Proposed Service

Name of Proposed Service:

search.travel

Technical description of Proposed Service:

The service is being offered as a way to provide an end-to-end user experience for all internet users looking for travel and tourism products and services. This is a value-added service to enhance the .travel TLD. The delivery method for this service would be the same as our other registry services. The service is being offered as free service to the travel community. The service does not require any direct participation of registrars. Implementation will be the full responsibility of the Registry.

We are proposing to offer a wild card service nearly identical to the service currently offered by .museum. The service is comprised of two primary components: a wild card redirection in the TLD zone and a web page to provide enhanced search capabilities for the user. The service will be fully compliant will all relevant IETF RFCs.

Wild Card Redirection

To effect the wild card redirection, we will insert a wild card into the apex of the .travel zone. The use of wild cards is well documented in various RFCs. Upon inserting the wild card, all DNS queries for any domain not found within the zone will receive a response containing the IP address of the search.travel web site.

Search.travel Description

This service provides an end-to-end user experience that is not disrupted while searching for a travel product or service. Under the proposed service, when a travel consumer types in a travel word or term as a DNS look-up they will land at a page that indicates that the name is not registered and is available for registration to eligible entities. Further, the entered name will be parsed into the search box on that page, without having the user type it in again. This search will return results that meet the profile description of the term, with .travel TLD results returned with higher rankings.

The service has three key benefits. It provides:

• Prospective registrants with visibility to unregistered .travel domain names, thus resulting in the expansion of the name space.
Existing registrants benefit by exposing browsers to their products and services in the .travel directory, a value added service that comes with .travel registration.

Web surfers with a consistent user experience when interacting with .travel, an important consideration given .travel’s lack of exposure.

The user is provided with the option to either continue the search or log off once having reached the search.travel web page. This should allay any anti-competitive fears about this service.

Appendix A (RRS-Tech description.pdf)

Consultation

Please describe with specificity your consultations with the community, experts and or others. What were the quantity, nature and content of the consultations?:

a. If the registry is a sponsored TLD, what were the nature and content of these consultations with the sponsored TLD community?:

As a sponsored TLD, we did have preliminary consultations with the sponsor of .travel TLD, The Travel Partnership Corporation (TTPC). We have briefed the Chairman, President and its Executive Committee and we intend to brief its 124 members next week via a conference call. The members of the TTPC are travel and tourism associations worldwide.

b. Were consultations with gTLD registrars or the registrar constituency appropriate? Which registrars were consulted? What were the nature and content of the consultation?:

We did not consult the gTLD registrars or the registrar constituency since we felt that it was inopportune at this point of time. However, when there are indications of approval for the service, we will initiate consultations with the registrars and registrar constituency since the introduction of the service should enhance .travel TLD acceptance resulting in greater registration volume that would be of benefit to them.
c. Were consultations with other constituency groups appropriate? Which groups were consulted? What were the nature and content of these consultations?:

*We did not consult other constituency groups as we felt it was not appropriate at this stage. However, we will be engaging in consultations with other constituency groups as and when we get indications of approval for the service.*

d. Were consultations with end users appropriate? Which groups were consulted? What were the nature and content of these consultations?:

*Please see the answer to question 2 (a). We intend to brief over 124 travel trade associations whose members will be impacted by this service.*

e. Who would endorse the introduction of this service? What were the nature and content of these consultations?:

*The travel providers, tourism organizations and travel consumers worldwide would endorse this offering. At this juncture, given the sensitivity to any new registry services, we have held consultations only with TTPC, the sponsor of .travel TLD, the representative body global travel community. However, once approved, we would be engaging in large scale consultations with ICANN constituencies, travel providers, tourism organizations and travel consumers.*

f. Who would object the introduction of this service? What were(or would be) the nature and content of these consultations?:

*We anticipate that there might be some opposition to the introduction of this service and if that happens we would be engaging in consultations with them to allay any concerns they may have. However, we do no foresee any major objection since it is similar to an existing service that is provided by .museum.*

**Timeline**

Please describe the timeline for implementation of the proposed new registry service:
The overall timeline of the service is materially dependent on the timing of ICANN approval and the final form in which the service is approved. However, at this time, we project that the service will be ready for the initial phase of production deployment 30-90 days from the time of ICANN approval.

For phasing, after the successful testing of the service, we will initially propagate wild cards to the travel DNS constellation for a one-hour period while continuously monitoring the DNS servers and the search.travel web site for unexpected abnormalities. At the conclusion of the one-hour period, the wild card would be withdrawn from the constellation to analyze the gathered operational and performance data. Subsequently, we would engage in further one-hour deployments at varying times of the day. Later deployments would be longer in length, increasing to, for example, 8, 12, and 24 hours. (The specifics of the phases will be determined at a later time.) After a period of such phasing, the wild card would be placed in the DNS constellation permanently.

At the boundaries of these testing periods, users will experience inconsistent results if their queries correspond to the beginning or end of a test. However, during testing, the search.travel web page will be clearly marked with a “beta” description and an “about search.travel” link will provide additional information on the test.

**Business Description**

Describe how the Proposed Service will be offered:

We propose to offer a service to the travel community which provides users with an uninterrupted experience while using the DNS to obtain travel-related information. We call the service “search.travel”. The service proposes to use a wild card in the TLD DNS to direct DNS queries for unregistered domains to a specially designed search web page, where the user will have the option to continue with the search or investigate the opportunity to register the name. The results of the user-initiated query will contain results from the .travel directory and the World Wide Web, with the .travel results placed higher in the rankings.

The proposed service provides the following benefits:

- Provides a larger footprint for the .travel TLD
- Builds an audience for the purchase of .travel domains
- Provides consumers with a satisfactory experience, while searching for keywords connected with .travel in the DNS
- Allows the registry to respond to consumer inquiries with relevant travel responses
- Provides visibility into the .travel directory, thereby encouraging the registration of .travel domain names
The proposed service is technically similar to the current wild card service offered by .museum.

Describe quality assurance plan or testing of Proposed Service:

We are committed to providing a highly reliable service. As such, we will conduct a full battery of tests, including system testing to detect bugs and defects, user acceptance testing (UAT) to ensure the service performs as intended and operational readiness testing (ORT) to ensure that the service can perform under normal and peak operating loads.

The testing will take place in an off-net testing environment in which an instance of the DNS server software and web server software will be subjected to query load in excess of 10 times the projected peak production load. We will drive this testing via test DNS servers and client drivers. The query stream will be composed of a statistically realistic mix of resolving and non-resolving domains, based on production data. Tests will be conducted with the production zone data to provide a realistic data set. Each test will be conducted at these load levels initially for a one-hour period and subsequently increasing in duration to multi-day test runs designed to simulate full production.

Tests will be conducted with and without the wildcard in place and the results compared to determine ascertain the de minimis impact of the wildcard. Testing will also verify the procedures to quickly remove the wildcard without operational impact.

We will then (pre)production test the web sites using production DNS by placing a test domain name (no wild cards) in the TRAVEL zone. We will drive traffic to the web server using the same mechanisms with which we tested in pre-production, but at gently increasing volume so as not to cause operational discontinuity in resolution.

Please list any relevant RFCs or White Papers on the proposed service and explain how those papers are relevant.: 

RFC 1034 provides a definition of wildcards, and provides an overview of how wildcards work in DNS. It provides provisioning examples for handling wildcards at various levels in the DNS in sections 4.3.3.

RFC 4592 solely addresses wildcards in the DNS. The author has stated that the overall goal is not to change wildcards, but to refine the definition of RFC 1034. The document attempts to address issues with the definition of wildcards, as found in RFC 1034. It does not address implementation choices.

There are also several other relevant documents, including:
ICANN Registry Request Service

Ticket ID: W7N3F-1F6G6
Registry Name: Tralliance Corporation
gTLD: .travel
Status: Pending Completeness
Status Date: 2006-08-23 13:16:14
Print Date: 2006-08-23 13:27:20

Redirection in the Com and Net Domains, by the ICANN Security and Stability Advisory Committee

Architectural Concerns on the use of DNS Wildcards, by the Internet Architecture Board

Contractual Provisions

List the relevant contractual provisions impacted by the Proposed Service:

The contractual provisions impacted by the Proposed Service are:
Article III.1 (d) (iii) (a) â€œthose services that are operations of the registry critical to the following tasks: dissemination of TLD zone files; operation of registry zone servers; and
Article III.1. (d) (iii) (C) any other products or services that only a registry is capable of providing, by reason of designation as the registry. None of the other contractual provisions are affected including performance obligations.

What effect, if any, will the Proposed Service have on the reporting of data to ICANN:

The service will have no impact on the data provided to ICANN in the monthly progress reports. The total of number of DNS queries will be reported in the same manner as it is reported today. Furthermore, the proposed service will not impact the Registryâ€™s service level obligations. DNS response times will not be impacted in any way.

What effect, if any, will the Proposed Service have on the Whois?:

There will be no impact to the Whois service. Only domain names that are actually registered in the SRS will appear in the whois database. Non-registered domain names that are redirected to the â€œsearch.travelâ€? web page will not appear in whois.

Contract Amendments

Please describe or provide the necessary contractual amendments for the proposed service:

We would provide the necessary contractual amendments as soon as we receive approval or indications of approval for the
Benefits of Service

Describe the benefits of the Proposed Service:

*The proposed service provides the following benefits:*

- Provides a larger footprint for the .travel TLD
- Builds an audience for the purchase of .travel domains
- Provides consumers with a satisfactory experience, while searching for keywords connected with .travel in the DNS
- Allows the registry to respond to consumer inquiries with relevant travel responses
- Provides visibility into the .travel directory, thereby encouraging the registration of .travel domain names

As indicated earlier, this service provides an end-to-end user experience that is not disrupted while searching for a travel product or service. Under the proposed service, when a travel consumer types in a travel word or term as a DNS look-up they will land at a page that indicates that the name is not registered and is available for registration to eligible entities. Further, the entered name will be parsed into the search box on that page, without having the user type it in again. This search will return results that meet the profile description of the term, with .travel TLD results returned with higher rankings.

The service has three key benefits. It provides:
- Prospective registrants with visibility to unregistered .travel domain names, thus resulting in the expansion of the name space.
- Existing registrants benefit by exposing browsers to their products and services in the .travel directory, a value added service that comes with .travel registration.
- Web surfers with a consistent user experience when interacting with .travel, an important consideration given .travel’s lack of exposure since it has not even completed a year since its launch.

Competition

Do you believe your proposed new Registry Service would have any positive or negative effects on competition? If so, please explain:

*The proposed service would have a positive impact on competition for the following reasons.*
ICANN Registry Request Service
Ticket ID: W7N3F-1F6G6
Registry Name: Tralliance Corporation
gTLD: .travel
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• Expands name space. Prospective registrants are provided with visibility to unregistered .travel domain names, thus resulting in the expansion of the name space. By increasing the registration of .travel TLD, it leads to the development and growth of domain name space thereby providing competition to incumbent gTLD domain name registries. One of the key missions of ICANN is to facilitate expansion of name space.
• Enhances e-commerce. Existing .travel registrants benefit by exposing browsers to their products and services in the .travel directory, a value added service that comes with .travel registration if the query goes on to search for a particular product or service on the landing page. This provides an added marketing channel for the providers of travel products and services in addition to the well-known search engines and other marketing channels.
• Increases consumer choice. Individuals and entities that rely on search engines for travel information is provided with another channel to search for travel products and services. This increases consumer choice thereby enhancing competition.
• No anti-competitive features. When a query is sent for an unregistered .travel name, it lands on search.travel web page where it is provided with option to;
  (a) pursue the registration of a domain name;
  (b) pursue search for travel products and services, and
  (c) log off from the page.
This gives query the option to pursue web search through search.travel or through other search engines or directories that are available.

How would you define the markets in which your proposed Registry Service would compete?:

It is difficult to define the market. It has two main components. One is the wildcard element which provides the query with the option of knowing that the particular name is available for registration and steps needed to be taken in order to register it. The second would be the option for either the search functionality or the domain name registration facility that the query may select to follow-through.

What companies/entities provide services or products that are similar in substance or effect to your proposed Registry Service?:

There are about 15 country code TLDs and one sponsored TLD that provide similar services. They are the following:
The country code TLDs are: .ac, .tm, .io, .mp, .nu, .pw, .st, .tk, .ws, .cd, .ph, .vg, .cm, .cn and .tw.
The sponsored TLD is .museum.

In view of your status as a registry operator, would the introduction of your proposed Registry Service potentially
impair the ability of other companies/entities that provide similar products or services to compete?:

No, we do not think that the proposed service would impair any one else’s ability to provide similar products or service. However, as the registry operator we will be the only entity that would be able to provide wildcard at the TLD level. Third parties, such as ISPs, browsers, plug-ins, etc. will retain the ability to offer services based on DNS query responses.

Do you propose to work with a vendor or contractor to provide the proposed Registry Service? If so, what is the name of the vendor/contractor, and describe the nature of the services the vendor/contractor would provide?:

Neulevel, the current registry operator for .travel, will be responsible for inserting the wildcard record into the .travel DNS zone files. They will continue be responsible for all operations of the .travel DNS.

Have you communicated with any of the entities whose products or services might be affected by the introduction of your proposed Registry Service? If so, please describe the communications?:

No, we do not feel that the proposed service will affect products or services of any other entity.

Do you have any documents that address the possible effects on competition of your proposed Registry Service? If so, please submit them with your application. (ICANN will keep the documents confidential).:

There are no documents that we are aware of that deals with possible effects on competition of the proposed registry service.

Security and Stability

Does the proposed service alter the storage and input of Registry Data?:

There will be no impact to the storage or input of registry data. The data collected by the Registry will be limited to (1) ordinary TLD DNS query log files; and (2) web server log files.
TLD Query Log Files - These log files record each DNS query and the response provided by the server. Each query and response is time stamped. In addition, the query source IP is recorded. There is no information recorded that would discern an end-user query from a query originating from a recursive DNS server.

Web Server Log Files - The Registry will keep standard web server log files. These log files will contain data on query source IP addresses, time stamps, etc. No personal data will be collected or stored at any time, including email addresses, contents of email messages, etc.

Please explain how the proposed service will affect the throughput, response time, consistency or coherence of responses to Internet servers or end systems:

The throughput and response time of the DNS will not be materially impacted by the service. The DNS query response will simply return an IP address rather than NXDOMAIN response.

We will initially propagate wild cards to the travel DNS constellation for a one-hour period while continuously monitoring the response servers and web sites for unexpected abnormalities. At the conclusion of the one-hour period, the wild card would be withdrawn from the constellation to analyze the gathered operational and performance data. Subsequently, we would engage in further one-hour deployments at varying times of the day. Later deployments would be longer in length, increasing to, for example, 2, 4, 8, 12, 18, and 24 hours. (The specifics of the phases will be determined at a later time.) After a period of such phasing, the wild card would be placed in the DNS constellation permanently.

During the phase-in period, consistency and coherence would be unaffected. Each DNS server will respond in the same way. During the times in which the wild card has been inserted into the zone, all queries for non-registered domains will receive a response with the IP address of the search.travel web page. During the periods in which the wild card has been removed from the zone, all queries for non-registered domains will receive an NXDOMAIN response. All queries will receive the exact same response regardless of where the query has originated.

In the SSAC’s report on Site Finder, they define coherence in the following way: "One of the fundamental objectives in the design of the domain name system is to give the same response no matter where the queries are initiated. This attribute is called coherence.” As all queries will be responded to in exactly the same way regardless of the origination of the query, the .travel wild card service will fully comply with the SSAC’s definition of coherence.

Have technical concerns been raised about the proposed service, and if so, how do you intend to address those concerns?:
The proposed service is currently offered by various registries including the sponsored TLD .museum. However, when Verisign launched a related service on 15 September, 2003 there was a concern within the ICANN community with regard to its impact on security and stability on internet. Following Verisign’s launch of Site Finder, a number of real and theoretical technical issues were raised by various groups and individuals. Many issues were portrayed as technical in nature, but were actually business related. The primary technical issues included:

**Impact on SMTP Responses**

Wildcard implementations at the TLD level can provide confusing responses for email servers, and in some cases cause extra load on the servers.

**Impact on Spam Filters**

Some spam filters perform DNS queries to determine if a domain is real. The response provided by a wildcard may cause some spam filters to believe the domain is real.

Our implementation will not return a response to an SMTP query sent to the search site server. Rather, the query will time-out. This implementation is similar to that of .museum.

To address the issue of spam filters, we will make public the IP addresses returned by a wildcard response. These IP addresses will be posted to the Tralliance website.

We believe that because .travel is a new space, with a small and very well defined community, neither of the issues mentioned above will have significant impact.

**Other Issues**

Are there any Intellectual Property considerations raised by the Proposed Service:

This proposed service does not infringe on intellectual property rights of its holders. There is no intent to use any domains in bad faith. The purpose of the service is to provide uninterrupted user experience with regard to travel products and services. Any user reaching the search.travel web page will be informed that the domain is available for registration subject to .travel policies. As with the current policy, the registry will not prevent eligible registrants from registering any un-registered domain names.

.travel policies do not give exclusive or preferential rights to intellectual property holders from any country. For example, the
online retailer Amazon.com is not necessarily eligible to register amazon.travel, and nor may they prevent the Ministry of Tourism in Brazil from registering amazon.travel. Furthermore, .travel has established well defined policies to resolve any intellectual property disputes that may arise.

Does the proposed service contain intellectual property exclusive to your gTLD registry?:

No, the proposed service does not contain intellectual property exclusive to .travel registry.

List Disclaimers provided to potential customers regarding the Proposed Service:

Any other relevant information to include with this request:

Recently .cm, the country code TLD for Cameroon became the latest TLD to launch a related service. This service did not affect the stability and integrity of Internet nor did it create any competition concerns. Their offering is different from our proposed service in that it goes to a parked page for the purposes of monetizing the traffic. This event did attract the attention of ICANN community. However, the debate on that service within the community brought out the advantages of services that are similar to .museum as noted in the article in circleid online magazine, http://www.circleid.com/posts/more_top_level_domain_wildcards. As indicated earlier, our proposed service is similar to .museum.
ICANN Registry Request Service
Ticket ID: W7N3F-1F6G6
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Appendix A (RRS-Tech description.pdf)
(Seen on Next Page)
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**Wild Card Redirection**

To effect the wild card redirection, we will insert a wild card into the apex of the .travel zone. The use of wild cards is well documented in various RFCs. Upon inserting the wild card, all DNS queries for any domain not found within the zone will receive a response containing the IP address of the search.travel web site.

**Search.travel Description**

This service provides an end-to-end user experience that is not disrupted while searching for a travel product or service. Under the proposed service, when a travel consumer types in a travel word or term as a DNS look-up they will land at a page that indicates that the name is not registered and is available for registration to eligible entities. Further, the entered name will be parsed into the search box on that page, without having the user type it in again. This search will return results that meet the profile description of the term, with .travel TLD results returned with higher rankings.

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- Web surfers with a consistent user experience when interacting with .travel, an important consideration given .travel's lack of exposure.

The user is provided with the option to either continue the search or log off once having reached the search.travel web page. This should allay any anti-competitive fears about this service.
The following is a mock-up of the search.travel web page. Each redirected HTTP query will resolve to this page. The user will have the option to enter a search term, the results of which will contain both .travel and non-.travel web sites. The .travel sites will be listed first.