility.

Search Capabilities

The current WHOIS service has rate-limiting characteristics within the software (e.g., the ability to throttle a specific requestor if the query rate exceeds a configurable threshold). In addition, QoS technology enables rate limiting of queries before they reach the actual servers, which provides protection against DoS and DDoS attacks. The current software also permits restrictions on search capabilities. For example, wild card searches can be disabled. VeriSign is generally not in favor of restricting searches unless it is clear that the results of the search are being used in ways not beneficial to registrants. It is possible to restrict or block individual requestors (i.e., requests coming from specific IP addresses).

EPP – From Section b:

Hardware and Software Systems

We recommend a three-tiered architecture to operate the proposed sTLD registry. Technologies applicable to each tier provide redundancy. For example, at the database tier, the EMC Symmetrix Remote Data Facility (SRDF) product can replicate data in real-time, both inside the data center (e.g., between multiple data centers in the same facility) and to the Disaster Recovery Data Center. Additionally, hot stand-by servers with automated failover using IBMs HA/CMP function, provide redundancy of the database server. Load-balancing the transactions across multiple gateway servers and application servers provide reliability and redundancy in the other tiers. The hardware systems that VeriSign proposes to use to support the sTLD registry have been extensively tested and validated in our state-of-the-practice engineering lab. IBM Enterprise Servers running the AIX operating system will perform as database servers using Oracle as the DBMS database. Application and gateway servers are predominately Intel-based

solutions. Web and FTP servers are also predominately Intel-based. VeriSign uses equipment from leading network vendors to provide a robust solution for network and load-balancing equipment. Verisign will use a three-tiered architecture for the sTLD registry as described in Section E.2.c. This structure separates gateway functions (e.g., login, session management, and service auditing), application functions (e.g., business rules), and database functions. This separation also improves security, allows easier problem diagnosis, and makes it easier and more reliable to test and deploy modifications. Standard industry software products (e.g., Java, C, and C++) facilitate performance and compatibility as appropriate at each tier. We use BEA"s WebLogic software for web application server development. We apply a rigorous QA and testing methodology that includes a separate, fully functional, production "look alike" Environment where we can test new software before deployment. Additionally, a "staging" environment enables us to practice repeatedly to ensure that deployments can be executed seamlessly within maintenance windows. The staging environment also enables an accurate prediction of the length of a deployment and back-out plan, if necessary.

Hot standby servers using IBM HA/CMP for automated failover monitoring and execution protect the database server functions. The data is stored on EMC SRDF and is synchronized in real-time to a secondary device located in a physically separate Data Center. This architecture has a demonstrated capacity of processing more than 300,000 transactions per minute and a proven availability rate higher than 99.99 percent.

7. In how many DNS zones are the NS records located? Is this zone in
    the requested sTLD or not? (I.e. how long will the chain of NS
    records be when chasing them?)

    The root zone will contain delegation records for the sTLD. This
    is no different from any other TLD. In the sTLD zone, maintained
    by the RO, there will be NS records for each registration (that
    is, each example.tld.Mail domain) which delegate to the XO's name
    servers. The XO will then serve A and TXT records for each
    registration. Thus, the chain is no longer than any other TLD
    which typically delegates to a user's DNS server(s).

8. Is there a risk that ISPs and others will stop receiving mail which
    is not from the .Mail sTLD in the future?

    We believe we understand the question, but to be clear, we are
    not proposing that any messages be "from" the .Mail sTLD, now or
    in the future. We propose that the "from", "to", "reply-to" and
    all other email header addresses be exactly the same as they are
    today. What we are proposing is that the .Mail TLD be utilized in
    the SMTP "HELO/EHLO" handshake. If you are asking "what is the
    risk that mail receivers will voluntarily (or otherwise) blindly
    reject all email that does not utilize the .Mail TLD in the
    "HELO/EHLO" handshake", then the answer is we believe there is
    little risk of that. The rejection of non .Mail email depends on
    the amount of spam originating from servers that do not use the
    .Mail TLD. The more spam messages originate from non .Mail
    senders, the more the receivers will reject those particular
    messages. The receiving servers will likely scrutinize that
    message (a message from a server not utilizing the .Mail TLD) to
    a greater degree by spending more resources on it (such as CPU
    cycles) than those that utilize the .Mail TLD, not blindly block
    it. We believe that even if .Mail was extremely widespread that
    mail receivers would not indiscriminately reject each message
    sent from a sending server not utilizing the .Mail TLD. They may

weigh it higher (in their filter algorithm or using other spam filtering methods), but even with widespread .Mail use, those receivers would still analyse each non .Mail email as they do today, there would just be less email messages to analyze.

The question raised here has also been raised in various forums regarding the newly proposed sender authentication technologies (SPF, Microsoft's caller ID, Yahoo's DomainKeys). The answers given by ISPs and others were that the existence of sender authentication records will be used only to assist in processing and filtering incoming email, and not as a blanket outright denial of incoming mail that does not have the sender authentication technologies.

9. What actions can you take to stop such policies, or is it in your interest to see all mail in the world use the .Mail sTLD in one way or another? (I.e., can you explain what the world of email will look like before "all" major domains exist as sub domains of .Mail?)

It is not in the receiving mail-server's interest to blindly block all messages from non .Mail email servers because they would then be generating false negatives (an email that is not spam being blocked) for **all** mail coming from a non .Mail mail server that is not spam. We would therefore recommend to them that the appropriate policy is for them to use the .Mail TLD to allow messages utilizing the .Mail TLD to pass unobstructed and without delay but that they should not use the .Mail TLD to reject all messages coming from non .Mail email servers. That they should apply whatever method they utilize today to distinguish spam messages from non-spam messages for those non .Mail messages.

There will be some domain name registrants who either cannot afford a .Mail TLD (even if the price is near zero there is someone who still cannot afford it) or will not have the opportunity to register a .Mail domain name because the TLD at which their domain name (the key domain) is registered does not have a contract with ICANN, and its "registrars" are not required to be ICANN accredited and therefore that TLD registry is not contractually bound to collect and display Whois information and to implement any of ICANN's policies. This is another reason why it shall be the .Mail policy for receiving mail servers to not blindly reject mail from servers not utilizing the .Mail TLD, otherwise all mail "from" certain ccTLDs would be blocked by .Mail participating mail receivers even if it was not spam.

It should be noted that any person, whether or not they can afford a .Mail TLD (even at great cost), and whether or not they have a name registered at a ccTLD registry without an ICANN contract, and whether or not they have a domain name registered at all, can still send mail utilizing the .Mail TLD. That person would use a sending mail server which does have a .Mail name registered. For example a registrant with the domain foo.de could send mail with all the same header information (from "foo.de", etc.) using the mail server that is utilizing the .Mail name bar.com.Mail. The registrant of "bar.com.Mail" would be taking

the risk that foo.de did not use that server to spam, and
therefore it is in the interest of the bar.com registrant to
possibly do its own spam filtering. In this case foo.de may pay a
small fee to bar.com for this service and the fee could be
proportional to the risk that bar.com assumes.

It is also not in our interest to have non .Mail messages blindly
blocked because the receiving person who would have received the
spam-free message (if it had not been blocked by the receiving
server) will complain to their email service provider (the
receiving server) and therefore either

1) that service provider may stop using the .Mail TLD
   altogether, or

2) that service provider will do the right thing and not block
   all messages from non .Mail mail servers, but use a
   different method to detect spam for those messages or,
   ultimately

3) that service provider will lose their customer to one who
   does implement a recommended policy.

Additionally, in this scenario the mail sender might either

1) get a .Mail name

2) utilize someone else's .Mail name

10.   Please provide a statement about how often disaster recovery
      plans are practiced, and for which contingencies. Also: (i) in the
      event of a need for recovery from primary data server failure, would
      there be an interruption of service? If so, for how long? (ii) is
      notification provided for failed transactions during a fail over?
      and (iii) what is the bandwidth allocation planned for the
      interconnection of data centers for synchronization purposes, and to
      the Name Servers serving the sTLD?

      (i) Disaster recovery drills will be conducted by the XO and RO on a
      regular basis consistent with best industry practices. In the event
      of a need for recovery from primary data server failure, we would
      anticipate no interruption of services for DNS resolution due to
      multiple server locations. It is conceivable that there would be a
      very short period where new records could not be entered, and
      existing records could not be changed, while the primary data source
      was switched to a backup. This time period would be notably short
      (presumably on the order of minutes).

      (ii) Notification would be provided on the editing web site if any
      failure were to cause an inability to create or edit records.

      (iii) The XO's chosen provider, eNom, maintains multiple data
      centers in geographically diverse locations and with sufficient
      bandwidth to support a top-five registrar. We anticipate that the
      amount of bandwidth necessary to support the operation of the .Mail
      registry will be significantly less than that already in place. If
      more is needed, however, it will be acquired.

```
     The disaster recovery plan by the RO is the same as that for the
     other registries they operate.

11.    Do you - or your subcontractors - have plans to use recent
     standards developed by the IETF for:
```

Our Registry Operator makes every effort to deploy systems that are standard compliant. However, it is difficult to comment on the eventual deployment of proposals that have not yet become an accepted standard. Nonetheless, our Registry Operator is very active in many of the working groups covering these subjects.

IETF Standard			
CRISP	See #1		
IDN	See #2		
	Registry	**DNS**	**WHOIS**
IPv6			
Transport	See #3	See #3	See #3
Glue Records	Yes	Yes	Yes
DNSSEC			
DS Records	See #4	See #4	See #4
Signed TLD	See #4	See #4	See #4

1.   CRISP: There is no current standard. VeriSign is participating in the CRISP working group and participating in discussions on the IRIS standard. We will be implementing IRIS when it becomes a standard.

2.   In the original RFP for .Mail we did not outline support for multilingual domains. However, our Registry operator does have the technology to support multilingual registrations following the current standard.

3.   IPv6 Transport implementation is dependent on the outcome of the IANA comment period on changes to the root zone. The XO and SO will look toward the RO for leadership in this issue to determine when it available for "prime-time".

4.   DNSSEC: Eventual deployment of DNSSEC is a complicated issue and still requires considerable work in the community and among ICANN constituencies. The following steps outline key milestones that remain open:

   Step 1: Development of a final standard.

   Step 2a: ICANN may develop a consensus policy on DNSSEC. We would adopt this policy.

   - or -

   Step 2b: A consensus policy is NOT developed. We would continue to work with the registry operator on how best to implement this technology.

QUESTIONS

.mail

(Please Note: We are asking these questions to provide you an
opportunity to demonstrate the existence of a well-developed business
model, rather than to judge whether this information constitutes a
"fail-safe" business plan.)

1.   Can you share the results of your "informal survey" that you used
to back up your revenue projections? Do you have other information
that would be evidence of the ability to obtain the projected number of
registrations at the designated price point?

We had eNom verbally ask their 10 largest customers by volume, among
who are domain name resellers, to estimate the number of names that
they thought would be registered in the first year at $1,000 and $2,000
price points. Their estimates did not vary much on price, for example
the volume at $2000 price-point was less (but not half) that at $1000,
but it did vary greatly on volume across the group. Some estimated low
(less than 2000 names), others estimated high (more than 35,000 names),
which is one reason why the deal with the RO has their prices decrease
to $6 per name-year after 30,000 names.

Other evidence is difficult to come by as new names have not been
offered at this price-point and utility. The value of most new names
in other TLDs is mostly based on the semantic meaning of the TLD string
and the value in preventing others from registering "your" name. The
only comparable in the newly registered names area would be .tm even
though, as near as can tell, the value in ".tm" lies with the implied
meaning of "TM" as "Trademark" not as "Turkmenistan". The .tm registry
offers names at $100/year with a 10-year minimum registration length so
that names cost $1,000 each up-front. The .tm registry has about 3,000
names registered according to http://www.domainworldwide.com/.

The other comparable would be for domains that are not new
registrations, but newly available (they were registered previously and
have recently become available, sometimes called "dropped names"). eNom
participates in this market and has over one year of data. In this
area, the volume for newly available names is about 30,000 names per
month and the dollar volume is about $3 million per month or on average
$100 each. At least 200 newly registered names per month (or 2,400 per
year) are sold market-wide for at least $2,000 each, most of them
because they have some value other than their semantic content, usually
traffic.

The utility of the .mail TLD depends on the take-up rate of the
receiving mail servers. Spamhaus (a founding member of the .mail
registry) estimates its spam filtering blocklist is now used by over

300 million user accounts world wide. It is a good assumption that most if not all current users of this blocklist will also readily use the .mail TLD based on their trust in Spamhaus and the knowledge that the TLD policies are maintained to their standards. Other members of the Anti-Spam Community Registry, such as CAUCE, plus outside entities will also, we believe, assure, or at least help promote, a rapid world-wide acceptance.

The bottom line, as with every TLD, is value. We believe that the value in a .mail name is gained because of its utility to get the mail through (if the user is not a spammer). We believe that it is worth $2,000 per year for non-spamming companies (such as ebay.com or amazon.com who send many emails per day) to be more assured that the email they send will actually reach their customers. We estimate that there are at least 2,200 such companies that exist worldwide and will buy a .mail domain.

2.   What is the minimal number of total registrations that are required for the Sponsoring Organization to sustain operations?

At $1,995 per year, the total number of registrations required for ongoing operations could be extremely low because 1) the fixed costs will be funded by the XO and RO before operations start, 2) the ongoing variable costs, which are incurred mostly by the RO and XO would be covered by the per-year fee, and 3) the SO could be run by volunteers if worse comes to worst, much as Spamhaus is currently run (even though, it is to note, its user base is estimated at over 300 million email boxes). Therefore we estimate the total registration volume to sustain operations at below 1,000 domains.

3.   What will you do if revenues come in less than your "low" projections? How will any revenue shortfall be funded? If it is unfunded, how will you manage - both operationally and financially?

1.   A high price-point serves three main purposes: to give a disincentive to spammers who repeatedly register low-cost domain names in order to spam, to fund the operations of the registry, and to reduce risk in assuming the per-name-year validation and other costs. If revenue that is less than the "low" projections were to occur, we would consider lowering the per-name-year fee with the objective of raising volumes more than the fee reduction and therefore increasing revenue. The drawback is that the probability that spammers will attempt to register multiple names would increase which would put additional stress on the validation and other costs of the registry, though the rule that the key domain must be registered for 6 months may provide some strain relief. The positive is that the utility that the .Mail TLD provides would then be affordable to more entities (therefore we would consider lowering the per-name-year fee even if revenue is not below "low" projections as early-adoption and experience in the validation process is acquired).

2.   Even if the revenues come in below the projections, there still may be no need to obtain outside funds, as we would look to renegotiate

the funds going to the XO and RO, in an effort to reduce their profit margins. Were we unable to reduce costs enough to avoid a deficit and the need does occur we may ask anti-spam groups, who utilize the .Mail TLD in their email clients or email-receiving servers, or in other ways, to help fund the registry with contributions.

4. If the cost of registration will be "less than the maximum proposed to ICANN," what impact will it have on budget projections?

Making the cost of registration lower is something we have considered and will consider on an ongoing basis. We believe that the .Mail registry idea has genuine utility. There is no need to "cybersquat" on any .Mail name, and leave it unused as that name cannot be registered by someone other than the key registrant. Each name registered will be used and we strongly believe that the renewal rate will be higher than gTLDs (currently at about 70%)

Revenue Impact
We believe that for more than 2,200 (medium demand level) key domain registrants who are not spammers, that $1,995 is smaller than the yearly value of the utility they will receive: their email will likely reach its destination and not be blocked as a false-positive by spam blocking software. Receivers of their email will know it came from them and was not forged, not to mention value received by sharing their .Mail name with those who do not have one. There are some mail senders that have no problems with false-positives, spoofing and phishing. For those senders (likely individuals), the .Mail sTLD provides little utility that they need right now so $1,995 is more than the value they would receive. But we do believe that the number of key domain registrants for whom the .Mail TLD will be of more value than the price increases rapidly if the price is lowered because the utility decreases very slowly with price, while the number of eligible buyers increases much faster. For example if the price were decreased to 1/10 of $1,995 (to $199) we believe more than 10 times 2,200 (or more than 22,000) key registrants would find the utility of a .Mail domain worth more than $199. Therefore the revenue would increase in this scenario, albeit at the risk of making the domain inexpensive enough that spammers may try to purchase a large number in an attempt to "fall through the cracks."

Cost Impact
The vetting costs increase as the cost of registration decreases. We believe the vetting cost on a per-registration basis will not be fixed because as the registration costs are lowered, more spammers will attempt to register names, even if used for a short period before they are cut off. This is because the value of the spam sent during that short period approaches the cost of the domain as the domain registration cost is lowered, especially because with .mail, all the mail sent will likely get through it the recipients. Because of this effect, by utilizing our automated spam traps, we will strive to shut off the spammer very soon after the spam burst is detected.

On balance we believe that the high cost will deter spammers, not because they have no money (the larger "professional" spammers have significant financial resources) but because the value they get will be

significantly less than the $2,000 registration fee because they will
not be able to spam much, if at all, before the name is shut off, even
if after the vetting process, they are able to obtain a name.

5.   Have the new arbitration provisions you propose to include in
registrant agreements been the subject of a legal opinion? If so, do
you have any relevant documentation that you can share with us,
particularly "with respect to the likelihood of keeping disputes out of
court?"

The framework for the arbitration provisions for .mail registration
agreements have been reviewed by the General Counsel of eNom.   The
General Counsel of eNom has first-hand experience with the litigation
issues faced by registrars, first- and second-hand experience with the
litigation issues faced by registries, and in depth understanding of
the United States statutory framework which insulated registries and
registrars from liability for trademark and copyright issues. Much of
the legal opinion was provided in the application, but is reiterated
here, with additional focus on the question of the enforceability of
arbitration provisions ("Can an arbitration provision prevent the
parties to a contract from taking a contract dispute to a court?").

Due to the unique "mirrored ownership" attribute of the proposed .mail
sTLD, specifically that the   .mail registrant must also be the
registrant for the "key domain," it is anticipated with a high degree
of certainty that the .mail registry will not be subject to first- or
third-party suits regarding the ownership of domain names in the .mail
sTLD ("first" parties in this context are the .mail registry and .mail
registrants).   The statutory laws of the U.S. and the laws of other
nations insulate registries from liability for trademark issues and
from liability for copyright infringement taking place on a website (or
through email) which is associated with a domain name; as a
consequence, the registry operator can be located in the U.S. or one of
these other countries   and would have, with a high degree of
certainty, no liability for nor the responsibility to settle copyright
or trademark disputes.

While there is a low probability that the .mail registry will face
first- and third-party legal claims regarding ownership and
intellectual property issues surrounding domain names and the use of
domain names in the .mail sTLD, it is anticipated that there will be a
significant number of claims regarding the enforcement of the .mail
registry's spam, WHOIS and other compliance rules.   As an initial
matter, the use of the .mail sTLD is not compulsory by anyone, neither
senders nor recipients, so the legal framework governing the registry
would be that of the law of contracts.   Both the senders of email in
the .mail sTLD and the recipients will be required to agree to enter
into contracts with the .mail sTLD.   Senders will enter into lengthy
signed contracts which, as part of the WHOIS compliance process, will
be mailed to the registrant and which must be returned with a
signature, or by another suitable method.   Recipients, or more
properly, the administrators operating email systems which are used by
recipients, by using the DNS system of the   .mail registry, will agree
to terms of use.

This response will first address the litigation risk posed by email recipients. The typical complaint by an email recipient would be that a WHOIS or spam compliance process has been incorrectly applied, resulting in either the receipt of spam or the blocking of legitimate email. Because recipients are not required to use the .mail DNS, and because the typical complaint by an email recipient would result in a review of the WHOIS or spam compliance process with respect to a particular domain name, it is not anticipated that email recipients will present a significant litigation risk. Nonetheless, users of the .mail DNS will be required to agree to terms of use regarding the use of the .mail DNS. The terms of use will specify that users of the DNS will hold the registry harmless for failures by the registry to follow the registry's own spam and WHOIS compliance rules and that such users agree that the exclusive remedy for any disputes regarding the use of the .mail DNS shall be the right to lodge a complaint with the .mail registry regarding the compliance action and/or the entry of the parties into binding arbitration regarding the enforcement action. At this time, we propose that email recipients do not pay any consideration to the .mail registry for using the .mail DNS, though the administrators of their email systems will have to expend effort to reconfigure their mail systems to use the .mail DNS. This expenditure of effort under the U.S. common law of contracts is known as "detrimental reliance" and may be used to supply the consideration which is necessary to find that there is a binding contract between the .mail registry and email recipients. To the limited extent that email recipients, as distinct from the administrators of email systems, also expend some effort to submit WHOIS and spam complaints, the email recipients will also be required to agree to click-through agreements when they use the registry's complaint system. In either event, the courts in the United States and in many other jurisdictions would recognize the formation of a contract between the recipients of email and the .mail registry and would enforce the hold harmless, limitation of liability, and binding arbitration provisions of such a contract. Provided the .mail registry submits to the binding arbitration process specified in the contract, the courts in the United States and in many other jurisdictions would be reluctant to substitute their own judgment for that of the .mail registry or for the judgment of an arbitrator. Statutory authority for such an arbitration clause is found in the United States in the Federal Arbitration Act 9 U.S.C (particularly Section 2), as upheld by the U.S. Supreme Court in Allied-Bruce Terminex Companies, Inc., v. G. Michael Dobson, et al, 513 U.S. 265 (1995). Arbitration clauses may be found to be unenforceable in certain contexts, such as when a consumer is particularly vulnerable relative to the service provider and when the enforcement of the arbitration clause would "shock the conscience" or is against public policy. This, however, is not one of these contexts because the email recipients are not required to use the .mail DNS, because the extent of their detrimental reliance is minimal, and because exposure of the .mail registry to wide-ranging litigation might force the closure of the registry and would, itself, be against public policy. The extent to which a U.S. or similar court would act would be to require that the parties submit to the judgment of the specified arbitration system, as specified in the agreements.

Senders of email will be required to enter into signed agreements with the .mail registry and considerable consideration will be paid. This agreement will include a hold harmless clause, a limitation on

liability (capping the .mail registry's liability to the   fees paid
by the email sender, plus   any award of arbitration fees, per the
arbitration rules), and a requirement that the parties submit all
disputes regarding the registry's enforcement actions to binding
arbitration in the jurisdiction chosen by the registry.   This
agreement will allow that the disputed decision of the registry will be
allowed to stand pending the outcome of the arbitration process.
This agreement would be enforced by the courts in the United States as
well as many other similar jurisdictions.   The extent to which such a
court would impose its judgment would be to require the parties to
submit to the specified arbitration process.

Thus, it is the opinion of the General Counsel of eNom that, if the
.mail registry operates   out of the United States or another
jurisdiction offering   equivalent protections, then the arbitration
provisions contemplated for use by the .mail registry will be
enforceable and will prevent the registry from having to answer to
disputes in court regarding the enforcement actions taken by the .mail
registry.

6.   Can you please clarify how a requirement for six months prior
ownership of a key domain will deter abusive registrations and
spammers?

There are multiple reasons for this delay period.

a) We hope and assume in this day and age, many of the problems caused
by trademark violating registrations and cyber-squatting of domains are
dealt with in a much quicker manner than in years past. Sadly, it's the
internet fraudsters themselves, such as "phishers", who have pushed the
requirement for many businesses and domain holders to constantly
monitor the domain space for abusive registrations. The six month time
period should allow for most of these issues to have been dealt with
without imposing too much of a burden on legitimate domain holders.

b) The spammers' current model of registering domains one day, spamming
with them the next, and then discarding them once the spam filters have
listed them will not work nearly as well with a delay of this type.
Spammers will have to spend money registering domains well in advance
of when they could be used to get a .mail and used to spam. This sort
of forward planning is not a known spammer trait. Also, anti-spam
groups keep a close watch on every domain they can link to one spam-
gang or another. This data, published to the web, usenet, or in
databases such as the ones at www.Spamhaus.org allow for easy checking
when an application for a .mail domain is being vetted.

c) Without it, spammers will register gTLD domains with stolen credit
card numbers and then obtain the .mail domain soon after. Many
registrars trap for fraudulent credit card activity and de-activate the
gTLD name when they detect fraud or when a chargeback occurs. Most
charge-backs happen within 6 months of the transaction. With the
delay, the .mail registry benefits from the gTLD registrar's vigilance
against credit card fraud when gTLD names are purchased.

d) Finally, many registrars have their own anti-spam and other policies

in place whereby they de-activate domains for spam.

It is true that a determined spammer could register a gTLD with valid
payment information, then wait 6 months to register the .mail name, pay
$2,000, then pass the vetting process, and spam, only to be shut off as
soon as the spam is detected.

The six months prior ownership of a key domain is also adjustable to a
longer period if we see spammers actively trying to "game" the system,
or to a shorter period if we find vetting can be done properly with
less registration time of the key domain and if the burden on
legitimate domain holders is too great.

7.   What evidence can you provide that indicates that eNom has
sufficient financial resources to be in existence in five years?

1.   eNom is profitable and has been for over two years as evidenced
by the fact that it has not accepted or needed any capital investment
during that period.
2.   eNom has been in existence for more than 5 years and is one of
the top five largest and fastest growing ICANN registrars for over two
years.
3.   eNom's cash based revenue is over $2.5 million per month

The remainder of this answer is confidential and is being sent by eNom
separately and directly to the ICANN sTLD evaluators via email to
Miriam Sapiro [msapiro@starpower.net].

8.   How much money has been allocated in the budget to enable a
smooth transfer of the TLD to another operator in the event of Registry
Operator or Sponsoring Organization failure? (For example, has a
reserve fund been established to cover any financial obligations
associated with multi-year registrations or other
registry/registrar/registrant obligations?)

None specifically for that purpose, but there is $800,000 allocated in
the first year for any contingency including RO or SO failure. The
figure increases to $1.66 million in the second year.

9.   Has money been allocated in the budget to enable a smooth
transfer of the TLD to another operator in the event of Registry
Operator or Sponsoring Organization failure?

This seems to us to be the same question as number 8 above. Please see
the answer for number 8.

10.   What other products or services, if any, do you intend to offer
that could impact the new TLD? Please specify whether such products or
services would rely upon the same, or different, staff and other
resources.

We do not plan on offering any other products or services.

SPONSORSHIP

1.   Please provide signed letters that are representative of all
parts of the Community that you propose to represent, detailing the
particular reasons for their support. You should include similar
letters from all supporters mentioned in your application. (Note: We
wish to assess the breadth as well as the depth of support.)

    Sent separately

2.   Please elaborate, consistent with the RFP criteria (concerning
enhanced diversity of the Internet name space), how the new sTLD would
"create a new and clearly differentiated space, and satisfy needs that
cannot be readily met through the existing TLDs."

Due to its uniqueness, this sTLD adds to the diversity of the Internet
name space.   It expands the number of dimensions for which a domain
name can be used. In this case, the name both represents a validated
identification and also an underlying system that enriches one of the
most basic functionalities of the Internet: email. The sTLD provides
an additional "layer" to other parts of the namespace increasing their
utility by allowing them to participate in a responsible email
community. Existing TLDs are unable to fully reach these goals.

Part of this sTLD's mission is to distinguish one group of users from
another group. An sTLD is intended to be an easily remembered, clear,
logical, classification of a community of Internet users not already
classified. It makes them easily identifiable by other users. By using
a second level domain under an existing TLD, this community of users
would be mixed-in with the other TLD's users, and this clarity is lost.

In the system the Anti-spam Community Registry (ASCR) proposes, the
risks of not using a sTLD are severe. If, for whatever reason, there
was a service interruption in the delegation of the SLD, the entire,
now established, trust system would be neutralized.
* There is a risk that the TLD in which the second-level domain was
registered, goes under.
* The second-level-name the ASCR selects is revoked. Many if not all
registration contracts reserve the right of the registry to remove the
name for any reason.
* A legal proceeding could be filed against the registry compelling
them to suspend the domain at best and delete it at worst, this could
be something as simple as a UDRP proceeding. The ASCR, being delegated
a sTLD, would be in complete control in all these circumstances and
would not have to rely on another party for security and stability.

To illustrate, with a second-level domain, were it to be taken out of
the TLD zone for any reason, validation queries (by the receiving mail
server) will return NXDOMAIN, the DNS response for "domain not found."
In this case the receiving mail server is instructed to distrust the
source of mail. This is the response we will send when the mail source
is, in fact, not trusted. Therefore, the effect of being removed from
the TLD zone would be that all trust verifications would actively fail.
If this were to happen, all receiving mail servers that were using the

SLD would break and they would have to change their code. The level of damage could be massive as now, every formerly trusted email, would be put though every recipient's spam filter systems, if they cannot quickly scale to this load, email service interruption would occur. The NXDOMAIN DNS response to the recipients query will normally mean a revoked TLD or an attempt at forgery, some systems will chose to "bounce" or delete incoming emails based on this. A failure of the DNS itself results in a time-out, which is not an active failure, and in this case the receiving mail server is instructed to fall back on alternative methods of verification. With a TLD, as we would not take ourselves out of the root zone for any reason, an NXDOMAIN would not be generated falsely.

Also, it is desirable for the string to be an easy memorable mnemonic because the public, if it remembers the string, can use it to easily find information on the mail sender or to easily send abuse messages to the SO (the ASCR) by simply appending the string to the end of the key domain. With a second-level name, or a not-so-memorable TLD string, this benefit is greatly reduced.

We would like the sTLD string to be as generic as possible because then the wider community of Internet users have an easy, and more important, memorable, way to 1) visit the site of the mail sender with verified information regarding the sender displayed there, and 2) to complain about sent mail by submitting an abuse complaint. Just add ".mail" to the domain to send an abuse or to see information about the sender. Using an existing TLD would greatly reduce this benefit.

3.   How would you prevent the Board from being captured by three individuals? Why did you choose this mechanism for Board decision-making, as opposed to one that would allow broader participation?

If we made a structure that required a large number of quality participants, there would be the risk that the required number of quality participants would not show up to the party. This is a reason why we did not impose a geographical restriction as well. Rather, we are trying to achieve broad, quality, active, *representation*, and not necessarily maximize the number of individuals on the board. Highly-qualified individuals are busy. We were not sure that we could get more than one person for each of the five sub-groups to devote the necessary time. If more people were named to board seats, we were unsure that all would be able to put in quality time to actively study the issues, participate and serve intelligently. We realize the risk of capture exists, and if demand for active and studied participation at the board level rises so that there are many highly qualified individual candidates for each sub-group, those participants would be welcomed. If that demand materializes (and we would be very pleased if it did), we could expand the board to 10 (2 for each sub-group) or more members and include a geographical restriction component as well.

4.   Do you expect user organizations, such as ICANN At-large, to play a role in selecting the Board seat reserved for users?

We would warmly welcome a role for the ALAC in selecting the board seat

reserved for users. An anti-spam "At Large Structure" could be formed that would focus participation at the anti-spam issue level (this At large structure would not be geographic-based). The Anti-spam At Large Structure and other At Large Structures could provide input to the 10 ALAC members to select this board seat.

We actually thought about proposing a similar ICANN role on the board but did not propose it because we wanted to avoid even the appearance of a conflict of interest.

5.   What will be the impact of the relatively high fee for registration on users from less developed countries?

1.   The price may be lowered over time once we have actual registrations and can accurately gauge the real-world costs of vetting each registration.

2.   We actually expect that costs to screen applicants in less developed countries will probably be higher than in the developed countries of Asia and the West. The model we envision will look much the same way as the Spamhaus Project's own model for providing access to the large data sets served. Those who can afford to pay the bandwidth costs associated with the serving of this data cover the costs for the rest of the world who use it.

3.   Any user in less developed countries or anywhere on the planet can utilize the benefits of a .Mail name by sharing one with another person or company that has one. The .Mail registrant takes on the responsibility that the person or people who are sharing it do not spam. The owner can charge a small fee for this or bundle it with other services such as ISP service. The .Mail system is not tied to a sender's email address; it is only used in the actual SMTP transaction.

4.   Even if the user in the developing country does not share a .Mail name that user will still be able to send email exactly as today and, if as we expect, mail receivers filter non .Mail email the same as they do today, it will arrive at its destination or not, just like today. There is no negative impact as compared to today.

.mobi

TECHNICAL

re: Policy

1. Is this TLD going to be "delegation only" (see, e.g., http://www.isc.org/index.pl?/sw/bind/delegation-only.php)? If not, describe (i) other types you expect to support; (ii) how this will affect registrars' current processes; and (iii) what allowance you will make for technical difficulties in communicating with registrars.

   Answer:

   The .mobi TLD will operate in a manner similar to the operation of other sTLDs currently under contract with ICANN. The entire TLD is going to be "delegation only". Nameservers for SLD sub domains are not operated by the TLD registry

2. If there are plans to allow third level registrations, please explain the selection process for these names, and the policies for registering them.

   Answer:

   The current plan of record is for Mobi JV to start operation with second-level
   registrations   as defined in the products section of the application.

   Additional product investigations are anticipated to support discoverability of
   location based services and provisions for consumer names, e.g.
   - local.mobi (for discoverability of location based services)
   - name.mobi (for user naming purposes)

   The detailed policies for those 3rd LD names are still under discussion. Until
   final clarity exists the two SLD are reserved (i.e. blocked for registration).

In any case, when final policy has been defined for these two sub-spaces of the

.mobi domain, all 3rd Level registrations based on these will be handled through

the usual established channel of ICANN accredited registrars only.

All other names are second level registrations

3.   Please clarify (i) the requirements for registration in the sTLD; (ii) how the requirements

would be validated; and (iii) how you would address any situations where there are

identical registrations in other domains.

Answer:

mTLD Registrant requirements will be clearly published via registrars such that those companies or persons registering an mTLD domain name will fully understand the commitments that make mTLD differentiated from other domains; and will indicate acceptance as part of the registrations process.   The mTLD requirement details are under formulation but at a minimum will include a commitment to support known and proven advanced networking and a best effort that mTLD domains will operate on all devices (including PC's although optimised for mobile) providing a quality user experience.

The validation of the registrant requirement will occur primarily thru self-policing where industry and market forces will identify services that do not conform to mTLD requirements and/or recommendations and be avoided by user's and/or identified in various publications or websites as poor quality.

Mobi JV does not plan on addressing any situations when identical domains (except for TLD) are registered – the decision as to the number and type of domains shall be made by the service

provider. At all times, mTLD will respect trademarks in the operation of the registry.

4. Will there be a policy on what eligible registrants may register in the sTLD? For example, on delegations? Will certain domain names be disallowed?

Answer:

The mobile TLD has policies for eligible registrants. The SLD names that can be registered must confirm to ICANN requirements but are not further restricted by the Registry. However, the intent is to publish a style guide policy that demands the registrants to follow best practices for content publishing, thus allowing a positive user experience for mobile end users.

Certain domain names will be disallowed for registration, such as the ICANN reserved names but also some mobile industry specific names, for example gprs.mobi and other names, which relate to mobile organizations or key standards. The use of those names will be reserved for respective organizations such as standard bodies, trade associations, regulatory bodies, etc. It is the intent of the Mobi JV to minimize the set of reserved names to mitigate cyber squatting and user confusion – all other domain names shall be leased to valid registrants.

 (see also question 6 for ICANN reserved names)

5. In the event a registrant is found in violation of the sponsored TLD policy, explain the process for addressing a violation, including what steps are taken to communicate with the registrant, and what technical actions will be taken.

Answer:

The intent of the Mobi JV is for registrars to implement registrant agreements through which

registrants agree to follow the style guide and other policies of the TLD. These will also be

available on the registry's website and will be updated from time to time, when technology so

requires. The primary intention of the style guide is not to block innovative content and other

service provisioning from the Mobile TLD, but to protect customers against inconveniences

and costs related to inappropriate or non-functional services from mobile point of view. We

are considering a system of warnings and ultimately exclusion from the name space, if the

warnings don't produce results.

However, we are still open for discussions about the details in this matter.

6. How will the reserved list that ICANN specifies be implemented? How, and when, is the reserved list used during the registration process? What happens if the reserved list is changed?

Answer:

In the 2001 round of new TLDs, there were several types/lists of reserved names. Reserved names for new sTLDs might include these among others:

1. Names reserved from registration: See http://www.icann.org/tlds/agreements/unsponsored/registry-agmt-appk-26apr01.htm for a representative ICANN contract and list. Either ICANN or the registry operator is listed as the registrant, as appropriate. These names include:

   a. ICANN and IANA-related names

   b. single-character and two-character labels

   c. registry operations names (e.g. nic, whois, www)

   d. TLD labels (e.g. aero, arpa, biz, com, etc.)

   e. country names.

2. Registry Operator's domain names: See
   http://www.icann.org/tlds/agreements/info/registry-agmt-appx-11may01.htm for a representative ICANN contract and list. The
   registry operator is listed as the registrant.

3. Reserved Generic Second-Level Domains: Selected generic
   second level domains will be reserved for distribution in an
   equitable manner, which may include auction. The successful
   bidder in each case will enter into a contract with Mobi JV to
   operate the second level domain in the interests of the
   sponsored community. The registry will also sell some reserved
   generic names directly to interested parties. These reserved
   names will be created/reserved in the registry prior to the
   opening of the Sunrise Period.

   Domain names in categories 1 and 2 can be reserved (i.e.
   created) in the registry before commencement of the Sunrise
   Period, making them unavailable in the SRS, consistent with
   ICANN policies.

   Names in category 1b can be prevented from being registered
   by setting the registry system to reject one- or two-character
   registrations.

   Our service provider, Afilias, successfully implemented ICANN-reserved lists using these methods before the launch of the .INFO
   TLD.

   If a different reservation implementation is desired, or should ICANN
   introduce a new type of reserved name that cannot be adequately
   reserved using the above methods, our service provider Afilias has
   implemented a "registration restricted" filter in its registry software.
   This filter prevents a list of given domains from being reserved in the
   SRS.

   Changes to a reserved list before the commencement of Sunrise
        registrations pose
   no known problems. Changes to a reserved list after the registry
        is opened for
   business (i.e. after the commencement of Sunrise registrations)
        could present issues.
   The most serious potential issue surrounds a previously registered
        name being placed
   on the intended reserved list. In such a case, the registry
        operator will rely on ICANN's

guidance regarding the state of the current ownership.   If the existing registration

were allowed to persist, the "registration restricted " filter noted above would preclude

the name from being re-registered should it ever complete a deletion cycle. Our

service provider, Afilias, successfully managed the implementation of a similar "post-

opening" ICANN-reserved list of country names resulting from ICANN Board

Resolution 01.92 (see http://www.icann.org/minutes/prelim-report-10sep01.htm).

re: Registry

7.   What is the technical setup of the DNS, Whois and EPP servers? For all of these elements, please specify how the setups fulfill the requirements of up time from ICANN?

Answer:

Detailed information on the technical setup of the DNS, Whois and EPP servers are provided in the application.

Fault-Tolerant EPP Servers

EPP is a load balanced application service provided against multiple stateless application servers. The application servers in use are either SUN or IBM Enterprise UNIX servers, and may be a combination of both. This approach permits the registry to maintain live EPP servers at all times with a minimum capacity of N+1 service availability in the primary data centre. The EPP application interacts with the primary database instance for the registry, which resides in an N+2 data layer environment using IBM Enterprise UNIX servers. Afilias has architected the primary data servers in the registry with a redundant hot standby RS6000 server solution - based on IBM's HACMP technology and a shared fibre disk array configured as Raid 1+0 with multiple hot spares. This failover will be initiated automatically upon machine failure. Each primary database server is replicated in real-time to a completely separate data server and dedicated fibre disk array both within the Primary Data Centre and also to a

completely separate data server and dedicated fibre disk array at the Secondary Data Centre. This solution allows the registry to maintain both rapid (minutes) catastrophic failover capability, as well as the ability to minimize permitted service outages during maintenance periods.

Redundant Whois Servers

Whois is a load balanced application service provided against multiple stateless application servers. The application servers in use are either SUN or IBM Enterprise UNIX servers, and may be a combination of both. This approach permits the registry to maintain live Whois servers at all times with a minimum capacity of N+1 service availability in the primary data centre. The EPP application interacts with multiple secondary database instances for the registry. In the unlikely event all secondary dataservers fail at both the primary and secondary Datacentres, the Whois application is designed to automatically fail interactions over to the primary data database instance. Afilias has architected the primary data servers in this registry with a redundant hot standby RS6000 server solution - based on IBM's HACMP technology and a shared fibre disk array configured as Raid 1+0 with multiple hot spares. This failover will be initiated automatically upon machine failure. Each primary database server is replicated in real-time to a completely separate data server and dedicated fibre disk array both within the Primary Data Centre and also to a completely separate data server and dedicated fibre disk array at the Secondary Data Centre. This solution allows the registry to maintain both rapid (minutes) catastrophic failover capability, as well as the ability to minimize permitted service outages during maintenance periods.

Global DNS Server Constellation

DNS services as provided by UltraDNS are architected in a highly redundant and geographically distributed manner. The core registry system will maintain redundant 100 megabyte per second encrypted VPN connections to the UltraDNS injection servers from both the Primary and Secondary Datacentres. DNS updates are streamed in near real-time through a dedicated SSL encrypted XML based API and propagated globally throughout the UltraDNS leafnodes in seconds. Multiple, geographically dispersed API injection points are maintained at all times, during rare full maintenance events on the API system, DNS updates

continue at the core registry system and are queued for later submission to UltraDNS.

UltraDNS applies an Anycast Network Strategy, automatically limiting DOS and DDOS attacks to the announced routes (and therefore local environs) of individual nodes of the DNS distribution system. Name servers answer IP DNS queries based on authoritative DNS data. The name server at each node shares a global IP address, and each server has two addresses. If one address becomes un-routable, the user will fall over to the second. By injecting a BGP route from each node, the system routes user queries to a topologically nearby node, resulting in reduced network latency for DNS transactions, fewer queries that are routed to distant servers and fewer dropped query packets. Should a name server fail to answer for any reason, the routing announcement for that node is withdrawn, removing it from the "reach" of an end user.

UltraDNS servers are distributed strategically, and will grow to meet scalability demands and geographic coverage in line with the growth of network traffic.

- Verio Inc: JP

- Metromedia Fiber Network Inc (AboveNet): UK

- Switch and Data: CA & VA, USA

- Equinix Inc: CA, VA and Chicago, USA

- USC Information Sciences Institute (ISI): CA, USA

Peering is in place in geographically dispersed locations as follows:

- Telefonica International

- Japan Telecom

- KDDI

- MAE East, West and Los Angeles

- Switch and Data (formerly PAIX), East and West

- Equinix East, West and Chicago

- AADS Chicago

The DNS Server Constellation employed by UltraDNS on behalf of Afilias has maintained
a 100% uptime resolution record since inception, and has permitted a near real-time
streamed DNS update capability unique amongst TLD registries. This performance
is expected to exceed ICANN's requirements.

re: DNS

8. Does TLD plan to use wildcard DNS records? If so, explain what will be the use and the types of records used.

Answer:

Wildcard DNS records will not be implemented.

9. In how many DNS zones are the NS records located? Is this zone in the requested sTLD or not? (I.e. how long will the chain of NS records be when chasing them?)

Answer:

The .mobi domain will implement the sTLD in a manner consistent with the best practices
currently in place at ICANN sTLD and gTLD registries. The .mobi zone will conform to
global Internet standards and our chosen Registry services provider, Afilias, is an
experienced and skilled organization with significant operational experience in the
management of the DNS.

The .mobi domain NS records are planned to be located in more than one DNS zone (i.e.,
not all in .MOBI zone), to ensure dispersion of risk. NS records in the .mobi zone will likely
have its glue record included in the TLD zone, resulting in a short hop. For NS records in
other TLD zones, there would be at least one additional hop required to the respective TLD
root zone name server.

All second level registrations will be located within the sTLD zone. However, because
of the distributed, delegated nature of the DNS, the registry itself does not control the
depth of the zone. For example, if the domain example .stld is registered, the registrant
could create many levels below this zone, such as a.b.c.d.e.f.g.h.example.stld. This behaviour
is supported within the DNS, and beyond the control of the registry.

10. What guarantee do users of mobile devices have to be able to access sites outside .mobi? And what actions can you take against providers that restrict access to Internet TLDs other than mobi?

Answer:

Providing accessibility for mobile users to any TLD in the internet falls into the responsibility of mobile Internet Service Providers, and they will be subject to the normal competitive requirements of meeting customer requirements and providing compelling services.

At present, that customer experience is not generally compelling to customers due to limitations of device and bandwidth. The aim of offering ".mobi" is to offer customers the option to direct their searches, if they choose, to ".mobi" services and site that have tailored the customer experience for their environment. In this respect, ".mobi" is intended to be additive to the options available to customers.

It is our belief that customer behaviour in this space will be similar to that in the internet in general – that the majority of customers will want full flexibility as well as some degree of "packaging". Therefore, it is our expectation that unrestricted access will be a competitive requirement driven by customers.

The registry may not have control of zones outside of the sTLD, and therefore cannot control what happens to a resource record either before it reaches the sTLD Name Servers (in the case of a blocked query), or after a response is delivered (in the case of a blocked response). The registry will certainly encourage the Internet community to take full benefit of this sTLD, and not filter it in any way.

The whole philosophy of the ".mobi" application is to increase the conscious choice for customers – by having the option of accessing everything that they have today, but adding to it a set of services tailored for their mobile environment. It would then be up to the market, customers and service providers, rather than the registry company, to define how best that choice is exercised.

<u>re: Operations</u>

11. Please provide a statement about how often disaster recovery plans are practiced, and for which contingencies. Also: (i) in the event of a need for recovery from primary data server failure, would there be an interruption of service? If so, for how long? (ii) what is the bandwidth allocation planned for the interconnection of data centers for synchronization purposes, and to the Name Servers serving the sTLD?

Answer:

Our chosen registry services provider, Afilias, has implemented comprehensive Disaster Recovery plans for the operation of the .mobi registry. Disaster Recovery Plan procedures are fully componentized between various registry services. Registry Staff enacts staging or dry run DR events on multiple services or components quarterly. Each service is included in at least two DR staging or dry run events each year. Further to these efforts, the registry intends to include cooperating registrars in an annual cooperative full failover exercise from geographically dispersed Primary to Secondary Datacentres.

- Full failure of a primary data server is an unlikely event, as the registry will be deploying IBM RS6000 enterprise class UNIX servers at the data layer. This equipment has redundant and multiple occurrences of key components, and has been specifically designed to decommission failing components on a live server without ceasing services.

- Afilias has architected the primary data servers in this registry with a redundant hot standby RS6000 server solution - based on IBM's HACMP technology and a shared fibre disk array configured as Raid 1+0 with multiple hot spares. This fail-over will be initiated automatically upon machine failure.

In the event of a full disaster at the Primary Data Centre, EPP service would be out for a maximum of 5 minutes for read only access and 30 minutes for full service. WHOIS service would be out for a maximum of 5 minutes, and DNS service would be unaffected.

Notifications of unscheduled service outages are provided upon detection and confirmation of service unavailability. Transactions logs are provided to registrars within the EPP client server session at all times, as well as in a downloadable report generated every four hours. In the event of a fail-over when the client has not received either a success or failure notice for an outstanding transaction, the registrar will be able to refer to the downloadable transaction report for final state of the transaction. Alternatively, the client can query the current state of the registry object upon service restoration.

Bandwidth allocation planned for the interconnection of data centres and primary injection point of the Name Servers for synchronization is 100 megabytes per second.

12. Do you - or your subcontractors - have plans to use recent standards developed by the IETF for:

IETF Standard			
CRISP	No		
EPP	Yes		
IDN	Yes		
	REGISTRY	DNS	WHOIS
IPv6			
- Transport	Yes	Yes	Yes
- Glue records	Yes	Yes	Yes
DNSSEC			
- DS records	Yes	Yes	Yes
- Signed TLD	Yes	Yes	

Here is further explanations to the answer to Q 12:

Standard	Yes/No	Comment
IETF Standard		
CRISP	No	CRISP is not currently an IETF standard. Our chosen registry services provider, Afilias, is a participant in the IETF CRISP Working Group. When the IRIS protocol standard has been finalized, the Mobi JN will evaluate it in the light of its adopted privacy policies, to ensure that the use of the standard does not in any way infringe or impact the privacy of its registrants.
EPP	Yes	The .mobi domain will support the RFC 3730-35 definitions for an EPP registry at launch. Our chosen registry services provider, Afilias, launched the first-ever EPP based gTLD registry, and intends to continue to produce EPP RFC compliant registry systems.
IDN	Yes	The Mobi JV will support ICANN-accepted IDN related standards. As IDNs are a newly developing technology with undefined technical approaches in some areas, our registry services provider Afilias will continue its tradition of contributing to further development of related IDN standards and rolling out IDN solutions in compliance with ICANN and IETF guidelines.
IPv6		
- Transport	Yes	The registry plans to support IPv6 connections at launch, but support for IPv6 "on the wire" is a work in progress. The registry is currently conducting IPv6 transport tests, and plans to move to IPv6 as the standard becomes readily available on the wire.
- Glue	Yes	The registry has plans to support IPv6 glue

Standard	Yes/No	Comment
records		records at launch, but we do not anticipate that all necessary IPv6 components outside the registry's control will be ready at launch. We will work in close coordination with various service providers to ensure that the support of IPv6 glue is useful.
DNSSEC		
- DS records	Yes	The .mobi domain intends to fully support DNSSEC and help in its advancement. The current document in standards track allows any user of the DNS to "walk the zone" (using considerable resources on the server). This ability, as currently proposed, poses serious privacy and availability issues, which would prohibit the registry from using DS records. Some work has been done to eliminate this problem, but to date, no standard has been adopted to resolve the issue. The registry will work with the Internet community to find a resolution to the problem of "walking the zone" and when it is resolved, incorporate DS (or its replacement) records into the registry system .
- Signed TLD	Yes	While DNSSEC is still not a standard at the time of this writing, the registry is evaluating signing the sTLD zones. There is, however, considerable work that still needs to be done in the area of key rollover and announcement. The sTLD zone cannot be signed until this work is complete.

BUSINESS/FINANCIAL

(Please Note: We are asking these questions to provide you an opportunity to demonstrate the existence of a well-developed business model, rather than to judge whether this information constitutes a "fail-safe" business plan.)

1. What is the basis for the projections of the number of domain names expected to be registered?

Answer:

We ask, that our answers to this question are treated as confidential.

Corporate and trademark Owners

- Based on the .info experiences, we expect --- registrations from the companies wanting to immediately brand their company name or trademark in this new mobile domain during the sunrise period.

- Another significant segment are small and medium size companies wanting to give clear <u>brand</u> image to their services being mobile. Mobi JV targets to promote Corporate & Trademark product for them instead of generic SLD names. The estimate is 250,000 registrations based on the .info experiences during the land-rush period. To avoid competition between this product and generic SLD name product, the pricing is set accordingly in both products.

- In addition to those we expect ---- new innovative small, medium and large companies to emerge and register their name in this category within the next 3 years.

Out of all of the previously mentioned registrant segments, we foresee some ---- belonging to the high paying category due to customer base size; most of these would be from large service providers, including mobile operators,

Generic SLD names

- Generic SLD name registrations are from the individuals making generic SLD name registrations (e.g. freelancers etc), small and medium size companies not wanting to make trademark validation, and from professional name resellers.

- Based on the .info experiences during the land-rush period, we are looking forwards having ----- in this category during the first years.

Reserved generic SLD names

- Current financial calculation assumes around a thousand reserved generic SLD names (+ the language variants).

- These names will be available through auctions, and we expect during the first years of operation these to attract several highly committed content and service providers. It will be difficult to estimate, what names will be the most desired ones and sold immediate, and if some names will remain un-sold.

- We assume, that the estimated average registry price of €---- is rather conservative. The main reasons for these reservations is to

1) minimize the impact of cyber-squatting, and

2) include a requirement, that real services are implemented under the SLD in a defined timeframe and that services are, what the name implies.

User SLD names

- In User SLD registrations we have started with conservative estimates noticing the many development steps needed to be made for wide introduction of name based services for the end-customers in mobile. We expect enthusiastic early adapters to make reservations first years of operation. The mass markets are expected to open once the overall end-user applications and services are available .
- Penetration is expected to follow typical mobile service adaptation (S-) curve lasting 4 to 5 years to reach wide markets acceptance (product launch is 1st half 2006). We are expecting significantly higher penetration towards the end of the decade .

See also question 5, regarding the user SLD registration volumes.

2. The key market segments identified are (a) corporations and trademarks; (b) operators and mobile service providers; (c) mobile content and service providers; and (d) individuals or groups of individuals. How much market share do you estimate will go to each of these key market segments you have identified? Also, will all four segments have access to all products offered?

Answer:

We ask, that our answers to this question are treated as confidential apart from the last title.

Access to products

Everybody will have access to all products as a basic guideline. Registry will also publish in due time detailed eligibility, for example for registering reserved generic SLD names. Registry will naturally promote certain products to the above mentioned customer segments as a primary choice.

We will reflect the evolution of the internet and the mobile sponsored community in a manner consistent with the best practices on the internet. The rationale for .mobi is to serve its sponsored community to ensure that all segments of the (sponsored) community have equal access.

3. What is the minimal number of total registrations that are required for the Sponsoring Organization to sustain operations? What is the minimal number of total registrations that are required for the Registry Operator to sustain operations (in this case, you may include other TLDs under operation)?

Answer:

The Mobi JV is backed by strong and motivated companies on the current business plan. With the cost structure and product matrix proposed the Mobi JV achieves cash break-even on an annual basis with approximately ----- registrations.

Should the demand and price projections for all the name products not be achieved, the .mobi has the ability to cut its costs and reduce breakeven registrations substantially (to approximately -----) to sustain operations, since the charges from the Registry Operator are made on a per-registration basis with no fixed fee, and by downsizing the own staff to the minimum. Please note also that operations of this TLD is expected to be absorbed within the existing operations of Afilias and no minimum registration volume is applicable.

Furthermore, the Mobi JV investors are motivated to take all necessary steps to adapt to the market place .

4. What will you do if revenues come in less than your "low" projections? How will any revenue shortfall be funded? What are the JV partners' commitments regarding funding if more than the initial $--- million is needed? If any gap is unfunded, how will you manage – both operationally and financially?

Answer:

This includes internal contractual information, which we like to keep confidential

5. Your application describes a large market, including 2.2 billion mobile subscribers by 2006. Yet the financial model projects only -- million Euros in sales in 2007, which represents ---% of the projected 2.2 billion subscribers. What is the reasoning? (E.g., Will registration be limited to network operators? Or is anyone with a mobile phone eligible to register?)

Answer:

a)   While we certainly do believe in a great growth potential, we also have strong reasons to believe that the takeup of individualized mobile domain names will follow the usual life cycle from innovators through early adopters to broad usage in a mass market, which is why our business model reflects a moderate growth for the initial periods.

Technology development cycles have frequently shown a first phase focussed on rather standardized offerings, creating a critical mass of customers, some network effect and the process of adoption and usage about new possibilities. Email service would be a perfect example as is the penetration of mobile voice services and short text messaging in mobile.

We reflect this pattern in the financial model presented in the ICANN application. It will take a bit of time before capable handsets are available. It will also take time for users to become aware of the benefits to have a domain name on an individualised basis rather than only from from their service provider(s).

Combined internal and industry analysts view (such as Strategy Analytics 2008, July 2003) indicates that approx. 25 million devices

installed in 2003 are capable to handle services within the scope of the mTLD rising to slightly below a third of the installed global device base in year 2006. We utilize this model to explain the deferred uptake effect above. We intend to actively invest in the creation of the .mobi TLD in order to accelerate this innovation cycle. Otherwise it would take much longer .

We expect good acceptance of .mobi as a mobile services name space quite early in the cycle, and quite moderate absolute numbers of individualized .mobi domain name registrations before acceleration due to increased experience kicks in within the community.

b) Registration for all available names from the registry will be handled through the well established channel of ICANN accredited registrars, hence registrations are not limited to network operators only. If a network operator decides to apply to ICANN to become an ICANN accredited registrar, this is their independent business decision and they will undergo the same standard ICANN process as anyone else. We anticipate that many mobile operators will choose to become resellers of accredited registrars instead of seeking a registrar position themselves.

Mobi JV will not limit registrations to mobile phones. Any mobile device, having suitable means to establish communication, and naming and addressing capabilities, like smart phones, personal digital assistants (PDA), handheld & wrist computers or laptops could be used instead.

6. The trademark verification fee is "expected to cover the cost of performing [such] verification." (i) What fee will you charge? (ii) What is the relationship between the fee and the overall cost of trademark verification?

Answer:

(i)The fee will be a non-refundable amount that covers search of the trademark in one country designated by the registrant. We aim at creating a relationship to preferred outsourcing partners in order to allow access for competitive flat fee to make the process of verification as administratively and economically easy as possible.

(ii) There will be a close relationship between the fee and the overall cost of trademark verification, as the fee will be priced to recover cost.

Validation service is part of the Mobi JV's contribution to protecting rights of other's, but it is also a business opportunity to other companies making trademark validations and offer it as a service to the registry

The current estimated validation fee would be ---€ as a one-time fee. This consists of validation service fee of ---€ and some ---€ internal expanses (IT systems/ databases, labour/staff, phone/fax and other related costs). Naturally, these prices are subject to change to cover the increased cost of performing such validation.

Also , as this trademark validation is a labour intense service while Mobi JV targets for lean organization, and while the consumption of this service is peaked to first years of the registry operation, it is rational to acquire this from the external service providers, and not as an in-house service.

 Mobi JV will negotiate agreements with regional validation service providers, and will provide in due time a list of approved trademark validation service providers.

7. Can you explain why companies that have already invested in their own brand will support this domain, and provide documentation of such support?

Answer:

Brand owners and trademark holders that want visibility with their customers and partners, will gain a new level of targetability and tailoring of the customer experience with the .mobi/.mbl domain. The primary purpose of a brand is to create an identity in the mind of the brand owners' target market of what the company does and what it stands for. Therefore, being able to reinforce that branding with specific treatments to segments of their overall market is very important. Brand owners will be able to develop various treatments and messages that will resonate well and reinforce the desired positioning of those brands with people who are in a mobile context .

As an example, with many multinational companies, there are often cases where the .com domain is used for a generic site relating to the overall brand, ethical policies, values and mission statement. It is then a pointer to other geographical sites, which relate to the specific market sector the company wishes to sell to. The customers of these multinationals are in fact expecting that and

select sites accordingly.

The same will occur with .mobi. The .mobi site acts as another route to market for a specific user segment that a brand wishes to market to .

In addition, the .mobi investors and supporters themselves have strong global brands and service hundreds of millions of customers worldwide focusing on mobile services. This represents a significant amount of end user support by itself. This provides important indication that strong mobile brands see the need and value to have one top-level-domain optimised for mobile users and services within the Internet.

We are in process of building our Sponsoring organization, and discussions with potential support candidates are proceeding. Particular enthusiasm comes from new innovative service providers, who see the big opportunities of mobile multimedia and want their ventures to have a chance for an appropriate and attractive name too. With an empty new TLD name space there is a lot more opportunity for that. The existence of the mobile specific TLD builds also improved visibility for their services and therefore can give significant boost for their businesses. Therefore, the mobile TLD also fosters competition in service provisioning, which is identified to be one of the core targets of the new sTLDs

8. Can you provide evidence to support the assumption that corporate and trademark organizations (with more than 10 million subscribers) are willing to pay nearly $----- for a registration?

Answer:

The primary reason for the higher pricing for large service providers is, that their customers are generating the majority of the name lookup traffic and therefore they should carry slightly higher share of the costs.

We have a high confidence level that the fee was not only reasonable but also actually quite attractive for major trademark and brand holders. Using comparatives to fees paid by major brand holders to secure their trademark name for existing TLD's, registration fees for the trademarks paid in each country/region, and the normal value associated with being able to target a defined customer segment.

Considerable part of the investors in the mTLD also belong to the higher paying category and still have proposed this schema, which

in itself is a proof, that the proposed pricing structure is not seen as an excessive burden.

9. What is the rationale for your estimate that reserved names will yield an average of Euro---- (Section 7) through auctions/sales.

Answer:

We primarily considered the list of names that yielded auction sales prices over the ---- € point and then sorted those based on likely applicability (similar value) with the mobile community. We then added in names that had particular value and meaning in the mobile industry. We validated this list between the Marketing departments of the companies backing the .mobi application and finally past the Public Relations company for external validation. We are confident that we have a valid list of names that will result in auction based sales averaging at least ---- € per name.

For financial planning purposes we have been using an indicative average price of ---- € . We expect that in auctions some names will reach higher price while the other reserved names are found less attractive. We also expect regionally variations in the most desired names .

Detailed eligibility requirements and an auctioning process will be published. Mobi JV targets for receiving solid revenues from these high value reserved names, and Mobi JV desires to promote this opportunity for innovative new service provider companies committing to provider high quality services suitable for both the fixed and mobiles users

10. What, if anything, will you do to ensure that registered domains do indeed provide content appropriately configured for wireless devices?

Answer:

As stated in the answers to the Questions 3 and 5 in the technical section the intent of the Mobi JV is for registrars to implement registrant agreements through which registrants agree to follow the style guide and other policies of the TLD. These will be developed by the Registry and will also be available on the registry's website and will be updated from time to time, when technology so requires. The primary intention of the style guides is not to block innovative content and other service provisioning from the Mobile TLD, but to protect customers against inconveniences and costs

related to inappropriate or non-functional services from mobile point of view.

The mTLD requirement details are under formulation but at a minimum will include a commitment to support known and proven advanced networking and a best effort that mTLD domains will operate on all devices (including PC's although optimised for mobile) providing a quality user experience.

The validation of the registrant requirement will occur primarily through self-policing where industry and market forces will identify services that do not conform to mTLD requirements and/or recommendations and be avoided by user's and/or identified in various publications or websites as poor quality. In addition, we are considering a system of warnings and ultimately exclusion from the name space, if the warnings do not produce results. However, we are still open for discussions about the details in this matter.

11. Does the agreement with Afilias include any compensation other than the fee of USD $--- per registration (e.g., is there any fixed fee or floor volume)?

Answer:

The costs included in the Mobi JV's agreement with Afilias are completely variable, with no fixed component. The basic agreement is a price per domain year registered (which is higher than the quoted $--- per registration). Afilias may also provide ancillary support services.

12. What evidence can you provide that indicates the Registry Operator you have chosen has sufficient financial resources to be in existence in five years?

Answer:

Afilias Limited ("Afilias") is a privately held Irish Limited company. As a private company, Afilias does not report financial results publicly. However, certain information regarding the firm is available and may be helpful in illustrating the firm's long-term viability. Specifically:

- Afilias is a profitable company – Since inception, Afilias has been prudent in managing its business, and as a result, the company is both cash-flow positive and profitable.

- Afilias is an ICANN-authorized Registry—Since 2001, Afilias has met or exceeded the requirements to be an ICANN authorized provider of registry services for a gTLD. ICANN requires Afilias to provide regular reports regarding these responsibilities.

- [CONFIDENTIAL INFORMATION REDACTED]

- [CONFIDENTIAL INFORMATION REDACTED]

- Afilias also provides services to ccTLDs—Afilias is also the official registry services provider for the nations of Antigua (.AG), Burundi (.BI), Gibraltar (.GI), Honduras (.HN), Laos (.LA), Seychelles (.SC), and St. Vincent & the Grenadines (.VC), the registry services contractor for Singapore (.SG), and provides IDN services for Belize (.BZ) and Singapore (.SG).

As a global organization, Afilias has offices in Dublin, London, Düsseldorf, Toronto, and Horsham, Pennsylvania (near Philadelphia). Afilias has established long-term service contracts with established multinationals such as IBM and DSI Technology Escrow Services, Inc. (Fort Knox / Iron Mountain). While no company can guarantee its long-term viability, we believe that Afilias has established a track record that supports our confidence that it can support this domain reliably.

13. How much money has been allocated in the budget to enable a smooth transfer of the TLD to another operator in the event of Registry Operator or Sponsoring Organization failure? (For example, has a reserve fund

been established to cover any financial obligations associated with multi-year registrations or other registry/registrar/registrant obligations?)

Answer:

We strongly believe, that the financial basis of our designated Registry Operator is very stable, which would be consistent with ICANN entrusting the Registry Operations for other TLDs recently to the same outsourcing partner. The necessary basic arrangements, e.g. data escrow, DNS back-up and disaster recovery are an important part of the agreement with the DNS service provider to guarantee the continuation of operations in all conditions.

Should the MobiJV fail, Afilias would continue its service to the domain until such time as ICANN can find a successor sponsoring organization. Afilias would expect to continue to be paid for these services, and would deduct service fees from incoming registration and renewal revenues.   Should it be necessary to transfer the domain to a new registry services provider, Afilias is prepared to assist as needed in migrating the data. If Afilias is unable to assist, the data escrow and disaster recovery provisions in the application would enable the transition to occur without risk of data loss.

These provisions deem the creation of a separate fund unnecessary at this time. However, if the business changes, the Mobi JV will consider the creation of a fund to secure the transition.

14. What other products or services, if any, do you intend to offer that could impact the new TLD? Please specify whether such products or services would rely upon the same, or different, staff and other resources.

Answer:

Mobi JV will contract with Afilias Limited (Afilias) to provide registry services for registrars. These services cover, but are not limited to, interfaces for registrars, WHOIS-database, 24x7 customer service and technical support. Further information is available in Part E – Technical Specification, e.g. in subsection Technical and Other Support. These services rely on the same staff too.

.mobi JV is also evaluating the launch of two other products relying on the same infrastructure as an offering to registrars :

- o   Local names

- 3LD names for the end-users

For Local names Mobi JV plans to publish a unified name structure e.g. for roaming customers, that would be the same for all the different networks for locally customized services, e.g. pubs.local.mobi. In mobile operator networks browsing those address could be also further assisted with the user location to improve overall service experience, if consumer desires it. The potential solutions will be evaluated in co-operation with experienced and respected DNS and location services specialists to find the best possible solution for mobile users while taking care, that reliability and other key characteristics of the Internet name services are maintained.

In the long run, as more and more mobile users desire own domain names, there becomes a growing pressure to utilize also 3LD names to have sufficient name space available for the consumers independent from, what operators are offering.

mTLD Consortium response to ICANN evaluation report

Sponsorship Section

I.   Introduction

The mTLD Consortium (the "Consortium"), which consists of 3, Telecom Italia Mobile, T-Mobile, Orange, the GSM Association, Ericsson, Samsung, Panasonic, HP, Sun, Nokia, Vodafone, and Microsoft, has reviewed the ICANN independent evaluator report of 10 August 2004. We concur with the premise that effective sponsorship is critical to the success of the proposed TLD, and we are therefore pleased to have this opportunity to respond to the questions raised by the evaluators and to clarify our previous submissions in response to the evaluation.

Some of the information contained in this response is proprietary and confidential, and we respectfully request that ICANN and its evaluators maintain in confidence appropriately marked portions of this text.

II.   Response Scope

ICANN requested the evaluation team to apply 9 selection criteria, divided into two major sections ("Sponsorship Information" and "Community Value"), to the materials submitted by applicants for a sponsored top level domain ("sTLD"). The evaluators concluded that the materials submitted by the Consortium met 5 of the 9 criteria (1B, 2B, 2C, 2D & 2E) and in this response, therefore, we address these only briefly. This response focuses on the remaining four criteria, about which the evaluators raised questions:

- 1A. Definition of a Sponsored TLD Community;
- 1C. Appropriateness of the Sponsoring Organization and the policy formulation environment;
- 1D. Level of Support from the Community; and
- 2A. Addition of New Value to the Internet name space.

We also address two areas that we consider as important for our application and the evaluation of new TLDs.

- Rationale for our request for a Sponsored rather than a Generic TLD; and
- The availability of alternative technical solutions to meet the customer need.

III.   Executive Summary

The attached document addresses the evaluators' specific comments and questions in detail. Our key issues are discussed below:

1.   Sponsored Versus Generic TLD

The evaluators did not specifically discuss the relative merits of a generic TLD over a sponsored TLD for the mobile communications industry. We understand, however, that this issue may be of general interest to the ICANN Board, which is ultimately responsible for the selection of new

sTLDs. Whilst it might seem attractive to postpone consideration of TLDs proposed by commercially oriented communities to a generic round, we believe that this would be a mistake. The interests of our distinct and well defined community, and the consumers who use services and products provided by that community, will be far better addressed in an sTLD setting. This is because policy requirements, which cannot reasonably be met in existing TLDs at the second level or in new generic TLDs, can be enforced by way of a charter with ICANN for the benefit of consumers. The fact that the sponsored community is potentially a large one does not undermine the value of collective policy development. By "going generic," the TLD would lose the capacity and commitment needed to address pressing needs of this major community. Moreover, as active participants in the mobile communications market, Consortium members are especially qualified to understand the status and future of mobile technologies and services required to keep necessary definitions and policies up to date and functional without stifling competition.

2. Alternative Technical Solutions to Meet Customer Needs and Addition of New Value to the Internet Name Space

The Sponsorship ET appears to believe that existing technical solutions could eventually provide equally valid options to serve customers and that ".mobi" is not needed. This point is used to argue that there is insufficient new community value through the ".mobi" name space.

Regarding the future and use of top level domains, there are many visions. ICANN and the Internet community as a whole have so far, to its credit, refused to permit the domain name system to become the captive of any one vision or actor. Instead, ICANN has championed the right of customers to choose solutions that meet their needs, and has encouraged innovation through robust competition. There is no need to make an either/or choice.

We believe that the mobile TLD offers consumers a legitimate and appropriate choice, consistent with recognized industry standards, by creating a clearly recognizable designation for enhanced services that can be implemented today and be easily understood by our customers. The sponsoring community envisions the ".mobi" designation as a widely recognized indicator of readily available enhanced services dedicated to the needs of mobility-enabled users, for a broad variation of user interface capabilities, and dynamically changing user situations. This benefits the mobile sponsored community and the Internet as a whole, while conforming to established technical and policy standards in the Domain Name System.

Altogether, the purpose and the promise of a ".mobi" domain is to bring the benefits of the Internet, within the easy reach of mobile customers, a very large proportion of whom are not well served by the current PC supporting Internet. A considerable percentage of mobile subscribers do not own and are not expected to own PCs in the near future. This situation is especially prevalent in developing countries, where Internet access may be especially important to industry and consumers. We believe that the new value of ".mobi", in addressing these needs, and the resulting benefit to both the sponsoring community and consumers of mobile communications are substantial and meaningful.

3.   Definition of the Sponsored Community.

The evaluations raised questions about how the definition of the sponsoring community would deal with new and emerging stakeholders in the mobile communications industry. Such stakeholders are virtually certain to emerge as a consequence of changing technology. It is important to repeat that day-to-day decisions are the responsibility of the Registry Company in accordance with the rules & procedures set by the Registry Company with ICANN. Should the board fail to accommodate the participation of emerging members of the mobile communications industry, it will be accountable to ICANN for charter violations and to competition authorities for anti-competitive behaviour.

Given these accountability obligations, the mechanism of the MAG permits total flexibility and the continuous ability to evolve. For example, membership in the MAG, which embodies the sponsoring community, is intended to be open to all self-identified participants in the mobile industry - operators, equipment providers, content and application providers, not-for-profit associations, entrepreneurs, academics, university consortia, researchers, and sole proprietors. While the entry barriers for MAG participation are reasonably low - requiring, for the most part, little more than a commitment of time and communications related costs - members of this community are all economic actors who must make rational choices about where they allocate resources. The fact that community members are self-identified does not, in our view, undermine the precision of the definition of the sponsored community. Rather, it recognizes and embraces the fact that as technology changes new industry stakeholders will emerge and that if it is in their interests to do so, they will participate in the MAG as members of the sponsoring community. It is also the best way to guarantee that new views will find their way into the Registry Company development process.

4.   Policy Formulation Environment

The evaluators questioned the allocation of decision-making authority among members of the sponsoring community. Implicit in this concern seems to be a fear of ceding - at least at a theoretical level - final decision-making to a private investor group. The evaluators ask how the board can be held accountable to its sponsoring community when policy development mechanisms like the Membership Advisory Group (MAG) and the Policy Advisory Board (PAB) ultimately have only advisory authority. According to the report, the evaluators wondered whether there could be a bias in favour of the financial backers of the joint venture, how the decision-making structure would promote innovation and benefit consumers, and whether the ultimate authority of the board would discourage community participation in the policy development process or cast doubt on the fairness of decisions made by the board.

These are fair - and indeed important - questions. They are, in fact, the very questions that ICANN wrestled with in the course of its evolution and reform process - how to balance the organization's commitment to bottom-up decision-making and consensus building with the realistic need to reach closure on issues and move forward. In addition, the ICANN RFP reasonably demanded that prospective sTLD operators agree to accept liability for their operations, and to protect ICANN from liability for these operations. It is incumbent on prudent operators to demand a certain level of control in order to minimize its liability. In striking the right balance here, the Consortium consciously adopted the model embraced by ICANN in the course of its evolution and reform activities. The ".mobi" charter grants authority to the MAG and PAB to initiate policy development and to comment on all board-initiated policy development. Under the charter, the board cannot adopt policy that is inconsistent with the advice of the PAB without first publicly and transparently explaining its decision to do so, and

engaging in further discussions with the advisory board before acting. In the ICANN process, an individual or entity adversely affected by a Board decision can request reconsideration and ultimately appeal to a national court to intervene. In the case of ".mobi", ICANN itself serves as a check on the board's decision-making authority in so far as ICANN typically grants rights to operate a sponsored TLD conditional upon the applicants' commitment to remain responsive to its sponsoring community.

In keeping with the ICANN model, the activities of the Registry Company would clearly be subject to the authority of national and multinational competition bodies. Countries in Europe, Asia, and the Americas have well-developed views on the permissible scope of industry standard-setting activities, and have shown plenty of enthusiasm for enforcing these rules.

On governance issues there are some very important aspects of the Consortium's proposal related to control and policy development. We have shared, in the past, certain confidential materials (with the reservation to request these remain confidential) about our shareholder agreement to demonstrate that the Board will be balanced and that no single investor will have the ability to control the joint venture board. Nor will the current Consortium as a group be able to control the joint venture board. Likewise, the governance documents ensure that no single investor sector (e.g. mobile operators or equipment providers) will be able to dominate the board. In our application we have provided detailed information of the extent to which the members of the Consortium include a wide diversity with respect to industry sector, functionally, and geographically.

IV. Summary

In summary, we are grateful for the opportunity to address here all the issues raised by the evaluators, as well as any other questions or concerns the ICANN staff or board may have with respect to our application for the ".mobi" sTLD. In this executive summary, and in the detailed responses that follow, we hope that we have clearly articulated our strong beliefs that:

- The ".mobi" TLD will add substantial new value to the Internet, to the Internet name space, to consumers of mobile communications, and to the Internet as a whole. It will remedy the current failure of "Internet over mobile" to live up to consumer.

- The ".mobi" TLD is a key to unlocking that value. Whilst other ways of unlocking that value may emerge, they have yet to do so, and we are not persuaded that this situation will change in the near term. Moreover, the ".mobi" approach does not preclude any such solution, and we urge ICANN to remain committed to the principle it has long embraced to encourage open innovation and facilitate customer choice. The mobile communications marketplace has the clear potential to support a variety of competing approaches, and consumers will benefit from the existence of such alternatives.

- A Sponsored TLD is necessary to achieve the desired consumer benefits efficiently. Whilst participation in the sponsoring community may change over time, this does not distinguish the mobile community from any other industry or even from the industry groups to whom ICANN has already delegated sTLDs. The ".mobi" application should not, therefore, be rejected for that reason.

- The Registry Company will conduct its policy development activities in an open and transparent manner, similar to the manner in which ICANN itself operates. The board will be accountable to the MAG and PAB, to ICANN itself, and to competition authorities around the world with respect to its compliance with the JV charter and to competition law. The fact

that the charter identifies the board as the ultimate decision-making authority merely reflects the realization that ICANN previously reached that the need to move forward should not be held hostage to the sometimes elusive - but always sought-after - goal of reaching consensus.

- The trust issues are largely resolved by Board accountability (above). In addition, the structure of the MAG facilitates the participation of all members of the sponsoring community, including emerging stakeholders in this community, whether they are commercial or non-commercial.

- Furthermore, as previously indicated, the Consortium is committed to looking beyond the sponsoring community to engage the consumers of mobile services directly. In this respect, the Consortium will reach out to identified independent consumer organizations, and will also leverage and support the activities of ICANN's at-large advisory committee process in this cause. Specifically, the Consortium proposes to underwrite the cost of independently-appointed consumer and ALAC participants in the PAB process. We strongly believe that this will strengthen the JV decision-making process, while providing both an important function and needed funding for ICANN's ALAC activities.

The Consortium urges the ICANN Board, in the strongest possible terms, to evaluate the ".mobi" application against the criteria set forth in the RFP (which have been refined and improved through community "input" Activities). In this regard, Vint Cerf ("On the Evolution of Internet Technologies" Proceedings of the IEEE, Volume: 92, Issue: 9, Year: Aug. 2004) said: "Though the author is likely biased as a consequence of service as Chairman of the Board of ICANN, it seems important that ICANN not be forced to increase the scope of its responsibilities. It already has a significant mandate that is hard to fulfil. Rather, it will need to work with interested constituencies to find appropriate venues in which to cope with governance matters associated with the Internet." Sponsored TLDs are clearly an effective mechanism to devolve appropriate policy making authority from ICANN down to the communities impacted by specific TLD policies. The mobile TLD is an important example of the possibility.

In closing, the Consortium wishes to make the strongest possible case as to the need for ".mobi", for the value that it can bring and the merits of the Consortium and the specifics of our bid. We have always been and, of course, will remain open to feedback and constructive suggestions on how we can improve. Some of the feedback has already been reflected in our approach, and we are open to further dialogue at any time. The ".mobi" domain represents an enormous opportunity to extend the reach of the Internet, serve a whole segment of customers under-served today, and add substantial value to the Internet Name Space. We should not allow this opportunity to be missed.

Specific Issues, Questions and Answers –	
	VI. In response to ICANN evaluation report (Sponsorship Section)

In this document, we address in detail, the three general issues first followed by detailed feedback from the Sponsorship evaluation report, section by section:

- General Issues: Rationale for a Sponsored rather than a Generic TLD, alternative technical solutions to meet the customer need, and trust.

- 1A. Definition of a Sponsored TLD Community

- 1C. Appropriateness of the Sponsoring Organization and the policy formulation environment

- 1D. Level of Support from the Community

- 2A. Addition of New Value to the Internet name space.

0	**Detailed Responses to General Issues**
	Sponsored versus a Generic TLD
	The cover letter from ICANN staff conveying the evaluation report suggests that ICANN may be wondering if the ".mobi" application would be more appropriately considered in connection with the addition of new generic TLDs (rather than sponsored TLDs). Whilst the basis for this question is not clear, this concern may reflect the following questions/considerations expressed by the evaluators:
	1. That the potential size of the mobile community argues that policy control must be handled centrally by ICANN.
	Applicant's comment: The evaluators argued on the one hand that the sponsored community is too large for the proposed policy development process to work. At the same time, the evaluators claimed that there was no evidence of a significant market for the ".mobi" domain. The mTLD Consortium (the "Consortium"), which consists of 3, Telecom Italia Mobile, T-Mobile, Orange, the GSM Association, Ericsson, Samsung, Panasonic, HP, Sun, Nokia, Vodafone, and Microsoft, of course, thinks that there is a substantial market for ".mobi" registrations, as evidenced in the application. The Consortium does not, however, think that the size of the sponsoring community should be determinative. Rather, the criterion should be whether there are enough interests and concerns shared by members of the community so as to make joint decision-making workable and desirable.
	2. That the needs of the mobile community can be equally well served by existing technologies and without reliance on a TLD
	Applicant's comment: This argument is equally applicable to all new top level domains due to the nature of the DNS technology.
	3. That the JV's board of directors cannot be trusted to take the right decisions on behalf of the community
	Applicant's comment (Confidential): Deleted as confidential
	We address both 2 and 3 in greater detail below. With respect to the argument that the ".mobi" domain should be a generic rather than a sponsored TLD because of its potential size, diversity, and the pervasiveness of mobile communications, the Consortium believes:
	1. The fact that our target community is potentially quite large does not support the argument that it would be more valuable to the sponsoring community, the community of mobile communications users, or the Internet community as a whole as a gTLD. As further explained below, we believe that our sponsoring community meets the RFP requirements for being susceptible to reasonably precise definition. In fact, the evaluators apparently accepted the adequacy of the currently identified community participants, and questioned only how new and emerging community participants would be

accommodated. Our definition of the sponsored community, as well as the mechanisms in place to identify and accommodate the involvement of sponsored community members is specifically designed to reflect the fact that our proposed sTLD relates to a rapidly evolving technology, and that new players will emerge in response to changes in technology. First, the sponsoring community consists of industry participants that are providing service to mobile users, wirelessly and on the move, across a variety of devices. This is a distinct need that can be defined: it does not describe the whole of the Internet and is in no way generic. Second, self-identified members of the community are welcome to participate in the MAG. Participants in consumer facing industry sectors such as the mobile industry have legal and ethical obligations to their investors to allocate resources - human and financial - in a rational way. Should a broadcaster determine that its interests could be served by participating in the MAG, then they could do so.

2. Although the sponsored community's user group potentially encompasses several billion consumers of mobile services, the size of this potential market *does not guarantee* fast, widespread and ubiquitous take-up. In recognition of this business reality, we have been deliberately conservative in our business plan about projecting consumer up-take, as acknowledged and accepted by the business evaluation team. Equally, though, we do not believe the other extreme - a scenario in which the industry achieves massive, instantaneous consumer penetration to the degree that it overwhelms the Internet. (Although, we note that if such rapid up-take did occur, the existence of a separate domain could serve as a pressure valve and thereby preserve Internet stability.) It is an undeniable fact that bandwidth, power and form factor constraints inherent to mobile networking will constrain mobile access to Internet services for the foreseeable future. At the same time, in many regions of the world, wireline access is out of reach, and in these regions it is the mobile community that will grow Internet reach and bring in new users. In both cases, the existence of a ".mobi" domain adds value to the Internet.

3. For the foreseeable future, the characteristics of mobility devices and systems will require that mobile device users be distinguishable from fixed device users. In this regard, the sponsoring community sees that the creation of voluntary standards for usability and quality will enhance the online experience of mobile device users. The development of such standards, including style guidelines, is an important role that is best performed by an sTLD with an enforceable charter in order to deliver a consistent user experience. The need that this community has for an effective policy development and implementation mechanism is as strong, if not stronger, than sTLDs already approved by ICANN. Fulfilling these roles will enable the building of consumer trust in the use of Internet over mobile.

4. Finally, there has been considerable hype about the potential of mobile Internet access, but the reality has, to date, failed to live up to the expectations of the industry, industry analysts, or the consuming public. As a result, the majority of consumers have yet to gain similar positive experience and trust in Internet services over mobile as they have gained in current mobile voice and short messaging services. A strong Consortium with sufficient resources and policy input from all industry stakeholders can help create critical mass for to support technology innovation. This Consortium represents a level of capability and commitment to grow the market fastest possible and provide an open environment on which all players may compete. Moreover, a successful mTLD will benefit the naming business community considerably.

In summary, the Consortium believes that only this sponsored mTLD can deliver the market benefits and user experience in a rapid timeframe.

<u>Alternative Technical Solutions to Meet the Customer Need</u>

Some technologists, including Sir Tim Berners Lee of the World Wide Web Consortium (W3C), argue that there is simply no need for additional TLDs in general or for sTLDs like ".mobi" (and others) in particular. ICANN has, however, already made a policy determination that it is appropriate to expand the top level domain space in a measured and controlled way to the extent that a proposed new TLD "meets needs that cannot reasonably be met in existing TLDs at the second level." We respectfully submit that the evaluators did not apply this criterion in their review of the ".mobi" proposal. Rather, the theoretical availability, down the road, of alternative technical solutions at the second level and elsewhere, seems to have raised questions in the evaluators' minds regarding the need for the approach proposed by the Consortium. The fact that a solution may someday be available at the second level, or that alternative solutions in other parts of the DNS may also provide means to serve customers does not undermine the validity of the Consortium's approach,

and the evaluators reliance on these possibilities is inappropriate for several reasons.

1. Even if one accepts the argument that it is theoretically possible to meet the needs cited by the Consortium through existing technical solutions and existing TLDs at the second level, it is a fact that customer expectations (in relation to mobile Internet use) are not being met and have not been met for several years. Therefore, we do not accept the above argument, for the reasons discussed below. The best judges of whether customers are reasonably being served are not technicians or service providers or the Consortium – it is customers themselves. Consumers are perfectly able to decide what is in their best interests and at present they are telling us clearly - by opting not to participate in the mobile Internet - that their needs are not being met.

2. The evaluators seem to believe that there is a black or white choice between the ".mobi" approach and other approaches. This is not self-evident to members of the mobile industry supporting this application, nor is it consistent with generally accepted views about the positive effect of competing approaches on innovation. We fully expect that the market will develop solutions for customers that combine both visions in coming years.

<u>Trust and Accountability</u>

The evaluators suggest in a number of ways that the JV board of directors cannot be trusted to take the right decisions on behalf of the community, may be biased by their own self-interests, or could discourage innovation and/or participation in policy development.

The evaluators' questions about the appropriateness of the sponsoring organization and the policy formulation environment, in particular, seem to refer to this issue. Unfortunately, these concerns appear to be based in large part on the misapprehension that the <u>initial</u> applicants (Nokia, Vodafone, and Microsoft) are still the <u>only</u> applicants and/or will have the ability to dominate the joint venture activities and the JV board of directors. This is simply not the case, as information provided by the Consortium has made clear on numerous occasions including in the response given to the evaluators' questions. To the extent the evaluation report is made public, it creates an inaccurate and seriously misleading impression about the Consortium and JV. Assuming that the evaluators had access to all of the materials provided by the Consortium, it is hard to see how they came to be under this misapprehension.

The evaluation team offers no basis for its concern that the mix of planned investors is not representative of the community or that, guided by policy input from the MAG and the PAB, the board will make decisions that are not in the interests of the sponsored community. They offer no specific criticisms of the MAG/PAB structure other than, like the ICANN supporting organizations, these bodies do not have final power over policy. It is difficult to respond in a constructive way to concerns that are offered without specifics. We attempt to respond to this here, but would be happy to respond further to any specific concerns that the evaluators or the ICANN staff or board might be interested in. We reiterate our view, which is the view adopted by ICANN in the evolution and reform process, that an organization must have the ability to act on less than perfect consensus, but that any excesses that might stem from granting the board authority to act in this situation can be flagged, if not checked, by transparency and accountability. It is impossible for any operating business to take responsibilities for liabilities without the ability to manage them and, at the same time, meet its fiduciary responsibilities to investors, its obligations under contract to ICANN, as an employer, and as an institution subject to the laws and regulation of various sovereign authorities. In accordance with the proposal, the JV board must publicly issue a written justification of any decision taken that is inconsistent with the policy recommendations of the PAB.

Two issues related to this concern deserve elaboration:

1. It has always been understood by the Consortium that whilst the JV board will have final authority on all day-to-day issues, it will, nonetheless, be accountable to ICANN for the fulfilment of its charter. There will be mechanisms to reopen Board decisions if they are in conflict with its charter (e.g. inhibiting reasonable extensions of community). This accountability, coupled with the transparency requirements of public explanations for board action, substantially reduce the risk that board decision-making might be abused or used in a manner that undermines important issues of public good, community definition, or policy. We have outlined the basic transparency and accountability mechanisms in our submissions to ICANN, but are open to exploring further mechanisms with ICANN, the MAG, or the PAB.

2. *DELETED AS CONFIDENTIAL*

3. With the significant exception of the GSM Association, the planned investors represent commercial entities. We do not see this as a disqualification, inasmuch as the sponsored community consists of participants in the mobile communications industry who share a common interest in meeting customer needs and expectations to expand the market. All of these industry players benefit from the expansion of this market, which provides an incentive to embrace new technologies and encourage rather than stifle competition. In fact, improving the uptake of the data services over mobile can only improve the competitive situation of e.g. current PDA manufacturers.

4. The MAG/PAB policy development structures were described in the sTLD application, and have been elaborated upon, refined, and further detailed in subsequent submissions. We would like to clarify, in this connection, that participation in the MAG is not limited to commercial or for-profit industry participants. Trade groups, universities, research institutions, standards bodies, and individual entrepreneurs will be welcome participants in the MAG. Whilst there are the normal entry barriers, consisting mainly of the need to dedicate human resources and to cover costs associated with participation in conference calls, these costs are reasonable and should be within the reach of any of the interested stakeholders.

5. With respect to the participation of consumer advocates and ALAC representatives in the PAB, the JV reiterates its commitment to fund meaningful participation in policy development by these participants to guarantee that consumers' and general Internet viewpoints are fully considered.

We would hope that these three points significantly assist in resolving the trust issue. We remain open to dialogue on how this may be improved further to the satisfaction of ICANN.

Detailed Responses:	

1. Sponsorship Information	

1A	**Definition of the community**

The sTLD RFP requires the sponsored community to be "precisely defined, so it can readily be determined which persons or entities make up that community" and "comprised of persons that have needs and interests in common but which are differentiated from those of the general global Internet community." The ".mobi" application fully meets these requirements.

1. The fundamental basis of the application is, as described in the original application and the responses to questions posed by the evaluators, that mobility and the use of mobile devices to access Internet content creates needs that are different from those of the general Internet community. The evaluators did not question this point, so we assume here that they agree. For further information with respect to differentiated needs, please see our response in section 2A (Community Value) below.

2. The evaluators did raise a question about the clarity of the definition of the ".mobi" sponsoring community.

    a. As a starting point, the evaluators did not take issue with the clarity of the definition of the sponsoring community in relation to the mobile communications industry of <u>today</u>.

    b. The evaluators did, however, raise questions about how the definition of the sponsored community would map to relevant stakeholders as the mobile communications technology evolves and changes over time. The evaluators posed this question using the example of radio broadcasting spectrum and computing devices. In response to this question, we want to reiterate several points from our application and supplemental answers here:

        i. Change is inevitable for all communities seeking sTLDs; to take a trivial example, if all cars became flying cars, the definition of ".aero" would be affected, as would the concept of a pilot, and the roles of numerous other travel industry stakeholders. Indeed, it would be short-sighted to define a sponsoring community in a manner that "froze" the organization at a fixed point in time, particularly if the shared community interest was related to technology of any sort.

        ii. Given the inevitability of change, the key is to define the functions of members of the sponsored community in technology neutral terms that permit the organization to accommodate inevitable changes in technology. This was the approach used to define the ".mobi" community, which rests on three key pillars:

            • We understand "mobility" as the access to the internet over a device that is connected wirelessly with the connection being managed while "on the move", with management of changing locations delivered through service providers by same and different access technologies, and in such way, that it is not dependent upon specific access or transport technologies or IP versions. This is a functional definition that can incorporate technological change either with devices (from mobile computers and handsets today to wristwatches and other devices tomorrow) or access (from radio spectrums used today to new radio spectrums tomorrow). Our application explicitly includes WiFi for precisely this reason, and contemplates that new technologies as well as existing technologies serving new purposes will become part of the policy development process in the ordinary course.

            • To the extent that new or different technologies are used to deliver aspects of mobility, the need for policy changes should be minimal in as much as the goal of the sponsored community is to create technology neutral policies. To the extent that policy changes are required, or new policy is needed, these would be considered in the policy development

	process as well as normal change control processes. • Given the protections described above, any remaining concerns would rest on the unspoken fear that existing Consortium members would engage in activities to block the participation of stakeholders seeking to deploy new technologies. Any such efforts would be (1) likely illegal under any competition laws with which we are familiar, and (2) swiftly brought to light by the transparency and accountability mechanisms described above. This would also be against the interests of the Consortium members, who also seek additional business potential from new technologies. This is addressed above in the section on trust, but to briefly summarize, we have established balance within the Consortium, envisioned a strong and vibrant MAG/PAB structure, developed transparency and accountability mechanisms, and recognize that the JV will also remain accountable to ICANN for charter compliance and to national sovereigns for compliance with law. We believe that there the strong failsafe mechanisms protect against the negative outcome that apparently concerned the evaluators.
1B	**(The complete section 1B is confidential)** **Evidence of Support from the Sponsoring Organization**
	Deleted as confidential

1C	**(The complete section 1C is confidential)** **Appropriateness of the Sponsoring Organization and the Policy Formulation Environment**
	Deleted as confidential

1D	**Level of Support from the Community**
	Some evaluators complained about their inability to assess the level of support to be offered since the sponsoring organization has not yet been formed. It is not clear from the evaluators' feedback if this is a material issue or not. For the avoidance of doubt, the level of support from the "Sponsoring Organisation" (meaning the Consortium that is seeking to participate in the Registry Company) is clear. It comprises 13 members, including the three initial applicants, 11 of which have sent direct letters to ICANN in support of the bid (see Question 1B above). All these entities intend to be registrants in their own right. Moreover, the GSM Association's participation was approved unanimously by its Board, all of whom are in support of the bid. For reference, the GSM Association Board is comprised of 21 members, including AT&T Wireless, NTT DoCoMo (Japan), China Mobile, China Unicom, Sunday (Hong Kong), Taiwan Cellular, Maxis (Malaysia), Singtel (Singapore), KTF (Korea), Telenor Mobile (Norway), Telia Sonera (Sweden/Finland), Turkcell (Turkey), SFR (France), O2 (UK), Telefonica (Spain), Orascom (Egypt). Some of these companies have explicitly written letters of support directly to ICANN. In addition, there have been support letters from organizations like the CTIA that has strong participation from companies in the USA, as well as several independent letters from a broad range of organisations. It is the only the formal Supporter Organisation structured as MAG/PAB that has yet to be formed. It was always envisaged that it will only be formed if the bid is successful and, presumably, this is a viable and reasonable approach that is fully conformant with ICANN policy.

2. Community Value

2A	**Addition of New Value to the Internet Name Space.**
	The essence of the evaluation team's criticism is threefold:

1. That the benefits of the TLD must be "provided at least as effectively with existing technologies and without reliance on a new TLD....through existing content negotiation and device capability negotiation technologies."

2. That it might create confusion as to where to find a particular service and whether there is any difference between *.com/org/ccTLD and *.mobi

3. That, as a consequence, the "ET was not convinced that the ".mobi" application "would bring new user communities to the internet"

These three statements have been made without any evidence to substantiate them and don't fit to the facts presented. The reality is that:

1. There is substantial latent demand for mobile Internet services, as evidenced by trial of WAP based services when they were first launched.

2. That latent demand notwithstanding, the fact is that the vast majority of mobile users today simply do not use the Internet in any way, despite many of them having access to the Internet over various forms of data connectivity. Feedback from customers has consistently been that customer experience is simply not strong enough to sustain usage. This is despite all the technical solutions available today. It is our strong belief that relying solely on technical solutions (which is what we have done so far) will not work quickly and that the weight of market experience supports this. We are proposing a commercial

solution that will work today.

3. If the right customer experience could be delivered, the Internet would be available to a whole generation of new users. They would comprise two sets of users:

   a. There are many users who have access to the Internet through PCs and fixed access. Extending their usage of the Internet over mobile devices would comprise substantial extension of the Internet.

   b. Equally important are the users who do not access the Internet today and will only be able to access the Internet over mobile. This applies especially to developing economies where mobile access will substantially exceed fixed access. Our July 30 posting to the evaluators showed the example of India. Today, India, with a population well of over 1bn, has less than 40m lines for fixed and mobile each, where mobile will pass fixed by the end of this year. The Telecoms Regulatory Authority of India (TRAI) has estimated that by 2007, mobile lines will grow to 100m, while fixed access will grow at a significantly lower pace. Their reality, as that of many other developing markets, is that the "universal" connection will not be fixed but rather mobile. These user communities can only be reached through a differentiated experience that ".mobi" is trying to create.

4. We disagree with the assertion of the evaluation team that "the existence of the TLD is likely to create confusion …". The ".mobi" TLD provides an instantly human recognizable distinction of services that will work on a mobile device and by providing a clear suffix aids in discoverability rather than diminishes. There is no confusion today about what one can find in .aero as opposed to .com sites of commercial participants or .org sites of regulatory authorities. Moreover search tools today are able to search for content independently of the TLD. All that the TLD will signify is that a particular site or service has been configured for a good customer experience so that a user can establish and effect preferences. This warrants further investigation.

5. We would like to make one point in addition. There have been statements made to the effect that ".mobi" users would somehow not be given access to non- ".mobi" sites and services. As we stated in our application and the June 28 response, ".mobi" is intended to be additive to the Internet without taking anything away. PC users and other existing Internet users will be able to use ".mobi" content in an un-restricted manner as ".mobi" users will be able to access services under other TLDs. There will be no policies in the Registry Company restricting access between ".mobi" and the wider Internet.

The ET Teams response has debated the competing claims of existing technical solutions versus a new ",mobi" TLD as if they are competing options only one of which can be chosen to serve customers. It is our strong belief that this is itself a flawed view that ignores one of the main properties of the Internet itself, which is to provide room for a variety of competing approaches. We fully expect that the market will develop solutions that combine both visions in coming years and that it will be the customers wish and capacity to decide which approach will best reflect his demands.

2B	**Protecting the Rights of Others**
	The evaluation team stated that the application met the selection criteria, but had questions about the ability of the SO to implement these policies. As the application has met the selection criteria, we will not make any further comment in this response. On the issue of implementation, we remain confident that the policies can be implemented, but are open to feedback and concerns and always happy to strengthen aspects if required.
2C	**Assurance of Charter Compliant Registrations and Avoidance of Abusive Registration Policies**
	As with 2B, the evaluation team stated that the application met the selection criteria, but stated that further work was required. As with 2B, are open to feedback and concerns and always happy to strengthen aspects and undertake further work as required.
2D	**Assurance of Adequate Dispute-Resolution Mechanisms**

	The evaluation team stated that the application met the selection criteria with no qualifications.
2E	**Provision of ICANN Policy Compliant WHOIS service.**
	The evaluation team stated that the application met the selection criteria with no qualifications.

Appendix:
An extract from Consortiums SO related answers to Evaluators Additional Questions Statements.

Answers were provided in full due agreement with ICANN on process between June, 24th and June 28[th,] 2004. The mentioned letters of support were attached to the response and can be re-submitted if desired.

Qu2	**Please provide signed letters that are representative of all parts of the Community that you propose to represent, detailing the particular reasons for their support. You should include similar letters from all supporters mentioned in your application. (Note: We wish to assess the breadth as well as the depth of support.)**
Ans2	We will provide signed letters from investors and supporters on Monday 28th June as agreed. Below is a summary of already expressed support as posted on the ICANN web site or as represented by investors in the Consortium.

	Operator	Mobile Equipment Vendors & Terminals Manufacturers	Internet companies (Technology companies, ISPs, Content Companies)
I. Investors			
Vodafone	X		X
T-Mobile	X		X
Telecom Italia Mobile	X		X
Orange	X		X
3 (Hutchison)	X		X
GSM Association	X	X	X
Microsoft		X	X
Hewlett Packard		X	X
Sun		X	X
Nokia		X	X
Ericsson		X	X
Samsung		X	X
Panasonic		X	X
II. Supporters			
KidsWebTV Inc			X
Norbelle LLC			X
Forschungsverein EC3			X
SurfControl			X
Cash-U Mobile Technologies			X
Zone 4Play			X
Lunagames International BV			X
FindWhat.com			X
Infocomm			X
SFR - France	X		
Orascom Telecom	X		
TurkCell	X		
Telefonica Moviles	X		
Telenor Mobile	X		
Smart Communications	X		
CTIA	X	X	X
Valeria Marques			X
Beta Lee		Independent Consumer	
Tom Swan		Independent Consumer	

As you see from the table, the ".mobi" Consortium comprises a balance between operators, vendors and internet companies (which include technology companies, ISPs and content companies). The structure of Consortium is such that no single constituency/sector will have a majority and the intention is to have up to 17 shareholders so that no single company has dominance. Currently we have 13 signed up investors to our memorandum of understanding and we have kept open 4 further slots to accommodate additional players that would add to the balance and representativeness of the Consortium.

It is important to note that while most investors have primary focus on one sector, they typically have

important stakes for other sectors also. Most operators are building offerings in content services, web portals and IP networks to complement their network services offerings and see those as critical to their future. Most are also part of larger groups comprising fixed operators (with participation in IP networks, ISP services and web services). Similarly, Microsoft, HP and Sun have broad portfolios, which include interests in the ISP space (MSN, Hotmail), core technologies (e.g. IPv6), IT hardware and terminals, software (e.g. Java) and content (e.g. MSNBC). All of the mobile equipment vendors have substantial interests not only in handsets but also core technologies (e.g. compression technologies, security, mobile internet).

It is also important to note that the GSM Association represents over 640 individual operators globally and more than 1 billion mobile users in GSM technologies alone (substantially more if one counts the non-GSM interests of the mobile operators such as Vodafone, NTT DoCoMo and China Unicom, with its CDMA network). In aggregate the GSM Association's members represent more than 70% of all mobile users globally. The membership of the GSM Association also includes many equipment manufacturers, technology, application and services companies and also government departments/regulators.

All these investor companies have substantial customer bases and are driven by the desire and requirement to serve end-users. In addition, the Registry Company will have a supporter organisation, which will embrace the broader community, including consumer groups, ICANN at large, and non-profit organisations.

In summary, between the current investors, the users they serve, and the supporter organisation, there is strong representation of most of the important stakes in the evolution of the internet to mobile. There is structural protection against overall imbalance and against dominance by any individual player. The Consortium is representative of all parts of the community.

The same balance can be seen from the supporter list with all the sectors and constituents represented. In addition the supporter list includes smaller companies that do not have the capacity to participate in such a consortium but have a strong desire to see the creation of a mobile TLD. They also include some independent consumers and therefore potential registrants providing some indication of the potential interest in the marketplace.

Two further points are worth mentioning. Both the investor list and the supporter list include non-profit as well as for-profit organisations. The GSM Association, the CTIA and Forschungsverein EC3 are all non-profit organisations with a primary motive to grow the overall mobile and internet sectors while serving customers in the best possible way. For information Forschungsverein EC3 is non-profit research centre funded by private companies, 5 universities and the Austrian Federal Ministry for Labour and Economic Affairs and by the City of Vienna.

Finally, these investors and supporters are truly globally representative and will substantially increase the outreach to markets outside the US and Europe, especially in developing markets. The answers to questions 3 and 4 further elaborate on these points.

Qu3	**Do you have any plans to involve industry participants outside of the United States and Europe?**
Ans3	Both the investor group and the supporter list are highly representative of the global community as shown in the table below.

First of all, the Consortium includes 3 companies headquartered outside the US and Europe; the company "3" (Hutchison) headquartered in China, Panasonic, in Japan and Samsung in Korea.

These three markets are critical and the participation of strong companies headquartered there will substantially help the Consortium. All the vendors, terminal manufacturers, technology companies (hardware and software) and service providers are clearly global and have both sales and local operations in all regions.

The operator members of the Consortium are also global and have substantial local operations outside

the US and Europe. As stated above, the GSM Association also represents operators globally.

The supporter list complements and re-enforces this global representation.   Their geographic focus is specified below but we would highlight several key companies.

- Orascom Telecom is a mobile company with operations in Egypt, Algeria, Pakistan, Tunisia, Congo, Chad, Zimbabwe, and Iraq which all represent the kinds of geographies that we are very motivated to reach.

The same can be said for

- Smart Communications (an operator based in the Philippines),
- Telenor Mobile (which has direct operations in Russia, Ukraine, Hungary, Thailand, Malaysia, Bangladesh and Pakistan as well in European territories such as Norway, Denmark, Sweden and Austria),
- Telefonica Moviles (with operations in Brazil, Mexico, Puerto Rico, Peru, Argentina, Chile, Guatemala, El Salvador and Morocco as well as Spain), and
- Turkcell (Azerbaijan, Georgia, Kazakhstan, Moldova, Northern Cyprus as well as Turkey).

All these operators see an enormous scope for serving customers, and promoting the economic and social development of developing countries through provision of the internet over mobile.

The rationale is further elaborated below in Qu4.

	North America	Western Europe	E. Europe/ Russia/ Middle East	South America	Asia / Australia	Africa
Investors						
Vodafone	X	X	X		X	X
T-Mobile	X	X	X			
Telecom Italia Mobile		X		X		
Orange		X	X		X	X
3 (Hutchison)		X			X	
GSM Association	X	X	X	X	X	X
Microsoft	X	X	X	X	X	X
Hewlett Packard	X	X	X	X	X	X
Sun	X	X	X	X	X	X
Nokia	X	X	X	X	X	X
Ericsson	X	X	X	X	X	X
Samsung	X	X	X	X	X	X
Panasonic	X	X	X	X	X	X
Supporters						
I.						
KidsWebTV Inc	X					
Norbelle LLC	X					
Forschungsverein EC3		X				
SurfControl		X				
Cash-U Mobile Technologies		X	X			
Zone4Play	X	X	X			
Lunagames International BV		X				
FindWhat.com	X					
Infocomm	X					

	SFR - France		X				
	Orascom Telecom			X		X	X
	TurkCell		X	X			
	Telefonica Moviles		X	X	X		X
	Telenor Mobile		X	X		X	
	Smart Communications					X	
	CTIA	X					

Qu4	**Do you have any plans for outreach to less developed countries to make the sTLD more global? How can the sTLD improve use of the Internet in developing countries?**
Ans4	There are four critical considerations: 1. In most developing markets, there is a substantial issue of tele-density and data network access. Most governments have a strong policy to increase access and many have come to the conclusion that the fastest way to increase tele-density and data access is through wireless. India is a good example. According to TRAI (Telecom Regulatory Authority of India) in its consultation paper, 31st May 2004, mobile tele-density has already exceeded fixed (22m versus 19m in 2003) and to quote "today, the country is witnessing tremendous growth in mobile wireless...About 2 million wireless subscribers are being added every month...it is expected that there would be about 100 million wireless subscribers by the end of 2005." If we wish to expand the footprint of the Internet to the developing countries, it is essential to ensure availability over mobile. 2. The second major consideration is availability of Internet enabled devices and total cost of ownership for consumers in countries where affordability is lower. Mobile offers the opportunity to create hybrid devices (e.g. combined phone/internet functionality on a mobile phone) at low incremental cost to customers if they are already subscribing to mobile services. It is our expectation that mobile devices represent the early mass market for personal (as opposed to shared) Internet devices in these markets. It is our belief that these mobile Internet devices will substantially increase the reach of the Internet. 3. The third issue is language capability (e.g. on devices), content and services. The Consortium members and supporters already have programmes in place for the development and extension of character table support for devices and services to create an adequate representation of a broad cultural diversification in the ".mobi" namespace. Content and services will come through critical mass of customers which we are motivated to support, but it will also be substantially accelerated through local services which the ".mobi" TLD will explicitly support and promote. 4. The final consideration is the motivation of the investors and supporters as an indication of the overall outreach and promotion of the ".mobi" TLD. All the companies listed have substantial operations in developing markets, and substantial existing outreach and promotion activities. The ".mobi" offering can be added to these existing programmes without substantial incremental cost. The outreach commitment and capability of investors and supporters will not only support this aim directly but also create a competitive dynamic that makes ".mobi" offerings widely available.

.tel (Pulver)

TECHNICAL

1. Is this TLD going to be "delegation only" (see, e.g., http://www.isc.org/index.pl?/sw/bind/delegation-only.php)? If not, describe (i) other types you expect to support; (ii) how this will affect registrars' current processes; and (iii) what allowance you will make for technical difficulties in communicating with registrars.

   Delegation only.

2. What is your response to the issues raised in the 29 April 2004 letter from ITU Secretary-General Utsumi to ICANN President Twomey regarding ENUM and E164.arpa?

   Secretary General Utsumi indicates in his letter that he has been instructed by the ITU Member States…"to take any necessary action to ensure the sovereignty of ITU Member States with regard to country code numbering plans and addresses will be fully maintained, as enshrined in Recommendation E.164 of the ITU Telecommunication Standardization Sector, in whatever application they are used."

   Applicants believe that the ".tel" Registry should operate under a set of policies that fully respect the sovereignty of ITU Member States with regard to country code numbering plans and addresses. Applicants have proposed to accept registrations exclusively from IPCSPs who are registering E.164 numbers that have been assigned to the IPCSP or to a customer of the IPCSP under country-specific number plan administration policies. Applicants have proposed to require every IPCSP to enter into an agreement that requires the IPCSP to warrant that its registrations are consistent with country-specific E.164 assignment policies. Applicants have further proposed to impose financial penalties on Registrants who are shown to have violated this key registration requirement.

3. How does your proposal relate to existing ENUM trials?

   Existing ITU and country-specific E.164 number assignment procedures provide for the delegation of E.164 numbers to three different entities, each of which can assert a valid claim over the use of a given E.164 number. Consider the following common number-delegation situation:

   > *__Carrier-Delegation__: A licensed telecommunications service provider ("carrier") is assigned blocks of E.164 numbers from a country-specific number administration authority.*

   > *__IPCSP-Delegation__: A Carrier assigns a subset of its numbers to an entity that is providing IP-based communications services to a group of individuals (i.e. enterprise, university, government agency, or other "non-carrier" communications service provider).*

   > *__User-Delegation__: An IPCSP (i.e. enterprise, university, etc.) assigns one of its E.164 numbers to an end-user (i.e. student, employee, etc.).*

   All three entities defined above (Carrier, IPCSP and User) have a different type of valid claim over the use of the same E.164 number under existing country-specific number assignment policies. As a result, at least three different implementations of the ENUM protocol with different registration and administration policies are required to meet the equally valid addressing needs of these three

different user groups. Existing ENUM trials and industry activities are currently addressing just two of the groups identified above (Carriers and Users).

> ***Carrier-ENUM**: Discussions are underway today within multiple industry organizations (ITU, ETSI, IETF, GSMA, etc.) to explore the issues surrounding the creation of a secure, private implementation of the ENUM protocol for use by licensed telecommunications providers.*

> ***IPCSP-ENUM**: Applicants have proposed the ".tel" registry for use exclusively by IPCSP's under a set of policies that require IPCSPs to fully respect the country-specific number allocation policies that defined the distribution of the E.164 numbers being registered by any given IPCSP.*

> ***User-ENUM**: ENUM services under "e164.arpa" are being deployed to provide a structure under which individual telephone number subscribers can "opt-in" to a public-ENUM service and administer NAPTR records under an individual subscriber account. Policies relating to individual E.164 subscriber registrations are being defined on a country-by-country basis under the "e164.arpa" implementation.*

The addressing needs of IPCSPs as defined under the ".tel" application are not being met by existing Carrier-ENUM and/or User-ENUM ("e164.arpa") activities. Both Pulver.com and NetNumber are currently involved in working with various industry groups and numbering authorities around the world focused on Carrier-ENUM and User-ENUM issues. Applicants propose to continue to work with these various ENUM related industry groups to advance the efficient deployment of ENUM services for the benefit of Carriers, IPCSPs and Users.

4. Please clarify who is eligible to register in .tel.

Applicants propose to restrict registrations under ".tel" to IP Communications Service Providers (IPCSPs). An IPCSP is defined as any entity that provides IP-based communications services to a group of individual subscribers. Entities that fit this definition of an IPCSP include: Enterprises, universities, government agencies, as well as communications service providers.

5. How will you handle the situation where a telephone company holding number assignments and the user of the telephone number both want to have that registration?

As defined in question #3 above, there are three entities that can claim valid rights over the use of a given E.164 number under existing E.164 number assignment policies today:

> ***Carrier**: A licensed telecommunications service provider ("carrier") that has been assigned blocks of E.164 numbers from a country-specific number administration authority.*

> ***IPCSP**: An entity that is providing IP-based communications services to a group of individuals (i.e. enterprise, university, government agency, or other "non-carrier" communications service provider) using E.164 numbers allocated from one or more Carriers.*

> ***User**: An individual (i.e. student, employee, etc.) who has been allocated an individual E.164 number from an IPCSP as part of a communications service.*

Under the ".tel" registry, the individual User will not be allowed to register and the IPCSP will be given priority over the Carrier. In certain situations, a Carrier will be fulfilling the role of both Carrier and IPCSP in the delivery of services directly to a set of end-users. In this situation the Carrier will be welcome to participate in the ".tel" registry as an IPCSP. In the situation where a Carrier and a separate IPCSP both claim to be providing services to the same end-user, the ".tel" conflict resolution process will be invoked to resolve the conflict.

6. Will you allow delegation to a block of numbers, e.g., +1-202-418-0? If so, how will these be priced?

Current Applicant thinking is that registrations will be limited to full E.164 numbers. This policy will be reviewed by the ".tel" Board of Directors as appropriate.

7. If users are registrants, how will you monitor whether the registrant is still the holder of that telephone number?

Individual telephone number subscribers ("users") will not be allowed to register under ".tel". The ENUM addressing needs of individual registrants are being provided for on an "opt-in" basis under the "e164.arpa" implementation of the ENUM protocol.

8. Please explain how you will verify this issue, for example, in country codes +249, +82 or +886 for example, in the absence of a functioning government or where there are language barriers?

N/A

9. What is the technical setup of the DNS, Whois and EPP servers? For all of these elements, please specify how the setups fulfill the requirements of up time from ICANN?

The NetNumber ENUM/ DNS name servers are deployed at multiple, geographically separated network sites. Each network site is composed of a server farm of two or more load balanced name servers. For example, NetNumber currently operates NSA.NETNUMBER.NET (65.214.42.86) in Boston, MA and NSG.NETNUMBER.NET (65.216.77.206) in Chicago, IL. Both the A and G sites consist of two or more physical name server platforms. Since 11/2003, the aggregate availability of both the A and G sites has been 100%. A third server farm located in California is scheduled for deployment in Q4 2004.

The WHOIS service will be deployed centrally at the registry master site in Boston, MA. The deployment architecture will consist of a server farm of two or more load balanced WHOIS protocol servers connecting to a highly available (clustered) database system. This architecture is designed to provide 99.9% service availability, exceeding the 99.79% ICANN requirement.

The EPP service will be deployed centrally at the registry master site in Boston, MA. The deployment architecture will consist of a server farm of two or more load balanced EPP protocol servers connecting to a highly available (clustered) database system. This architecture is designed to provide 99.9% service availability, exceeding the 99.87% ICANN requirement.

re: DNS

10. Does TLD plan to use wildcard DNS records? If so, explain what will be the use and the types of records used.

No wildcard delegation is anticipated.

11. In how many DNS zones are the NS records located? Is this zone in the requested sTLD or not? (I.e. how long will the chain of NS records be when chasing them?)

   The ".tel" registry will be deployed initially with a single DNS zone under ".tel". As the number of registrations grows in size NetNumber will evaluate the appropriate time to partition the namespace into multiple zones, most likely at the country-code level.

12. How do you expect to meet the ICANN requirements of DNS answers RTT if all your DNS servers are in the US?

   NetNumber will deploy additional ENUM/DNS query servers outside the US as appropriate to meet the RTT requirements of both ICANN and the IPCSPs using the ".tel" infrastructure.

13. Please provide evidence of public DNS operations and locations of publicly available instances of DNS servers running your software.

   nsa.netnumber.net   65.214.42.86
   nsg.netnumber.net   65.216.77.206

14. Is this sTLD a candidate for filtering based on the TLD? If so, what will be effects on the operation/survival of this TLD if it is locked-out (i.e., if a large ISPs return "NXDOMAIN" for all queries for it)?

   No. IPCSPs are the primary users of the ".tel" sTLD and we do not anticipate that these users will be filtered by their ISPs.

re: Operations

15. Please provide a statement about how often disaster recovery plans are practiced, and for which contingencies. Also: (i) in the event of a need for recovery from primary data server failure, would there be an interruption of service? If so, for how long? (ii) is notification provided for failed transactions during a fail over? and (iii) what is the bandwidth allocation planned for the interconnection of data centers for synchronization purposes, and to the Name Servers serving the sTLD?

   Intra-site data server failover and recovery procedures are practiced on a monthly basis. Registry site fail-over and recovery will be practiced on a quarterly basis. Failover from a primary data server to a standby data server will result in a short (5 minutes or less) interruption of provisioning service while the standby data server recovers and takes over for the primary data server. All failed transactions will result in an error response being returned to the initiating registration client application. Planned bandwidth allocation between all NetNumber data centers for replication and synchronization purposes is burstable to 100 mbps.

16. Can you clarify whether or not you will escrow registry data?

   Applicants currently do not plan to escrow registry data because all Registry data will be automatically replicated to a geographically distributed back-up master database infrastructure as part of the normal course of business. If data escrow is a requirement from ICANN, Applicants will implement a data escrow process that fulfills the ICANN requirement.

17. Do you - or your subcontractors - have plans to use recent standards developed by the IETF:

   NetNumber plans to implement the following recently developed IETF standards for use with the ".tel" registry:

   - *EPP will be supported for provisioning if requested by ".tel" Registrars. Initial provisioning services will be provided under a W3C Webservices (SOAP/XML) interface.*

   - *DNS IPv6 transport and glue records.*

   - *DNSSEC Transactional Signatures (TSIG).*

BUSINESS/FINANCIAL

(Please Note: We are asking these questions to provide you an opportunity to demonstrate the existence of a well-developed business model, rather than to judge whether this information constitutes a "fail-safe" business plan.)

1. What is the minimal number of total registrations that are required for the Sponsoring Organization to sustain operations? What is the minimal number of total registrations that are required for the Registry Operator to sustain operations (in this case, you may include other TLDs under operation)?

    Applicants have proposed to address the downside risk associated with potential slow adoption of the ".tel" Registry by integrating the initial operating costs of the registry into the existing businesses operated by both Pulver.com and NetNumber, Inc. The operation of a ".tel" registry is complimentary to both the Pulver.com and NetNumber business models. Pulver.com will provide the infrastructure for communicating with the IPCSP community through existing industry conferences and newsletter activities. NetNumber will provide the underlying ".tel" Registry services through its existing ENUM/DNS infrastructure and existing operations staff. The work associated with promoting industry adoption of the ".tel" sTLD is perfectly complimentary to the community development activity that represents the core of the Pulver.com business. Similarly, the work associated with delivering Registry services to the communications industry is perfectly complimentary to NetNumber's business which is based on the development of the NetNumber ENUM Server technology. As such, no minimum number of registrations is required for the Sponsoring organization or Registry Operator to justify sustained operation of the ".tel" sTLD. From a business model perspective, Pulver.com and NetNumber will support the initial operations of the ".tel" sTLD though our existing business models and then as the ".tel" registry grows in size and in revenue, the registry infrastructure will be migrated over to dedicated assets and staff as appropriate.

2. What will you do if revenues come in less than your "low" projections? How will any revenue shortfall be funded? If any gap is unfunded, how will you manage – both operationally and financially?

    See question #1 above. Applicants business plan is based on integrating the initial registry services into the existing services provided by Pulver.com and NetNumber, Inc. As a result, initial operations of the ".tel" registry will not generate any unfunded revenue shortfall or gap for either NetNumber or Pulver.com.

3. You have stated that the purpose of the .tel TLD will be to "enable(s) the mapping of legacy telephone numbers to the Internet address information required by IP-enabled communications applications and services." How does this directory infrastructure that you propose differ from what is being done currently with ENUM trials using e164.arpa?

    Existing ITU and country-specific E.164 number assignment procedures provide for the delegation of E.164 numbers to three different types of entities, each of which can assert a valid claim over the use of a given E.164 number. Consider the following common number-delegation situation:

Carrier-Delegation: *A licensed telecommunications service provider ("Carrier") is assigned blocks of E.164 numbers from a country-specific number administration authority though existing ITU guidelines regarding the use of the E.164 namespace.*

IPCSP-Delegation: *A Carrier assigns a subset of its numbers to another entity that is acting as an IP-based communications service provider (IPCSP) to a group of individuals. IPCSP examples include enterprises, universities, government agencies, and various other types of "non-carrier" communications service providers.*

User-Delegation: *The IPCSP (i.e. university, etc.) assigns one of its E.164 numbers to an end-user (i.e. student).*

In the E.164 delegation example above, all three entities (Carrier, IPCSP and User) have a different type of valid claim over the use of the same E.164 number under existing country-specific number assignment policies. As a result, at least three different implementations of the ENUM protocol with different registration and administration policies are going to be required to meet the equally valid addressing needs of these three different user groups. Existing ENUM trials and industry activities are currently addressing just two of the groups identified above (Carriers and Users).

Carrier-ENUM: *Discussions are underway today within multiple industry organizations (ITU, ETSI, IETF, GSMA, etc.) to explore the issues surrounding the creation of a secure, private implementation of the ENUM protocol for use by licensed mobile and fixed-line telecommunications providers.*

IPCSP-ENUM: *Applicants have proposed the ".tel" registry for use exclusively by IPCSP's under a set of policies that require IPCSPs to fully respect the country-specific number allocation policies that defined the distribution of the E.164 numbers being registered by any given IPCSP.*

User-ENUM: *ENUM services under "e164.arpa" are being designed to provide a structure under which individual telephone number subscribers can "opt-in" to a public-ENUM service and administer NAPTR records under an individual subscriber account. Policies relating to individual E.164 subscriber registrations are being defined on a country-by-country basis under the "e164.arpa" implementation.*

The addressing needs of IPCSPs as defined under the ".tel" application are not being met by existing Carrier and/or User ("e164.arpa") ENUM activities.

4. To what degree have you determined the potential market for .tel outside of North America?

    Applicants have not sponsored any original market research on this subject. However, industry activity relating to the deployment of broadband IP infrastructure and the sale of IP-based applications like IP-PBXs indicates that IP-based communications applications are advancing just as quickly in Europe and Asia as they are in North America.

5. Please explain why you believe that the limits of a "closed user group" are not yet being addressed.

    See question 3 above. Industry activity is already underway to meet the needs of individual subscribers under "e164.arpa" ("User-ENUM). Industry activity is already underway to define a secure, private implementation of the ENUM protocol for use by licensed telecommunications service providers to facilitate the interconnection of IP-based services ("Carrier-ENUM"). No coordinated effort exists to reflect the perfectly valid addressing needs of the closed user group defined by Applicants as IPCSPs.

6. *[CONFIDENTIAL INFORMATION REDACTED]*

7. Please describe further the relationship between Pulver and NetNumber.

   Pulver.com and NetNumber, Inc. have agreed to a business relationship regarding the operation of the ".tel" Registry whereby Pulver.com will provide on-going community outreach and communications services and NetNumber will provide Registry operations services. The business relationship will provide for the equal distribution of any profit from the operation of the ".tel" registry between NetNumber and Pulver after baseline Registry operations costs have been covered.

8. In Section VII regarding Provision for Registry Failure, you state that NetNumber can provide the names of several financially viable and competent DNS infrastructure service providers who would be willing to provide contingency plan services. Please provide us with those names.

   Given the existing stock ownership relationship between NetNumber and Verisign, NetNumber will seek to negotiate a contingency plan agreement with Verisign before discussing this opportunity with any other DNS service provider. Applicants will initiate discussions with Verisign regarding the delivery of contingency plan services pending feedback from ICANN regarding the award of the ".tel" sTLD. Please let us know if a contingency plan needs to be negotiated in advance of any decision by ICANN.

9. How much money has been allocated in the budget to enable a smooth transfer of the TLD to another operator in the event of Registry Operator or Sponsoring Organization failure? (For example, has a reserve fund been established to cover any financial obligations associated with multi-year registrations or other registry/registrar/registrant obligations?)

   Applicants have been working under the assumption that all multi-year registration fees will be deposited into a "pre-paid services" account. Funds will be withdrawn from the account on a monthly basis as services are provided. In the event of a Registry Operator failure, funds from the pre-paid services account will be used to facilitate the migration of the Registry to a new operator.

10. With regard to Whois service, you have proposed that you will "avoid providing any information regarding the identity of the underlying individual communications service subscriber who has been assigned day-to-day control over the registered e.164 number". How will your Registry/Registrar agreement ensure that the Registrant (IPCSP) working on behalf of the individual subscriber maintains accurate and up-to-date information about the individual subscriber? Who will assume any responsibility for the accuracy of that information?

Applicants propose to hold each individual IPCSP responsible for the accuracy of all registered data. Registrars will be required to integrate specific contractual language into all IPCSP Registrant agreements defining this requirement in a consistent fashion across all Registrant agreements. Applicants propose to require every IPCSP to provide a deposit fee to cover potential costs associated with the resolution of conflict associated with the provisioning of inaccurate data. Applicants have proposed to provide an on-line conflict resolution tool to facilitate the quick resolution of questions regarding the accuracy of any given E.164 registration. The costs of providing such conflict resolution services shall be born by the entity found to have made a mistake.

11. Please explain how the existing staff and infrastructure can be used to operate the .tel Registry in addition to continuing NetNumber's current business operations (as noted in Section II and elsewhere) and how you can continue to count on anticipated revenue from your current operations if existing staff is re-deployed to operate the .tel TLD. *[CONFIDENTIAL INFORMATION REDACTED]*

12. Will you draw your staff of conflict resolution personnel (Section IV) from existing staff? Please indicate which section of your budget addressed the cost of training existing staff for this new role.

NetNumber has proposed to charge a fee for all conflict resolution services. Conflict resolution fees will be set at an appropriate level to provide NetNumber with fully allocated cost recovery for all conflict resolution activity. A certain amount of experience will be required to define the conflict resolution fees appropriately and to refine the procedures associated with the process. NetNumber believes that it has sufficient management and staff in place to fulfill the early role associated with "figuring out the process". Additional staff will be hired and trained as ".tel" registration/activity grows and as ".tel" revenue grows.

13. Please indicate the section of your budget that provides for a possible increase in the cost of liability insurance associated with this new business activity for NetNumber.

In order to be conservative, the Year-1 and Year-2 business models provided in the ".tel" application do not reflect any incremental revenue from ".tel" registrations. As a result, no increase in liability insurance costs is projected in the Year-1 and Year-2 models. As registrant activity (and revenue) builds within the ".tel" registry, NetNumber will revisit this issue. In the event that additional liability coverage is appropriate NetNumber believes it will have sufficient financial reserves on-hand to cover any such additional insurance premiums.

14. Even though you have not yet finalized the numbers, please provide us with an indication of your initial thinking on the dollar amount of the deposit fee you plan to charge registrants, and fees for the conflict resolution services that the .tel registry will provide.

At volume, NetNumber anticipates a fully-loaded cost of $60/hour for manual conflict resolution services. Initial estimates are that the average conflict can be resolved with less than 1-hour of dedicated staff time. NetNumber currently plans to request a deposit of 3-hours of conflict resolution time ($180) from every IPCSP to cover the cost of the conflict resolution service. This policy, and all other pricing policies, will be reviewed by the ".tel" Board of Directors and modified as appropriate to provide for fully-loaded cost recovery on all conflict resolution services. .

15. Please explain how you can be confident that it will not be necessary to acquire any additional/new systems and facilities when the size, scope and earning potential of this new TLD are not known. (You have stated "Insufficient evidence exists to support specific revenue projection claims for the introduction of the .tel TLD.")
   [CONFIDENTIAL INFORMATION REDACTED]

16. Please provide additional information regarding projected travel associated specifically with the .tel TLD side of NetNumber's operations, as requested in Section 3, Financial Model.

Applicants have proposed to hold public meetings for the ".tel" TLD in conjunction with regularly scheduled Pulver.com VON events. Pulver.com and NetNumber currently maintain travel budgets that already include the costs associated with sending appropriate staff to the VON events. No incremental ".tel" travel expenses have been proposed during the early operation of the ".tel" TLD.

17. Please explain the following variations between Year 1 and Year 2 in your budget spreadsheet, as they relate to the .tel TLD side of NetNumber's operations: (i) Very minimal increase (292,000 to 315,000) in Customer/Registrar Service expenses; (ii) Decrease in Legal/Contracting expenses; (iii) Flatline in utilities expenses; (iv) Significant decreased in Systems/Software expenses and (v) Significant increase in Supplies expenses.

(i) <u>Customer/Registrar Service Expense</u>: The Year-1 and Year-2 business model reflects the business plan for NetNumber's existing operations for 2005 and 2006. In order to be conservative, no revenue for the ".tel" sTLD is projected in the Year-1/Year-2 model. In the event that the ".tel" TLD generates significant customer activity during 2005 or 2006, additional service staff will be required. Applicants propose to provide initial ".tel" customer support services through the existing NetNumber staff and then align additional ".tel" specific staff expenses with the generation of ".tel" specific revenue.

(ii) <u>Legal/Contracting Expenses</u>: The small dollar difference between Year-1 and Year-2 is based on slightly higher projected patent activity in the Year-1 plan versus the Year-2 plan. In hindsight it seems clear that Year-1 legal/contracting fees will need to be increased to accommodate ICANN related work in the event that the ".tel" sTLD application is granted.

(iii) <u>Utilities expenses</u>: As stated above, NetNumber's existing infrastructure will be used to support initial ".tel" operations. Utilities expenses built into Year-1 and Year-2 reflect existing fixed-fee contractual costs for facilities, power, etc. incurred by NetNumber's existing operations.

(iv) <u>Systems/Software Expenses</u>: Year-1 includes an allocation for licensing of third-party software components that might help facilitate the start-up of the ".tel" registry. These start-up costs do not carry forward into Year-2.

(v) <u>Supplies Expense</u>: The Supplies expense category was used to aggregate several items in the NetNumber business model into the ICANN form. The increase of $40,000 from Year-1 to Year-2 was not intended to represent a significant increase in this category. Please let us know if additional data is required on the make-up of the $40,000 increase.

18. What other products or services, if any, do you intend to offer that could impact the new TLD? Please specify whether such products or services would rely upon the same, or different, staff and resources. *[CONFIDENTIAL INFORMATION REDACTED]*

SPONSORSHIP

1. Please elaborate, consistent with the RFP criteria (concerning enhanced diversity of the Internet name space), how the new sTLD would "create a new and clearly differentiated space, and satisfy needs that cannot be readily met through the existing TLDs."

As per question #3 above: Existing ITU and country-specific E.164 number assignment procedures provide for the delegation of E.164 numbers to three different types of entities, each of which can assert a valid claim over the use of a given E.164 number. Consider the following common number-delegation situation:

__Carrier-Delegation__: A licensed telecommunications service provider ("carrier") is assigned blocks of E.164 numbers from a country-specific number administration authority according to the ITU E.164 numbering plan policies and procedures.

__IPCSP-Delegation__: A Carrier assigns a subset of its numbers to another entity that is acting as an IP-based communications service provider (IPCSP) to a group of individuals. IPCSP examples include enterprises, universities, government agencies, and various other types of "non-carrier" communications service providers.

__User-Delegation__: The IPCSP (i.e. university, etc.) assigns one of its E.164 numbers to an end-user (i.e. student).

All three entities defined above (Carrier, IPCSP and User) have a different type of valid claim over the use of the same E.164 number under existing country-specific number assignment policies. As a result, at least three different implementations of the ENUM protocol with different registration and administration policies are required to meet the equally valid addressing needs of these three different user groups. Existing ENUM trials and industry activities are currently addressing just two of the groups identified above (Carriers and Users).

__Carrier-ENUM__: Discussions are underway today within multiple industry organizations (ITU, ETSI, IETF, GSMA, etc.) to explore the issues surrounding the creation of a secure, private implementation of the ENUM protocol for use by licensed telecommunications providers separate from the User-ENUM implementation proposed under "e164.arpa"..

__IPCSP-ENUM__: Applicants have proposed the ".tel" registry for use exclusively by IPCSP's under a set of policies that require IPCSPs to fully respect the country-specific number allocation policies that defined the distribution of the E.164 numbers being registered by any given IPCSP.

__User-ENUM__: ENUM services under "e164.arpa" are being designed to provide a structure under which individual telephone number subscribers can "opt-in" to a public-ENUM service and administer NAPTR records under an individual subscriber account. Policies relating to individual E.164 subscriber registrations are being defined on a country-by-country basis under the "e164.arpa" implementation.

The addressing needs of IPCSPs as defined under the ".tel" application are not being met by existing Carrier and/or User ("e164.arpa") ENUM activities.

2. How would the Sponsor represent parts of telco community, including the wireless, wireline traditional, and voice over IP sectors? Please provide signed letters of support from these parts, which describe their specific contributions.

Please see the answer to question #1 above: Sponsor does not propose to represent the licensed telecommunications carrier community (wireless or wireline) through the ".tel" sTLD. Requirements for a secure, private implementation of the ENUM protocol for use by wireless and wireline communications service providers will be met through a separate Carrier-ENUM infrastructure.

3. In order to further substantiate your statement of broad-based support, please indicate which of your supporters represent the universities, regulatory bodies and/or research groups that form part of "community of interest focused on the advancement of the IP communications industry," which Pulver.com is dedicated to creating. How will these groups be represented on .tel's Board of Directors?

*Part-B of the Pulver.com ".tel" application (**Sponsoring Organization Structure**) provided a partial list of organizations (including universities, research groups and regulatory bodies) that participate in regularly scheduled "Voice on the Net" (VON) events organized by Pulver.com. The most recent Spring 2004 VON event attracted 3,500 participants from 30 countries representing over 950 organizations including universities, research groups and regulatory bodies. Examples of regular Pulver.com event participants from the university, regulatory body and research group categories include Cornell University, Columbia University, University of Zurich, CRTC Canadian Government, FCC, The Yankee Group, Gartner Dataquest, etc. Please let us know if the ICANN evaluators would like to see a complete list of Spring VON participants to gain a more complete understanding of the breadth and scope of the community of interest created by Pulver.com.*

*Applicants propose to fill 9 open positions on the ".tel" Board of Directors with individuals representing various elements of the IPCSP community including representatives from universities, enterprises, regulatory bodies, as well as emerging IP-based communications service providers. Part-B of the ".tel" application (**Appropriateness of Sponsored TLD Community**) provided a list of 35 industry executives who declared their public support for the ".tel" sTLD. The majority of these industry executives represent companies that can be defined as emerging or next-generation IP-based communications service providers. Applicants propose to select several Board members from this list of already identified supporters. In addition, Applicants propose to broaden the pool of potential Board candidates by soliciting interested parties through use of the Pulver.com website, the Pulver.com free newsletter and through public meetings at VON events. Given the number of regular VON participants from the enterprise, university and regulatory communities, Applicants feel confident that a representative group of qualified Board candidates can be assembled in a timely fashion with appropriate ICANN oversight.*

4. Do you have a plan for outreach to less developed countries to make the sTLD more global? And how can the sTLD improve the use of the Internet in that part of the world?

As described above, the Pulver.com community of interest already extends to 30 countries around the world. Pulver.com is constantly working to extend the reach of the VON community of interest to include representatives from additional countries by promoting free distribution of the Pulver.com newsletter and by organizing VON events outside of the US. For example, in 2005, Pulver.com events already scheduled outside of the US include: Sophia-Antipolis France, Montreal Canada, Stockholm Sweden and Sydney Australia.

Telnic's Responses to Evaluators' Technical Questions

21st June 2004

Please note that, due to the time constraints that have been imposed, these should be considered our initial responses. Whilst we understand the time demands of the ICANN process, the three working days response time required is quite short for a considered and detailed response.

Given the time constraints, these responses are not perfunctory, but we are happy to engage in a dialogue if you have further questions or require further clarifications. We would ask that you give us as much notice as possible of these questions or requests for clarification so that we might schedule the appropriate staff to answer them.

Also, we would urge that you consider our responses to questions from Telefonica (Annex 1) and Larry Boston (Annex 2) on the public ".tel-Telnic" ICANN forum, and the closing comments on that forum by our CEO (Annex 3). We believe that those statements address many of the questions raised here.

As an overall statement, the .tel sTLD is intended to hold contacts associated with a person (or company) and their services, rather than their machines. This is a subtle point, and we will return to it, as it is fundamental to the proposal.

There are several technical aspects that follow from this:

(i)   Contacts for machine nodes will NOT exist within the .tel name space. This includes nodes providing DNS; resource records such as "aaa.bbb.tel IN 10 20 A 194.101.125.240" (or the AAAA equivalent) are NOT permitted within a .tel delegated domain (or sub-domain).

(ii)   If a Registrant wishes to identify machines that run services (such as the address of a web server), then this must be done using a registration in another TLD; .tel is purely for their contacts, not those of their machines.

(iii)   Note that SRV records and MX records would be acceptable. However, the target for these records will have to be in a zone in another TLD.

Question T1

1. Is this TLD going to be "delegation only"
   (see, e.g., http://www.isc.org/index.pl?/sw/bind/delegation-only.php)?
   If not, describe (i) other types you expect to support; (ii) how this will affect
   registrars' current processes; and (iii) what allowance you will make for technical
   difficulties in communicating with registrars.

A1:

The short answer is "Yes".

The PAG may request that the Sponsoring Organisation arranges a "Registrar of last resort", and that Registrar will be expected to provide authoritative DNS service. Note that in such a case this Registrar would not (we believe) be expected to compete with other Registrars, and we would expect a pricing premium approach to be used to discourage Registrations where there is an alternative. In this scenario, there might be delegations that refer to servers run by the Registry Operator. Those would be, however, standard delegations from the DNS technical perspective.

We expect to support domain reservations (as opposed to full delegated Registrations), particularly during the "sunrise period". The DNS Registry will treat these as standard NS delegations, but they will be made to servers that are required to have no zone content over and above the mandatory SOA record; these delegations will be to "empty" domains (see also answer to question 5).

Question T2

2. If there are plans to allow third level registrations, please explain the selection process for these names, and the policies for registering them.

A2:

We will discourage registration of a domain with the intent of providing a third level domain within this to third parties. Thus if a Registrant makes an application for the domain "Brown.tel", then this is intended for their personal (or corporate) contacts. It is not intended that they then provide a (for payment) service by sub-delegating the domain "John.Brown.tel" to a third party for their separate use.

Under certain circumstances, the PAG might ask the SO to process third-level registrations directly, where the second level label is classified by the PAG as a "category name" such as "taxi"; this is discussed further in our answer to question 4.

We expect that the policies for such registrations would be similar to those for standard domains, with the sole exception that, in this case, the domain requested would include the category name "under which" the registration was to be processed. Other than that, the selection process would be the standard "first come, first served", qualified as usual by protections on trademarks.

Question T3

3. Please clarify (i) the requirements for registration in the sTLD; (ii) how the requirements would be validated; and (iii) how you would address any situations where there are identical registrations in country code domains.

A3:

(i) The TLD is intended to hold contacts for people (or companies), not contacts for their machines. Thus it is defined by use. The registration process includes an agreement with the potential Registrant that they concur with this acceptable use policy for their zone. The Registrar acts for the Registry in this regard; they keep a proof that the Registrant has agreed to these conditions of use, and will be expected to pass on Registration requests only once this is done.

(ii) The Registry is able to check that a delegated domain has no embargoed Resource types by means of a set of basic DNS queries on the authoritative DNS server for that domain. It will carry out a low level of pseudo-randomized queries on the set of delegated domains as part of its normal procedures and also to monitor this policy; statistical results will be made available to the PAG.

It will, in addition, act on complaints from 3rd parties over misuse of a Registrant's domain to hold unacceptable resource record types. A complainant is required to make their comment via a web service that will check the domain in question. If the domain is found to be non-compliant, it will be marked for "re-checking" after a given interval. If it is still detected as non-compliant, the Registrar who is shown as the "tag-holder" for the domain will be informed that there is primae face evidence of misuse, and will be required to inform the Registrant formally that this breaks the terms of their agreement. The Registrant (or their agent) will be required to indicate to the Registry (again via a web service) that the non-compliant usage has ceased, without which the Registry reserves the right to de-activate the domain delegation.

The complaints procedure has the potential for abuse and might form a means of denial of service attack on a delegated domain. Thus the source of complaints and the pattern of target of the complaints will be monitored for unusual activity. Throttling will be used to control the rate of checking, and if the pattern of activity exceeds certain limits, the Registry Operator personnel will be informed and requested to influence the operation of the system, potentially blocking unwarranted complaints against "attacked" delegated domains.

Note that this process (from the Registry's perspective) is fully automated and logged (with manual post-facto auditing for statistical and legal purposes).

From the perspective of the Registrar, it should be straightforward to make this a similarly automated process. The Registrar, by passing on the initial request (or re-

Registration request, or Transfer request, in the case of Registrar change) will be expected to have proof that the Registrant has agreed to use their domain only to hold personal or corporate contacts. However, they have the service contract with their customer (the Registrant), and so they must be free to use whatever system they choose that protects their legal rights and executes their duties. The Registrars will be able to respond on behalf of the Registrant in any non-compliance case, but unless compliance is regained, they will be informed that the domain will be deactivated, and will be required to inform the Registrant of this action. If they fail to do this, we believe that the Registrant may have a case against the Registrar. However, this is a matter between the Registrar and their customer, not with the Sponsoring Organization or Registry Operator that carries out the sTLD policies.

(iii) We believe that no other gTLD or ccTLD is designed solely to hold contacts for people. Thus any other registration cannot really be said to be identical, as it does not have the same role and usage limitations. The nearest to this role is the ENUM domain space with apex ".e164.arpa.", but as that is also organised effectively on a national (or regional) basis it is not possible to specify a global set of usage rules for ENUM delegations.

Given that the aim of the .tel sTLD is to provide a name space for people or companies to publish their contacts, the domains registered are expected to reflect names to which they have a right (i.e. by which they are to be known). If there is a registration within another TLD (either global of country code based), we consider this completely orthogonal to a registration within .tel.

Thus we will take no action to address registrations for the same domain label in another Registry, other than the standard procedures for trademark protection. We do expect the PAG to address the issue of "Famous Names", but that is not directly related to other Registries.

Question T4

4. Will there be a policy on what eligible registrants may register in the sTLD? For example, on delegations? Will certain domain names be disallowed?

A4:

A domain registration in .tel is intended to hold personal or corporate contacts. Thus the domain names registered should be associated with the registrant personally (or a company, where the registrant acts as its officer or agent). Whilst we see little reason for an individual to have a complex hierarchy in their zone, we do not expect to try to bar such sub-domains. For companies, we believe that multiple sub-domains are very likely, and again, we will not try to block this usage.

The sole exception is shown in our answer to question 2; a .tel domain is for personal or corporate contacts, NOT for use by third parties. If a Registration is made on behalf of an association or partnership, then control over a sub-domain by a member of that association is acceptable. However, sub-delegations that have the effect of passing control for those sub-zones to third parties are **not** acceptable.

As mentioned in question 2, the PAG might consider blocking direct registration of certain "category-based" names. It is one of the tasks of the PAG to specify the policies to be carried out in this case, but our view is that these "categorical" names could be, in effect, "pre-registered" and sub-registrations within these categories would be accepted

Question T5

5. How will the reserved list that ICANN specifies be implemented? How, and when, is the reserved list used during the registration process? What happens if the reserved list is changed?

A5:

As mentioned in the answer to question 1, the Registry will support reservation of domains by the process of delegating these domains to servers with effectively empty zone files (other than the SOA record).

(i) The list of ICANN-reserved domain labels will be processed in this way, with a marker within the Registry automation to indicate that these are permanent and are reserved by ICANN.

(ii) We would expect any Registrar to perform a DNS query (for SOA records) on a domain before they attempt to place a Registration for it. Any reserved or registered domain will return a valid SOA record in response to such a query, whilst queries on unregistered (and unreserved) domains will return NXDOMAIN, with the .tel Registry servers shown in the additional information records part.

The Registry, on receipt of a Registration or Reservation request, will (of course) check its internal database. As any ICANN-requested reservations will be present already in the database, the attempted Registration/Reservation request will fail at this point.

It is a matter for the PAG whether or not penalties will be included in the Registry/Registrar agreement for those Registrars who persistently place unchecked Registration or reservation requests.

(iii) We would expect ICANN to inform the Sponsoring Organisation (with which it has the sTLD agreement) if the list changes, and any additions will be processed as new reservations in the same way, with any released reservations being deleted (and, in effect, returned to the pool of available domains).

Question T6

6. Please provide details on how the .tel TLD would avoid interference with established and/or future national and international telephone numbering plans.

A6:

(See also response to question 7)

In addition to the ICANN-requested domain label reservations, .tel domain labels are required to include at least one alphabetic character. In this way, it is not possible to register a domain that reflects a telephone number.

The domain labels in the .tel sTLD are intended to reflect personal or corporate names, not numbers. With very few exceptions, jurisdictions do not restrict names, and so choice of name is not seen as a national matter.

Names are quite different from telephone numbers that fall under the control of the National Regulatory Authorities as agreed within the E.164 numbering framework (i.e. as approved by ITU study group 2).

Part of the ongoing "clarification process" at the ITU (and at ETSI) in developing the ENUM procedures has been to explain that the ENUM registrant is free to place any valid URI into NAPTRs held in the zone associated with the E.164 assigned to them. These URIs may include telephone numbers encoded according to RFC2806 (within the rules specified in RFC3761 and in the Internet drafts currently being processed by the IESG).

Placing such URIs into a zone associated with an E.164 number does not interfere with national or international numbering plans; it is an integral feature of ENUM, which it is now agreed does not interfere with the rights of the NRAs in setting their numbering policies.

Where a .tel Registrant's zone includes contacts encoded in NAPTRs (according to RFC2915, with a null RS sub-field), these similarly do not interfere with numbering plans, and due to the restrictions on domain labels, .tel has been arranged to be isolated from ENUM domain structures and the E.164 number plan.

Unfortunately, this level of understanding has not propagated to all parts of the Telecommunications community, but the agreements have already been made at the ITU and IAB for ENUM, and insofar as .tel zones include NAPTRs, these same techniques are equally valid and non-interfering.

Question T7

7. What is your response to the issues raised in the 29 April 2004 letter from ITU Secretary-General Utsumi to ICANN President Twomey regarding ENUM and E164.arpa?

A7:

First, we re-iterate that the .tel-Telnic proposal is for a name-based space to hold contacts. It is designed specifically to avoid confusion with a number-based system. Thus the issues raised by the Secretary General do not impinge on our proposal. It is our understanding that this specifically relates to the .tel-Pulver proposal in the current round. We do not believe that any other proposal suggests an "overlay" of the E.164 number space.

We agree with the points raised by Yoshio Utsumi. We believe that he represents the collective expert opinion of the ITU well. Any attempt to reflect the international telephone numbering plan in the domain name system must take into account the national and regional rights and responsibilities of the governments over their own telephone number resources. If such a domain space exists, it must do so with the complete agreement of the countries concerned. This is exactly the agreement reached by the ITU with the IAB, and has produced the ENUM domain space under the ".e164.arpa." apex.

We are concerned with any proposal that would attempt to overlay this number-based system for use over the Internet, and so draw ICANN (and the U.S. Government) in a rehearsal of the argument over a single "golden tree" as opposed to "multiple numbering roots" - that argument was resolved several years ago in the ITU (and the IAB/IETF), with the "golden tree" being agreed.

In addition, we believe that in all "communications-focussed" TLDs, restrictions should be in place so that domains that appear to be related to telephone numbers cannot be introduced (see our response to question 6).

Allowing such domains to be registered detracts from the primacy of the ITU/IAB agreed "golden tree"; that would be no longer "the place to look" for number-based contacts. They also introduce confusion in third party users who make queries for the domain they believe is associated with a telephone number assigned to one person and receive information that may be under the control of someone quite unrelated.

A single name space for telephone number-related contact data is there for a good reason, and the delegation policies by which this is partitioned into national or regional responsibilities are there for necessary legal and jurisdictional reasons. Attempting to put all such registrations under the control of a single company is fraught with difficulties. Not least of these is that, where the policy is to allow Communications Service Providers to register domains associated with number ranges that have been allocated by their National Regulatory Authority, there is a real question over whether or not these numbers have actually been assigned to them, or to their customers. We believe that the lawmakers

(and lawyers acting for the number assignees) may well take a keen interest in such a system; ENUM was hard enough to agree.

Where such a system is intended to be used purely between providers of telephony service, and is used to assist in routing calls between these providers ("carrier" or "Operator" ENUM), we do not believe that this is the subject of an ICANN TLD. The Electronic Communications Service Providers will exchange this data over a private internetwork - not the Internet. To do otherwise would a major risk to their ability to place calls, as it would open their "signalling" to attack over the Internet. They are free to use whatever root they choose, as the private network used to carry this ENUM-like data is closed to the public and completely isolated from the Internet. However, it is not ICANN's role to be involved in what is carried over isolated networks, and so any such proposal to ICANN is misguided.

Question T8

8. Does TLD plan to use wildcard DNS records? If so, explain what will be the use and the types of records used.

A8:

Our initial response is "No". We believe that the introduction of wildcards as a means of providing a revenue-earning search engine service blocks competition. In the particular case of a name-based sTLD, search engines are almost certain to exist and will be helpful to end users, and we will not discourage their development by forcing queries to any one of them using wildcards.

In addition, there is no technical need for wildcards. Without wildcards, client applications can respond to receipt of an NXDOMAIN response by automatically initiating a search engine query. Introducing wildcards doesn't help, in that it blocks this process.

Question T9

9. In how many DNS zones are the NS records located? Is this zone in the requested sTLD or not? (I.e. how long will the chain of NS records be when chasing them?)

A9:

If we understand the question clearly, the .tel Registry will hold NS records for the master server(s) for a delegated domain, and the zone held by the Servers authoritative for that delegated domain will hold the complete list of Name Server records for that domain. Thus, the answer is 2. However, note that Address records are not allowed within a delegated .tel zone. These 'A' (or 'AAAA') records must be held in another TLD, so in practice the authoritative DNS servers would have node names within a different TLD.

In principle, the .tel Registry could be operated without "glue" records. However, to do so would be damaging to the performance and traffic requirements of the global DNS, and we will provide additional information in DNS responses, showing the authoritative name server IP addresses that were passed (along with the DNS server node names) to the .tel Registry during the Registration process.

Question T10

10. Is this sTLD a candidate for filtering based on the TLD? If so, what will be effects on the operation/survival of this TLD if it is locked-out (i.e., if a large ISPs return "NXDOMAIN" for all queries for it)?

A10:

We aren't clear on the question. All TLDs are candidates for such filtering. The simplest way is to use the returned root hints and a single query of the "targeted" TLD Registry to find the current list of name servers to isolate the IP addresses, and then redirect any DNS queries to another machine that claimed to be authoritative for the TLD. In terms of malicious intent on the part of an ISP, we would be forced to consider what legal redress was available. For a U.S.-based ISP, such redress could be considered on the grounds of free speech, whilst in Europe we would consider "constraint of trade" rules.

These are not, of course, technical solutions, as we believe that there **is** no solution that is proof against such malicious intent.

Question T11

11. Do you - or your subcontractors - have plans to use recent standards developed by the IETF for:

- CRISP
- EPP
- If Validator
- IDN

[For the] Registry, DNS, Whois, [is] IPv6 [supported]

[For the] Registry, DNS, Whois, [are] Glue Records [supported]

[For the] Registry, DNS, Whois, [is] DNSSEC [supported]

- DNS Records
- Signed TLD

A11:

CRISP:

We are considering the use of CRISP. We are as yet unsure whether this is an appropriate protocol and provides the functions needed in transferring information to consumers. For example, we believe that, when working with partners providing Directory or search engine services, an optimised "push" model may be more appropriate than the "pull" model envisaged within CRISP. However, this is a matter for the Registry Operator sub-contractor, with the possible exception of a mandatory requirement being placed by Government agencies.

EPP:

We will support EPP. It's the obvious solution to the Registration data exchange process.

If Validator:

We are unaware of a protocol called "If Validator" under active development in the IETF.

IDN:

We will support IDN. This has an impact on the list of reserved domain labels for .tel, in that registration of a domain label "xn--" will be reserved, and any registration request received that starts with this string will be assumed to be intended as Punycode.

IPv6, Transport and Glue Records:

We will support queries sent using IPv6 to the Registry, to the DNS servers holding the TLD zone, and to any Whois servers provided by the Registry.

We will also support registrations in which the Registrant has passed "AAAA" records as well as "A" records to indicate the node address of the authoritative name servers for their delegated domain; both sets of node addresses will be returned in the additional section of the DNS responses.

DNSSEC, DS and Signed TLD:

We are concerned at the many issues raised with the introduction of DNSSEC, notably the zone layout copyright issues being discussed at present. In short, we believe that DNSSEC is not "ready for prime time", but is an appropriate candidate for experimentation by the Registry and any interested Registrants.

In addition, we believe that the size of DNSSEC responses make UDP based queries over links with small MTU sizes difficult. Our experience is that DNSSEC is not supported well in most devices, and is very poorly supported on mobile phones and other hand held devices.

Our current view is that the DS Record approach is simpler for the Registry, but the impact on DNS response sizes is a concern.

However, we believe that, in the medium to long term, the benefits of assurance of validity and "spoof-protection" that DNSSEC promises will drive support in clients, and will encourage Registrants (or their agents) to introduce signed zones. In order to do this, the Registry itself will need to be signed. However, we do not believe that this is either a priority or practicable in the short term, and will migrate the Registry to this in cooperation and conjunction with other Registries.

Annex 1: Telefonica Response

The comments from Telefonica are very surprising for a leading Internet Access and Telephony Services Provider.

- They are based on a fundamental misunderstanding of the way in which DNS operates.
- They constitute a serious misreading of the .tel-Telnic proposal; the comments might be applicable to other proposals (notably .mobi and .tel-Pulver), and so the inclusion of quotes from the Telnic proposal seem out of place.
- The latter sections of the Telefonica comments seem to attack all ICANN issued gTLDs (and, potentially all ccTLDs) rather than being applicable only to the .tel-Telnic proposal. It is unclear why these comments were made to this proposal only.
- The comments also reflect a basic confusion between storage and publication of communications contact information and provision of communications service to those individuals.
- Finally, it would appear that there is a lack of understanding of the addressing mechanisms in Voice over IP systems as opposed to the operation of the PSTN.

Here below is a point by point response to the Telefonica comments. Please refer to the original Telefonica 0000.PDF document for the individual comments. In the following, references to .tel mean the sTLD proposed by Telnic, unless specifically mentioned otherwise.

1.

1.1.

This section contains the ICANN Definition of Community to which we have no comments.

1.2.

This section contains examples of communities served in 'last round' sTLDs.

It should be noted that registration in these sTLDs is not mandatory. For example, most museums don't have a registered .museum domain.

1.3/1.4.

For the .tel-Telnic proposal, the community served is those people and companies who wish to store communications contact details in one place. The community is defined by their use of this sTLD; the role of the sTLD is to act as the 'well known place' to store and publish contact information.

1.5.

In presentations to the GSMA and the UMTS Forum, Telnic has stated that a single sTLD to store all communications contact details is, by definition, suitable to store mobile-

specific contact details, and so fulfils one of the requirements of a mTLD originally proposed to the UMTS Forum and GSMA.

2.

2.1.

This section contains three quotes from the .tel-Telnic proposal - to summarize:

- .tel is a text based naming structure
- .tel is a catalyst and enabler for new communications services
- New communication service and application growth is in the Internet

By implication, these new services and applications use the Internet & DNS for naming, not just the PSTN and E.164 telephone numbers.

We have no disagreement with these points.

2.2.

This section contains an ICANN Charter extract to which we have no comments.

2.3.

Telefonica states: '.tel is a complete system, of which TLD is only a part'. This is only as true as stating that Internet connected nodes run applications and exchange protocols other than just DNS.

There are many potential applications that could use a single repository for storage and publication of communications contact details. The .tel proposal intends to provide the registry that supports communications contact storage and publication.

It is a strange misreading of the proposal to assume that only Telnic-supplied applications would operate using this sTLD.

As the goal is to provide a domain space under which can be stored standard DNS Resource Records (such as NAPTRs), any application can query and collect this data and can process it. The sTLD acts as a single name space to enable these applications; it isn't these applications.

Telefonica further states that the .tel-Telnic sTLD proposal is: "...a proposal that appears more like a search for a fraudulent alternative means of becoming a provider of telecommunications services..."

To expect that any TLD Registry is capable of providing Telecommunications Service when it provides only DNS support is incorrect.

If any proposal expects to get a Telecommunications License from ICANN, then it would indeed be woefully misguided?

None of the sTLD proposals have made this basic mistake; however, Telefonica confuses DNS with Telecommunications Service.

2.4.

Given the basic mistake of confusing a structure to allow users to publish their contact data with the process of providing a telecommunications service for users, the seriousness of ICANN exceeding its authority in approving a sTLD is equally mistaken.

3.

Telefonica states in its first two paragraphs of section 3:

'The nature of the proposal and the extent of its subject-matter and of the intended services affect, if not encroach upon, aspects which are the responsibility of established international organizations, primarily the ITU, and of both national telecommunications services regulators (States) and supranational regulators. Successfully implementing the proposal would also require the consensus of the international community (regulators, service providers, consumers ...) on key aspects of the proposal, which has categorically not been obtained.

We are speaking about matters such as: network security and integrity, universal service (directory of directories), operator selection, tariff rebalancing and pricing mechanisms, policies for routing and Internet use incentivization, commercial agreements between operators, server location and application legislation, call identification services, emergency services, and in particular about issues relating to numbering, interconnection and voice services over IP.'

One of the key aspects of the .tel-Telnic proposal is that any individual can register a domain and can publish whatever contact details they choose under this domain. Given that this contact data is chosen by the end user (rather than some third party, such as a Service Provider), Telefonica's comment is misplaced. One might as easily say that the ITU controls printing of business cards or the publication of telephone contact details shown on a web page.

It seems that again this reflects a basic misunderstanding of the difference between publication of contact data by individuals and provision of telecommunications services to those individuals.

3.1.

In this section, Telefonica discusses ENUM.

ENUM has involved ITU SG2 and IAB cooperation, and is designed to reflect allocation of E.164 numbers by the Nation States. The E.164 number space is the remit exclusively of the ITU and the Nation States that are members. We agree that is imperative that any domain space that reflects or is mapped to the E.164 number space should involve such co-operation.

However, as is explicitly stated in the proposal, the .tel domain does not reflect the E.164 number space. Registration of domains that are (or may be confused with) E.164 numbers is barred.

Domains within .tel can use NAPTRs, as can any other domain within the DNS. These NAPTRs hold communications contact information in the form of URLs, and these URLs may include telephone numbers.

Telnic disagrees that such specific use is either barred or controlled by individual Nation States, over and above the choice of some Countries to block access to the Internet to their citizens.

We are unaware of any action taken against individuals publishing 'their' telephone numbers on their Web pages, thus this assertion from Telefonica is unfounded.

3.2.

It appears that this section of Telefonica's comments is addressed for other proposals, not .tel-Telnic.

Barring registration of any domain that might be confused with an E.164 number is one of the clarifications in this proposal added since the initial round in 2000; .tel (in the Telnic proposal) is designed purely to complement the number based domain space agreed for .e164.arpa.

Given this explicit statement, we do not understand the assertion that there is any conflict with ENUM reflected in the .tel-Telnic proposal; Telefonica appears to have confused Telnic's proposal with another proposal.

3.3.

The relevance of the comments in this section is unclear.

Telnic has been careful to exclude the possibility of conflicting with E.164 number based domain registrations. The .tel proposal has been designed to allow Registrants to store contact data under a domain registration that reflects their name. It does not and cannot reflect the E.164 number by which they are provided Telecommunications Service.

To suggest that "the ability to dial via .tel conflicts with the provisions of the National Numbering Plans..." is to widely misunderstand existing Voice over IP systems.

It is perfectly possible for two individuals to communicate via SIP (or even H.323) without using E.164 numbers to address the caller or callee. Indeed, it is possible for them to communicate without the use of any third party application entity; all that is needed is a means of transferring data between their SIP UAS. Given that Telefonica is a provider of just such Internet access services, it is surprising that this misunderstanding has been made.

If a registrant decides to place a SIP URI within a NAPTR stored in their .tel domain, then this is not an E.164 number; it's a SIP URI.

Even if the registrant decides to place a NAPTR containing a tel: URI into their domain, this is discrete from a provision of a telecommunications service using the value of the URL as an address.

3.4.

These comments relate only to provision of telecommunications service. As Telnic has no intention of providing such services, and the proposal is unrelated to such provision, these comments are irrelevant.

3.5.

Insofar as Telnic would operate a sTLD Registry, they would, of course, ensure that their operations meet the appropriate legislation. See also next section.

3.6.

Telnic has no intention of dispensing with regulations and will comply with the rules laid down by competent authority; in this case, ICANN (and, where appropriate, Data Privacy legislation and WIPO rules on Trademarks, together with Financial accounting regulations).

However, nowhere does this proposal suggest that Telnic will be providing telecommunications service to their customers.

We believe that Communications Service Provision regulation does not cover operation of a sTLD (i.e. the provision of DNS delegations). This is a general rather than a specific comment on this sTLD; we do not believe that such regulation applies to any gTLD (or ccTLD).

4.

4.1.

Given that Telnic intends to operate a sTLD, and so will perforce support standard protocols, it is unclear exactly what this section means. We assume that communications contact data will be stored by registrants using NAPTRs (as specified in RFC3401-RFC3404, the successors to RFC2915).

It is not at all clear what proprietary, non-standard features Telefonica believes are being suggested in the proposal; as such we cannot respond. We can only restate that the .tel will be an open system to all.

4.2.

After considerable searching, Telnic is unaware of any enforceable patents on DNS operation or NAPTR Resource Records. We are aware of the use of the terms Universal Identifier, Communications Identifier, Personal Communications Space, and other variants from many EU and other projects that preceded the ETSI work. We are unaware of any trademark on these terms.

If the assertion on patents and trademarks is in earnest, we would appreciate a list of these allegedly applicable patents and trademarks; there is considerable 'prior art' in the public domain so we are surprised at this assertion.

4.3.

Telnic will, of course, comply with ICANN and other guidelines on protection of Trademarks.

A) Telefonica is aware that their statement is a gross simplification, and that clarification is required - see Telefonica comment 4.4, and the first sentence of the closing paragraph of this section.
B) ICANN has a policy on labels that must not be registered such as two character country codes. Telnic will enforce this ICANN policy fully and Telefonica's interpretation of the Telnic proposal is in correct in this regard.
C) Famous Names is a difficult topic; this has an impact on other TLDs, but is one to which Telnic is sensitive; hence, the comments in the .tel-Telnic proposal address this topic clearly.

The .tel sTLD is name-based, and we are aware that the right to register, for example, the domain 'Enrique.Iglesias.tel' is not straightforward. As highlighted, regimes are being developed in WIPO and within ICANN working groups, and the goal is for the PAG to reflect these policies as they are developed. The PAG will develop specific policies for the .tel sTLD, but these are intended to reflect global policies developed by competent authorities. Intentionally to do otherwise would be absurd.

4.4.

This is a general issue for all gTLDs.

The UDRP is, of course, not a panacea, but it does exist and has been agreed upon and used to resolve disputes. As policies are developed and agreed upon by the competent authorities, Telnic, (in common with all other gTLD operators,) will apply these.

The suggestion that the Telnic proposal is 'even less sufficient' is unclear. It is difficult to see how communications contacts chosen by a Registrant to populate Resource Records in their domain relate to Trademarks on the domain name; this is the only difference between this and any other gTLD.

4.5.

Scarcity is not an issue here; however, control of E.164 number spaces allocated to National or Regional Regulatory Authorities by a United Nations organization (ITU-T) is, undoubtedly, a national or regional issue. One could well argue that domain names that reflect E.164 numbers are thus related to these national or regional concerns.

The .tel-Telnic proposal specifically rejects such domain names, and so is unaffected by such concerns. It is instead a name-based sTLD.

It is difficult to imagine how names can be subject to national or international regulation, except in relation to trademarks. As the UDRP is specifically concerned with trademark dispute resolution, it seems eminently appropriate for this sTLD.

5.

We believe that the concerns stated in this section apply equally to all gTLD Registries, and that the concerns expressed as specific to Telnic's proposal arise from a misunderstanding of the way in which the DNS system operates.

5.1.

This section appears to reflect a misunderstanding of the roles of different providers in the DNS system.

To clarify, Telnic intends to oversee the sTLD Registry; they do not intend to operate the Authoritative DNS servers for the domains they delegate.

The Registrants are assumed to have control over the Resource Records populated in their domains, and so are assumed to have redress against their DNS Service Providers for incorrect publication.

Thus the data they hold will not be Resource Records holding the contact details chosen by registrants. Instead, the .tel Registry will hold the identities of the Registrants and the Registrars who act for them, along with the technical information needed on the domain names and IP addresses of the DNS servers authoritative for that domain. In short, the kind of information held will be identical to that held by other gTLDs.

Telnic is based in the EU, and so is sensitive to the data privacy concerns of its Registrants. As it will operate a sTLD, the kind of data it holds is the same as the data used by any other registry, and so is subject to ICANN guidelines.

However, we understand that provision of a WHOIS (or CRISP) service is, of course, subject to data privacy concerns. Furthermore, we are sensitive to concerns on a 'Thin Registry' model, where personal information may be made available by a Registrar operating in one legislative jurisdiction on behalf of a customer who lives in another (and may expect different levels of control over accessibility to their personal information). We expect to work within ICANN guidelines, and will protect Registrant's personal information where possible.

5.2.

It is unclear how this differs from any other gTLD.

A) Regarding .tel Registry DNS Operation centers, it is expected that, as with all other gTLDs, the servers and databases will be placed in at least three different continents, for performance, robustness and security reasons.

B) Telnic Limited is a UK-based company, as mentioned in the proposal. We are fully aware of the differences in Data Privacy regulations between the EU and other jurisdictions.

In terms of the specific case of court-ordered access or interception of telecommunications, this would be an issue if Telnic were intending to provide Telecommunications service; as it does not, this is irrelevant.

C) This comment seems to reflect Telefonica's misunderstanding of DNS.

Telnic oversee the sTLD Registry Operator, and so will not operate the Authoritative DNS servers that publish the Registrants' Resource Records. Thus personally chosen communications contact data would not be published by Telnic.

The only exception would be the publication of Registrant contact data inside any required Whois or CRISP service, as would any other gTLD operator.

6.

6.1.

The goal is to have a sTLD that can be used as a 'well known place' to register domains under which communications contact information can be published.

It will not hold and publish a database with the contact information for the Registrants (other than in the limited sense of Whois/CRISP publication, in common with all gTLDs).

Publication of the Registrants' choice of communication contact data is done by Authoritative DNS Service Providers selected individually by those Registrants. As such, there is no single database holding all such contacts.

6.2.

To hold and publish a complete databases of all customer's contact details would indeed be a major asset. However, as this is not how DNS operates, it is not relevant.

6.3.

As already stated, Telnic has no intention of providing telecommunications service for any of its customers. Thus it will not, directly or indirectly, manage telecommunications traffic. Telecommunications Service is completely discrete from provision of a gTLD Registry (i.e. providing DNS delegation service). Whilst any protocol might be misused to carry voice packet data, using DNS for this purpose seems unimaginably perverse.

To provide a telecommunications service as well as arrange domain Registrations 'under which' communications contact details were published might cause such confusion. However, for such confusion one should look to other proposals that do involve such Service Providers, not the .tel-Telnic one.

6.4.

Whilst Telnic has requested an sTLD with the intent that the delegated domains will be used to publish NAPTR Resource Records holding communications contacts, it does not have any control or influence over the supply of contacts populated in those Resource Records.

Even for the specific case of the ENUM system, this is akin to storing a SIP URI provided by a US-based VoIP provider inside an ENUM domain that is registered in the UK portion of the ENUM domain space (4.4.e164.arpa.). In the case of ENUM, the

domain name is dependent on the UK ENUM regulations. However, the content of the resource records published for that domain name are quite separate.

Thus, the suggestion that control of the supply of domain names somehow controls the contacts that are published in those domains misapprehends the operation of DNS and the .tel sTLD.

In conclusion, we would ask Telefonica to reconsider their comments in the light of these clarifications.

We sincerely believe that these comments arose due to a misunderstanding of certain aspects of the .tel-Telnic proposal, and trust that with these clarifications Telefonica now understands the benefits of this proposal for end users and will no longer oppose it.

Telnic Management

Annex 2: Boston Response

Thank you for your questions. These are subtle points, so are addressed in turn.

1) Restricted use for Telname sTLD?

Yes - Telnic believes that there is a business case for a Telname (name-based) mechanism to store contacts in DNS. We believe that in this case the behaviour of the Telname system will be different from that of a 'normal' gTLD.

The performance requirements for resolving personal contacts can be different from 'finding' a machine IP address, and an individual may not have a machine 'visible' on the Internet and still have personal contacts to store in their Telname.

In many ways, resolving personal contacts in Telnames is similar to the ENUM scheme. Both allow contacts to be stored and queried using 'standard' DNS messages, and both are restricted in some way.

However, there are several differences:

(i) We believe that there should be a separation between storage of personal contacts and machine addresses - one holds information on me, the other holds information on my machine(s).

(ii) Performance issues are different from a 'normal' gTLD and similar to ENUM; personal lookups are likely to follow Telephone network patterns, but machine address resolution is going to follow normal Internet patterns. Current ENUM schemes do not have this restriction - we believe that mixing the two is a mistake.

(iii) Phone numbers are useful NOW as an identifier, but we expect that there will be a move towards using personal names as identifiers - most times, people want to talk to a person, not whoever happens to be addressed by a particular phone number. For a company, this isn't a real issue, but for an individual, in most places you only are allowed to register a domain in ENUM while you have a telephone service from a service provider - that is a problem if you move and cannot take your phone number with you.

2) No address records allowed?

We would expect that 'standard' Address records used to map to IP addresses would be stored elsewhere from their contacts - these are fundamentally different uses. As stated, we believe that the traffic patterns used for DNS queries on .tel will be different in the short to medium term from those used to lookup the IP address for a machine.

In the short term, most people will be called by telephone numbers. We expect queries on a registrant's Telname for NAPTR, and for most, this would result in a phone call being placed (e.g. over the existing wireline or cellular service). A Telname lookup is a 'hybrid', with a short Internet query, followed by a normal voice call.

Queries for A records will be done, as needed, in other TLDs - we expect cacheing to behave differently for these lookups, particularly with 'vanity' domains for a personal web server or for a mail server address. Similarly, as they are introduced, SIP 'addresses of record' would be in a NAPTR stored in a Telname, but the 'contact address' for the SIP phone would not, nor would the IP address of that SIP phone. There are good reasons for suggesting that such 'dynamic' information should not be published in DNS at all; it is certainly excluded from the Telname model.

3) SRV/MX records allowed?

From the above, we expect that MX and SRV records may be placed in Telnames, as long as the target for these records is in another TLD.

4) Policing .tel domains?

We do not intend to scan all domains under .tel, but will react to a complaint from an individual that a .tel domain is used incorrectly. As just mentioned, we do this for performance concerns as well as general principle. In the case of Telnames, the check can be done by anyone automatically, and will be simple (and so will be quick and with low cost); it just involves a check on the kind of resource records returned in a normal DNS query. Note that we do not restrict the kind of content that can be provided by a server that is referenced in a Telname - any such restriction is related to the TLD in which the A records are stored.

We hope we have answered your questions.

Telnic Management

Annex 3: Why Telnic's .tel is an sTLD

A common pair of questions seems to have been raised regarding the .tel-Telnic proposal; "*what is the served community* and *what is the Sponsoring Organization*"? An implied question is "*what is the goal of .tel*"?

To answer this, it is useful first to consider what the goal of an STLD is, and how it fits with the gTLD system. This has to reflect the history – how did we get here?

After this, we consider the detailed roles expected of the Sponsoring Organizations at the heart of all proposals.

We consider how a community can be defined, in terms of the personal role or characteristics of the registrant, and in terms of the usage to which the domain registration is put.

We then describe the way in which we envisage how a personal name space can be used to store personal (or corporate) communications contacts.

Finally, we describe how the Sponsoring Organization for **.tel** will have to remain neutral, balancing the different interests of the community served, and not fall under the sway of any single sectional interest.

1. History

Initially, the gTLDs were partitioned into name spaces that supported different groups. Thus .mil served the community that was connected to MILNET and so was associated with Department of Defense use. Similarly, .edu served the Academic community. With network expansion away from ARPANET, there was a demand for domain names from organizations that didn't fit within these communities; thus the .com (and .org and .net) gTLDs served the general pool of registrants that were not tied to Academic or Military institutions. The introduction of .int was intended to cover those potential registrants who had operations in more than one country, and initially was used to deal with global infrastructure developments. This proved a major role, so that .arpa was introduced to deal with "infrastructure" issues.

In parallel, a similar process was developing in other countries, with the creation of country-code specific TLDs. In the UK, for example, the original domain name registrations were dealt with via the Joint Academic Network (JANET); as commercial companies inter-connected with this network, a defined partitioning into the .ac and .co second-levels was made, allowing registrations for academic and commercial communities to be made separately. As networks were interconnected between the various countries, so the existing domain name system evolved.

Over time, the gTLD system and its role relative to the ccTLDs was refined; for example, no longer did potential registrants for .com,.net, or .org need to be U.S-based organizations. Their operational rules were limited to ensuring that the DNS continued to operate; what the delegations were used for was unimportant. They had become true general as well as global TLDs.

With the introduction of ICANN, one of the roles it took on was ensuring that the DNS provided support for all Internet users. It became apparent (from the many issues raised) that there were potential users who had a discrete identity that was not reflected in the global nature of the general gTLDs, and yet didn't fit into the strictly country-based communities either. Thus the sTLD process was developed to deal with this perceived "gap".

2. *Role of Sponsoring Organizations*

The goal was to have identified groups served by proposed sTLDs with a strong Sponsoring Organization to control those aspects of the sTLD that are specialised and so don't fall under general ICANN guidelines.

Specifying the identity of the group served is a crucial task of the Sponsoring Organization at the heart of each of the sTLD proposals. The sTLD communities are not mutually exclusive (i.e. a person can register a domain in .cat, and potentially in .travel).

Similarly, there are a number of "interested parties" for each potential identified community, and balancing the interests of these different parties to ensure common agreement on the operation of the sTLD is also a key task. Looking after the interests of all of those affected by the proposed sTLD is a responsibility delegated by ICANN to the Sponsoring Organization and its specialists.

ICANN is also responsible for ensuring the integrity and continued stable operation of the DNS. Thus, another requirement in this process is to ensure that the Registries operating the proposed sTLDs continue to operate. In practice, this means there is a Sponsoring Organization that ensures the Registry serving a community does not cease operations. It is important that the sTLD operation is commercially viable, and if not then there is a group who can be called on to provide the needed financial support.

It also follows from this that, in most cases, an overly restrictive community means that there is little revenue for the Registry operation using "normal" registration charges, and so funding must come from somewhere; the Sponsoring Organization must ensure that the Registry "business proposition" is viable, in conjunction with the community. In this way, a balance is struck between the commercial drives of a Registry and that of the community served by this "franchise".

In the past, the sTLD operations have been restricted to non-profit organizations; this is not the case for this set of proposals, so that some are operated on a non-profit whilst other proposals have for-profit organizations.

Whilst the profit basis of the organization should not matter (in that the same requirements from stable and continued operation are applied) it may affect the Governance, structure and internal balance of the Sponsoring Organization that is, in effect, responsible for the sTLD.

In a for-profit proposal, it is important that the policy setting function of the Sponsoring Organization is autonomous from the Investors. In practice, there will be influences in both directions as no policy can be set regardless of financial consequences. However, care must be taken to ensure that these distinctions are not blurred.

For example, for a Sponsoring Organization to manage the sTLD policies effectively, it should be careful to consider both the requirement for a commercially viable Registry and the neutrality of the organization. Its policy setting functions should not be dominated by the interests of any sectional group, regardless of the financial power of that group relative to the other community members. This is a challenge for any proposal, but with one involving a for-profit organization, it must be seen that, beyond doubt, the Sponsoring Organization is strictly neutral and represents all users in the community equally.

One should not be confused between the constituency of the Sponsoring Organization (i.e. entities that have board member representation) and the community served by the sTLD. The constituency of the Sponsoring Organization has to reflect the whole community, rather than only a portion of that community. Where there is board representation reflecting equally the wide spread of interests in the community, then the constituency of the Sponsoring Organization can be said to be democratic. Where that constituency does not reflect the plurality of the served community, then it is hard to convince people that that community is well served.

3.   How Should a Community be Defined?

As already mentioned, the existing general gTLDs have no restrictions on the people they serve (or the use to which domains are put), and so any identified group chosen by an sTLD proposal reflects an aspect of life of the potential registrants.

For all of these proposals, the identity is defined by a role taken by a registrant in a served aspect of their life. Thus, for example, a Catalan-speaking person could register a domain under .cat; they could simultaneously register a domain under .edu (if they fulfilled the "Educational Establishment" criteria). These registrations reflect different aspects of their life and are not in any way contradictory.

Thus what appears to be a simple question – "how is this person in the served community different from that person who isn't" – is not quite so straightforward. The real distinction may be between two aspects of the same person's life.

Identification of a community based purely in terms of the personal characteristics of registrants is only one distinguishing factor and does not always have any meaning when applied to DNS. For example, it is hard to see how a community of registrants who are "left-handed people" has any relation to the content of their "published" zones.

With several of the proposals, the community identity is defined by the use to which domain registrations are put, as well as the personal characteristics or organization membership of the registrants.

For example, the purpose served by a registration under .cat is considered important – it should be to further the social and cultural aims of the Catalan community.

In this case, the community membership is not only defined by inclusion (i.e. what aspect is part of this community) but also exclusion (i.e. what aspect is explicitly not allowed in this community).

Definition of community in terms of the usage aspect is important, not only for culture-based proposals like .cat but also for all of the communications-based proposals (.mobi, .tel-Pulver, and .tel-Telnic). The set of people who could ask for or use registrations in the communications-based proposed sTLDs is almost everyone. Their community is defined by the communications aspects of the registrants' lives.

This emphasises another related point; the size of the community alone does not determine whether or not the proposal needs to be an sTLD or is more suited to a general gTLD. This is solely determined by whether or not the community requires a Sponsoring Organization to define, control and protect its specific activities.

In the case of .tel-Pulver, registrations are open only to service providers, but these are expected to use their domains to publish information on the communications contacts of their service customers.

In the case of .mobi, registrations are open both to Service Providers (and Content or Application providers) and to individuals.

In the case of .tel-Telnic, registrations are open to individuals and companies that wish to store personal or corporate communications contacts. It excludes use to identify machine node addresses.

These communications-based sTLDs all require a strong Sponsoring Organization to ensure the correct operation of the domain space and to balance the conflicting interests of the parties involved in their chosen communities.

4. Telnic's .tel: An sTLD for Personal and Corporate Contacts

4.1. People are not Machines

Curiously, the generality of Internet users (either individuals or corporations) are not represented by current DNS name spaces. The machines they use are, the servers that support their applications are, but we feel that the people aren't.

At present, the information held in a registrant's domain indicates node names and IP addresses, as well as the application services that run on those nodes. Thus the identity of a potential registrant does not reflect the use to which they put their domain registration.

4.2. People as Numbers: ENUM is half the solution

The introduction of ENUM changes that – for the first time, personal communications contact data is to be "published" in DNS in a coherent and structured way. The E.164 telephone number acts as a top level identifier for that person, and with ENUM, this is tied to a defined domain name space. Using this, we now have a DNS space that represents a user rather than their machines. Within ENUM, the registrants can store and "publish" the communication contacts that relate to them, rather than just the machines they use.

However, there are several limitations and restrictions in the use of telephone numbers as universal identifiers, and they interfere with the goal of ENUM.

The assignment process by which E.164 numbers are provided is closely controlled to ensure that a given number is truly unique. The existing (and quite reasonable) process by which this is done involves national control over those number spaces, and thus, in ENUM, implies national control over the associated domain name space.

There is another risk to the use of E.164 numbers as personal or corporate identifiers; these numbers are traditionally associated with Telephony Service, and in many jurisdictions current plans assume that an ENUM domain registration will be valid only while the registrant has Telephony Service provided via their E.164 number. If that service ceases, then their entitlement to the E.164 assignment (and thus to the ENUM domain) also ceases. Thus, unless the registrant is guaranteed exclusive and continued assignment of an E.164 number, then the ENUM domain is not always a reliable place either to store or to look up personal contacts.

Finally, the basic advantage of telephone numbers as identifiers is also one of their most marked weaknesses. They are easy to dial into even the most basic communications terminals, but they are hard to associate with a person – as most customers do not have a free choice of the E.164 numbers they are assigned, they are not readily predictable, and they are not very memorable.

4.3. People as Names: Telnic's .tel is the solution

With the introduction of more capable terminals (for example, with mobile phones or PC-based VoIP clients), many people have been enthusiastic in their use of in-built address books and other aids that allow them to operate on the level of names rather than numbers. This is neither surprising nor unexpected – nor is it a passing fashion. For this reason, we believe that whilst ENUM is a major step forward in allowing a personal name space for communications contacts, it is to some degree an interim technology that is limited by the use of E.164 numbers as the "top level" personal identifier.

The .tel-Telnic proposal envisages a true Personal name space to store and publish communications contacts for individual and corporate registrants.

This domain space uses the names that people find easier to use than E.164 numbers, but employs similar DNS technology to the ENUM system. The zones for **.tel** domains will hold NAPTRs that indicate the registrant's communications contacts, and by querying these clients (or their agents) can decide on the most appropriate form of communication, without requiring dedicated support in any single Service Provider's infrastructure.

This means that the domain fulfils the goal of a personal domain space, without the limitations of number-based identities. It does not conflict with other TLDs as they will continue to be used to identify machines.

In common with the other communications-based sTLD proposals, we believe that a gTLD is inappropriate. This task requires a neutral Sponsoring Organization that can build consensus amongst the different groups affected by **.tel** mediated communications; it is too important to leave to any one sectional interest.

5. Telnic's .tel Sponsoring Organization and Community

5.1. Telnic's .tel needs a unique policy perspective

There are several key aspects to the .tel-Telnic proposal that, in combination, have a unique influence on the policies and operations that justify an sTLD. Whilst it is the role of the policy setting function (defined in our proposal as the Policy Advisory Group, or PAG) to establish the issues and the policy choices to be made, we raise a few here.

- **.tel** is a Name based system. Our goal is to provide domains that are exclusively tied to a person or company's name, and are used to hold contact information associated with the registrant rather than their machines. This is a specialised use of the domain name system, and introduces new possibilities. For example, it is now practical for a registrant to store "non-Internet" contacts in their zone (e.g. telephone numbers) alongside links to their web sites. In this, it enables potential services that have not been a part of previous TLDs. It shares underlying technology with ENUM – the difference lies in name rather than number based identification, and to avoid confusion, registrations of domain names of the form used in ENUM are barred.

- **.tel** has different privacy concerns. In the case of this sTLD, we believe that our focus on personal and corporate contacts will lead to a different balance in terms of data protection and privacy. Whilst this may seem paradoxical, given that registrants will use their domains to publicize their contacts, we expect that they will wish to maintain control over any contacts available, including those from the Registry and Registrars. Against that must be balanced the concerns of existing Intellectual Property protection groups, as expressed by CCDN.

- **.tel** is an enabler for communications. We believe that, as it is used to hold contact details, most queries will be done as the prelude to a communications session. Thus there may be a reasonable expectation of DNS server performance on the part of clients who query this data. This expectation will be different from that in "traditional" TLDs, and is a direct consequence of a communication-focused sTLD.

- **.tel** is the holder for personal contact information for individuals and corporations, and therefore must guarantee fair access, use, and publication to the industry, regardless of network access technology.

5.2. Groups who need representation in the .tel served community

The groups that make up the **.tel** served community and their interactions are different from other TLDs.

In addition to the usual group of interested parties (Registrants, Registrars, third parties with an interest in protecting Intellectual Property), it adds new ones.

The use of **.tel** as a prelude to communications means that third party communications service providers have legitimate interests in the performance provided by the DNS servers, not only of the Registry itself but also those Authoritative servers that host a registrant's zone. Providers of such Authoritative DNS hosting service will need to be represented so that reasonable recommendations can be agreed.

As a holder for contact information the Sponsoring Organization has a a responsibility to guarantee fair access, use, and publication. Thus, the communications service providers who use the data will need to be represented in the policy setting process. Equally, developers of new applications that process the contacts for other services (for example in a directory service web portal) will also be involved.

To initiate this process, Telnic has appointed an eminent "Interim PAG" Chairperson with the mandate to select six influential and representative individuals with the exclusive goal of establishing the PAG charter and the development of the PAG.

5.3. Model for Telnic's .tel Sponsoring Organization

As the .tel-Telnic Sponsoring Organization is a commercial venture, special concern has been taken to ensure a separation between the commercial needs of the Sponsoring Organization and the policy setting role that defines the operation of the sTLD. To that end, overall control of policy setting for the **.tel** sTLD has been delegated to an autonomous Policy Advisory Group with strong Sponsoring Organisation board representation, and a mandate to ensure diversified community inclusion.

The PAG will exert effective control over policy, and is not merely a source of proposals without power. This will guide the sTLD and specify all policies to be carried out. Only in the case where policies proposed by the PAG will directly damage the stable operation of the sTLD, or are in direct conflict with ICANN agreements, can the Sponsoring Organization refuse to implement the proposals. In effect, the PAG will control all policy issues in the **.tel** sTLD.

As a closing point, there is another reason that drives us to conclude that a communications-based TLD requires a broad based and independent policy-setting constituency. The reason for using a Top Level Domain to hold name-based personal and corporate contacts is that it forms the "one place to look". There is a responsibility that comes with this right, however.

Apart from the obvious need for the operations of the sTLD to remain commercially viable, policy setting should reflect the people served by the sTLD, not the Investors in the Sponsoring Organization. Blurring the roles and responsibilities of the two in a commercial venture can only lead to conflicts of interest.

We think that this is the only reasonable approach to a "for profit" Sponsoring Organization, and in particular for any sTLD that has its focus on communications. Only through a wide constituency with real control can we avoid the risk that the sTLD will be used by a sectional group to further their aims to the determent of others, and particularly the registrants. No single group should be able to "take control" of this important role. The Sponsoring Organization must not only be neutral, but be seen to be neutral.

We believe that there is a business case for a Registry to support a Name-based communications contact name space, that it adds value to the Internet name space, and supports a defined use and so community. This meets the definition of a Sponsored Top Level Domain; it has an autonomous policy setting group with executive power, it has a defined community, and a well-defined use.

SPONSORSHIP

1. Please elaborate, consistent with the RFP criteria (concerning enhanced diversity of the Internet name space), how the new sTLD would "create a new and clearly differentiated space, and satisfy needs that cannot be readily met through the existing TLDs."

As outlined below ICM and IFFOR set forth a detailed analysis of how the proposed .XXX sTLD creates a new and clearly differentiated space that satisfies needs that cannot be readily met through existing TLDs.

- Is clearly differentiated from existing TLDs;

As previous discussed in ICM and IFFOR's original application, one of the principal reasons the .XXX string was selected was because it transcended multiple geographic regions and languages while having high recognition and lasting value for both registrants and Internet users.

In order to understand how .XXX will clearly distinguish itself existing among other TLDs it is useful to look at the dynamics of the current domain name space. There are currently 245+ ccTLDs. Although there are a number of ccTLDs that market themselves more along the lines of a gTLD (.WS, .CC, .TV, etc), for the most part ccTLDs are readily identifiable by their two-character length and their association with the specific country that they designate. Most gTLDs, whether sponsored or unsponsored, are clearly distinguished in the marketplace from ccTLDs. Because ICM and IFFOR is not proposing a TLD associated with a geographic region or that has cultural significance, the primary focus of the remaining analysis will deal with how the proposed .XXX is clearly differentiated from existing gTLDs.

The gTLD space is effectively composed of the following TLDs:

TLD	Registrations	Type/Purpose
.COM	28.9 million	(unsponsored/unrestrictive) / primarily commercial in nature
.NET	3.7 million	(unsponsored/unrestrictive) / originally intended for network providers
.ORG	2.9 million	(unsponsored/unrestrictive) / originally intended for non-commercial entities
.INFO	1.1 million	(unsponsored/unrestrictive) / primarily commercial in nature
.BIZ	1.0 million	(unsponsored/restrictive) / contractually restricted to "bona fide" businesses
.NAME	Less than 100,000	(unsponsored/restrictive) / intended for individual domain name registrants
.PRO	Less than 10,000	(unsponsored/restrictive) / contractually

		limited to select professional groups
.COOP	Less than 10,000	(sponsored/restrictive) / contractually restricted to cooperatives
.AERO	Less than 5,000	(sponsored/restrictive) / contractually restricted to the aviation community
.MUSEUM	Less than 5,000	(sponsored/restrictive) / contractually restricted to the museum community

Other gTLD such as .EDU, .GOV, .MIL, .INT and .ARPA are not available for general registration and like the ccTLD will not be considered in this analysis.

Although the Domain Name System was not intended, nor does it serve, as a directory service, there is no denying that there is clearly a source identifying function with certain TLD character strings. For example, all three sTLD selected in 2000 have an intuitive relationship between the TLD strings and the community intended to be served by that TLD.

When analyzing ICM and IFFOR's selection of the .XXX string to serve the interests of the responsible online adult entertainment community, it is clear that this string was selected because its transcended multiple geographic regions and languages, had high recognition and last value for both registrants and Internet users.

Moreover, the community's desire for a clearly identifiable name space to serve this large and growing sector was evidenced by an MSNBC survey conducted in conjunction with ICANN's 2000 proof of concept round. When respondents were asked what they thought of the proposed TLDs .XXX was the top-rated selection with .SEX being ranked third, see http://www.msnbc.com/modules/surveys/domainname.asp

ICM and IFFOR therefore respectfully submit that the proposed .XXX TLD is unique and clearly identifiable from any of the existing TLD currently available in the marketplace today.

- Meets needs that cannot reasonably be met in existing TLDs at the second level;

Following the initial industry outreach that ICM undertook in 2000, it quickly became apparent that the creation of an adult-oriented TLD could serve to establish a framework for bringing together members of communities that had traditionally existed independently and in isolation from one another (such as child advocacy, privacy, free expression). ICM also realized it was partly this failure in communication that prevented the members of the online adult-entertainment community from working together with other interested stakeholders to establish responsible business practices.

Because the establishment of responsible business practices is one of the key objectives of IFFOR, this objective can only be achieved by incorporating these provisions directly into the registration agreement of all .XXX domain names, similar to the contractual incorporation of the UDRP into all domain name registration agreements back in 1999 to combat cybersquatting. There is simply no other way to contractually incorporate these best practice standards into other existing TLDs. Additionally, many of the other proposed benefits to the community are directly tied to the .XXX TLD itself, and could not be effectively provided via second level domain names in other TLDs. These proposed benefits include potential defenses in domain-related litigation, enhanced acceptance by search-engines and therefore increased functionality, better opportunities to negotiate with credit card and transaction providers, and new marketing opportunities.

- Attracts new supplier and user communities to the Internet and delivers choice to end users; and

Independent of any action by ICM and IFFOR, the marketing statistics in Part C clearly establish that the supply and demand for online adult entertainment goods and services will continue to grow. However, the existence of the proposed TLD, in conjunction with the IFFOR sponsoring organization, provide the opportunity for the online adult entertainment community to build a more trusted virtual marketplace for consenting adults.

Another important consideration weighing in favor of ICM and IFFOR's proposal is the potential quicker adoption of the proposed .XXX among the relevant community. This factor is important as one of the biggest barriers in new TLDs gaining recognition in the marketplace, is the high cost in transition from one TLD to another. However, as discussed in an Associated Press article ("Porn Mag Sales Go Limp," – November 10, 2003), Professor Samir Husni, head of the magazine program at the University of Mississippi's journalism school, noted that several hundred new adult websites launch each month, as compared to about 30 new adult magazines for all of last year.

With regard to end users having greater choice, a number of users made their desire known in a 2000 MSNBC poll that listed .XXX as the preferred choice among new TLD extensions. Providing a more trusted environment for these consumers (users) of online adult entertainment goods and services is critical as the profile of the typical consumer changes.

Although many people may have a stereotypical image of the typical consumer of adult entertainment products and services, several recent studies, statistics and developments have shattered this image. In fact, this information reveals that

those individuals interested in adult entertainment are much more mainstream than most people would likely believe.

An example of the increasing mainstream acceptance of adult entertainment in society is the recent approval by Harvard University to approve a student magazine about sex that will feature art, sex advice and fiction. The proposed H-Bomb magazine will join other sex-themed magazines published by Vassar and Swarthmore colleges. Additionally, in a recent New York Times article entitled, Women Tailor Sex Industry to Their Eyes, Mireya Navarro reported that according to Nielsen/NetRating, women accounted for more than one quarter of all visitors to sites with adult content with more than 10 million women logging on to such sites in December alone.

Dr. Alan McKee, a media studies lecturer at the University of Queensland (UQ), provided some even more interesting demographics. Dr. McKee is the project leader of a three-year Australian government study jointly conducted by Sydney University and UQ to study Australian's pornography habits and their initial research has revealed that 20% of mainstream porn consumers were younger women, while 33% were currently married. 63% thought themselves religious, while a full 93% claimed to believe in gender equality.

One of the benefits that ICM and IFFOR believe the proposed TLD provides is that it potentially offers an environment in which responsible consenting adults can purchase adult entertainment goods and services online with increased confidence. This is important as unfortunately there is a certain component of the online adult entertainment community operating in existing TLDs that engage in illegal or questionable business practices, such as child pornography, auto-redialers, credit-card fraud, etc. ICM and IFFOR hope to achieve this increased consumer confidence through the incorporation of a Best Business Practices provision to be incorporated into the domain name registration agreement, as well as the online compliance mechanisms described below.

- Enhances competition in domain-name registration services, including competition with existing TLD registries.

As discussed above, .COM is the dominant TLD in the entire marketplace representing 45% of all global TLD registrations, including both gTLDs and ccTLDs. Additionally, despite rather bold predictions from the seven new TLD registries back in 2000, all have fallen well short of their projected goals. Notwithstanding this sombre backdrop, ICM and IFFOR believe that the proposed .XXX will enhance competition in domain-name registration services, including competition with existing TLD registries.

First, because of the strong interest among Internet users to search for and view online adult entertainment as documented in our various marketing research, there is a high probability that the online adult entertainment community would

more readily adopt this TLD if it facilities the ability to distinguish themselves and reach potential consumers in a competitive environment. Second, given the large influx of new online entertainment ventures launched each month, there is a greater potential that these new entrants would choose to create a presence in the new TLD as there is a greater association with the branding of the .XXX TLD as well as the fact that they would not be burdened with the transition costs from existing TLDs.

Although ICM and IFFOR intend to offer new registry services to benefit the community, its initial primary focus will be on gaining community adoption through a comprehensive industry marketing campaign as well as consumer recognition. As part of its adoption/recognition campaign, ICM and IFFOR intend to seek out initiatives to increased priority placement among Internet search engines based upon modified algorithms recognizing the new intuitive function of the TLD. ICM and IFFOR will also work in conjunction with the credit card industry to seek more favorable terms for registrants that are required to adopt and implement the proposed best business practice standards. It is these initiatives that ICM and IFFOR believe will provide the most immediate return on investment to the .XXX registrants.

Just as the adult industry has been a pioneer in making several technologies mainstream, ICM and IFFOR believe that .XXX will have a similar effect by increasing consumer awareness that there are other TLDs and that we do not need to continue existing in a .COM dominated environment.

2. How do you plan to reconcile the various culturally-based definitions, and what content is included and is not included, as part of the defined community?

ICM and IFFOR respectfully submit that it is not necessary for them to reconcile the various culturally based definitions and what content is included and is not included as part of the defined community. A common misunderstanding among people upon their first evaluation of the proposal is that ICM and IFFOR are seeking to "regulate" sexually oriented content. This is simply not the case. ICM and IFFOR are merely seeking to provide an easily identifiable virtual marketplace for the global responsible online adult-entertainment community to offer their goods and services while providing a forum for the industry to interact with the various stakeholders impacted directly or indirectly by their industry. One of the reasons that IFFOR as the sponsoring organization modeled its bylaws after ICANN, is that IFFOR like ICANN simply serves a coordinating role and not a regulatory one.

As ICM and IFFOR disclosed in its original application, the community intended to be "primarily" served was the global responsible online adult-entertainment community ('Community'). This community was then further defined as:

> [T]hose individuals, businesses, and entities that provide sexually-oriented information, services, or products intended for consenting adults or for the community itself. The terms "adult-entertainment" and "sexually-oriented" **are intended to be understood broadly for a global medium**, and are **not** to be construed as **legal or regulatory categories**. (emphasis added)

Therefore, the proposed TLD is primarily intended to serve the needs of the Internet community that is involved in sexually-oriented entertainment, as that concept is broadly understood internationally. We are not seeking to impose a single national model or culturally-based definition of what constitutes adult entertainment. Nor are we proposing a regulatory model in which different cultures' standards for obscenity would come into play. Although we would not permit child pornography as that term has been defined by international law enforcement authorities, we would not otherwise employ regulatory-type definitions to determine what content falls within the domain.

The approach ICM and IFFOR took in crafting its charter was modeled in large part upon ICANN's existing sponsored TLDs. By way of example, when one looks at the charter of the .AERO TLD, the community is broadly defined to include a wide range of stakeholders, see Attachment 1 to the AERO registry agreement http://www.icann.org/tlds/agreements/aero/sponsorship-agmt-att1-20nov01.htm

- aerospace industry
- airlines
- airport authorities and airport / aerodrome operators

- air freight industry
- air logistics companies
- air traffic service providers
- air crews
- air crew and air transport unions
- aviation clubs (aero clubs) and their members
- aviation consultants
- aviation education and information providers
- aviation industry associations and other representative bodies
- aviation insurance associations
- aviation law associations
- aviation media
- aviation suppliers and service providers
- charter and private aircraft operators
- civil aviation authorities
- computer reservations systems
- general aviation
- global distribution systems
- government agencies responsible for providing aviation, facilitation and meteorological services
- ground handling operators
- licensed aircraft maintenance and engineering professionals
- pilots

The definition of the community provided by the Sponsoring Organization of the .AERO TLD is not intended to serve a regulatory definition of who is or is not part of the aviation community, but merely a broad brush stoke of stakeholders within the aviation community that would be served by the proposed TLD and might therefore be interested in registering a domain name. This is no different than the proposed broad brush stoke definition of the responsible online adult entertainment industry as defined by ICM and IFFOR.

To further illustrate the coordinating (i.e. non-regulatory) role of a sponsored TLD, look again at the definition of "pilot" in the .AERO charter. In the United States one can pilot a single seat ultralight with no pilot's license, no medical exam and no airplane certification. However, in other countries such as England, Canada and Australia before one can pilot an ultralight one must undergo extensive training and licensing requirements. See http://www.ultraflight.com/JonsWebPhotos/IyinganUltralightOverACongestedArea.pdf Just like .AERO is not in the regulatory position to make cultural or national definition as to who is or is not a pilot, ICM and IFFOR are similarly not in a regulatory role to cultural define sexually explicit material. ICM and IFFOR mere seek to serve a coordinating role.

ICM and IFFOR understand the original intent of the question , if indeed ICM and IFFOR had intended to act in a regulatory role. However, given the subsequent

clarification as to ICM and IFFOR's intended role they respectfully submit that creating bright line definitions as referenced in the your question is not necessary. However, if further clarification on this issue is required ICM and IFFOR would welcome any supplemental questions to help clarify this issue.

3. Does the proposed structure include input from all parties that may be interested, including governments and international organizations?

ICM and IFFOR have modeled the Sponsoring Organization after ICANN so that all interested parties and stakeholders can participate in an open, transparent and bottoms-up consensus driven organization. Although ICANN in its bylaws specifically recognize the existence of a Government Advisory Committee (GAC), IFFOR did not include this specific Advisory Committee in its organizational structure. However, this does not preclude governments and other international organizations from participating in IFFOR's various Supporting Organizations and constituencies.

In fact, ICM and IFFOR believe that an open and healthy dialog with various governments and international organizations is a fundamental requirement to promote and preserve the interests of the Community. In fact, this proactive approach is necessary since many governments and international organizations do not initially understand the benefits and limitations of this application. That is why education and information are such importance assets in this initiative.

Finally, ICM and IFFOR have already received positive input from a series of face-to-face meetings with governments, senior political figures, law enforcement and international organizations in North America, Europe, and the Asia Pacific region whilst finalizing this application.

4. Have you identified supporters of the TLD from outside of North America and Europe? If so, who are they and can you document such support with letters signed at the appropriate level.

As previously stated ICM and IFFOR are committed to diverse global participation and representation with the sponsoring organization. Although our market analysis has shown that over 86% of the entire online adult entertainment market in 2001 was located primarily in North America and Europe (where we have extensive and documented support), ICM and IFFOR recognized the need for global representative as these other regional markets developed. As detailed in Question 7, there is already documented proof of the growing demand in these regions, particularly the Asian Pacific region.

Notwithstanding the fact that many of these North American and European infrastructure, content and service providers supply turn-key solutions to the majority of the small and niche adult webmaster located throughout the world. ICM and IFFOR nevertheless sought out and received support from some of the leading adult entertainment companies in these other regions to leave no doubt as to the breath and depth of our outreach and support.

Outside of the defined Community, we have also received support via the Public Comment forum from India, http://forum.icann.org/lists/stld-rfp-xxx/msg00049.html and, as part of our general outreach campaign, positive feedback from entities in Singapore, Australia and other Asia/Pacific countries.

5. Please provide signed letters of support from each of the communities to be represented in the Supporting Organizations, which discuss how the supporters plan to use the sTLD services and participate in the relevant SO. Please also provide signed letters that are representative of other parts of the Community that you propose to represent, detailing the particular reasons for their support. You should also include such a letter from any supporters mentioned in your application. (Note: We wish to assess the breadth, as well as the depth, of support.)

Please find on the following pages copies of a representative sampling of some of the letters of support that we have received in connection with our efforts to date. To facilitate the evaluation teams review as to the breadth and depth of ICM and IFFOR's support, these letters have been structured in the following manner:

     I.   Adult Online Entertainment Community

        a. Webmaster resource providers

        b. Affiliate program providers

        c. Third party billing providers

        d. Content providers/producers

        e. Adult verification providers

        f. Leading distributors and portal sites

        g. Traffic Generators

        h. Audiotext/mobile services

        i. Legal and Consulting services

     II.   Free Speech

     III.   Child Advocacy/Privacy/Security

A representative range of community supporters, covering all facets of the industry, together with geographic diversity were listed and profiled in Part C- Business Plan- Section VII of the original ████████████████████████████
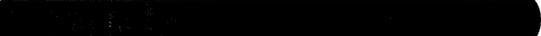
The representative list of supporters from the Community detailed in Part C was drawn specifically to allow ICANN and the evaluation team to gauge the very broad range of industry support together with the depth thereof. Although ICM and IFFOR has and continues to receive addition letters of support in connection

with its ongoing outreach and education efforts, we believe that those letters currently made available should answer any doubt regarding the breadth, depth and geographic diversity of our Community support.

We also enclose letters of support, explanations of reasons for support and expectations of the Supporting Organization structure from other eminent individuals and respected groups that cover the spectrum of Child Advocacy, Privacy and Security and Free Expression. Many similar constructive comments were made during the Public comment period and are available on the ICANN website for review. In addition, we already received several, confidential, requests for candidacy for Directorships of the Sponsoring Organization, IFFOR by well-respected individuals seeking election by the appropriate Supporting Organizations, once formed.

One recurring message in all of these letters is willingness of historically disparate viewpoints to come together and participate in the framework proposed in the IFFOR bylaws to mutually achieve some common ground. Given the continued momentum of ICM and IFFOR efforts, there is little doubt that upon approval the Supporting Organizations will populate very quickly as many entities are eager to make progress on this issue.

Davis Wright Tremaine LLP

ROBERT CORN-REVERE
Direct (202) 508-6625
bobcornrevere@dwt.com

SUITE 450
1500 K STREET NW
WASHINGTON, D.C. 20005-1272

TEL (202) 508-6600
FAX (202) 508-6699
www.dwt.com

June 24, 2004

Mr. Stuart Lawley
The International Foundation for Online Responsibility
130 Adelaide Street West, Suite 2500
Toronto, Ontario M5H 2M2
Canada

Dear Mr. Lawley,

I am writing as a reaction to questions presented by Summit Strategies International in connection with the application of ICM Registry and the International Foundation for Online Responsibility ("IFFOR") for a .xxx sTLD. Specifically, I am addressing the question of the extent to which members of relevant communities would participate in the supporting organizations. In particular, this letter discusses expected participation in the Free Expression Supporting Organization. Of course, until the proposal is accepted and the supporting organizations actually exist, it is not possible to have firm commitments regarding participation.

As a First Amendment specialist, my practice brings me into regular contact with most of the major organizations devoted to free expression issues in the United States. As counsel to ICM Registry, I have met with a number of such organizations that are actively involved with online policy and First Amendment issues since the ICM Registry and IFFOR application was filed with ICANN. Based on my experience in this field, I am convinced that organizations involved in free expression issues would

provide input to the Free Expression Supporting Organization when First Amendment issues arise if ICANN were to approve the proposal for a .xxx domain.

Please contact me if you have any questions.

Sincerely,

Robert Corn-Revere

ICRA

February 17, 2004

Mr. Jason Hendeles
President
ICM Registry, Inc.
3 Hawthorne Gardens
Toronto, Ontario M4W 1P4
Canada

Dear Mr. Hendeles:

The Internet Content Rating Association (ICRA) is an international, non-profit organization of Internet leaders committed to making the Internet safer for children, while respecting the rights of content providers. ICRA has long believed the best approach to protecting children online is through "user empowerment" – giving families the tools to control their online experience. When used voluntarily, tools like ICRA's empower families to assure their online experience supports their values, without compromising free expression or undermining other users' access to information.

ICRA has created a voluntary, internationally accepted self-labeling system that allows content providers to identify and label their website using pre-defined, cross-cultural categories. ICRA does not rate content. Content providers do that, using the ICRA system. ICRA makes no value judgments about which sites are suitable for a child. Parents and other concerned adults do that.

ICRA believes the best way to accommodate the global diversity of individual and family values and at the same time preserve the vibrancy of Internet content is to give families the tools they need to tailor their own Internet experience. ICRA is therefore supportive of additional tools, like the proposed .xxx TLD that enhances a parent's ability to protect their children online.

In addition to the philosophies of ICM Registry and ICRA being complementary, the technological solutions under consideration are of significant interest. Systems that allow content providers to describe their content at the point of domain registration and for those descriptions to be made available as labels to filtering tools would be to the advantage of parents and industry alike.

Should your efforts be successful, ICRA looks forward to working with you and the proposed non-profit sponsoring entity on ways to enhance choice on the Internet.

Sincerely,
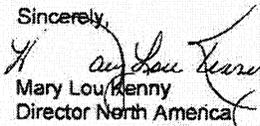
Mary Lou Kenny
Director North America

6. Does the applicant include the community of those who want to use adult entertainment content as part of the community they represent? Is the community of those who seek to avoid adult entertainment content included in any way?

As discussed earlier in Question 3, ICM and IFFOR have modeled the Sponsoring Organization after ICANN so that all interested parties and stakeholders can participate in an open, transparent and bottoms-up consensus driven organization. Therefore, although the global responsible adult entertainment community is clearly defined as "the Community" to be served by the .XXX TLD, the structure of IFFOR has been modeled so that direct stakeholders such as the consumers of online adult entertainment goods and services as well as collateral (indirect) stakeholders that may wish to avoid online adult all have a voice in the IFFOR policy development process.

This broad brush stoke approach to ensure that all parties, direct and indirect, had a voice at the IFFOR table was again modeled after ICANN itself. During ICM's and IFFOR's outreach and consultation, it became clear that a sponsoring organization composed exclusively of the online adult entertainment Industry only would not be able to accomplish the task. Only an organization that provided a frame work for all interested parties to communicate and exchange ideas in a structured forum would suffice.

The need for representation within IFFOR on behalf of the consumers of online adult entertainment goods and services has been outlined above in Question 1. Specifically, as the dynamics of the marketplace continued to evolve and as the previous stereotypes of the consumers of online adult entertainment goods and services erode, proactive steps must be taken to ensure a more secure marketplace and provide protection against some of the more unscrupulous enterprises.

With regard to the community which seeks to avoid online adult entertainment for either themselves or their children, ICM and IFFOR believe that the responsible online adult entertainment community is willing to engage in an open discussion with these stakeholders to find some mutually acceptable common ground.

ICM and IFFOR respectfully submit that this balanced and inclusive approach is the best approach to maximize the success of the TLD.

7. Do you have a plan for outreach to less developed countries to make the sTLD more global? And how can the sTLD improve the use of the Internet in that part of the world?

ICM and IFFOR strongly believe that the proposed structure of the IFFOR Sponsoring Organization provides appropriate outreach mechanisms to developing countries and can also improve the use of the Internet in that part of the world as well. The commitment to geographically diverse participation within IFFOR is reflected in its bylaws that mandate geographic diversity in the various held positions within the organization. This commitment to geographic diversity is modeled directly after ICANN's own bylaws.

This forward thinking commitment to geographic diversity and participation was in part based upon ICM and IFFOR's market research that showed, as reported by Datamonitor, in 2001, 86% of the online adult entertainment marketplace to be located in the United States, England and Germany. This statistic was consistent with ICM's and IFFOR's own projections that online adult entertainment is primarily concentrated in those markets with ready access to Internet connectivity. Given the current user demand for adult entertainment services, as reflected in the various marketing material provided by ICM and IFFOR to date, it is reasonable to predict that there will be a similar uptake in other countries, both developing and developed, as Internet access becomes more accessible to users.

To support this likely trend, consider the following report from CNN/Reuters in 2002 that reported a 30-40% increase in the number of visitors to adult website in Taiwan, Hong Kong and Singapore. See http://emoglen.law.columbia.edu/CPC/archive/decency/more-asians-surf-for-porn.html Therefore, notwithstanding ICM and IFFOR's original market analysis that showed a current concentration of the online adult entertainment market in North America and Europe, ICM and IFFOR is committed to ensuring broad geographically diverse participation within the Sponsoring Organization.

One of the potential biggest benefits that proposed TLD can provide to developing countries is the ability of the responsible online adult entertainment community to participate in this voluntary initiative to market their goods and services in a clearly identifiable virtual marketplace. This type of industry lead initiative has been successfully undertaken in other industries such as the Motion Picture Association, with their voluntary film rating guidelines, as well as by the video game and music industries.

Failure of the online adult industry to adopt a pro-active initiative could result in overly broad and intrusive regulations by the governments of developing countries that might impede the development of the Internet as a global communication medium. This scenario was succinctly articulated by Vickram

Crishna , from India ,during the ICANN public forum, see
http://forum.icann.org/lists/stld-rfp-xxx/msg00051.html.

As Vickram Crishna states in his public comment ICM and IFFOR's proposal
represents "an interesting way to approach the freedom of the Net while
controlling access and abuse of the innocent and also for controlling abuse of
online payment practices." Vickram Crishna also talked about the potential
viability of this approach if "one or two major adult industry players" participate.
Given the broad level of support that ICM and IFFOR have been able to
assemble from all aspects of the online adult industry (content providers,
payment providers, age verification providers, hosting companies, news
channels, etc.) the potential to make a positive impact is heightened.

In addition to these benefits, ICM and IFFOR also anticipate making a positive
contribution to developing countries through the use of various grants that
IFFOR will be making, specifically those in the area of advancing online child
protection initiatives. As the CNN/Reuter's article highlighted, as developing
countries connect online it is generally students and the younger generation that
are the pioneers.

Until such time that IFFOR's various Supporting Organizations and
constituencies can be fully formed and populated, it would premature to list other
more specific initiatives as this would be interfering with the rights of these
stakeholders and constituents to engage in bottoms up consensus driven
initiatives as outlined in IFFOR's bylaws.