

## **ATTACHMENT A**

### **ADMINISTRATIVE INFORMATION**

#### **1. Name, Address and Contact Information**

SRI International  
333 Ravenswood Avenue  
Menlo Park, CA 94025 USA

Tel: +1-650-326-6200  
<http://www.sri.org>

Contacts:

Yvan Leclerc, Ph.D.  
Email: [leclerc@ai.sri.com](mailto:leclerc@ai.sri.com)  
Telephone: +1-650-859-6153  
Fax: +1-650-859-3735

Michael Summers, Vice President  
Email: [michael.summers@sri.com](mailto:michael.summers@sri.com)  
Telephone: +1-650-859-5555  
Fax: +1-650-859-6171

#### **2. Action of ICANN for which Review and Reconsideration is Sought**

SRI International (SRI) requests that ICANN reconsider its decision not to approve the application presented by SRI to ICANN for a new top-level domain, ". geo" (Dot-Geo). SRI's initial application can be found at <http://www.dotgeo.org/>.

#### **3. Date of the Action**

ICANN published its decision regarding SRI's application on November 16, 2000.

#### **4. Manner in which the Requesting Party will be Affected by the Action**

SRI presented an application to structure, organize and operate the Dot-Geo top-level domain in response to ICANN's request for applications for new top-level domains.

ICANN's decision not to approve SRI's application directly affects SRI, which will be deprived from the opportunity to structure, frame and lead this initiative.

More importantly, the decision prevents or delays the introduction of an innovative service and structure that would provide universal benefits to developing and developed countries, governments and businesses, health and education, as well as current and future Internet users. SRI's Dot-Geo system supports civic and commercial progress on a global basis. It offers valuable specific benefits, such as opening better access to lesser-known regions and communities; enhanced opportunities for indigenous enterprises, and in general, more even development of the Internet among the developed and developing nations.

## **5. Whether a Temporary Stay of the Action is Requested**

A temporary stay of the November 16, 2000, action is not requested.

## **6. What Specific Steps the Requesting Party Asks ICANN to Take**

SRI requests that ICANN reevaluate the SRI application for the Dot-Geo TLD; reconsider its decision; reverse its decision; and allow SRI's application for the Dot-Geo top level domain to proceed.

## **7. Grounds on which the action should be reversed, cancelled or modified**

The grounds on which SRI requests that ICANN review and reverse its prior decision are stated in detail in the Supporting Document that is attached to this Request for Reconsideration (Attachment B1).

In summary, SRI requests that its application be reevaluated, and that ICANN reconsider its decision to reject SRI's application because:

- ?? SRI's proposed relationship with NeuLevel, for the provision of registry services, was not properly understood or evaluated, and its scope was misinterpreted. There are non anti-competitive aspects to the Dot-Geo application. Dot-Geo incorporates numerous mechanisms to promote competition in the origin, issuance, registration, and use of domain names and metadata.
- ?? The technical concerns that were raised are not founded. Dot-Geo is a proven technology that uses standard DNS, http, and XML, thereby maintaining the stability and robustness of the Internet.
- ?? The IPC rating of the SRI application was changed during the November 2000 meeting, after SRI clarified its proposed policies to the IPC. Dot-Geo's final rating was "Good," the best rating available, in all categories.
- ?? Dot-Geo supports civic and commercial progress on a global basis.
- ?? Dot-Geo is technically innovative. It creates the infrastructure for a more efficient, robust, comprehensive and, ultimately, more useful Internet. Dot-Geo avoids the current conundrum of assigning location to Internet data.

## **8. Supporting Documentation**

- ?? Attachment B1: A brief in support of its requests, to expand on, and explain the statements above
- ?? Attachment B2: An executive summary describing Dot-Geo's proposed structure and organization
- ?? Attachment B3: SRI's clarification letter to the IPC

In addition, SRI is available for answering any questions or inquiries, and welcomes any suggestions or comments that ICANN may have about SRI's application or this Request for Reconsideration.

## ATTACHMENT B1

### SUPPORTING DOCUMENT

This document supports our formal request for reconsideration of SRI International's application for the new top-level domain, .geo (Dot-Geo).

#### **1. Foreword**

- a. Historically and technically, Dot-Geo's timing is right. By authorizing SRI to introduce Dot-Geo now, ICANN will make possible new services with universal benefits for developing and developed countries, governments and businesses, health and education, and current and future Internet users. It also will create a new role for the national government holders of ccTLDs, who can actively participate in Dot-Geo as GeoRegistries.
- b. In its evaluation of proposed new TLDs, the ICANN staff concluded:

**“The SRI .geo proposal is an interesting and innovative expansion of the functionality of DNS. The technical, business, and legal details provided suggest that the service can be successful, and might revolutionize use of the Internet.”<sup>1</sup>**

- c. With Dot-Geo in operation, the Internet can provide many social and commercial benefits. Dot-Geo encourages innovative uses of the Internet. Simultaneously, it makes many existing applications more useful. Equally important, from a technical perspective: Dot-Geo is a proven system. Its prospects for widespread adoption are favorable. Dot-Geo will contribute to a better quality of life on a global basis, for Internet users and non-users alike.
- d. This letter articulates support of SRI's request for ICANN's reconsideration, categorized as follows:
  1. Foreword
  2. A Brief Overview of Dot-Geo
  3. Background to Reconsideration of Dot-Geo
  4. Dot-Geo Supports Civic and Commercial Progress on a Global Basis
  5. Dot-Geo Provides Valuable Internet-Specific Benefits
  6. SRI Can Satisfy the Board's Perceived Concerns
  7. Conclusion: The Board Should Approve Dot-Geo

#### **2. A Brief Overview of Dot-Geo<sup>2</sup>**

- a. Today, the only way we can discover information about countries, states, communities, and neighborhoods is to guess the name of a Web site that might carry the relevant locational information. And, believing one has found it, not trusting whether the information is accurate. The limited time, funds, and specialized interests of even the largest Web sites necessarily lead to incomplete and biased collections of information about an area; and, even then, only for a limited number of areas. This approach is fragmented, suffers from narrow focus, and is not easily navigated.
- b. Dot-Geo will overcome today's limitations by letting the owners of the information themselves build a complete, global, and unbiased collection from neighborhoods to countries around the globe. Searchable by anybody and for any purpose. Tourist and business portals will be able to provide a much richer experience for their users. Internet-connected cell phones and car navigation systems will be able to provide up-to-the minute information about traffic, shops,

and restaurants. And users will be able to rely on it -- globally -- to find the nearest doctor, hospital, or pharmacy in an emergency.

- c. Dot-Geo is based on three standard technologies: HTTP servers, XML-based metadata and the Domain Name System (DNS). The metadata is a structured description of information that includes the location/area/time to which the information refers, keywords that summarize the information, and links to the information itself (URLs). The DNS is used in a novel way to hierarchically designate servers that are responsible for storing and serving metadata for restricted geographic areas.
- d. Specifically, in Dot-Geo, a domain name identifies a standard HTTP server responsible for a "cell" or geographic region bounded by its latitude and longitude. Each geographic cell is assigned at least one server. Cell servers are maintained by organizations called GeoRegistries, accredited by SRI. Each GeoRegistry is identified by a Dot-Geo domain name that includes its brand name and the geographic coordinates of the cell(s) they serve.
- e. Each GeoRegistry stores registered metadata that can be used to search for, and receive information (XML "metadata"), according to the geographic location and size to which it pertains and responding to queries for metadata that lie within its cell boundary. A Data Provider (business, organization, or individual) who wishes to make information available in a GeoRegistry applies for registration of its metadata via a GeoRegistrar.
- f. GeoRegistrars also are accredited. They include traditional domain name registrars, web site design companies, and even newspapers (for the registration of classified ads). Their role is analogous to that of a traditional Domain Name Registrar; but instead of registering a domain name in a Domain Name Registry, they register metadata with one or several GeoRegistries.
- g. To conduct a search, end-users will normally use a Dot-Geo enabled Web site starting from a standard Web browser. In response to a query for specific data within a specific area, the Web site will identify the geographic cell(s) that covers the query, choose a GeoRegistry, and transmit the query to the corresponding cell server(s). The cell server(s) will respond with a list of all metadata records that satisfy the query. All of this is not visible to the end-user, who only sees a meaningful visual presentation of the information he or she was looking for.

### **3. Background to Reconsideration of Dot-Geo**

- a. On November 16, 2000, the ICANN Board evaluated 44 proposals for new TLDs, including SRI's proposal for Dot-Geo. Dot-Geo was rated among the top TLD applications by the Intellectual Property Constituency,<sup>3</sup> Harvard Law School's Berkman Center for the Internet and Society,<sup>4</sup> and ICANN's own staff.<sup>5</sup> It was favorably reviewed in the press,<sup>6</sup> by agencies of the United Nations (see below), and by commentators inside the Internet and geospatial communities -- and beyond.<sup>7</sup>
- b. The ICANN Board included Dot-Geo in its initial "basket" of preferred new TLDs. Subsequently, however, the Board removed Dot-Geo from the basket and chose not to approve its implementation. No formal reason was given for Dot-Geo's refusal. We believe the Board's apparent grounds were:
  - ?? SRI, in its proposal, chose NeuLevel (JVTeam) as its vendor of registry services. Some Board members were concerned that awarding the Dot-Geo TLD to SRI would unfairly benefit NeuLevel, which had applied for its own TLD (.biz). We will show that these registry concerns are unfounded.
  - ?? Some Board members voiced technical concerns regarding Dot-Geo. We address these concerns. We explain why a TLD is *very* important to Dot-Geo as a new Internet service.

We believe, however, that Dot-Geo will be a credit to ICANN and a benefit to Internet users and the world at large.

#### 4. Dot-Geo Supports Civic and Commercial Progress on a Global Scale

- a. Dot-Geo is innovative, making new applications possible and existing applications work better. The geo-referencing of information available on the Internet can make a tangible, positive difference in the lives of current and future Internet users.
- b. In the published *Recommendations* of its Expert Meeting on E-Commerce and Tourism,<sup>8</sup> held in Geneva, in September 2000, the United Nations Commission for Trade and Development (UNCTAD) recommended that UNCTAD should...

"Encourage the adoption of open data standards, e-signatures, and new Internet developments (e.g., new top-level domains such as .geo) where these would assist in opening up the e-tourism marketplace... and ensure that e-commerce serves equitably the needs of developed and developing nations, and can contribute to social and environmental accountability within the tourism industry. [emphasis added]

This recommendation, cited in SRI's proposal to ICANN, was accepted by the Expert Meeting chairman and is currently under consideration by UNCTAD for incorporation in UNCTAD's 2001 report to the Secretary-General. Ultimately, Dot-Geo is destined for consideration in the UN's 2001-2002 annual action program.<sup>9</sup>

- c. UNCTAD Experts expect Dot-Geo can provide the following benefits, among others:
  - ?? More even development among the developed and developing nations, particularly in critical new sectors such as e-commerce and tourism
  - ?? Lesser-known regions and attractions becoming known and accessible to all Internet users
  - ?? More self-knowledgeable, activated citizenries and communities
  - ?? Better knowledge and allocation of national and regional assets and resources
  - ?? Enhanced opportunities for indigenous enterprises (including tourism)
  - ?? Better management of natural attractions for ecological sustainability

- d. Dr. Philippe Quéau, Director of UNESCO's Information Society Division (also cited in SRI's proposal to ICANN), in September 2000 wrote to SRI:

"We warmly support the [.geo] initiative. ...UNESCO in principle is interested to examine the possibility [of becoming] a member of the .geo Council [Forum] to help evolve the .geo in the public interest."<sup>10</sup>

- e. Mr. Oliver Hillel, Coordinator of the UN Environmental Program's Tourism Program, in a comment posted to ICANN's Public Discussion Forum, has written:

"Having recently heard about SRI's proposal to ICANN to create a .geo domain, ... I believe that it would be a great tool [for the development of indigenous tourism and enterprises]."<sup>11</sup>

Mr. Hillel makes two key points:

?? "Dot-Geo could make it easier [for travelers] to find small- and medium-sized destinations and enterprises that may have less chance of becoming members of mega-Web travel portals. This would enhance the distribution of benefits to local populations. As the number of experienced travelers increases, .geo will be an essential support system for better and wiser traveling."

?? "By giving each posting [of information] a geographical reference, we increase the information provider's accountability and responsibility. Researchers can correlate geo-referenced information to data on tourism and the environment, both cultural and natural."

Summarizing his feelings, Mr. Hillel writes:

"For these reasons, I would like to fully support SRI's proposal and look forward to using .geo in the near future."

- f. With Dot-Geo's approval, UNCTAD, UNESCO, UNEP, and other UN-affiliated agencies (ranging from IATA to the Office of Refugees) will be able to formally endorse and implement Dot-Geo, giving the Internet heightened, positive visibility on the global stage.
- g. We also foresee a role for national authorities (such as the U.K. Ordnance Survey or the Japanese Ministry of the Interior) and those organizations that currently manage ccTLDs. As domestic GeoRegistries and/or GeoRegistrars providing Dot-Geo service, they will be able to give their registrants' information a new dimension of relevance.
- h. In the same way that latitude and longitude presaged the Age of Exploration and global commerce, Dot-Geo, by mapping the virtual world, can benefit global, national, and regional economies and promote:

?? Economic integration of the developed and developing worlds

?? A common, global geographic reference for commerce

?? Greater global exchange of knowledge and human resources

?? Commerce enriched by the exchange of value-adding information

?? Avoidance and resolution of conflicts based on inaccurate or distorted information with a geographical dimension

## **5. Dot-Geo Provides Valuable Internet-Specific Benefits**

- a. Dot-Geo provides additional Internet-specific benefits that merit ICANN's approval. Among these benefits are:
  - ?? Creating the physical infrastructure for a more efficient, robust, comprehensive and, ultimately, more useful Internet
  - ?? Solving the current conundrum of assigning location to Internet data
  - ?? Enabling new, innovative Internet services and uses based on geography

- ?? Providing a framework for integrating disparate information systems
  - ?? Enabling location-based services for value chains in:
    - ?? Business logistics
    - ?? Transportation planning and management
    - ?? Residential and commercial real estate sales and facilities management
    - ?? Health and educational planning and management
  - ?? Worldwide health-emergency and other public services that are dynamic and accessible on a 365/24/7 basis. For example, locating the nearest doctor, hospital, or pharmacy, anywhere in the world
- b. In the longer-term, we expect Dot-Geo to catalyze new enterprise models, applicable in all regions, based on the economics of geography and other geographical factors.

## 6. SRI Can Satisfy the Board's Perceived Concerns

- a. **Our Choice of Registry Vendor.** SRI urges ICANN to reconsider the Dot-Geo proposal on its merits.
- ?? The Dot-Geo proposal provides for substantial competition among GeoRegistries and GeoRegistrars. The role of the central registry is to maintain a mapping between GeoRegistry domain names (such as acme.20e30n.geo) and the IP addresses of the physical servers (such as 128.12.64.33). The registry never sees or handles metadata records or has direct contact with registrants. Metadata records are solicited by an army of GeoRegistrars and maintained by a regionally distributed, worldwide network of GeoRegistries.
  - ?? In our proposal to ICANN and in this request for reconsideration, we stressed that our registry services would be obtained from a *vendor*. NeuLevel is a service provider, not a partner with management responsibility for Dot-Geo. That responsibility is SRI's alone. We have structured our relationship to limit NeuLevel's services to those that are technically and operationally noncompetitive.
  - ?? NeuLevel offers credible and desirable competition to other registry vendors.
- b. **Technical Concerns.** In response to the technical concerns expressed by ICANN Board, we offer the following clarification, which that we believe will allay the Board's concerns.
- ?? **Scalability.** Dot-Geo is inherently scalable. The dot-geo hierarchy is like a quad-tree, whose elements represent progressively smaller "cells," each identified by a domain name. These names point to standard HTTP servers that serve standard XML metadata. The hierarchy can have variable depth depending on demand: e.g., 10-degree cells over the ocean and 10-minute cells over urban areas. This distributes the storage and computational load over as many machines as necessary to meet demand and scale to *all* georeferenced metadata in the world.
  - ?? **Granularity.** There is no problem of "granularity." The servers for the smallest cells (10-minutes, or 20km) can store metadata about objects as small as a house, a chair, or

even a grain of sand. Each metadata record represents the position of the object to sub-millimeter precision using double-precision floating point numbers.

- ?? **Proven Internet Technology.** SRI has demonstrated the above points, and the robustness of its technology, in two live coast-to-coast demonstrations in October 2000: at the DARPA Next Generation Internet Conference and the Supercomputing 2000 Conference. For these demonstrations, SRI used standard DNS, standard HTTP servers, and standard XML metadata. We reiterate our offer to perform this demonstration for ICANN.
- ?? **Reduced Dependence on Domain Names.** Discovering Internet information by location reduces the need for every business to acquire a globally visible and easy-to-remember domain name, thereby reducing the impetus for cyber-squatting. For example, the multitude of businesses in the world with similar or identical business names will no longer each need a unique, distinctive domain name. Dot-geo will enable a user to locate each small-business by its locale, independent of the domain name of its web site or web page.
- ?? **Encouraging New Internet Presence.** Dot-Geo will encourage even the smallest of businesses or organizations not already on the Internet to create their own web presence, because they can be found locally, and will therefore derive new benefits from doing so.
- ?? **Intellectual Property Rights Protection Concerns.** Dot-geo received a "Good" rating in all categories. The SRI application shows great awareness and respect for the protection of intellectual property rights.

ICANN's Intellectual Property Constituency (IPC) upgraded its rating of the SRI Proposal to "Good" in all categories after conducting meetings with SRI representatives during ICANN's November 2000 meeting and receiving a clarification of SRI's proposed Intellectual Property Policies and Dispute Resolution mechanisms.<sup>12</sup> A copy of SRI's clarification letter is attached as Attachment B3.

- c. **Dot-Geo Needs a TLD.** Dot-Geo, as a universal, dynamic, ever-growing atlas of geo-referenced information relies on the opt-in registration of information by data providers to rapidly compile a comprehensive, useful directory of globally accessible geo-referenced information. The success of Dot-Geo's opt-in registration requires a TLD, because:
  - ?? A TLD provides a global presence. It tells potential users: "Dot-Geo is available everywhere, to everyone. Information you register via Dot-Geo will be globally accessible -- and you will be able to access others' registered information, also globally." This will greatly encourage data providers to seek out GeoRegistrars, to have their information geo-referenced.
  - ?? The factor most essential to successful opt-in registration is *public trust*. Gaining the public's trust for Dot-Geo will be more certain when SRI concludes with ICANN a publicly available contract that states, in unequivocal, enforceable terms, the registration, intellectual property protection, privacy, and data abuse policies by which SRI is required to abide. This is a central reason for seeking and obtaining ICANN's approval for a TLD.

## 7. Conclusion: The Board Should Approve Dot-Geo

- a. SRI respectfully requests ICANN, on reconsideration, to approve its proposal for a new top-level domain, Dot-Geo, for the following reasons:

- ?? Dot-Geo represents an innovative, exciting new use of domain names that is in keeping with the expanding, ever-changing Internet. Moreover it will make existing applications even better.
  - ?? There are no anti-competitive aspects to the Dot-Geo application. Dot-Geo incorporates numerous mechanisms to promote competition in the origin, issuance, registration, and use of domain names and metadata.
  - ?? Dot-Geo evidences great awareness and concern for the protection of intellectual property rights. It has received a "Good" rating (the best rating) in all categories from the Intellectual Property Constituency.
  - ?? Dot-Geo's availability will make a concrete contribution to the quality of life in both the developing and developed worlds, as testified to by experts on the international scene and observers more local in their outlook.
  - ?? There are no outstanding technical objections to Dot-Geo. Dot-Geo is a proven technology that uses standard DNS, HTTP, and XML, thereby maintaining the stability and robustness of the Internet.
  - ?? Dot-Geo has been praised by international bodies, Internet experts, experts in geospatial technology, educators, business analysts, and most importantly, current and potential future users of the Internet.
- b. For all of these reasons, and because Dot-Geo embodies ICANN's ideals for the future of the Internet -- stability, competition, openness, inclusion, efficiency, reliability, and innovation -- SRI respectfully urges ICANN to approve SRI's proposal for the Dot-Geo top-level domain.
  - c. SRI International is available for answering any questions or inquiries, and welcomes any suggestions or comments that ICANN may have about the SRI International Proposal or this Request for Reconsideration.

## **ATTACHMENT B2**

### **DOT-GEO EXECUTIVE SUMMARY**

#### **1. Overview**

SRI International proposes a new top-level domain that will focus on geographic location, rather on trademark or trade name.

In the .geo TLD ("Dot-Geo"), a domain name identifies a standard HTTP server responsible for a "cell," or geographic region bounded by latitude and longitude lines. Each geographic cell is assigned at least one server. Cell servers are maintained by organizations called GeoRegistries, accredited by the Sponsor (SRI). Each GeoRegistry is identified by a Dot-Geo domain name that includes its brand name and the geographic coordinates of the cell(s) they serve.

Each GeoRegistry stores registered metadata that can be used to search for, and receive information (XML "metadata"), according to the geographic location and size to which it pertains and responding to queries for metadata that lie within its cell boundary. A Data Provider (business, organization, or individual) who wishes to make information available in a GeoRegistry applies for registration of its metadata via a GeoRegistrar.

GeoRegistrars also are accredited. They include traditional domain name registrars, web site design companies, and even newspapers (for the registration of classified ads). Their role is analogous to that of a traditional Domain Name Registrar; but instead of registering a domain name in a Domain Name Registry, they register metadata with one or several GeoRegistries.

To conduct a search, end-users will normally use a Dot-Geo enabled Web site starting from a standard Web browser. In response to a query for specific data within a specific area, the Web site will identify the geographic cell(s) that covers the query, choose a GeoRegistry, and transmit the query to the corresponding cell server(s). The cell server(s) will respond with a list of all metadata records that satisfy the query. All of this is not visible to the end-user, who only sees a meaningful visual presentation of the information he or she was looking for.

#### **2. The Dot-Geo Hierarchy**

Dot-Geo proposes to categorize locations according to a Domain Name System (DNS) hierarchy of geographic domain names. This is basically like a quad-tree, where each element of the quad-tree has a corresponding domain name.

Only GeoRegistries receive a domain name. Domain names are awarded once the Sponsor has completed the accreditation process. Each domain name is registered in the Dot-Geo gTLD registry. The prefix of a domain name is comprised of a brand name and the geographic identifier of the cell it serves. Its suffix is ".geo". For example, acme.10e20n.geo.

A GeoRegistry serves one or more geographic cells. Each cell, or bounded region, is identified by its latitude and longitude. For example, the coordinates 20e30n identify the 10-degree x 10-degree cell whose southwest corner is located at 20 degrees east, 30 degrees north. A GeoRegistry named "acme" that has been accredited to operate servers assigned to the cells located at 10e20n, 10e30n, and 2e5n.10e30n will receive the domain names [acme.10e20n.geo](#); [acme.10e30n.geo](#); and [acme.2e5n.10e30n.geo](#). When several GeoRegistries operate cell servers assigned to the same cell, their domain names will contain the same cell geographic ID, but different brand names. For example if the GeoRegistries "Acme," "Best," and "First" have servers assigned to the 20e30n cell, their respective domain names will be [acme.20e30n.geo](#); [best.20e30n.geo](#); [first.20e30n.geo](#).

### **3. GeoRegistries and GeoRegistrars**

The Sponsor accredits and supervises the GeoRegistries and GeoRegistrars, ensuring that they correctly use the standards and protocols, and meet the performance criteria. These standards, protocols, performance criteria and related policies are defined by the Sponsor, in consultation with an open forum that includes GeoRegistries, GeoRegistrars, data providers, international standards organizations, and end users.

Each GeoRegistry maintains one or several cell server(s) that use the standard HTTP protocol for communication. It stores metadata that pertains to business, organizations, weather, etc. within the boundaries of the cells for which it has been accredited. It provides services for the registration and discovery of metadata according to protocols and service criteria defined by the Sponsor. It may charge a fee for registering and storing metadata.

GeoRegistrars serve a role similar to that of the traditional Domain Name Registrars. However, instead of registering a domain name in a Domain Name Registry, a GeoRegistrar registers a metadata record in one or more GeoRegistry(ies). A data provider who wishes to make georeferenced information available via the Dot-Geo structure must register the metadata through an accredited GeoRegistrar and pay a fee for such registration. The GeoRegistrar parses and codes the metadata to identify the precise geographic coordinates of the subject matter of the metadata, and hence the cell. Once it has identified the cell corresponding to the metadata, the GeoRegistrar transmits the metadata to the cell server(s) of the GeoRegistry(ies) servicing that cell.

A special class of GeoRegistrars called Dynamic GeoRegistrars handle dynamic data, i.e. data that require periodic update, such as the real-time position of aircraft or weather systems. Dynamic GeoRegistrars are trusted agents, to ensure and assure data accuracy.

### **4. Metadata and Georeferenced Information**

Data providers generate and own their metadata and georeferenced information.

Metadata (also called “geodata” in the SRI Proposal) is a summary of georeferenced information. It may include the information's author, owner, date, geographic location, keywords, and URL pointing to a website or other digital representations of the georeferenced information. For example, the metadata for a restaurant having a website at [www.goodfood.de](http://www.goodfood.de) could include the restaurant's name, street address, various keywords, and the URL of the restaurant web site, [www.goodfood.de](http://www.goodfood.de).

Georeferenced information may include maps, elevation data, aerial and satellite images; geographic locations of businesses, services and resources; three-dimensional (3D) dynamic models of buildings, bridges, roads, sea lanes, air routes, vegetation, croplands, vehicles; weather data, scientific models of natural phenomena.

To ensure the accuracy and validity of the data and/or metadata, the metadata record includes a field for optional validation certificate(s). Validation certificates are issued by validation organizations, and digitally signed. They certify that one or more elements of the data and/or metadata meet certain qualifications, such as accuracy, completeness, or compliance with standards or conventions.

### **5. Searches and Queries**

Users who wish to discover information for a given geographical area will normally use a Dot-Geo enabled Web site within a standard Web browser. The user will type a query (for example: Which airlines offer direct flights between XX and YY? What are the restaurants with outdoor seating and a shaded patio within one half mile from ZZ Airport?). The system running on the Dot-Geo enabled Web site will then determine the cell(s) that covers the query, choose one or several GeoRegistry(ies), and transmit the search query to the corresponding cell server(s). The cell server(s) will respond with a list of the metadata records that satisfy the query. Where appropriate, the system will download the data referenced by the URLs in the metadata records and integrate these data into a view. This view could be a list of URLs ordered by distance from a point, or a set of icons on a map, or a set of 3D models with hyperlinks integrated into a 3D scene.

**ATTACHMENT B3**

**SRI International  
333 Ravenswood Avenue  
Menlo Park, CA 94025-3493**

Mr. J. Scott Evans  
Guest  
Room 809  
Marriott Hotel  
Marina Del Rey, CA

**Re: SRI International Application for .GEO TLD**

Dear Mr. Evans,

Thank you very much for your time and constructive comments this morning. As discussed, we have prepared a clarification of the "notice and take down" procedure for use in case of dispute with respect to the content of geodata.

In the .geo TLD, a Data Provider may register the geodata with respect to his website with a GeoRegistrar, so that the URL and associated data are stored by one or more GeoRegistries that cover a specific geographic cell. When a web user makes a query using his/her browser, the GeoRegistry provides a list of links to the websites that contain the requested information.

If a person or entity ("complainant") determines that (1) the content of the website of a third party ("publisher") violates the intellectual property rights or other rights of the complainant; and (2) that a GeoRegistry provides access to such website; then, the complainant will be able to request the GeoRegistry to disconnect the link between the GeoRegistry and the allegedly infringing website, and to disable access to the related geodata. To do so, we propose that the complainant be required to initiate a "notice and take down" procedure, using the same procedure as that which is described in the DMCA in case of copyright infringements.

The complainant will first notify the GeoRegistry's designated agent of the claimed infringement or violation. To do so, the complainant will provide a written notice with:

- (i) a physical or electronic signature of the person authorized to act on behalf of the complainant;
- (ii) identification of the works claimed to have been infringed (or, if multiple works, a representative list of such works), or of the right claimed to have been violated;
- (iii) identification of the material that is claimed to be infringing, or to be the subject of infringing activity, or to cause a violation of the complainant's rights, and to which access is to be disabled, and information sufficient to permit the GeoRegistry to locate the material;
- (iv) information reasonably sufficient to permit the GeoRegistry to contact the complainant, such as an address, telephone number and, if available, email address;
- (v) a statement that the complainant has a good faith belief that use of the material in the manner complained of is not authorized by the copyright owner, or is otherwise a violation of the complainant's rights; and

- (vi) a statement that the information in the notification is accurate and, under penalty of perjury, that the complainant is authorized to act on behalf of the owner of an exclusive right that is allegedly infringed.

Upon receipt of such evidence, the GeoRegistry will:

- (i) promptly disable the publisher's geodata and the link from the GeoRegistry's servers to the publisher's website;
- (ii) promptly take reasonable steps to notify the publisher that it has disabled the link; and
- (iii) provide the publisher with an ability to send a written counter notification within ten (10) business days. The counter-notification will have to include a statement under penalty of perjury that the publisher has good faith belief that disabling the link to his website was the result of a mistake or a misidentification of the material. The publisher's counter-notification will also have to include a statement that the publisher consents to the jurisdiction of the court in which the publisher's address is located, and that the subscriber will accept service of process.

If the GeoRegistry does not receive a counter-notification within a period certain, the link will be disabled. If the GeoRegistry does receive a counter-notification, then, within ten days, it will notify the complainant of such receipt, will provide the complainant of the counter-notification, and will inform the complainant that it will reactivate the disabled link and related geodata in ten business days, unless it has received notice that the complainant has filed an action, as outlined below, seeking the disablement of the link.

The action above could be filed in court immediately, as provided in the DMCA. However, to the extent possible, to avoid long and costly litigation, and to the extent that an alternative dispute resolution mechanism can be put in place, we would encourage the publisher and the complainant to attempt to settle their dispute through a dispute resolution mechanism, such as the dispute resolution service providers identified by ICANN and listed at <http://www.icann.org/udrp/approved-providers.htm>. If such entities are not willing or able to do so, then, in cooperation with ICANN, we will attempt to identify and secure participation of other entities that provide dispute resolution, mediation or arbitration services, and that have an international reach. Given the nature of .GEO, it is likely that Data Providers and GeoRegistries will be located throughout the world. Therefore, when organizing this dispute resolution mechanism, we will encourage use of electronic mail, web-video conferencing, list-servs, encryption, secure repository of electronic documents, and the like, to limit the requirements for travel, and take into account that the parties might be in different geographic locations.

The dispute resolution mechanism could require the parties to attend, in person or electronically, dispute settlement conferences according to a tight, set schedule, aiming at a speedy resolution of the dispute. For example, failure to participate could result in final disablement of the link or permanent dismissal of the complaint, against the defaulting party, if a party does not appear, or does not comply with the schedule. Any amicable mutual settlement through the dispute resolution mechanism would be deemed final, without the ability to appeal. If there is no settlement, the parties would have the ability to bring the action in court.

Example:

- ?? YEEPEE.10e20n.geo is a GeoRegistry for the cell in which the City of Blue Springs is located, at 10e20n.
- ?? Joe, the owner of Joe's Pizza Place in Blue Springs has registered with YEEPEE the geodata of his restaurant, e.g. URL of his website [www.joespizza.com](http://www.joespizza.com), key words pizza, fireplace and Blue Springs.
- ?? The owner of Bill's Restaurant in Carmel believes that materials in the [www.joespizza.com](http://www.joespizza.com) website infringe the website, brochures, paper guidebook, billboard advertisement, or radio commercials that Bill uses to promote Bill's Restaurant.

- ?? Bill can contact YEEPEE using a procedure similar to the notice and take down procedure of the DMCA, making a sworn statement that he has a good faith belief that use of the material in the [www.joespizza.com](http://www.joespizza.com) website infringes upon Bill's rights in his own materials, and providing evidence of the infringement.
- ?? YEEPEE will disable the link from YEEPEE's servers to the [www.joespizza.com](http://www.joespizza.com) website until the dispute between Joe and Bill is resolved.

We hope that the description and example above clarify the statement made in the SRI .geo proposal about disputes with respect to the content of geodata registrations.

Again, we thank you for your insightful comments. We welcome your further suggestions, and remain available at your convenience should you or your colleagues have any further questions about SRI International .geo TLD's application.

Very truly yours,

SRI International

---

## Endnotes

- <sup>1</sup> ICANN Staff Analysis of TLDs,  
<http://www.icann.org/tlds/report/report-iiib3-09nov00.htm>
- <sup>2</sup> SRI's application including technical description and operational plans is available on SRI's Dot-Geo website, <http://www.dotgeo.org/>.
- <sup>3</sup> Intellectual Property Constituency Revised Evaluations, 15 November 2000,  
[http://ipc.songbird.com/NewTLD\\_IPC\\_revised\\_111500.htm](http://ipc.songbird.com/NewTLD_IPC_revised_111500.htm)
- <sup>4</sup> Berkman Center Student Analysis of the New TLD Applications by Leor Farhadian, Talia Milgrom-Elcott, and Devesh Tiwary  
<http://cyber.law.harvard.edu/icann/pressingissues2000/briefingbook/tld-application-chart.html#chart>
- <sup>5</sup> ICANN Staff Analysis of TLDs,  
<http://www.icann.org/tlds/report/report-iiib3-09nov00.htm>
- <sup>6</sup> For example...
- Reuters, "Coming Soon: Special Purpose Domain Names," Eric Lai, 18 November 2000  
[http://dailynews.yahoo.com/h/nm/20001118/wr/column\\_netrends\\_dc\\_4.html](http://dailynews.yahoo.com/h/nm/20001118/wr/column_netrends_dc_4.html)
- TheStandard.com (Industry Standard), "ICANN Says Nuh-Uh to Dot-Kids," Aaron Pressman, 10 November 2000  
<http://biz.yahoo.com/st/001110/20129.html>
- Wall Street Journal*, "Internet Oversight Body to Expand List of Domain Names at Meeting," Anick Jesdanun (AP), 15 November 2000  
[http://interactive.wsj.com/archive/retrieve@6.cgi?cyberoid/text/wsjie/data/SB974320631477879005.djm/&d2hconverter=display-d2h&NVP=&template=atlas-srch-searchrecent-nf.tpl&form=atlas-srch-searchrecent-nf.html&from-and=AND&to-and=AND&sort=Article-Doc-Date+desc&qand=&bool\\_query=icann&dbname=%26name1%3Ddbname%26name2%3Ddbname%26name3%3Ddbname%3Bwsjie%26named%3Ddbname%26period%3D%3A720&location=article&Hl=](http://interactive.wsj.com/archive/retrieve@6.cgi?cyberoid/text/wsjie/data/SB974320631477879005.djm/&d2hconverter=display-d2h&NVP=&template=atlas-srch-searchrecent-nf.tpl&form=atlas-srch-searchrecent-nf.html&from-and=AND&to-and=AND&sort=Article-Doc-Date+desc&qand=&bool_query=icann&dbname=%26name1%3Ddbname%26name2%3Ddbname%26name3%3Ddbname%3Bwsjie%26named%3Ddbname%26period%3D%3A720&location=article&Hl=) (requires registration)
- GISCafe.com, "SRI International Aims to 'Map' the Internet with .geo Proposal," 23 October 2000  
[http://www.giscafe.com/GISCafe/NEWS/CorpNews2/20001023\\_sri.html](http://www.giscafe.com/GISCafe/NEWS/CorpNews2/20001023_sri.html)
- GIS Vision, "A Spatial Data Approach to the Social Sciences," Kyle Bohnenstiehl, November 2000  
[http://www.giscafe.com/GISVision/Feature/Spatial\\_Data\\_Approach.html](http://www.giscafe.com/GISVision/Feature/Spatial_Data_Approach.html)
- <sup>7</sup> Letters of Support, generally, <http://www.dotgeo.org/support.html>
- <sup>8</sup> Recommendations of the Expert Meeting, 27 September 2000 (TD/B/COM.3/EM.9/L.1)  
<http://www.unctad.org/en/docs/c3em911.en.pdf>
- <sup>9</sup> UNCTAD staff have informally communicated their expectations that Dot-Geo will contribute to the solution of the profound development dilemmas discussed in its 2000 report, *Building Confidence: Electronic Commerce and Development*, 1 February 2000, (UNCTAD/SDTE/Misc.11). <http://www.unctad.org/en/docs/posdtem11.en.pdf>
- <sup>10</sup> Dr. Quéau's statement is available at <http://www.dotgeo.org/support.html#unesco>.

---

<sup>11</sup> Mr. Hillel's statement is available at <http://www.dotgeo.org/support.html#unep>.

<sup>12</sup> Intellectual Property Constituency Revised Evaluations, 15 November 2000, [http://ipc.songbird.com/NewTLD\\_IPC\\_revised\\_111500.htm](http://ipc.songbird.com/NewTLD_IPC_revised_111500.htm)