Designating a successor operator for the .net registry –
Final GNSO report July 2004 (revised)

Membership
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Context
At its meeting in Rome, Italy, on 6 March 2004, ICANN’s Board of Directors adopted resolution 04.18 on the dot net Registry Agreement Expiration Date and Initial Procedure for Designating Successor Registry Operator.

“Whereas, Section 5.1 of the .net Registry Agreement entered into between ICANN and Verisign on 25 May 2001 provides that the agreement will expire no later than 30 June 2005 www.icann.org/tlds/agreements/verisign/registry-agmt-net-25may01.htm

Whereas, Section 5.2 of the .net Registry Agreement obligates ICANN to adopt an open, transparent procedure for designating a successor Registry Operator by no later than one year prior to the end of the agreement, which would be 30 June 2004;

Resolved, [04.18] that in order to prepare for the designation of a transparent procedure by 30 June 2004, the Board authorizes the President to take steps to initiate the process as specified in Section 5.2 of the .net Registry Agreement for designating a successor operator for the .net registry, including referrals and requests for advice to the GNSO and other relevant committees and organizations as appropriate”.

ICANN VP Policy Development subsequently, 31 March 2004, sent a “request for guidance” to the GNSO council chair. In this comprehensive communication the GNSO Council is requested to issue a “consensus statement defining criteria and conditions to be applied in the selection of a successor registry operator”. In developing the scope of its recommendations, the GNSO should be guided by the example criteria listed in paragraph 5.2.4 (see annex 1). The GNSO Council established a .net subcommittee at its 1 April 2004 meeting. That subcommittee was charged with expediting a recommendation to GNSO Council within the designated timeframe to enable it to provide advice to the Board.
Timescale and outreach
The subcommittee worked by e-mail and held conference calls between April and July 2004. It provided an oral progress reports to the May, June and July meetings of the GNSO Council. For full details see annex 2. Annex 3 provides a record of input received from parties outside of the subcommittee.

This report is supported unanimously by members of the sub-committee.

Dot net and ICANN’s mission
It is useful to consider these recommendations against ICANN's mission and relevant core values.

ICANN's basic mission is: "to coordinate, at the overall level, the global Internet's systems of unique identifiers, and in particular to ensure the stable and secure operation of the Internet's unique identifier systems."

The core values relevant to the .net tender are:

1. Preserving and enhancing the operational stability, reliability, security, and global interoperability of the Internet.
   - this is a core requirement

2. Respecting the creativity, innovation, and flow of information made possible by the Internet by limiting ICANN's activities to those matters within ICANN's mission requiring or significantly benefiting from global coordination.
   - should encourage creativity and innovation

4. Seeking and supporting broad, informed participation reflecting the functional, geographic, and cultural diversity of the Internet at all levels of policy development and decision-making.
   - ensure broad participation in deciding on changes in the .net registry operation.

5. Where feasible and appropriate, depending on market mechanisms to promote and sustain a competitive environment.
   - putting out the operation of the .net registry for tender is itself a market mechanism to get the best result.

6. Introducing and promoting competition in the registration of domain names where practicable and beneficial in the public interest.

The application form
ICANN should ensure the form(s) is(are) comprehensive of the required criteria but also proportional to the need. In other words the complexity of the form and the burden it places on applicants should not go beyond what is necessary to achieve its objective.

The RFP must make clear the process for the designation of the successor registry and the scope of that designation.

**The evaluation process**
ICANN must ensure that the process is impartial. ICANN should publish timely criteria for selection of the evaluators to ensure impartiality. ICANN should ensure transparency where appropriate throughout the process.

**Criteria to be considered**
Criteria are divided into absolute and relative criteria. Absolute criteria are thresholds which an applicant is expected to meet. Failure to do so should imply disqualification. Absolute criteria must be considered first.

Relative criteria become relevant once absolute criteria are met and are proposed as a basis for comparison and evaluation of competing applications. Absolute criteria are listed in no particular order. Relative criteria are listed with weighting with the highest weight at the top of the list.

**Absolute criteria**

**Absolute criteria related to the Targeting**
- Dot net should remain un-sponsored.
- Dot net should remain unrestricted.

**Absolute criteria related to Continuity**
- **Grand fathering**
  There are a number of organisations and individuals that have made an investment in .net domain names. The cost of migrating to a new domain name is potentially significant. Existing registrants should not be penalised by changes in policy as a result of this process. Existing registrants in .net should be entitled to maintain their registrations on terms materially consistent with their existing contracts under current policy, including the right to transfer a .net domain to another party.

**Absolute criteria related to Policy Compliance**
- **Consensus policies**
  In the operation of the .net domain name registry, the registry operator must comply with all consensus policies of ICANN, both existing (UDRP, WHOIS, Deletes, Transfers etc), and any which are developed via the ICANN process in the future.
- **Policy development**
Any future .net registry agreement must specify that policy development for .net will take place in an open bottom-up process, which enables input from the full Internet community via ICANN's processes.

- **Registrars**
  All ICANN-accredited registrars must be allowed to qualify to register names in .net. All registrars that have qualified to operate as .net registrars, must be treated equitably by the registry operator.
Absolute criteria related to stability, security, technical and financial competence

- The .net registry operator should meet or exceed the specifications of the current .net registry contained in the following sections of the current .net registry agreement:
  - appendix C.4, “Nameserver functional specifications”;
  - appendix C.5, “Patch, update and upgrade policy”;
  - appendix D, “Performance specifications”;
  - appendix E, “Service-Level Agreement”;
  - appendix O*, “Whois Specification – Public Whois”;
  - appendix P*, “Whois Data Specification – Independent Whois Provider”;
  - appendix Q*, “Whois Data Specification – ICANN”;
  - appendix R, “Data Escrow Specification”.

* reference the .org agreement if a thick registry model is proposed.

- In addition annex 3 contains a reference to documents submitted to the sub-committee including submissions from Neulevel and Verisign Inc. Due account has been taken of the relevant parts of these while maintaining the characteristic broad approach of this report. Should implementation of these broad criteria be required beyond the specifications of the current .net agreement it is recommended that the Board use the expertise of the ICANN SESAC (Security and Stability Advisory Committee) and ICANN staff.

- The entity chosen to operate the .net registry must:
  - be able to demonstrate that they possess the capability to maintain .net registry functions in an efficient and reliable manner,
  - demonstrate disaster recovery capability,
  - show its commitment to a high quality of service for all .net users worldwide,
  - make registration, assistance and other registry services available to ICANN accredited registrars in different time zones and different languages.

- If applicable, applicants should document their plan for migrating .net from the current registry operator with specific attention paid to maintaining existing functional capabilities as defined at the time of the RFP, performance specifications and protocol interfaces (i.e. registry registrar protocol RRP to extensible registry protocol EPP migration)

- Minimum financial stability should be required to ensure the operator can fulfil its obligations and demonstrate reasonable certainty of continuity.
Relative criteria

1. Relative Criteria related to promotion of competition
Maximization of choice for DNS users. Once an applicant has qualified by meeting baseline stability, technical and financial criteria, preference should be given to proposals that are evaluated to further the following goals within the ICANN mission:
“Where feasible and appropriate, depending on market mechanisms to promote and sustain a competitive environment”
And,
“Introducing and promoting competition in the registration of domain names where practicable and beneficial in the public interest”.

- Pricing and costs: Price is here defined as the registry price (currently $6.00). Once an applicant has qualified by meeting the absolute criteria, preference should be given to proposals offering lower overall costs to the registrar including the registry price.
- Preference should be given to migration and operational strategies that minimise costs.
- Innovation and value: It is possible that applications will offer innovation or new services and hence effect the value proposition. An assessment based on price should be balanced with the value proposition offered. Any proposed innovation or new services:
  - should be described,
  - together with an assessment of the value of them to the effected stakeholders (typically registrants or registrars),
  - and applicants must demonstrate their capability to offer such services based on their prior experience in this area.

2. Relative criteria relating to stability, security, technical and financial competence

- Consideration should be given to stability based on a plural supply base of suppliers and vendors in order to reduce the impact of any one provider failure.
- Preference should be given to proposals offering improved implementation of and support for GNSO policies such as transfers and deletes.
- Applicants should indicate how their proposed solution compares against the current service (defined as .net operator's monthly reports over the past 12 months) and indicate how they could enhance the service. For example an applicant could provide the mean time to resolution for additions or changes to the .net zone file. Preference should be given to proposals offering enhanced performance.
- Preference should be given to proposals offering improved reliability, stability and service level agreements for the operation of the registry; in particular the provisioning, zone file generation and DNS subsystems.
3. Relative criteria related to existing registry services
Dot net currently offers registry services such as the Redemption Grace Period, support of internationalized domain names in accordance with the IDN Guidelines www.icann.org/general/idn-guidelines-20jun03.htm, (and the pending Wait List Service WLS). Applicants should be asked “Does the applicant wish to maintain all registry services existing at the time the Request For Proposals is released?”
  o If yes, please provide specifics and demonstrate the technical and legal ability of the registry to maintain existing services.
  o If no, please expand on any issues relating to the withdrawal of such services.
Annex 1  § 5.2 of the current .net Registry Agreement

5.2.1 Not later than one year prior to the end of the term of this Agreement, ICANN shall, in accordance with Section 2.1, adopt an open, transparent procedure for designating a successor Registry Operator. The requirement that this procedure be opened one year prior to the end of the Agreement shall be waived in the event that the Agreement is terminated prior to its expiration.

5.2.2 Registry Operator or its assignee shall be eligible to serve as the successor Registry Operator and neither the procedure established in accordance with subsection 5.2.1 nor the fact that Registry Operator is the incumbent shall disadvantage Registry Operator in comparison to other entities seeking to serve as the successor Registry.

5.2.3 If Registry Operator or its assignee is not designated as the successor Registry Operator, Registry Operator or its assignee shall cooperate with ICANN and with the successor Registry Operator in order to facilitate the smooth transition of operation of the registry to successor Registry Operator. Such cooperation shall include the timely transfer to the successor Registry Operator of an electronic copy of the Registry Database and of a full specification of the format of the data.

5.2.4 ICANN shall select as the successor Registry Operator the eligible party that it reasonably determines is best qualified to perform the registry function under terms and conditions developed pursuant to Subsection 4.3 of this Agreement, taking into account all factors relevant to the stability of the Internet, promotion of competition, and maximization of consumer choice, including without limitation: functional capabilities and performance specifications proposed by the eligible party for its operation of the registry, the price at which registry services are proposed to be provided by the party, the relevant experience of the party, and the demonstrated ability of the party to manage domain name or similar databases at the required scale.

5.2.5 In the event that a party other than Registry Operator or its assignee is designated as the successor Registry Operator, Registry Operator shall have the right to challenge the reasonableness of ICANN's failure to designate Registry Operator or its assignee as the successor Registry Operator pursuant to Section 5.9 below. Any such challenge must be filed within 10 business days following any such designation, and shall be decided on a schedule that will produce a final decision no later than 60 days following any such challenge.
Annex 2 Timetable and outreach

6 March 2004  ICANN’s Board of Directors adopted resolution 04.18
31 March 2004  ICANN VP Policy Development sends request to GNSO council chair
1 April 2004  GNSO Council established a .net subcommittee at its meeting
15 April 2004  Subcommittee conference call
4 May 2004  Subcommittee conference call
6 May 2004  Oral progress report to GNSO Council
25 May 2004  Subcommittee conference call
1 June 2004  Subcommittee conference call
28 May - 18 June 2004  20 day public comment period on draft subcommittee report v6
22 June 2004  Subcommittee conference call
25 June 2004  Publish Initial report
25 June - 14 July 2004  20 day public comment period on initial report and request for written input from Constituencies
20 July 2004  Subcommittee meeting at Kuala Lumpur
20 July 2004  Final report submitted to the GNSO council
5 August 2004  GNSO Council votes on report
Annex 3 Outreach and synopsis of documents and comments submitted to the subcommittee

Subcommittee members from each GNSO constituency and the At-Large Advisory Committee typically consulted with their constituencies or executive committees during the course of the subcommittee’s work as the basis for their contributions. One constituency submitted a formal position paper in advance of the first comment period.

In addition, two comment periods were held, during which the public was invited to submit comments. The first comment period was from 28 May – 18 June, 2004, and the second comment period from 25 June – 14 July 2004. Comments received during these periods are located in the ICANN forum at: http://forum.icann.org/lists/dotnet-criteria/

A record of all other input received is maintained by ICANN on the net-com mail list and comments archive. This input was typically from subcommittee or mail list members.

The following list of documents and comments received are listed below with summaries, and with links to the original versions. Also, in Annex 4, all documents and comments are copied.

1. Evaluation and responsibility criteria for the .net TLD – submitted by Chuck Gomes, VeriSign

This document suggests that Internet stability should be considered as the key criteria to measure applicants in the .net re-assignment evaluation, and sets forth additional criteria relating to Internet stability. The aspects discussed are as follows:

- Stability of Resolution System (including response times, availability, accuracy of zone data for resolution, and diversity of infrastructure),
- Scale of Resolution System (including capability for handling exiting names and projected growth, and events such as DDoS attacks and other threats),
- Stability of Registration System (including support and response times for Shared Registration System),
- Scale of Registration Systems (including current volumes and projected growth),
- Security of Infrastructure (including security audits and failure/disaster recovery capabilities),
- Operational Expertise (including ability to identify and handle increased traffic or unusual activity, and contribute to standards creation),
- Track Record (in relation to scale and performance levels),
- Migration Plan (including impacts on registration and resolution systems, and costs to registrars),
- Standards Compliance
- Support of New and Emerging Technologies (for example, IPv6)
- Network Coverage (including support of growing, emerging, underserved markets)
- Customer Service (including technical support and 24x7 customer service staff, plus international language skills)
- Feature Functionalities (IDNs, IPv6, real time updates, and other features)
- Track Record of Opening New and/or underserved Markets
- Financial Stability (including people, capital, cash reserves)
2. Comments submitted by Jeff Neuman, NeuLevel

This comment discusses the difference between “price” and “value” and how these two concepts need to be distinguished. A comparison of prices charged by registrars for differently-priced TLDs is included, suggesting that a price reduction at the registry level will not necessarily benefit the end user. The comment concludes that when choosing between two otherwise equal applications, then value should be considered as opposed to only the lowest price.

3. Position of the GNSO Business Constituency

This comment notes that the elements of competition in relation to registries are complex. Indicators of competition such as market dominance, market behaviour and the degree of interdependence in the market sector are all relevant to the re-assignment of .net. In designating a successor registry operator, the Business Constituency supports both competition and a competitive environment. In furtherance of this goal, there should be a continued separation between registry and registrar functions, and registration in .net should continue to be open to all ICANN-accredited registrars.

With regard to technical and financial stability, the comment suggests that technical and financial criteria should be developed in advance so that applicants can be developed in compliance with these. Included in technical stability is the diversification needed to reduce impact of any single failure.

The comment also states, in relation to marketing and continuity, that .net should remain unrestricted but could be marketed more to a specific sector, and that any reassignment of the TLD should not negatively impact existing .net registrants. Additionally, it is key that .net should comply with all current and future consensus policies, and that policy development for .net should function as an open, bottom up process to allow input from the full Internet community.

4. Comments from the Progress and Freedom Foundation - suggestions on treatment of situation with an incumbent operator who is a potential bidder.

This comment notes that this will be the first time that ICANN will be choosing a registry operator where one of the applicants is the incumbent. The comment encourages adoption of the principle that “the criteria should strongly favour the incumbent operator where the incumbent has performed well, and disadvantage the incumbent where has not.”

The comment notes that the criteria are designed to predict how an applicant would operate the .net registry. Meeting a minimum threshold would not be sufficient to make this determination; the criteria and weights must be stated in concrete and specific terms. Past performance is a far more reliable indicator than any untested “paper proposals.”
The comment urges consideration of the experience of the US Federal Communications Commission (FCC) in granting limited term licenses for certain uses of spectrum. Both the FCC and the courts have found it advisable to factor in a “renewal expectancy” in the granting of licenses where the incumbent is an applicant. This does not create any right certainty of renewal, but recognizes the importance of a good record of service.

The comment also notes that criteria which take into account a strong performance by the incumbent would not compromise ICANN’s other policy goals such as promoting the public interest, promoting competition, and maximizing consumer choice.

It was further noted by the subcommittee members that the Progress and Freedom Foundation is supported by the current .net Registry Operator, VeriSign, Inc. http://www.pff.org/about/supporters.html

http://forum.icann.org/lists/dotnet-criteria/msg00001.html

5. Comments from NeuLevel

The first part of this comment is discussing and in general supporting the selection process laid out in the draft procedure – including: timeline, criteria for selecting evaluators, maintaining the impartiality of the evaluators, written notices and the availability of RFP amendments in writing, establishment of independent review panel to review potential challenges from registry operators in accordance with the net agreement and, release publicly a report evaluating the applications with regards to the selection criteria.

The second part of the comment discusses the selection criteria, which also in general is supported by the commenter. This includes a recommendation for clear language of the evaluation of applicants in respect to absolute and relative criteria, in that the absolute criteria should separate the applicants into classes of technical competency and only those with high ranking should be evaluated towards to relative criteria.

The comment regarding the selection criteria continues with the following aspects:

- Recommendation for establishment of minimum technical standards similar to those in .org and .biz.
- Flexibility to accommodate alternate registry models, such as “thin” or “thick” registry models.
- Clarification that the consumers of .net are the registrars and not the registrants.
- To distinguish between value and price, which should be evaluated separately?
- Evaluation of applications in regards to registry services should only be based on the services that are implemented and available for registrars at the time the RFP is issued.

Finally an attachment A has been included in this comment, containing proposals on elaboration of the selection criteria (in details).


6. Comments from VeriSign Inc.
This comment proceeds on the understanding that all bidders in the .net process would be required to meet certain minimum “absolute” criteria and, having met that threshold, would also be evaluated on “relative” criteria. VeriSign believes it is critical that the minimum performance requirements be identified and well defined in order to make sure they are met by participants. Recommended criteria are attached to the comment as “Appendix A.” (These were also submitted separately, see Comment 1 above). The comment suggests that a numerical scoring method should be defined to rate each proposal and that the extent to which applicants meet or exceed the requirements should also be taken into account.

The comment includes a recommendation that stability, security, technical and financial competence each be considered as separate subcategories of the Absolute Criteria. Any applicant must objectively demonstrate that minimum standards can be met in all four criteria.

Also in regard to the Absolute Criteria, the comment suggests that criteria regarding “equitable” treatment of registrars are too vague.

When defining Relative Criteria, the comment suggests that the minimum performance criteria should also be included, and that performance should be the most heavily weighted of the relative criteria.

Additionally, the comment expresses concern over definition of criteria regarding promotion of competition. ICANN must define these criteria in such a way that does not adversely affect incumbents proposal, or base decisions on subjective theories or other data such as number of registrations.

VeriSign suggests that criteria relating to existing registry services should be weighted higher than that of consumer choice or price, as these have more direct impact on consumers.

Regarding the .net criteria process, this comment also expresses the view that the Subcommittee should not take into account any elements from the.org process, due to contractual differences and differences between TLDs.

The comment also expresses concerns regarding the process followed by the GNSO. Feedback containing specific bylaw provisions compared with a description of actions taken by the GNSO is attached as Appendix B. A comment dated 8 October 2002 from an applicant expressing dissatisfaction with the .org process is attached as Appendix C.


7. Comment from Eric Brunner-Williams

This comment begins by stating that any invitation for public comments should have an observable outcome. It describes the .org redelegation process, including the evaluation by Gartner, Inc. and by the staff as corrupt, and suggests that public comments previously submitted have had little or no effect.

According to this comment, the central issue is “which well-qualified existing or potential registry operators will risk the bid preparation cost and compete for the NET registry.”
Commenter suggests that the RFPs used in the past have been overly complex and encourage dishonest input by applicants, as well as imposing high production costs and difficulties on applicants. In addition, they have also required high evaluation costs.

http://forum.icann.org/lists/dotnet-criteria/msg00006.html

8. Comment from Melbourne IT

This comment suggests various changes to the criteria. Among them, it suggests referencing the subcommittee recommendations against the Mission and Core Values of ICANN as listed in the Bylaws. It also suggests a reference to the criteria used in the first round of TLDs.

Given that registrars are dependent on the performance of the registry’s systems, commenter calls for Absolute Criteria containing tighter performance specifications than those currently included in the .net agreement. Suggestion is to set the benchmark using last 12 months of service.

Commenter suggests the addition of “Migration Strategy” to the criteria. Impact on cost to existing registrar customers of .net should be considered.

This comment suggests that “maximization of consumer choice” should be eliminated from the criteria, as .net is an existing TLD and any redelegation of the registry operator will have little impact on consumer choice. In addition, the section on pricing can be recast as “registrar cost” since the prices charged to consumers are determined primarily by registrars and their resellers. An increased registry operator fee should also be part of the process and could result in lower overall costs to registrars.

The comment notes that maximization of services provided to registrars (enhancing such services as Whois, transfers, and handling of deleted names) is also an important consideration. As part of its demonstration of innovation and value, an applicant should be required to explain how they would improve the services offered to registrars, which ultimately impact the public.

http://forum.icann.org/lists/dotnet-criteria/msg00005.html

9. Comments from the Registry Constituency

The Registry Constituency’s comments on the criteria state: 1) that the absolute criterion on stability and security should not be simply a matter of meeting technical specifications, 2) that registry prices have little to no effect on the prices charged to registrants, and 3) that “competition” must be clearly defined.

The Constituency statement also contains comments on the process, suggesting that public comments should be solicited at each stage of the selection process, and that feedback should be provided by ICANN on its consideration of the comments. The Constituency supports adhering to the time schedule proposed. Should ICANN find it necessary to change or modify the RFP after it is issued, this should be done publicly and within a reasonable time frame allowing applicants to make any necessary adjustments to their proposals.
The comment urges ICANN to establish qualification criteria for those who will evaluate the bids, to establish and articulate the processes used to ensure impartiality of those involved and prevent conflicts of interest, and to establish an Independent Review Panel. ICANN should make clear the definitions and weighting of the criteria, and ensure that its criteria are appropriate for either thin or thick registry models.

The Constituency states that at the close of the process, ICANN should issue a written report promptly after the announcement demonstrating how the successor was chosen.

http://forum.icann.org/lists/dotnet-criteria/msg00007.html

10. Comments from NeuLevel

This comment was submitted as a reiteration of NeuLevel’s previous comment (see 5 above). The comment begins by re-stating criteria suggested to be considered and included in the RFP. The criteria discussed are:

- Establishment of the criteria for selecting those evaluators that will assist in evaluating the proposals.
- Establishment of those processes that ensure and maintaining the impartiality of the evaluators.
- Changes to the RFP should be in writing and publicly available.
- Exchanges with evaluators are recommended to take place in writing and publicly available.
- Development of RFP forms should be made in a way that avoids content limitations such as elements different than text only.

The comment continues discussing clarifications of the selection criteria to ensure transparency and outreach to bidders and evaluators. Specifically the comment urges for clear language of the evaluation of applicants in respect to absolute and relative criteria. Continuing:

- Recommendation for establishment of minimum technical standards similar to those in .org and .biz.
- Clarification that the consumers of .net are the registrars and not the registrants.
- To distinguish between value and price, which should be evaluated separately?
- Evaluation of applications in regards to registry services should only be based on the services that are implemented and available for registrars at the time the RFP is issued.

The comment contains an attachment that provides a redlined version of the selection criteria in the GNSO report.


During the first public comment period two comments were received on the draft report sent to the comments list but others as above were circulated to the sub-committee list. Multiple notifications to solicit input into both public comment periods were sent to the
following ICANN mail lists: the GNSO Council, the GNSO constituency secretariat’s list liaison-6c, the general assembly ga list and the open-to-all announce list.

Certain of the comments referenced above were received after the publication by ICANN of the Final Procedure for Designation of the Subsequent .net Registry Operator. Certain of these comments contain recommendations for the conduct of the RFP and go beyond the remit of this report. It is recommended therefore that they are read in full before the publication of the RFP.
1. **Evaluation and responsibility criteria for the .net TLD – submitted by Chuck Gomes, VeriSign.**

**Evaluation and Responsibility Criteria for the .net TLD**

1. **Internet Stability:** Internet stability should be the key evaluation criterion when deciding upon a Registry Operator. Additional criteria relating to Internet stability are set forth below.

2. **Stability of Resolution System:** The successful resolution of .net domain names is critical to the stability of the Internet. Applicants should be required to demonstrate past and current performance against key metrics of performance.

Key metrics of .net performance, by way of standards, should include:

- Response times from .net authoritative servers measured from various points around the globe. This should be measured in accordance with current ICANN DNS Registry Operator Specifications. However, in order ensure that current performance is maintained, the performance target set should correspond to performance levels currently being achieved on .net.
  - Response times should be equal to current performance, which is averaging 40ms.
  - Packet loss target should be less than 1%
- 100% availability of .net authoritative name servers. 75% of name servers should be available at any given time.
- 100% accuracy of .net zone data for resolution (no data corruption). The data that resolves is an exact replica of data in the data base. Applicant should demonstrate processes, tools and automated monitoring in place to ensure this is continuously achieved.
- Diversity of DNS resolution infrastructure with no single point of vulnerability due to vendor equipment, design, implementation methodology or zero-hour security exploits.
- Demonstrated diversity and redundancy of network and DNS infrastructure to handle bandwidth congestion and network failure of ISPs and host providers.

3. **Scale of Resolution system:** The operational system must be scalable to support ongoing performance of .net at all times. Applicants should be required to provide specific volumes and performance measures that they will be capable of supporting, such as:

- Scale sufficient to handle the existing number of names and projected growth.
- Scale to handle existing DNS query loads including normal peaks and projected growth.
- Scale to handle events such as DDoS attacks and traffic generated by viruses, worms and Spam. RFC 2870, “Root Name Server Operational Requirements”, requires excess query capacity of three times the measured peak rate for those critical name servers. In our opinion, this value would be the very minimum for any critical authoritative name servers in light of modern-day threats. Attacks and malicious activity are on the increase and can generate as much as 10x -20x
peak load. It is expected that these events will continue to grow in frequency. A DDoS attack resulting from a worm infecting thousands of computers with access to high-bandwidth Internet connections is a very real possibility and must be anticipated. The operator should have the scale to handle increase traffic caused by these attacks. Excess capacity of at least ten times sustained average query rate is required.

- Demonstrated restart capability from complete outage to avoid prolonged outage due to initial overload.
- Multiple geographically dispersed point of presence to handle simultaneous attacks across the network.

4. Stability of Registration System: The applicant must possess the capability and infrastructure to support equivalent access to the shared registration system by all Registrars with response times equal to those that Registrars currently experience. Among other things, applicants should be required to demonstrate past and current performance against key metrics of performance in terms of such factors as:

- The availability of the system with specific focus on unplanned outage time. This should not exceed 99.99% for unplanned outage time.
- Response time performance – the time to check the availability of a requested name and to add a requested name. The target should be less than 100ms for a check and 150ms for an add command.

5. Scale of Registration Systems: Applicants should be required to demonstrate their capability to support a scaleable registration system, including demonstrating such capabilities as:

- Scale to handle current volumes and projected growth.
- 2x name base capacity to withstand a “registration add attack” from a compromised registrar system.
- Scale to handle through-put rates currently achieved by .net Registry

6. Security of Infrastructure: Applicants should be required to demonstrate their capability to establish the following:

- A secure environment in which the registry infrastructure is to be operated.
- Their Failure/Disaster Recovery Capability, including a plan and assets to support failure of any or all of the infrastructure, with a 4 hour disaster recovery time for registration and a 1 hour disaster recovery time for a gTLD site.
- An independent annual security audit (SAS 70 or comparable).

7. Operational Expertise: Applicants should have staff in place with technical skills, expertise and experience to operate the Registry in order to maintain current levels of performance, including:

- To operate at current and projected volume.
- To maintain operation during periods of increase traffic or activity such as DDoS.
- To identify and diagnose unusual activity such as DDoS attacks targeted at either the Registry operator or other critical Internet infrastructure.
- To minimize vulnerabilities in infrastructure.
- To completely mitigate security vulnerabilities before they are publicly announced.
- To manage any planned outages to minimize impact to Registrars and end users.
- To contribute to standards creation and other issues of Internet development.
8. **Track Record:** Applicants should possess a record of proven performance to handle operations comparable to .net, including:
   - Comparable performance levels.
   - Comparable scale.

9. **Demonstrated Commitment to Performance:** Applicants should have a track record of performance sufficient to demonstrate their ability to measure and perform against appropriate SLAs.

10. **Migration Plan:** Applicants should be required to demonstrate a clear and sufficient plan to migrate from the existing operator, including a plan demonstrating that the migration will have:
    - No impact on performance of registration system.
    - No impact on performance of resolution system.
    - Minimal impact or cost to Registrars.

11. **Standards Compliance:** Applicants should have a demonstrated commitment to compliance with applicable standards designed to improve the user experience on the Internet.

12. **Support of New and Emerging Technologies:** Applicants should have the technical expertise and resources to support new technical initiatives, such as IPv6, designed to improve usability, performance and security of the internet. A focus should be given to technologies which have a demonstrable demand and measurable user benefit.

13. **Network Coverage / Geographic footprint:** Applicants should demonstrate capability with respect to the following measurement standards:
    - Number of name servers and points of resolution sufficient to provide 100% availability. Analysis has shown that this number should be a minimum of 8 physically diverse sites plus a minimum of two swing or hot standby sites for maintenance.
    - Network coverage of key geographic centers of the Internet in the Americas, Europe and Asia Pacific, and providing .net resolution close to the end user.
    - The support of growing and emerging markets so that those people in these markets experience the same levels of performance as those in the developed world.
    - Demonstrated efforts to expand stability in underserved markets.

14. **Customer Service:** Applicants should possess:
    - Skilled staff operating 24x7 to support Registrars' hours of operation.
    - Sufficient staff to support current and projected registrar volumes.
    - International language skills.
    - Technical on-site assistance available (engineering) on 24*7 basis.

15. **Feature Functionality:** Applicants should possess the following:
    - Ability to support current feature functionality of .net to avoid any feature regression. This includes
      - Internationalized Domain Names
      - Support of IPv6
- Ability to provide real time updates
- Demonstrated ability to support key product features and capabilities demanded by Registrars and end users, including IDNs.
- Demonstrated flexibility of system to incorporate new rules/ standards/ business practices with minimum negative impact on Registrars.

16. Track Record of Opening New / Underserved Markets: The applicant should have a track record in successfully investing in underserved markets and new geographies even if financial return does not justify investment. For example, VeriSign has continued to expand the geographic footprint of its network outside the North American market. In addition, the applicant should have a demonstrated willingness to support initiatives driven by market demand.

17. Financial Stability: Significant investment will be required to establish the initial registry system to support the scale and performance levels of .net. This includes the people and capital required to establish a global resolution footprint, capable of handling traffic spikes caused by DDoS attacks and other non standard operational events. The applicant should be required to demonstrate resources sufficient to make an investment at levels required to scale the operation initially and maintain and grow the domain base and infrastructure. The applicant also should possess substantial cash reserves and a record of sustained growth in revenue and profitability.
The draft mentions that pricing should be an important factor.

Please consider the following:

1) ICANN is not selecting its supplier, but rather a third party to perform a service. In most RFPs where the contractor is selecting a supplier, price is obviously a key component. Here it is not ICANN paying the Registry Fees, but rather a Registrar that is paying the fee. However, according to the draft presented, it states "All things being equal with respect to baseline stability, technical and financial criteria, preference should be given to proposals offering lower pricing of the domain name." This is even higher up than enhancements, innovation and other factors, which should be viewed as more important. Price should still be considered, but so long as the price is credible and reasonable, other factors should take precedence.

2) Second, and perhaps more important is that a price reduction does not necessarily benefit the end user. I am not sure that the GNSO Council realizes this point. Regardless of the price, Registrars still charge the same amount. They just get larger margins. The Consumer still pays the same. Just look at this pricing list of a few registrars of unsponsored TLDs. Although the registry price for .biz and .info are less, the domain names at a retail level are still the same:


- .com -- Registry Price is $6.00; Retail Price = $34.99
- .org -- Registry Price is $6.00; Retail Price = $34.99
- .biz -- Registry Price is $5.30; Retail Price = $34.99
.info - Registry Price is $5.75; Retail Price = $34.99

Register.com  (http://www.register.com/pricing/index.cgi)

.com -- Registry Price is $6.00; Retail Price = $35 per year
.org -- Registry Price is $6.00; Retail Price = $35 per year
.biz -- Registry Price is $5.30; Retail Price = $35 per year (2 year min.)
.info -- Registry Price is $5.75; Retail Price = $35 per year (2 year min.)

DomainBank  (http://www.domainbank.net/pricing.cfm?affiliateid=1)

.com -- Registry Price is $6.00; Retail Price = $35 per year
.org -- Registry Price is $6.00; Retail Price = $35 per year
.biz -- Registry Price is $5.30; Retail Price = $35 per year
.info -- Registry Price is $5.75; Retail Price = $35 per year

ENOM  (http://www.enom.com/pricing.asp)

.com -- Registry Price is $6.00; Retail Price = $29.95 per year
.org -- Registry Price is $6.00; Retail Price = $29.95 per year
.biz -- Registry Price is $5.30; Retail Price = $29.95 per year
.info -- Registry Price is $5.75; Retail Price = $29.95 per year

DIRECTI (www.directi.com)

.com -- Registry Price is $6.00; Retail Price = $12.99 per year
.org -- Registry Price is $6.00; Retail Price = $12.99 per year
.biz -- Registry Price is $5.30; Retail Price = $12.99 per year
.info -- Registry Price is $5.75; Retail Price = $12.99 per year


.com -- Registry Price is $6.00; Retail Price = $18 per year
.org -- Registry Price is $6.00; Retail Price = $18 per year
.biz -- Registry Price is $5.30; Retail Price = $18 per year
.info -- Registry Price is $5.75; Retail Price = $18 per year

In fact, some registrars, like OnlineNic
(http://www.onlinenic.com/english/prices.html) charge more for .biz and .info that .com (which is actually more expensive).

Bottom line is that I think more careful consideration should be paid to the "Pricing. All things being equal with respect to baseline stability, technical and financial criteria, preference should be given to proposals offering lower pricing of the domain name."

This may lure bidders into believing that the lowest price should be selected, when in reality, I believe there are a lot more crucial issues to look at. Each of our registries one day will be up for re-bid. The
criteria used here will be used when .info, .biz, .name, .pro, etc. come up for renewal. Do we want price to be one of the most important determining factors, if we want to rebid on our own registries?

Rather than price, one needs to look at "Value". The two words are similar, but completely different.
3. **Position of the GNSO Business Constituency**

[net-com] BC position

- **To:** <net-com@xxxxxxxxxxxxx>
- **Subject:** [net-com] BC position
- **From:** "Philip Sheppard" <philip.sheppard@xxxxxx>
- **Date:** Wed, 26 May 2004 16:26:30 +0200
- **In-reply-to:** <200405261102.i4QB2nJP018109@wawserver.aim.be>
- **Sender:** owner-net-com@xxxxxxxxxxxxx
- **Thread-index:** AcRCcDlmB18729NiTpePbyxn6JQLmcbAn9bqgAVgFeA=

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For information

For good order I attach the position paper of the Business Constituency on dot net. This paper has been on the BC web site for some time but not I think sent yet to this list.

I do not propose any changes to the existing sub-committee draft based on this input.

Philip

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**Business Constituency Position Paper**

**Reassignment of the dot net registry - May 2004**

**Context**

At its meeting in Rome, Italy, on 6 March 2004, ICANN's Board of Directors adopted resolution 04.18 on the dot net Registry Agreement Expiration Date and Initial Procedure for Designating Successor Registry Operator.

"Whereas, Section 5.1 of the .net Registry Agreement entered into between ICANN and VeriSign on 25 May 2001 provides that the agreement will expire no later than 30 June 2005 [www.icann.org/tlds/agreements/verisign/registry-agmt-net-25may01.htm](http://www.icann.org/tlds/agreements/verisign/registry-agmt-net-25may01.htm)

Whereas, Section 5.2 of the .net Registry Agreement obligates ICANN to adopt an open, transparent procedure for designating a successor Registry Operator by no later than one year prior to the end of the agreement, which would be 30 June 2004;

Resolved, [04.18] that in order to prepare for the designation of a transparent procedure by 30 June 2004, the Board authorizes the President to take steps to initiate the process as specified in Section 5.2 of the .net Registry Agreement for designating a successor operator for the .net registry, including referrals and requests for advice to the GNSO and other relevant committees and organizations as appropriate”.

The GNSO Council is requested to issue a consensus statement defining criteria and conditions to be applied in the selection of a successor registry operator. In developing the scope of its recommendations, the GNSO should be guided by the example criteria listed in paragraph 5.2.4 (see annex).
Position of the Business Constituency

1. Competition
Competition is a key concern of users. The elements of competition in relation to registries are complex. As at end 2003 ICANN reports confirm there were 27.0m registrations in dot com, 4.5m registrations in dot net, and 5.1m registrations in the other open top-level domain names (3.0m dot org, 1.1m dot info, 1.0m dot biz). Thus dot com and dot net, under single ownership, represent an 86% market share. Market dominance like this is one indicator of competition; other significant indicators are market behaviour and the degree of inter-dependence in the sector. All three indicators are relevant to the re-assignment of dot net.

- **Successor registry**
The BC seeks an outcome that supports competition and a competitive environment. Users seek an effective and meaningful choice of suppliers.

- **Independence of registry and registrar**
In the furtherance of competition, there should be separation between registry and registrar functions, consistent with other generic TLDs, and registration should be open to all accredited ICANN registrars.

2. Technical and financial stability

- **Selection criteria for successor registry**
It is important that the successor registry operator should have sufficient resources to provide a high quality service level for registrars and registrants. A set of technical, financial and policy criteria should be established in advance and then tenders requested in compliance with these criteria.

- **Diversity adds to stability**
Consideration should be given to technical stability based on diversification in order to reduce the impact of any one supplier failure.

3. Marketing and continuity

- **Targeting**
Dot net should remain an unrestricted domain but consideration could be given for it to be marketed as a space intended for a specific sector.

- **Grand fathering**
There are a number of businesses and individuals that have chosen to establish a presence in dot net and have invested in this. They therefore face significant cost to leave. They should not be penalised by any possible change in policy. Existing registrants in dot net should be entitled to remain there.

4. Policy compliance
Dot net should comply with all consensus policies of ICANN, both existing, and any which are developed in the future.

- **UDRP**
  Mandatory acceptance of the ICANN UDRP and any related changes as they develop.

- **WhoIs**
  There should be an open and effective WhoIs capability, consistent with the consensus ICANN policy and related criteria. As changes are made in the consensus ICANN policy in this area, dot net should be required to maintain consistency in implementation of the consensus policy.

- **Policy development**
  Policy development for dot net should continue to take place in an open bottom up process, which enables input from the full Internet community.
Annex 1

§ 5.2 of the current .net Registry Agreement

5.2.1 Not later than one year prior to the end of the term of this Agreement, ICANN shall, in accordance with Section 2.1, adopt an open, transparent procedure for designating a successor Registry Operator. The requirement that this procedure be opened one year prior to the end of the Agreement shall be waived in the event that the Agreement is terminated prior to its expiration.

5.2.2 Registry Operator or its assignee shall be eligible to serve as the successor Registry Operator and neither the procedure established in accordance with subsection 5.2.1 nor the fact that Registry Operator is the incumbent shall disadvantage Registry Operator in comparison to other entities seeking to serve as the successor Registry.

5.2.3 If Registry Operator or its assignee is not designated as the successor Registry Operator, Registry Operator or its assignee shall cooperate with ICANN and with the successor Registry Operator in order to facilitate the smooth transition of operation of the registry to successor Registry Operator. Such cooperation shall include the timely transfer to the successor Registry Operator of an electronic copy of the Registry Database and of a full specification of the format of the data.

5.2.4 ICANN shall select as the successor Registry Operator the eligible party that it reasonably determines is best qualified to perform the registry function under terms and conditions developed pursuant to Subsection 4.3 of this Agreement, taking into account all factors relevant to the stability of the Internet, promotion of competition, and maximization of consumer choice, including without limitation: functional capabilities and performance specifications proposed by the eligible party for its operation of the registry, the price at which registry services are proposed to be provided by the party, the relevant experience of the party, and the demonstrated ability of the party to manage domain name or similar databases at the required scale.

5.2.5 In the event that a party other than Registry Operator or its assignee is designated as the successor Registry Operator, Registry Operator shall have the right to challenge the reasonableness of ICANN's failure to designate Registry Operator or its assignee as the successor Registry Operator pursuant to Section 5.9 below. Any such challenge must be filed within 10 business days following any such designation, and shall be decided on a schedule that will produce a final decision no later than 60 days following any such challenge.
4. **Comments from the Progress and Freedom Foundation - suggestions on treatment of situation with an incumbent operator who is a potential bidder.**

Comment on Draft Initial Report on Criteria for Designating Subsequent .net Registry Operator

- **To:** "dotnet-criteria@xxxxxxxxx" <dotnet-criteria@xxxxxxxxx>
- **To:** Generic Names Supporting Organization Council
- **Subject:** Comment on Draft Initial Report on Criteria for Designating Subsequent .net Registry Operator
- **From:** Bill Adkinson <WAdkinson@xxxxxxx>
- **Date:** Fri, 18 Jun 2004 14:36:55 -0400

From: William F. Adkinson, Jr.

Re: Draft Initial Report on Criteria for Designating Subsequent .net Registry Operator

Date: June 18, 2004

A. Introduction

The Progress & Freedom Foundation ("PFF") is a market-oriented, private non-profit, non-partisan research institution established in 1993 to study the digital revolution and its implications for public policy. PFF's underlying philosophy combines an appreciation for the positive impacts of technology with a classically conservative view of the proper role of government and its tendency to reach beyond its legitimate functions in ways that harm consumers and slow progress. PFF has previously described the benefits of relying on competition rather than regulation for the governance of domain name system (DNS) services, and questioned the need for regulation by the Internet Corporation for Assigned Names and Numbers (ICANN).

PFF hereby submits these comments on the draft report, titled "Dot net subcommittee draft report version 6" (the "Report"). The report was developed in response to a request by ICANN's vice president for Policy Development to the Generic Names Supporting Organization (GNSO), seeking a "consensus statement defining criteria and conditions to be applied in the selection of a registry operator." The GNSO Council appointed a subcommittee and charged it with "expediting" the report.

B. What Function Should Criteria Perform?
Ultimately, the criteria are to be used to "determine [which applicant] is best qualified to perform the registry functions..." Criteria thus should be relevant to predicting how an applicant will in fact operate the registry. As the .net Registry Agreement states, "relevant experience" and "demonstrated ability" of the applicant should be key considerations. Indeed, evidence of direct experience should far outweigh planning documents. And since ICANN is seeking the best-qualified applicant, simply setting minimum thresholds that the applicants must meet will not suffice. Rather, ICANN must consider the fully demonstrated ability of each applicant to serve user needs and ensure stability.

Moreover, ICANN must do this in a transparent and objective manner. This means at a minimum that ICANN must clearly state the decision criteria it will use, and their relative importance, in specific and concrete terms. This will provide a transparent process in which applicants can design their proposals with full information on how they will be evaluated. It will also help make application of the criteria accurate and fair.

Of particular importance to this development of criteria is the fact that this will be the first time that ICANN will be choosing a registry operator where one of the applicants is the incumbent. The criteria should strongly favor the incumbent operator where the incumbent has performed well, and disadvantage the incumbent where he has not. Past operation of the registry in question is uniquely relevant evidence of future operation. Moreover, as discussed below, favoring well-performing incumbents is very important to provide adequate incentives for investment by registry operators. In this regard, the experience of the United States Federal Communication Commission (FCC) in granting limited term broadcast licenses, and in particular its policies regarding "renewal expectancy" to be afforded incumbents, may prove helpful.

B. FCC Treatment of Incumbent Licensees in Comparative Hearings

In the United States, awards by the government of limited term licenses for
certain uses of spectrum, e.g. by television or radio broadcasters, have long been common. As a result, the FCC and the U.S. courts have often faced situations where an existing license is terminating and the current licensee is pitted against other applicants seeking the new license. Both the FCC and the courts have recognized the important public policy reasons for factoring in a strong "renewal expectancy" where the incumbent has a good record of service. They have emphasized that this is not to benefit the incumbent, but to benefit the public and the consumer.

As the Court of Appeals for the District of Columbia Circuit explained in Central Florida Enterprises, Inc. v. FCC, 683 F.2d 503 (D.C. Cir. 1982), "[t]he reasons given by the Commission for factoring in some degree of renewal expectancy are rooted in a concern that failure to do so would hurt broadcast consumers." The "renewal expectancy will be factored in for the benefit of the public, not for incumbent broadcasters." The court quoted the FCC's presentation of the reasons for this policy with approval:

The justification for a renewal expectancy is three-fold. (1) There is no guarantee that a challenger's paper proposals will, in fact, match the incumbent's proven performance. Thus, not only might replacing an incumbent be entirely gratuitous, but it might even deprive the community of an acceptable service and replace it with an inferior one. (2) Licensees should be encouraged through the likelihood of renewal to make investments to ensure quality service. Comparative renewal proceedings cannot function as a "competitive spur" to licensees if their dedication to the community is not rewarded. (3) Comparing incumbents and challengers as if they were both new applicants could lead to a haphazard restructuring of the broadcast industry especially considering the large number of group owners. We cannot readily conclude that such a restructuring could serve the public interest.

The court went on to emphasize that each of these factors had been cited by the Supreme Court in the FCC v. Nat'l Citizens Comm. for Broadcasting, 436 U.S. 775 (1978).
Of course, this "renewal expectancy" applied by the FCC neither creates a right to renewal nor any certainty of renewal - the courts have insisted that it not be raised into an "irrebuttable presumption." Rather, the FCC's implementation of this factor has emphasized the central importance of the incumbent's service record:

Where . . . the incumbent rendered substantial but not superior service, the "expectancy" takes the form of a comparative preference weighed against [the] other factors . . . . An incumbent performing in a superior manner would receive an even stronger preference. An incumbent rendering minimal service would receive no preference.

Thus under U.S. law, incumbency is a double-edged sword. It will greatly benefit the incumbent who has built a strong record of service, but substantially injure the changes of one who has built a poor one. Or, as the D.C. Circuit has repeatedly stated, "the only legitimate fear which should move [incumbent] licensees is the fear of their own substandard performance, and that would be all to the public good."

C. Treatment of Incumbency in the .net Designation Criteria

These FCC policies identify three fundamental reasons why the criteria for awarding the .net registry should strongly favor the incumbent who is performing well. First, actual performance in the role of running the registry in question would provide a highly reliable indication of future performance (either good or bad) relative to the "paper proposals" of other applicants. There could be other applicants with experience running a registry, but the significance their past performance would depend on the similarity between the registries. Some applicants may have no registry experience but will have experience in related businesses, which is likely to have limited relevance. Ultimately, demonstrated ability to provide the service at issue is the best possible evidence of how an operator will actually perform. This must take precedence in ICANN's criteria.

Second, the criteria should recognize that the treatment of the incumbent will dramatically affect the incentives of current and future registry operators. Registry operators must make substantial investments in facilities and personnel in order to provide service. They would under-invest if they believe that they are likely to lose the contract when
it is rebid. This problem looms especially large where the contract is of
fairly short duration. In this regard, the current term of the .net registry agreement is limited to four years. If registry operators must
assume that they are likely to lose their contract after four years, this
would dramatically reduce their willingness to make investments yielding
long-term returns.

Third, treating an incumbent .net registry operator as if it were simply
another new applicant could lead to "haphazard" changes in registry operators, potentially reducing continuity and stability of operations. Maintaining an existing operator avoids these potentially large costs, and this should be considered in comparing an incumbent to another applicant.

Nor would criteria recognizing the value of the incumbent's proven track record, strong investment incentives and continuity of operations compromise the achievement of other policy goals. The .net registry agreement does provide that the incumbent registry "shall not acquire any right in the Registry TLD by virtue of its operation of the Registry TLD..." Recognizing the full import of an incumbent's experience and demonstrated ability does not violate this stricture. Rather, failing to give the incumbent full credit for the advantages he brings to the table disadvantages could violate the .net Registry Agreement's requirement that ICANN not disadvantage the incumbent. Downplaying one applicant's advantages inherently disadvantages it relative to the others.

Similarly, recognizing the public interest in specifying criteria that promote investment and product introduction by incumbents does not create any property right in the operation of the registry. The choice of the successor will be ICANN's to make, and accordance with the various contractual commitments it has made and the criteria adopted. But ICANN should use criteria that promote the public and user interests, and this requires giving strong weight to good performance by incumbents.

Nor would this undercut the "promotion of competition and maximization of consumer choice." First, a well-functioning registry is vital to providing
consumers with real choice of service – picking a less experienced operator in the interests of diversity will not promote consumers' interests. Second, while competition among registries is important, considerable competition already exists due to the addition of new gTLDs with a diverse set of registry operators as well as competition from operators of ccTLDs. If further diversity is desired, more gTLDs could be added. This is the most appropriate mechanism at ICANN disposal for increasing diversity.

D. Implementing Criteria

The Draft Procedure for Designating Subsequent .net Registry Operator, also currently out for comment, explains that ICANN will develop and issue a request for proposals (RFP) based in part on the criteria, applicants will submit proposals, a team of advisors will "evaluate the proposals against the criteria ... in the RFP" and make a recommendation, and the ICANN Board will vote on the recommendation. This underscores the central importance of designing criteria that are transparent to the potential applicants, and that can be directly applied in evaluating applications. In particular criteria must be transparent and operational.

* Criteria must be set forth clearly in the RFP, so that the applicants can use them effectively in developing their proposals. The RFP must make clear how the evaluators will measure or assess the extent to which each applicant meets each of the criteria. In addition, it must indicate how the relative importance of the criteria.

* Similarly, if the decision process is to be open and transparent, the advisors must implement them in an open and transparent manner. The criteria must be sufficiently clear and unambiguous, so that the reviewers are not left with broad discretion in measuring and applying them. Perhaps most importantly, the weight to be assigned to different criteria should be clearly stated.

* In order to meet these goals, criteria should be readily operational and measurable, in terms of explicit performance characteristics. Because the search is for the best registry operator, the criteria should not simply set minimum levels of performance, but also indicate how evidence of performance above this minimum will be treated.
Endnotes

1 William F. Adkinson, Jr. is Senior Policy Counsel at The Progress & Freedom Foundation. The views expressed here are his own and do not necessarily reflect those of The Progress & Freedom Foundation, its officers or Board of Directors.
2 Additional information about PFF can be found on its web site at www.pff.org.
3 William F. Adkinson, Jr., Domain Name Services: Let Competition, Not ICANN, Rule (Progress on Point, Release no. 9.21 (September 2002); Letter from Jeffrey A. Eisenach, Ph.D., President, The Progress & Freedom Foundation to Members of the Board of Directors, Internet Corporation for Assigned Names and Numbers (October 27, 1999).
4 Report at 1.
5 .net Registry Agreement § 5.2.4.
6 .net Registry Agreement § 5.2.4.
7 The report indicates that it will "take[e] account of any elements from the dot org re-assignment where relevant." The .org reassignment does not offer relevant guidance to applying criteria to an incumbent, and so will not be helpful in this regard.
8 Central Florida Enterprises, 685 F.2d at 507 (emphasis in original).
9 Id. at 507
12 Central Florida Enterprises, Inc. v. FCC, 683 F.2d at 508.
13 See .net Registry Agreement § 5.1.4.
14 The .net Registry Agreement's provides that "neither the procedure established in accordance with subsection 5.2.1 nor the fact that 'Registry Operator' is the incumbent shall disadvantage Registry Operator in comparison to other entities seeking to serve as the successor Registry."
See .net Registry Agreement § 5.2.2.
15 See .net Registry Agreement § 5.2.5.

Respectfully submitted,

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Senior Policy Counsel
The Progress & Freedom Foundation
1401 H Street, NW, Suite 1075
Washington, D.C. 20005
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5. **Comments from NeuLevel**

June 18, 2004

Dotnet-comments@icann.org  
Dotnet-criteria@icann.org  
Internet Corporation for Assigned Names and Numbers (ICANN)  
4676 Admiral Way, Suite 330  
Marina del Rey, CA 90292-6601

**Re: Procedure for Designating a Subsequent .net Registry Operator**

Dear ICANN and the GNSO:

NeuLevel, Inc. (“NeuLevel”) applauds the efforts to date of ICANN and the Generic Names Supporting Organization (“GNSO”) to adopt a competitive and transparent process for the selection of the successor operator for the .net registry. Establishing a fair and transparent process for selecting the next operator, and adhering to it rigorously, is essential to ensuring the designation of the most appropriate entity and being able to defend that selection from challenge. NeuLevel very much appreciates the opportunity to offer its thoughts on the .net registry operator selection process. It hereby submits its comments on the Draft Procedure for Designating Subsequent .net Registry Operator (the “Draft Procedure”) and the Dot Net Subcommittee Draft Report Version 6 (the “GNSO Subcommittee Report”), which outline the proposed selection criteria.

As a member of the Internet community interested in the secure, stable and smooth functioning of the domain name system, and as a prospective bidder for .net, NeuLevel believes that the selection process should be governed by two fundamental principles: (1) the process itself must be unambiguous, transparent and fair to all bidders; and (2) the elements of the selection criteria and their relative weighting must be clear and directly targeted to the relevant skill set of the entity to be selected. NeuLevel generally supports the framework set out by the GNSO Subcommittee both in terms of process and substantive criteria. However, NeuLevel believes that certain aspects of the proposal require clarification and/or further elaboration. Toward this end, NeuLevel submits the following thoughts for addressing such issues.

**The Selection Process**

NeuLevel supports the schedule laid out in the Draft Procedure for development of the Request for Proposals (“RFP”) and the selection process. The proposed timeline provides adequate time for the selection of a successor registry by the end of the existing contract term. The timeline and proposed selection process also do so in a manner that comports fully with the requirements of the .net Registry Agreement, particularly the requirement that ICANN adopt an “open and transparent” procedure for designating a successor registry operator by June 30, 2004.¹ The proposed process also satisfies the other requirements of the .net Registry Agreement, including affording the incumbent .net registry operator a full and fair opportunity to compete in the selection process on an equal footing with the competing bidders, and expressly taking into account factors relevant to the

¹ See, .net Registry Agreement at Article 5.2.1.
enhancement and stability of the Internet, such as promotion of competition, maximization of consumer choice, performance capabilities and experience.  

NeuLevel especially applauds that the timeline affords multiple opportunities for public comment. Under the GNSO Subcommittee’s proposal, public comment is solicited at four critical stages of the selection process: (1) with respect to the draft criteria and timeline (the instant comment cycle); (2) with respect to the revised version of the GNSO Subcommittee Report; (3) with respect to the draft RFP; and, finally (4) with respect to the proposals submitted by each bidder. These multiple opportunities for public comment are consistent with ICANN’s bottom-up policy development approach. Affording adequate opportunities for affected entities to provide input will help to ensure that the right entity is selected and that the designation process is fair for all.

NeuLevel strongly urges ICANN to adhere strictly to the timeline as proposed. The Draft Procedure, the GNSO Subcommittee Report and the.net Registry Agreement clearly contemplate that an entity other than the current .net registry operator may be selected as the successor operator. The proposed timeline preserves this opportunity by affording sufficient time from the selection of the new entity in March 2005 for a smooth transition before the end of the incumbent’s contract on June 30th of that year. However, should the timeline’s various milestones be allowed to slip, the time needed to accomplish that smooth transition could be significantly constrained. It would be contrary to the principles of an “open and transparent” selection process to adopt a timeframe that would effectively exclude any bidder other than the incumbent from competing on a level playing field for the registry. Accordingly, ICANN must adhere to the schedule proposed.

NeuLevel generally supports the steps of the selection process laid out in the Draft Procedure. However, there is a need for clarification or further elaboration of certain aspects of the proposal:

• Criteria for Selecting Evaluators. The Draft Procedure contains no reference to the qualifications of those entities evaluating the .net bid submissions. Prior to the issuance of the RFP, ICANN should establish and articulate criteria to govern the qualifications and selection of those individuals who will assist in evaluating the proposals. Understanding the skill sets of the evaluators would greatly aid bidders in developing their proposals, particularly with respect to the extent and complexity of information submitted.

• Maintaining the Impartiality of Evaluators. The Draft Procedure contains no reference to how the impartiality of the bid evaluators will be assured and maintained. ICANN should establish

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2 See, id. at Article 5.2.2.
3 See, id. at Article 5.2.4.
4 The current .net registry agreement does not obligate VeriSign to continue operating the .net registry beyond June 30, 2005. Accordingly, any transition would need to occur by that date.
5 This would especially be the case if VeriSign were to exercise its right to challenge ICANN’s decision to select a registry operator other than VeriSign, pursuant to Article 5.2.5 of the .net Registry Agreement.
NeuLevel is not suggesting that the identity of these individuals be released in advance as that could unnecessarily subject them to undue influence.

and articulate the processes and procedures to be used to ensure the impartiality of persons selecting the successor .net registry operator and/or evaluating the proposals. Specifically, ICANN should define and announce the criteria for selecting evaluators that have no interest in the outcome. ICANN should also establish an express prohibition on oral ex parte contacts between bidders and bid evaluators and other selecting officials from the time the RFP is issued until a subsequent .net registry operator is announced. Further, written ex parte contacts must be promptly made public.

• Putting Changes in Writing. The Draft Procedure contains no reference to how changes to the RFP would be made once it is issued. In the event ICANN needs to change or modify the requirements of the RFP after its issuance, ICANN should do so through written amendments that are made public. Ensuring that any changes to the RFP are in writing and publicly available will foster transparency of the selection process as well as ensure that all bidders receive the same information about the nature of the change.

• Additional Written Notice. The Draft Procedure does not indicate whether ICANN plans to allow a question and answer period once the RFP is released or interview candidates once bids are submitted. ICANN should announce in advance whether and when such activities will occur. Further, in order to ensure transparency and fairness, any such exchanges between actual or potential bidders and evaluators from the time the RFP issues until the subsequent .net registry operator is announced must occur in writing and be made publicly available. Thus, questions posed by potential bidders and answers from ICANN should be in writing and made available to other bidders. Similarly, any requests from ICANN for further information from actual bidders and the bidders’ responses must be in writing and made public.

• Establishment of Independent Review Panel. Article 4.3.2 of the .net Registry Agreement requires the establishment of an Independent Review Panel to review any challenge by the .net registry operator to “Consensus Policies” established by the ICANN Board, such as the designation of a successor registry operator. The Draft Procedure contains no reference to when or how this panel would be established. In order to ensure that there is no delay in the proposed schedule that could disrupt a smooth transition or impair the chances of selecting an entity other than the incumbent operator, ICANN should establish the Panel well in advance of issuance of the RFP.

• Release of a Written Report Supporting the Outcome. Although the Draft Procedure references that the ICANN Board will base its .net successor registry operator selection on a report evaluating the proposals, there is no discussion as to whether this report, or a final report adding the Board’s decision and supporting rationale, will be made available to the public. In order to provide adequate transparency of the process and to enable bidders to learn from the experience for future competitive bidding opportunities, ICANN should issue a written report evaluating the proposals with regard to the selection criteria and demonstrating how the successor registry was chosen consistent with those criteria. Such a
report should be made public promptly upon the announcement of the .net successor registry operator.

Further elaboration regarding all of these aspects of the selection process prior to the issuance of the RFP will help to ensure the resulting process is unambiguous, transparent, and fair to all.

The Selection Criteria

NeuLevel generally supports the selection criteria identified in the GNSO Subcommittee Report. NeuLevel believes they include relevant areas of inquiry with respect to the capabilities necessary and desirable for the .net registry operator. The criteria also appear to place the proper importance on the technical knowledge and experience of the candidates. However, more clarification of the criteria is necessary to properly inform bidders and evaluators as to the desired qualifications. Specifically, NeuLevel urges that ICANN (1) make clear the extent to which bidders are comparatively evaluated on the absolute criteria; and (2) further elaborate as to the specific elements and/or level of capability sought with respect to the various criteria, both absolute and relative.

The language of the GNSO Subcommittee Report is somewhat ambiguous on these points. The relevant language in the GNSO Subcommittee Report states, “[a]bsolute criteria are thresholds which an applicant is expected to meet. Failure to do so should imply disqualification. Relative criteria become relevant once absolute criteria are met and are proposed as a basis for comparison and evaluation of competing applications.” This language could be interpreted to mean that bidders that have satisfied the “threshold” requirements of the absolute criteria will be distinguished solely by their respective ratings on the relative criteria.

However, the absolute criteria are the factors by which the technical expertise and experience of the applicants are evaluated. Given the technical nature of the .net registry contract and that technical expertise and experience will be essential to successfully executing its functions, award of the contract should require further consideration of each bidder’s technical expertise beyond the mere achievement of a minimum threshold. Accordingly, ICANN should use the absolute criteria collectively to separate the bidders into classes of technical competency. As in the .org selection process, only those bidders earning the highest class of technical ranking should be further evaluated based upon the relative criteria. Again, as in .org, once bidders in the highest technical class are identified, their individual technical scores should no longer be considered and selection should be made only on the basis of their scores on the relative criteria.

In addition to clarifying the evaluative role of the absolute criteria, ICANN should provide more elaboration as to specific elements of each criterion (both absolute and relative). As noted above, NeuLevel believes that the GNSO Subcommittee Report generally identifies the criteria relevant to the selection of the .net successor registry. However, in most instances, the elements that constitute the minimum threshold for each factor or that would result in a finding of enhanced expertise are not specified or are unclear. For example, Absolute Criterion 4 provides that any entity chosen to operate the .net registry must be able to demonstrate that they have the ability to maintain the .net registry “in an efficient and reliable manner,” and show a commitment to “a high quality of service.” Yet, the proposal contains no indication as to what constitutes “an efficient and reliable manner” or “a high quality of service.” In order to achieve sufficient transparency in the selection process and to ensure that all potential bidders are provided with adequate and unambiguous notice as to what aspects will be valued by
ICANN (and thus what should be included in their proposal), ICANN needs to provide more precise definitions for these criteria.

Toward this end, NeuLevel has included as Attachment A its proposal for further elaboration of the elements of each of the specified criteria (absolute and relevant). With respect to each criterion, NeuLevel offers certain clarifications to prevent misinterpretation as well as to ensure all qualified bidders compete on an equal footing. Among other things, these suggestions address:

• Appropriate and Specific Minimum Technical Standards. ICANN should articulate minimum technical standards for .net based upon an appropriate and established level of technical service, including SRS, Nameserver and Whois Availability and frequency of updates. A logical choice for this could be the standards defined in the current .net contract. However, since this is a fairly dated contract, NeuLevel recommends that ICANN look to more recently established standards that better reflect advances in technology. Accordingly, NeuLevel urges ICANN to adopt technical standards similar to those prescribed in ICANN’s recently awarded contracts, such as for .org and .biz. In establishing minimum technical requirements for .net and evaluating the technical capabilities of the bidders, ICANN must focus on what is appropriate and relevant to the operation of .net—and only .net. For instance, it would be unfair to most bidders and unnecessary to .net’s operation to establish minimum standards reflective of certain aspects of .net’s current operation in conjunction with .com, a database that alone contains over 26 million domain names, or the equivalent of well over 70 percent of all gTLD domain names. Further, to the extent information regarding the current or projected operation of .net is necessary to address the criteria, the incumbent .net registry operator must be required to make such information available sufficiently in advance of the deadline for submitting bids.

• Flexibility to Accommodate Alternate Registry Models. There is currently more than one model on which an effectively functioning registry can be based. ICANN should ensure its technical criteria do not inadvertently preclude these other registry models. For example, ICANN should retain the flexibility to consider other models besides the “thin registry” model. Yet, by using Appendices O, P, Q and R of the current .net Agreement, referenced in Absolute Criterion 4 of the GNSO Subcommittee Report, ICANN would implicitly be requiring that .net be a “thin registry” model despite the advantages of the “thick model.”

• Clarification that .net Consumers are the Registrars. Relative Criterion 1 emphasizes that bidders will be evaluated on their ability to maximize and enhance choice, price, innovation and value for the “consumer.” To be clear, the consumers or customers of the .net registry operator are the registrars. These are the entities with whom the .net registry operator will directly contract and who will be the beneficiaries of any lower prices or additional services offered by the
operator (as the registrar may or may not choose to pass lower prices and additional services on to the public at large). The registry operator contracts with, and only has control over the

For example, it would be unnecessary and unfair to most bidders to require that they demonstrate that they already have experience operating a database of 5 million names, as VeriSign is the only registry that currently has that volume.

It should be noted that many ICANN constituents have expressed a preference for the “thick” registry model due to the fact that the thick registry model is often more secure because it provides an expansive central repository for customer information and facilitates transfers more efficiently.

services that it can offer to, the registrars. Thus, the true consumers of the registry are the registrars, not the end user. ICANN should therefore clarify that this Criterion involves the maximization of choice, price, innovation and value for registrars, not for the general Internet public.

• Price As a Function of Value. Relative Criterion 1 in the GNSO Report states that “preference should be given to proposals offering lower pricing of the domain name.” Later on, the same Criterion emphasizes that “[a]n assessment based on price should be balanced with the value proposition offered.” These statements together create confusion as to the relationship of price and value for purposes of the .net evaluation process. ICANN should thus make clear that, while price is important, the overall evaluation must be one of value. The relevant inquiry should not be which offering is less expensive, but rather which offering provides the most value for the lowest price.

• Existing Registry Services Are Those Offered at RFP Issuance. Relative Criterion 3 provides that bidders will need to indicate in their proposals whether and how they will extend and support “existing registry services.” This term is made ambiguous by the specific reference to the Wait List Service, which is not yet offered in .net and is described as “pending.” ICANN should make clear that “existing registry services” includes only those services actually being offered by the .net registry on the date the RFP is issued. It would be unreasonable and unfair to bidders to require them to address services that are not launched sufficiently in advance of the time the RFP is issued, as bidders would not have an opportunity to determine what those services are and how those services are administered. Further, to include unlaunched services in such term would provide an unfair advantage to the incumbent operator – the only entity who would know the details of the new service and how to best support it. So as not to disrupt users of .net, the .net registry operator should be directed to maintain the status quo and be prohibited from introducing any new service beginning on the date the RFP is issued and to release any relevant details regarding the administration of any services launched prior to such date. Such an operational freeze is standard practice with respect to competitive contract rebids.

In addition to ensuring that the appropriate evaluative criteria are clearly and adequately described, ICANN must also ensure that bidders are afforded sufficient latitude to demonstrate their qualifications and expertise under each of the criteria. The GNSO Subcommittee Report does not indicate whether ICANN will limit the quantity or type of
information submitted by each bidder. NeuLevel would strongly urge ICANN not to so drastically limit .net submissions as it did for the latest round of sponsored TLD applications. 10,000 characters of text with no opportunity for the submission of figures, diagrams or spreadsheets is simply not adequate for a bidder to demonstrate their ability to satisfy the criteria. Indeed, such severe content limitations actually discourage the submission of specific evidence of practical (as opposed to theoretical) experience – the kind of information ICANN should be seeking in the comparative process.

* * * * *

For example, a $6.05 service may offer much more value in terms of additional capabilities than a $6.00 service, and thus should be evaluated more highly.

NeuLevel again appreciates the opportunity to offer its thoughts on the .net successor registry operator designation process, specifically on the Draft Procedure and the GNSO Subcommittee Report. NeuLevel hopes that ICANN finds these comments to be useful and constructive. Please feel free to contact me should you have any questions or should you require further clarification of the information presented in this letter and the attachment.

Sincerely,
Richard Tindal
Vice President of Registry Services
NeuLevel, Inc.

.NET ATTACHMENT A

CRITERIA TO BE CONSIDERED

Criteria are divided into absolute and relative criteria. Absolute criteria are thresholds that an applicant is expected to meet. Failure to do so should disqualify the Applicant. Given the technical nature of the .net registry contract and that technical expertise and experience will be essential to successfully executing its functions, award of the contract should require further consideration of each bidder's technical expertise beyond the mere achievement of minimum thresholds. Accordingly, ICANN should use the absolute criteria collectively to separate the bidders into classes of technical competency. Only those bidders earning the highest class of technical ranking should be further evaluated based upon the relative criteria. Once bidders in the highest technical class are identified, their individual technical scores should no longer be considered and selection should be made only on the basis of their scores on the relative criteria. Relative criteria are listed with weighting with the highest weight at the top of the list.

Absolute Criteria

Absolute criteria related to the Targeting
- .net should remain unsponsored.
- .net should remain unchartered.

Absolute criteria related to Continuity
- Grandfathering. There are a number of organizations and individuals that have made an investment in .net domain names. The cost of migrating to a new domain name is potentially significant. Existing registrants should not be penalized by changes in policy as a result of this process. Existing registrants in .net should be entitled to maintain their registrations on terms materially consistent with their existing contracts under current policy, including the right to transfer a .net domain to another party.
Absolute criteria related to Policy Compliance

- Consensus policies. In the operation of the .net domain name registry, the registry operator must comply with all consensus policies of ICANN—those that exist today (UDRP, WHOIS, Deletes, Transfers etc), and any that are developed via the ICANN process in the future.
- Policy development. Any future .net registry agreement must specify that policy development for .net will take place in an open bottom-up process, which enables input from the full Internet community via ICANN’s processes.
- Registrars. All ICANN-accredited registrars must be allowed to qualify to register names in .net. All registrars that have qualified to operate as .net registrars must be treated equitably by the registry operator.

Absolute criteria related to stability, security, technical and financial competence

The .net registry operator should meet or exceed the following specifications:

- Nameserver Functional Specifications and Patch, Update and Upgrade Policy. Applicants should comply with appendices C.4 and C.5 of the current .net Agreement;
- Performance specifications. Applicants should have a track record of performance sufficient to demonstrate their ability to measure and perform against industry standard Service Level Requirements (SLRs). Because each of the registries currently have different SLRs and different measurement methodologies, registry performance should be measured against the average of all unsponsored registry SLRs rather than measuring each registry against its own SLRs. For example, the incumbent Registry Operator for .net currently has an SLR of approximately 99.4% for SRS availability, while .info has an SLR of 99.45% and .biz has an SLR of 99.95% for SRS availability (each measured differently). At first glance, the track record of a registry with a lower SLR (99.4%) may appear to be better than the track record of one with a higher SLR (99.95%) in terms of meeting its own SLRs, even though the registry operator with the higher SLR may have, in actuality, achieved a higher level of performance. Any measurement of SLRs should be made with consistent criteria. Examples of appropriate SLAs to measure include:
  - Shared Registration System
    - SRS Availability
    - SRS Processing Time (Add, Modify, Delete)
    - SRS Processing Time (Query Domain)
    - SRS Planned Outage (Duration)
    - SRS Extended Planned Outage (Duration)
  - Nameserver Performance Specs
    - Nameserver Availability
    - Nameserver Resolution Processing Time
    - Nameserver Update Frequency
    - Cross-Network Nameserver Performance
  - Whois Performance Specs
    - Whois Availability
    - Whois Processing Time
    - Whois Update Frequency
    - Whois Planned Outage (Duration)
    - Whois Extended Planned Outage
• Service-Level Agreement. SLA measurements and credits should be commensurate with the current industry standards amongst all unsponsored gTLDs.

• Whois Specification – Public Whois. Requirement that the entity operating .net shall act as the authoritative Whois service for all second-level Internet domain names registered in the .net top-level domain and for all hosts registered using such names). The Whois service should offer the ability to search by “Domain Name”, “Registrar” and “Nameserver.”
  o Similar formats to Appendix O of .net Agreement if “Thin Registry Model”
  o Similar formats to Appendix O of .org, .info or .biz Agreements if “Thick Registry Model”

• Whois Specification – Independent Whois Provider. Registry Operator shall provide bulk access to up-to-date data concerning domain name and nameserver registrations maintained by Registry Operator in connection with the Registry TLD on a daily schedule, only for purposes of providing free public query-based access to up-to-date data concerning domain name and nameserver registrations in multiple TLDs to a party designated from time to time in writing by ICANN. The Content, Format and Process shall be as set forth in:
  o Appendix P of .net Agreement if “Thin Registry Model”
  o Appendix P of .org, .info or .biz Agreements if “Thick Registry Model”

• Whois Data Specification – ICANN. Registry Operator shall provide bulk access by ICANN to up-to-date data concerning domain name and nameserver registrations maintained by Registry Operator in connection with the Registry TLD on a daily schedule, only for purposes of verifying and ensuring the operational stability of Registry Services, the DNS, and the Internet. The Content, Format and Process shall be as set forth in:
  o Similar to Appendix Q of .net Agreement if “Thin Registry Model”
  o Similar to Appendix Q of .org, .info or .biz Agreements if “Thick Registry Model”

• Data Escrow Specification. The Data Escrow requirements should comport with the latest industry standards as reflected in Appendix R of the .org, .biz and .info unsponsored gTLD agreements.

• Security, Stability & Scalability. The entity chosen to operate the .net registry must:
  o Be able to demonstrate that they possess the capability to maintain.net registry functions in an efficient and reliable manner while at the same time be scalable to support future growth, including:
    Scale sufficient to handle the existing number of names and projected growth.
    Scale to handle existing DNS query loads including normal peaks and projected growth.
    Scale to handle events such as DDoS attacks and traffic generated by viruses, worms and spam. RFC 2870, “Root Name Server Operational Requirements”, requires excess query capacity of three times the measured peak rate for those critical name servers.
    Demonstrated capability of restarting from complete outage to avoid prolonged outage due to initial overload.
    Multiple geographically dispersed points of presence to handle simultaneous attacks across the network.
  o Commit to 100% accuracy of .net zone data for resolution
  o Demonstrate a diversity of DNS resolution infrastructure to prevent single points of failure
  o Make registration, assistance and other registry services available to ICANN, accredited registrars in different time zones and different languages.

• Migration/Transition Plan. If applicable, applicants should document their plan for migrating .net from the current registry operator with specific attention paid to maintaining
functional capabilities existing at the time the RFP is issued, performance specifications and protocol interfaces (i.e. registry registrar protocol RRP to extensible registry protocol EPP migration). Applicants should demonstrate that the

migration will have a minimal impact on performance of the registration system and no impact on the resolution of existing .net domain names.

• Security of Infrastructure. Applicants should be required to demonstrate their capability to establish the following:
  o A secure environment in which the registry infrastructure is to be operated.
  o Their Failure/ Disaster Recovery Capability, including a plan and assets to support failure of any or all of the infrastructure

• Operational Expertise. Subject to the provision of the following data to the Applicants, Applicants should demonstrate that they have staff in place with technical skills, expertise and experience to operate the Registry in order to maintain current levels of performance, including:
  o To operate at current volume and expected growth volumes .
  o To maintain operation during periods of increased traffic or activity such as DDoS.
  o To minimize vulnerabilities in infrastructure.
  o To manage any planned outages to minimize impact to Registrars and end users.
  o To contribute to standards creation and other issues of Internet development.

• Customer Service. Applicants should possess:
  o Skilled staff operating 24x7 to support Registrars’ hours of operation.
  o Sufficient staff to support current and expected registrar volumes.
  o International language skills.
  o Technical on-site assistance available (engineering) on 24x7 basis.

• Financial Stability: Significant investment will be required to establish the initial registry system to support the scale and performance levels of .net. The applicant should be required to demonstrate resources sufficient to make an investment at levels required to scale the operation initially and maintain and grow the domain base and infrastructure. The applicant also should possess substantial cash reserves and a record of sustained growth in revenue and profitability.

Relative Criteria

1. Relative Criteria related to promotion of competition

• Maximization of consumer choice. Once an applicant has qualified by meeting baseline stability, technical and financial criteria, positive consideration should be given to ICANN’s mission to improve consumer choice and competition. For the purpose of this criteria, the consumers or customers of the .net registry operator are the registrars.

• Innovation and Value. It is possible that applications will offer innovation or new services, and hence will affect the value proposition. An assessment based on price should be balanced with the value proposition offered. Any proposed innovation or new service should be described together with an assessment of their value by the affected stakeholders (typically registrars or registrants). Once the absolute criteria are met, the entity selected should be the one that presents the greatest value to ICANN, the Registrars and Registrants.

• Industry Relations. Consideration will be given to the applicant’s track record in constructively contributing to the competitive nature and smooth functioning of the Internet through participation in the ICANN policy development process and through its dealings with other industry players.
2. Relative criteria relating to stability, security, technical and financial competence
   • Consideration should be given to technical stability based on diversity of suppliers and vendors in order to reduce the impact of any one provider failure.
   • Mean time to resolution for additions or changes to the .net zone file should not exceed the current time with the existing registry operator. Preference should be given to proposals offering enhanced or faster resolution.
   • Industry Standards. In the operation of the .net domain name registry, including any proposed registry services, the registry operator must demonstrate a commitment to abide by industry best practices and standards as they affect the technical stability of the DNS.

3. Relative criteria related to existing registry services
   .net currently offers registry services such as the Redemption Grace Period and the support of internationalized domain names in accordance with the IDN Guidelines (http://www.icann.org/general/idn-guidelines-20jun03.htm). Applicants should be asked “Does the applicant wish to maintain all registry services existing at the time the RFP is released?”
     • If yes, please provide specifics and demonstrate the technical and legal ability of the registry to maintain existing services.
     • If no, please expand on any issues relating to the withdrawal of such services.

13 Although it is contemplated by VeriSign to introduce the Wait List Service (WLS) in the near future, the .net registry operator should be directed to maintain the status quo and be prohibited from introducing any new service beginning on the date the RFP is issued
6. *Comments from VeriSign Inc.*

To: The GNSO .net subcommittee  
From: VeriSign, Inc.

VeriSign appreciates the opportunity to be part of this important process. Developing the criteria for the bidding process on the .net generic top level domain (gTLD) is fundamental to a successful decision by ICANN. The following comments are in response to the .net subcommittee draft report (the “Draft Report”) of the ICANN Generic Name Supporting Organization (GNSO) .net subcommittee. We welcome the discussion this process will bring to the .net re-bid criteria and want to thank the committee for its contributions to this process.

Our comments have three main points and are organized as follows:
1. Comments with regard to the Draft Report
2. Comments on the .net criteria process
3. Comments regarding PDP procedures

1. Comments with regard to the Draft Report.

The current criteria to be considered in the Draft Report have been divided into “absolute” and “relative” criteria by the Committee. We understand this to imply that all bidders would have to meet certain minimum (“absolute”) criteria after which, if they passed that threshold, they would be differentiated based on evaluation of “relative criteria.”

For sake of clarity in our comments we assume this is an accurate understanding of the intentions of the .net subcommittee. We believe it is critical that minimum performance measurements be identified by this committee and are well defined and calculated to ensure the minimum threshold is fully met by each participant in the bidding process.


Meeting or exceeding the minimum criteria should allow a bidder to be subsequently judged according to the relative criteria. However, the degree to which a bidder exceeds the minimum criteria must be taken into account in the subsequent evaluation. That is to say, the minimum criteria establish the baseline for competing bidders. If one bidder far exceeds the baseline, according to the identified performance metrics, that bidder’s “score” on absolute criteria should be factored into the bidder’s overall performance in the relative criteria evaluation. Otherwise, all bidders who move on to the relative criteria evaluation will be incorrectly treated as capable of delivering identical levels of performance as the subsequent .net registry operator.
The minimum criteria we cite above should also be included in the category of “Relative criteria related to stability, security, technical and financial competence”. Performance measurements in this category should be based on the current operating criteria of .net and should be most heavily weighted of all of the relative criteria. Any other relative criteria would be of little or no consequence to the operation of .net if the stability of the registry or security of the operating system were compromised, if technical qualifications are sub-par, or if the registry operator cannot provide the financial resources to provide service at the scale necessary to accommodate ongoing growth of the TLD.

The criteria need to be weighted to show the importance of “relative criteria related to stability, security, technical and financial competence” otherwise it would require assuming one of the following: 1) all bidders would be able to demonstrate the competence to deliver identical levels of stability, security, technical and financial competence; or 2) the variations in bidders’ competence levels in these four areas would reasonably be expected to be insignificant with regard to the .net registry operator selection. These assumptions are unrealistic and adopting such an approach would prejudice the ability of this process to select the operator that is best able to preserve the stability of the registry.

The Draft Report needs to define a numerical scoring method to be used to rate each proposal against ICANN’s requirements and against each other, as well as a clearly defined evaluation process to ensure that the evaluation criteria, associated sub factors, and scores for each bidder are fairly applied through a transparent, fair and objective process. The scores for each bidder and each bidders’ relative scores should be provided to all bidders upon the decision of the bid. In addition, it must be possible for all bidders to earn a perfect score under the scoring system and for each category (i.e., for each criterion, no bidder automatically loses points prior to the objective application of the scoring system to that criterion). We have previously outlined additional elements of the process in a letter to ICANN’s General Counsel.

Specific comments regarding “Absolute Criteria” are provided here:

**Absolute criteria related to stability, security, technical and financial competence**

Because of the high level of importance of each of these four items, stability, security, technical and financial competence, we recommend that each one of these criteria be considered as a separate subcategory for evaluation purposes.

In addition to separating out these four criteria, specific minimum measures of performance should be required along with objective evidence demonstrating the experience, the expertise, and the resources to meet the minimum measures.

Annex 3, noted in the subcommittee’s Draft Report, contains a reference to a document submitted by VeriSign titled "Evaluation and responsibility criteria for the .net TLD." Minimum performance measures are proposed in that document relating to each of the categories that we recommend be included in the .net criteria. These criteria are spelled out in Appendix A of this document.

Any of the bidder’s proposals, as required by an RFP, should objectively demonstrate that minimum performance standards can be achieved in all four of these criteria. Our concern is that often, in an attempt to win a bid, performance is subjectively described without any demonstration of real performance capabilities. Because of the critical
nature of the .net TLD, evaluators should verify the bidders’ ability to fully satisfy objective requirements through further investigation and testing. This is consistent with the requirement in Section 5.2.4 of the .net registry agreement that ICANN select a party that “demonstrated ability of the party to manage domain name or similar databases at the required scale.”

An on-site audit should be performed and prior performance of similarly sized directories should be evaluated by an independent, technically qualified firm for any finalists in the bidding process. This verification is critical to ensure .net maintains current operating functionality.

These are common procedures in a complex procurement such as this one. They are especially necessary here due to the important role of the .net registry for the stability of the DNS, as we discuss in Section 2 below. Requiring anything less than the procedures proposed here would impact the accountability of the parties bidding for .net as well as the openness, transparency and accountability of the decision-making process.

Absolute criteria related to “equitable” treatment of registrars

The proposed requirement for registry operators to treat registrars “equitably” would be inappropriately broad and ambiguous. The established concepts of “equivalent access” and “preferential treatment” should be used in lieu of the term “equitably.”

Specific comments regarding “Relative Criteria” are provided here:

Relative Criteria related to promotion of competition

The proposed relative criteria regarding the promotion of competition needs to be defined. As a general matter, any consideration of competition in the selection of a specific operator must be based on: 1) experience and strength of the bidder to ensure the continued competitive viability and strength of the .net registry; 2) objective and quantifiable considerations aimed at continued investment in and innovation of the registry; 3) valid data; 4) well supported professional economic analysis; 5) compliance with applicable antitrust laws; and 5) the requirements of the existing registry agreement. ICANN must define any criteria related to the promotion of competition in such a way as to ensure that their application would not adversely affect consideration of VeriSign’s proposal due to the fact that VeriSign is the current operator of the registry, due to subjective theories of competition not supported by economic analysis, or due to other improper considerations, including, without limitation, the number of domain name registrations serviced by VeriSign (alone or in relation to any other company), VeriSign’s size, or VeriSign’s incumbency as the registry for the .net and certain other TLDs.

Relative criteria relating to stability, security, technical and financial competence

As we discuss above this sub-category would ideally be a separate category that is heavily weighted to show the importance of these items to the functional stability of the .net gTLD.

We suggest a category should be added for each of the items, ordered as the top four subcategories in this section. Specific performance measures as suggested under
“Absolute Criteria” should be required for each category and minimum performance requirements must be met to qualify as a bidder for the contract.

Under “relative criteria,” demonstrated capabilities to achieve performance levels at or beyond the minimum should be compared and evaluated for all bidders who satisfy the “absolute criteria” with the goal to ensure the selected registry operator has the highest levels of expertise, resources, experience and plan to maintain exemplary performance in the near and long-term. This should include, among others, resolution availability, response times, packet loss statistics, registration system availability, and operational performance statistics.

Due to the importance of the .net registry to the stability of the DNS, only a bidder who has maintained a substantial registry operation will be able to produce a reasonably supported and reliable record sufficient to establish that it can in fact fulfill these important requirements. At a minimum, any bidder without such a record of proven success at operating a registry must be required to produce other compelling evidence, based on a proven track record, of its ability to fulfill these critical requirements and must be subjected to an in-depth investigation prior to any transition being made in the operation of the .net registry.

Relative criteria related to existing registry services

It seems inconsistent to have an “Absolute Criteria Related to Continuity” (“grandfathering”) while at the same time not placing a high priority on maintenance of existing services, especially those that impact large numbers of users such as internationalized domain names. A lesson can be learned from the Public Interest Registry in their transition as the .org TLD registry operator: they decided to not continue supporting previously registered IDNs only to later reverse their position because of strong customer objections.

This category should be weighted higher than promoting the concerns of consumer choice and registry price because discontinuance of existing services would have a direct impact on consumers whereas: 1) consumers have little or no choice with regard to the registry operator except in the selection of the TLD; and 2) there is not a documented correlation between registry price and the registrar price that consumers pay.

2. Comments on the .net criteria process

In his 31 March 2004 letter to GNSO Chair, Bruce Tonkin, Paul Verhoef suggested “As an additional reference point, the GNSO may want to consider the work of the DNSO with respect to the reassignment of the .org registry.” We disagree; the Subcommittee should not take into account any elements from the dot org “re-assignment,” as the process used by ICANN to select an operator for the .org registry is neither applicable nor sufficient for the selection of an operator for the .net registry, and therefore, not relevant to this process.

VeriSign has previously expressed some of its specific concerns about ICANN’s .org process and would have objections to any continued reference to the .org bid. We have a concern that association with the .org process will mislead the potential bidders on .net to consider the .org criteria relevant to the current process.
In view of the fundamental differences of the contracts, any relevance to the .org process should be explained in detail by the committee with the relevance to the .net contract explicitly spelled out. VeriSign has made prior objections to association with the .org process in a submission to ICANN and restates those objections here (attached as Appendix C).

A short summary of our concerns are as follows: 1) The contractual terms relating to the termination of the .org registry agreement are significantly different than those in the existing .net registry agreement; 2) In contrast to the .org TLD, the .net TLD is used globally by large numbers of Internet infrastructure providers and therefore is especially critical from a security and stability point of view; 3) Any efforts to use the .org reassignment as a reference point should include a careful analysis of the problems associated with the .org reassignment (e.g., functional transition) along with efforts to mitigate those problems as applicable to the .net effort.

With regard to the Mission of the Subcommittee, while the criteria for .net certainly should to be consistent with ICANN’s mission and core values, it is even more critical that they be in compliance with the requirements of the current .net registry agreement, other associated agreements such as the Registry Registrar Agreement, and the operational requirements necessary to maintain current performance levels. These agreements define the scope of obligations and responsibilities of ICANN with respect to the current registry operator and are critical to establishing appropriate criteria for evaluating the .net registry assignment process.

3. Comments regarding PDP Procedures

Annex A of ICANN’s By-laws, as amended, purports to prescribe the procedures by which the Generic Names Supporting Organization (GNSO) must conduct its policy development process (“PDP”).¹ The Draft Report and the actions of the .net subcommittee of the GNSO have not complied with these requirements. The procedures in the Bylaws exist in part to ensure the openness, transparency and objectivity of ICANN’s decision-making process.

These developed procedures should not be ignored nor changed, absent proper consideration and lawful process. If the Draft Report is intended to serve another purpose, such purpose should be stated by the GNSO subcommittee referencing its authority under ICANN’s Bylaws or other relevant policies.

Regardless of the GNSO’s reasons for disregarding the PDP, the GNSO must strictly adhere to the PDP provisions, particularly in light of the importance of the issues and policies being considered. We suggest further, that anything less, distorts the process, decreases the legitimacy of the GNSO’s work, casts doubt on any “consensus” position that may result from that work, and exposes the process to claims of lack of transparency and fairness.

We note that, in addition to the specific comments below, it is not clear whether the GNSO Council decided to form a task force or decided to respond to ICANN’s request for a consensus “policy” statement without forming a task force.

¹ Although VeriSign expresses no opinion at this time as to the propriety of the PDP or whether it is consistent with applicable requirements, it reserves its right to do so.
The Council purported to form what it has referred to as a “subcommittee”. The GNSO Council is not a committee of the Board of Directors, and therefore we question whether it is technically capable of forming a subcommittee. Indeed, ICANN's Bylaws do not appear to authorize the GNSO Council to form any committees. Moreover, a review of the actions of the “subcommittee” to date leads to the conclusion that it has functioned more like what the PDP process calls a task force. We therefore request that the Draft Report be amended to cite the relevant authority under which the subcommittee is acting and specifically address the deficiencies therein.

Specific cases where the PDP procedures were not followed are listed here in summary (without limitation) and described in further detail in Appendix B, citing the applicable section from the ICANN Bylaws, Annex A:

- Section 2 describes the process by which an Issue Report shall be created, its scope, required deadlines, and purpose. We note, at a minimum, the following deficiencies:
  1. The request of ICANN staff was sent to the GNSO Council 25 days after Board action instead of the required 15 days;
  2. There is no evidence that the required Issue Report, containing even the minimum information and instruction required by Section 2, was created or transmitted to the GNSO Council; and
  3. The request sent to the GNSO Council was not accompanied by an opinion of the ICANN General Counsel.

- Section 4 (and by reference Sections 7 and 8) describe the manner in which a PDP shall be initiated. We note, at a minimum, the following deficiencies:
  1. We have not been able to locate any public posting of the minutes of the GNSO Council meeting that allegedly took place on 1 April 2004 authorizing the creation of the “Subcommittee” notwithstanding the fact that under the Bylaws those minutes should have been posted by 22 April; and
  2. There does not appear to be any public record of a vote by the Council.

Sections 5-7 describe the composition and selection of task forces, their role and the collection of information, and the public notification of the PDP. We note, at a minimum, the following deficiencies:

- Section 5
  1. There appeared to be a lack of involvement of the ICANN Staff Manager; and
  2. There appeared to be a lack of transparency in requesting appointment of representatives to the Subcommittee.

- Section 6
  1. The first request for public comment did not occur upon initiation of the PDP but rather 57 days later.

- Section 7(b)
  1. There is no evidence of a charter created by the GNSO Council; and
  2. No specific directions to the “Subcommittee” were published by the GNSO Council or any specific guidelines developed to assure that the Subcommittee does not deviate from instructions of the GNSO Council.

- Section 7(d)
  1. The one constituency statement received failed to contain even the minimum disclosures required by Section 7(d) for the Subcommittee’s consideration of those statements (i.e., voting results, how the constituency
arrived at its position in the statement, dissenting or opposing positions of constituency members to the position submitted as the consensus position in the constituency statement, any analysis of time or impact on the constituency, etc.).

- **Section 7(e)**
  1. The GNSO Subcommittee draft, if intended as a Preliminary Report as specified in the Bylaws, does not contain most of the disclosures or information required; and
  2. None of the following dates were met:
     - The Preliminary Report was due not later than 12 May.
     - A Final Report was due not later than 17 May.
     - The Final Report was supposed to be posted by 22 May.
     - The GNSO Council should have called for a meeting of the full Council to consider the Final Report by 2 June, 2004.

Section 8 describes the procedure if no task force is formed. We note at a minimum, the following deficiencies:

- **Section 8**
  1. GNSO constituencies did not appoint representatives within 10 days;
  2. Representatives generally did not solicit comments from their constituencies;
  3. Constituency statements were only received from one constituency, and that statement was wholly deficient in that it is reasonable to assume that statements received by the GNSO Council should contain disclosures similar to those required of constituency statements submitted to a task force; and
  4. The ICANN Staff Manager did not compile an Initial Report and post it within 50 days of the PDP initiation.

In light of the above inconsistencies in following procedure, additional steps should be taken to identify all conflicts of interests by GNSO members. Any member of the GNSO whose business or other affiliations stand to benefit from any recommendation to be made to the ICANN Board concerning substantive policies relating to the competitive process of assigning .net should be recused from this process and abstain from any participation of voting.

Again, we appreciate this opportunity to participate in the committee’s process and we hope that the comments above are useful to the GNSO Council and its .net subcommittee. We would be happy to respond to any questions the comments might generate or to provide additional information if it is needed. We sincerely hope that our input assists ICANN and the GNSO in its responsibility to comply with the ICANN Bylaws and meet the requirements of the current .net registry agreement with regard to selection of a successor operator. VeriSign looks forward to providing any additional information the GNSO may find helpful as it finalizes its guidelines.

Respectfully,

Charles A. Gomes
VeriSign, Inc.
Appendix A

Evaluation and Responsibility Criteria for the .net TLD

1. Internet Stability: Internet stability should be the key evaluation criterion when deciding upon a Registry Operator. Additional criteria relating to Internet stability are set forth below.

2. Stability of Resolution System: The successful resolution of .net domain names is critical to the stability of the Internet. Applicants should be required to demonstrate past and current performance against key metrics of performance.

Key metrics of .net performance, by way of standards, should include:

- Response times from .net authoritative servers measured from various points around the globe. This should be measured in accordance with current ICANN DNS Registry Operator Specifications. However, in order ensure that current performance is maintained, the performance target set should correspond to performance levels currently being achieved on .net.
  - Response times should be equal to current performance, which is averaging 40ms.
  - Packet loss target should be less than 1%
- 100% availability of .net authoritative name servers. 75% of name servers should be available at any given time.
- 100% accuracy of .net zone data for resolution (no data corruption). The data that resolves is an exact replica of data in the database. Applicant should demonstrate processes, tools and automated monitoring in place to ensure this is continuously achieved.
- Diversity of DNS resolution infrastructure with no single point of vulnerability due to vendor equipment, design, implementation methodology or zero-hour security exploits.
- Demonstrated diversity and redundancy of network and DNS infrastructure to handle bandwidth congestion and network failure of ISPs and host providers.

3. Scale of Resolution system: The operational system must be scalable to support ongoing performance of .net at all times. Applicants should be required to provide specific volumes and performance measures that they will be capable of supporting, such as:

- Scale sufficient to handle the existing number of names and projected growth.
- Scale to handle existing DNS query loads including normal peaks and projected growth.
- Scale to handle events such as DDoS attacks and traffic generated by viruses, worms and Spam. RFC 2870, “Root Name Server Operational Requirements”, requires excess query capacity of three times the measured peak rate for those critical name servers. In our opinion, this value would be the very minimum for any critical authoritative name servers in light of modern-day threats. Attacks and malicious activity are on the increase and can generate as much as 10x -20x peak load. It is expected that these events will continue to grow in frequency. A DDoS attack resulting from a worm infecting thousands of computers with access to high-bandwidth Internet connections is a very real possibility and must be anticipated. The operator should have the scale to handle increase traffic caused by these attacks. Excess capacity of at least ten times sustained average query rate is required.
• Demonstrated restart capability from complete outage to avoid prolonged outage due to initial overload.
• Multiple geographically dispersed point of presence to handle simultaneous attacks across the network.

4. Stability of Registration System: The applicant must possess the capability and infrastructure to support equivalent access to the shared registration system by all Registrars with response times equal to those that Registrars currently experience. Among other things, applicants should be required to demonstrate past and current performance against key metrics of performance in terms of such factors as:
  • The availability of the system with specific focus on unplanned outage time. This should not exceed 99.99% for unplanned outage time.
  • Response time performance – the time to check the availability of a requested name and to add a requested name. The target should be less than 100ms for a check and 150ms for an add command.

5. Scale of Registration Systems: Applicants should be required to demonstrate their capability to support a scaleable registration system, including demonstrating such capabilities as:
  • Scale to handle current volumes and projected growth.
  • 2x name base capacity to withstand a “registration add attack” from a compromised registrar system.
  • Scale to handle through-put rates currently achieved by .net Registry

6. Security of Infrastructure: Applicants should be required to demonstrate their capability to establish the following:
  • A secure environment in which the registry infrastructure is to be operated.
  • Failure/Disaster Recovery Capability, including a plan and assets to support failure of any or all of the infrastructure, with a 4 hour disaster recovery time for registration and a 1 hour disaster recovery time for a gTLD site.
  • An independent annual security audit (SAS 70 or comparable).

7. Operational Expertise: Applicants should have staff in place with technical skills, expertise and experience to operate the Registry in order to maintain current levels of performance, including:
  • To operate at current and projected volume.
  • To maintain operation during periods of increase traffic or activity such as DDoS.
  • To identify and diagnose unusual activity such as DDoS attacks targeted at either the Registry operator or other critical Internet infrastructure.
  • To minimize vulnerabilities in infrastructure.
  • To completely mitigate security vulnerabilities before they are publicly announced.
  • To manage any planned outages to minimize impact to Registrars and end users.
  • To contribute to standards creation and other issues of Internet development.

8. Track Record: Applicants should possess a record of proven performance to handle operations comparable to .net, including:
  • Comparable performance levels.
  • Comparable scale.
9. **Demonstrated Commitment to Performance**: Applicants should have a track record of performance sufficient to demonstrate their ability to measure and perform against appropriate SLAs.

10. **Migration Plan**: Applicants should be required to demonstrate a clear and sufficient plan to migrate from the existing operator, including a plan demonstrating that the migration will have:
   - No impact on performance of registration system.
   - No impact on performance of resolution system.
   - Minimal impact and cost to Registrars.

11. **Standards Compliance**: Applicants should have a demonstrated commitment to compliance with applicable standards designed to improve the user experience on the Internet.

12. **Support of New and Emerging Technologies**: Applicants should have the technical expertise and resources to support new technical initiatives, such as IPv6, designed to improve usability, performance and security of the Internet. A focus should be given to technologies which have a demonstrable demand and measurable user benefit.

13. **Network Coverage / Geographic footprint**: Applicants should demonstrate capability with respect to the following measurement standards:
   - Number of name servers and points of resolution sufficient to provide 100% availability. Analysis has shown that this number should be a minimum of 8 physically diverse sites plus a minimum of two swing or hot standby sites for maintenance.
   - Network coverage of key geographic centers of the Internet in the Americas, Europe and Asia Pacific, and providing .net resolution close to the end user.
   - The support of growing and emerging markets so that those people in these markets experience the same levels of performance as those in the developed world.
   - Demonstrated efforts to expand stability in underserved markets.

14. **Customer Service**: Applicants should possess:
   - Skilled staff operating 24x7 to support Registrars’ hours of operation.
   - Sufficient staff to support current and projected registrar volumes.
   - International language skills.
   - Technical on-site assistance available (engineering) on 24x7 basis.

15. **Feature Functionality**: Applicants should possess the following:
   - Ability to support current feature functionality of .net to avoid any feature regression. This includes
     - Internationalized Domain Names
     - Support of IPv6
     - Ability to provide real time updates
     - DNSSEC.
   - Demonstrated ability to support key product features and capabilities demanded by Registrars and end users, including IDNs.
   - Demonstrated flexibility of system to incorporate new rules/ standards/ business practices with minimum negative impact on Registrars.
16. **Track Record of Opening New / Underserved Markets:** The applicant should have a track record in successfully investing in underserved markets and new geographies even if financial return does not justify investment. For example, VeriSign has continued to expand the geographic footprint of its network outside the North American market. In addition, the applicant should have a demonstrated willingness to support initiatives driven by market demand.

17. **Financial Stability:** Significant investment will be required to establish the initial registry system to support the scale and performance levels of .net. This includes the people and capital required to establish a global resolution footprint, capable of handling traffic spikes caused by DDoS attacks and other non standard operational events. The applicant should be required to demonstrate resources sufficient to make an investment at levels required to scale the operation initially and maintain and grow the domain base and infrastructure. The applicant also should possess substantial cash reserves and a record of sustained growth in revenue and profitability.
Appendix B

This section identifies some of the problems noted with the process to date with the intent of providing constructive feedback that we hope will be helpful going forward.

The observations below first of all reference the section of the PDP process followed by a description of what appeared to take place and then notes the deficiencies in cases where the actions have already occurred. In the later instances included below, some of the steps are still in progress or are yet to be performed so no deficiencies are identified.

ICANN Bylaws - Annex A, GNSO Policy Development Process, Section 2 requires the creation of an Issue Report by the Staff Manager within 15 days after receiving an instruction by the Board to initiate a GNSO PDP. The Issue Report must be accompanied by an opinion of the ICANN General Counsel regarding whether or not the proposed PDP is within the scope of the ICANN policy and GNSO. Furthermore, the Staff Manager is required to distribute the Issue Report to ALL Council members for vote on whether or not to initiate a PDP.

What Actually Took Place
Paul Verhoef, Vice President, Policy Development Support, sent a letter to Bruce Tonkin, Chair of the GNSO Council, on 31 March, 2004 requesting that the GNSO prepare a “consensus policy recommendation” with regard to the .net successor registry procedure.

Deficiencies
1. The Board action instructing Staff to make the request of the GNSO occurred on 6 March 2004 at the ICANN Rome meeting. That was 25 days, rather than 15 days as required by Bylaws.

ICANN Bylaws - Annex A, GNSO Policy Development Process, Section 4 requires that within 15 days of receipt of the Issue Report, the GNSO Council must hold a meeting to decide, by a majority vote, whether to appoint a Task Force to address the issue identified in the Issue Report. (Section 4, GNSO PDP, Annex A to ICANN Bylaws). Pursuant to Article X, Section 3, subparagraph 8 of ICANN Bylaws, the GNSO Council meeting can be held by electronic or other means so long as all Council Members can actively participate. Minutes of the GNSO Council meeting must be transmitted to the ICANN Secretary and posted on the ICANN Website no later than 21 days following the date of the GNSO Council meeting. (Article X, Section 3, subparagraph 8 of ICANN Bylaws).

What Actually Took Place
Apparently a meeting of the GNSO Council was held on 1 April 2004 approving the initiation of the PDP.

Deficiencies
As of 8 June 2004, no public posting of the minutes of the GNSO Council meeting that allegedly took place on 1 April 2004 could be found; the minutes have since
been posted. The minutes show that plans were made in this meeting to create a “Subcommittee” to produce the consensus policy “statement” requested by the ICANN Board. The minutes should have been posted by 22 April 2004. In summary, there does not appear to be any public record of a vote which raises questions about whether the process so far has been open and transparent.

ICANN Bylaws - Annex A, GNSO Policy Development Process, Section 5 requires the GNSO Council to invite each of the constituencies of the GNSO to appoint one individual to participate. A constituency wishing to appoint a representative on the “Subcommittee” must notify the Staff Manager of its designee (note this is not the GNSO Chairman or other member of the GNSO Council).

What Actually Took Place
Apparently there was an email sent out by the GNSO Council asking the constituencies to appoint members to the “Subcommittee”. We only know this because we received a copy as a result of receipt of an email addressed to the registry constituency requesting appointment of a member. It is unclear who the constituencies notified of an appointment to the Task Force. Involvement of the ICANN Staff Manager in the process is not known from any documentation on the Website.

Deficiencies
There appeared to be a lack of apparent involvement of the ICANN Staff Manager, a lack of transparency in requesting appointment of representatives to Task Force, etc. This is not consistent with or in compliance with the GNSO PDP Bylaws provisions for appointment of a “Task Force”. (At the same time, the actions are not consistent with the requirements of Section 8 of the PDP when a task force is not used.)

ICANN Bylaws - Annex A, GNSO Policy Development Process, Section 6 requires that upon the initiation of a PDP, ICANN is required to post notification of the initiation of the PDP on its Website and offer a comment period for 20 days “after” the initiation of the PDP. Note: This section refers to an ICANN posting, not a posting for public comment by the GNSO “Subcommittee”. The Staff Manager would subsequently add public comments to the Preliminary Task Force Report.

What Actually Took Place
No notice from ICANN was posted on the Website. There was no apparent involvement of the Staff Manager. The first public comment called for was in response to the GNSO Subcommittee draft report on 28 May, fully 57 days after the initiation of the PDP by the GNSO Council.

Deficiencies
The public posting, the first of which was 57 days after the initiation of the PDP by the GNSO Council, is not compliant with the Bylaws requirements or the PDP process.

ICANN Bylaws - Annex A, GNSO Policy Development Process, Section 7(b) requires that a “Charter” be developed for a Task Force within 10 days of the initiation of the PDP. The charter is developed by the GNSO Council in cooperation with the Staff Manager and must include: 1) the issue to be addressed as articulated by the GNSO Council authorizing the PDP and Task Force; 2) a specific timeline that the Task Force must adhere to; and 3) any specific instructions of the Council. The Task Force report
must be prepared and the Task Force must conduct its activities in accordance with the Charter. Any deviation from the express provisions of the Charter requires the approval of the majority of the GNSO Council. In other words, any deviation requires a GNSO Council meeting and vote.

**What Actually Took Place**
There is no visible evidence of a specific Charter being created by the GNSO Council or cooperation in the creation thereof by the Staff Manager. No Charter could be located.

**Deficiencies**
There is no evidence of any Charter or the creation of such a document as required by the applicable Bylaws provisions. Therefore no specific directions to the “Subcommittee” were published or any specific guidelines to determine whether the Subcommittee is deviating from instructions of the GNSO Council. In fact, it appears that the only timelines published or visible for the process are those fixed by the Subcommittee Draft report and subsequently in the call for public comment of the GNSO Council on 2 June 2004.

**ICANN Bylaws - Annex A, GNSO Policy Development Process, Section 7(d)** enumerates the content requirements for constituency statements received and to be considered by the Subcommittee. Such statements must include an indication of whether the consensus vote on the statement was by a Supermajority Vote (i.e., more than 66% of constituency membership or executive committee). In the absence of a Supermajority Vote the constituency statement must include a clear statement of all positions espoused by constituency members. In any event, such statements must contain a clear statement of how the constituency arrived at its position (i.e., details of constituency meetings, teleconferences, other means of deliberating on the issues, list of members participating). The statement must also contain an analysis of how the issue under consideration by the Subcommittee would affect the constituency including financial impacts, and an analysis of the period of time that would likely be necessary to implement the policy. *(It might be useful for constituencies to be informed of the content requirements of their statements.)*

**What Actually Took Place**
As indicated by the Subcommittee Draft Report of 2 June 2004, one constituency, the Business Constituency, submitted a formal statement to the Subcommittee. There were also 2 other statements submitted by interested parties, but not in the form of constituency statements, and apparently there was more informal input received and maintained by ICANN on the subcommittee’s net-com mail list.

**Deficiencies**
The Business Constituency statement failed to address even the minimum disclosures of voting, how the constituency arrived at its position in the statement or any analysis of time or impact on the Business Constituency. It only contained summary conclusions with no information as to how those conclusions were reached or what level of consensus was achieved. Given these serious insufficiencies, it is unclear what weight, relevance or consideration ICANN can give to the Business Constituency statement.
ICANN Bylaws - Annex A, GNSO Policy Development Process, Section 7(e)
requires that the Chair of the Task Force working in cooperation with the Staff Manager, prepare and distribute a Preliminary Task Force Report and deliver it to the full Task Force within 40 days after the initiation of the PDP. In this case, since the PDP was apparently initiated on 1 April, 2004, this should have been accomplished by 12 May, 2004. Thereafter, within 5 days of the distribution of the Preliminary Report, the full Task Force is to meet to consider the Preliminary Report and try to reach a Supermajority Vote on the issues and wording of the Preliminary Report. Within 5 days after the final Task Force meeting, the Chair and Staff Manager are required to create a Final Report and post it on the ICANN Comment Site. The Task Force Report must include: 1) a clear statement of any Supermajority Vote on the Issue; 2) if no Supermajority, a clear statement of ALL positions of Task Force members submitted within the 21 day period for submissions of constituency statements; 3) an analysis of how the Issue under consideration by the Task Force would affect each constituency, including financial impact on each; 4) an analysis of the time period likely necessary to implement the policy; and 5) a detailed statement on advice from outside Advisers used. (Even if the GNSO did not intend to use a task force, it seems reasonable and consistent with the PDP that the content required in this section be included in any final report.)

What Actually Took Place
GNSO Subcommittee issued a draft proposal on the procedure for designating a successor registry, which draft proposal is dated 2 June 2004, and apparently requested comments from constituencies and any other interested parties. On 28 May, 2004, the GNSO .net subcommittee published a notice of First Public Comment period specifying in summary form the process and time periods for developing the .net selection criteria and requesting comment on the GNSO Subcommittee draft report.

Deficiencies
The GNSO Subcommittee draft, if intended as a Preliminary Report as specified in the Bylaws, is deficient and does not contain most of the disclosures or information required to be contained therein. The Preliminary Report was required to be delivered for consideration by the full Task Force by 12 May, 2004, which then should have produced a Final Report by 17 May, 2004, which Final Report should have been posted for public comment by 22 May, 2004. Thereafter the GNSO Council should have called for a meeting of the full Council to consider the Final Report by 2 June, 2004. (Section 10(a), GNSO PDP, Annex A, ICANN Bylaws). None of these timelines have been met.

ICANN Bylaws - Annex A, GNSO Policy Development Process, Section 8 requires the following if at a meeting of the GNSO Council organized to consider a PDP request from the ICANN Board, the Council elects not to organize a Task Force: 1) the Council must call for the appointment of representatives from the various constituencies within 10 days of the Council meeting; 2) the appointed representatives must solicit comments from their respective constituencies; 3) those constituencies desiring to submit statements for consideration by the GNSO Council must do so through the Staff Manager (consideration if the statements submitted is by the Council not a Subcommittee or other body); and 4) (it is reasonable to assume) that the constituency statements provide the same disclosure of information as required for constituency statements if a Task Force is used (see Section 7(d)). Furthermore, the GNSO Council
is to prepare an Initial Report and post it for public comment within 50 days of the PDP initiation.

What Actually Took Place

As indicated by the Subcommittee Draft Report of 2 June 2004, one constituency, the Business Constituency, submitted a formal statement to the Subcommittee, not to the Staff Manager for subsequent consideration by the GNSO Council. There were also 2 other statements submitted by interested parties, but not in the form of constituency statements, and apparently there was more informal input received and maintained by ICANN on the subcommittee’s net-com mail list. Once again, these documents or comments were submitted to and considered only by the Subcommittee rather than to the Staff Manager for consideration by the GNSO Council.

Deficiencies

GNSO constituencies did not appoint representatives within 10 days. Representatives apparently did not solicit comments from their constituencies except possibly in one case. Constituency statements were only received from one constituency, and that statement was wholly deficient in that statements received by the GNSO Council should contain disclosures similar to those required of constituency statements submitted to a task force. The ICANN Staff Manager did not compile an Initial Report and post it within 50 days of the PDP initiation.
VeriSign Comment

- To: "org-eval@xxxxxxxxx" <org-eval@xxxxxxxxx>
- Subject: VeriSign Comment
- From: "Boggess, Jennifer" <jboggess@xxxxxxxxxxxxx>
- Date: Tue, 8 Oct 2002 19:02:29 -0400
- Cc: "Cochetti, Roger" <RCochetti@xxxxxxxxxxxxx>
- Return-receipt-to: "Boggess, Jennifer" <jboggess@verisign.com>

I am submitting the attached comments on behalf of Roger Cochetti and VeriSign.

To the Members of the ICANN Board of Directors: <urn:namespace prefix = o ns = "urn:schemas-microsoft-com:office:office" />

Having participated in and closely monitored ICANN's process for selecting a registry operator for the .org top-level domain, we wanted to take this opportunity to voice our concerns about ICANN's handling of that process. As discussed more fully below, the design and administration of the proposal process were fundamentally flawed, resulting in widespread criticism both from the participants in the process, all of whom invested significant time and resources in preparing their bids, and by the greater Internet community. ICANN's conduct not only has been, and continues to be, inconsistent with the letter and spirit of its Memorandum of Understanding with the U.S. Department of Commerce, but also amounts to a breach of its obligations under its Registry Agreements with VeriSign, Inc. Perhaps more important, the absence of meaningful safeguards to ensure a fair, open, competitive process is a disservice to the Internet community.

The .org Registry Agreement section dealing with the general obligations of ICANN require it, among other things, to exercise its responsibilities in "an open and transparent manner," and to not apply "standards, policies, procedures or practices arbitrarily, unjustifiably, or inequitably..."

We are not alone in these views. The various .org bidders have submitted more than 200 pages of questions, concerns and issues they have raised associated with the flawed .org process.

While there are a series of examples of ICANN's failure to meet its commitments, two in particular are illustrative.

1. Disqualification of UIA after the fact
VeriSign acted as a subcontractor to the Union of International Associations in their .org bid. Both UIA and VeriSign invested substantial resources in preparing the bid and in all the myriad follow up questions and requirements associated with the bidding process, a period that has lasted more than 5 months.

The ICANN staff final report, issued at the very end of the .org bid process, says that:

The UIA proposal employs VeriSign as its registry operations provider, at least for the first three years of operation. As such, as detailed in the General Counsel's report, it is the only proposal that ranks low on Criterion 3: Enhancement of Competition for Registration Services. Since this is the overarching goal for the entire undertaking of re-assignment of the .org registry, we believe that UIA/VeriSign should not be favorably considered, unless there was no satisfactory proposal of sufficient merit - which is clearly not the case.

Criterion 3 is one of the 11 criteria laid out by ICANN. There was no information in the bidding process that any bidder would be disqualified if they employed VeriSign as a subcontractor. In fact, ICANN actually contradicted itself in the final staff report, arguing that:

The weights being given to the criteria were derived from the words of the criteria themselves. The Usage Evaluation Team weighted them equally because there was nothing in the words to suggest otherwise. The Gartner team gave 70% of the weight to Criteria 1 and 9 because the words clearly stated that primacy of consideration had to be given to stability of operation and transition. No weights were indicated in the draft RFP that was posted, and neither UIA nor any of its partners commented that this was a deficiency.

A reasonable reading of this statement indicates that all of the criteria were weighted equally, with the exception of Criteria 1 and 9. If criterion 3 were weighted the same as the other criteria (with the exception of 1 and 9), then ICANN should not be arguing after the fact that UIA's bid "should not be favorably considered."

Both UIA and VeriSign have incurred the cost of a significant financial investment in the bid which ICANN is now telling us - after the fact -- never had a chance.

2. Weighting of criteria

Contrary to ICANN's assertion that UIA or its partner VeriSign did not comment that the lack of weighting of criteria was a deficiency in the bid process, VeriSign sent a clearly-worded 9 page letter on May 13, 2002 laying out detailed and specific concerns associated with such an arbitrary approach. The letter is attached. ICANN refused to respond to the questions and concerns, arguing that VeriSign was not a bidder on .org. However, ICANN
did respond to questions raised by other prospective bidders and their partners. At the
time the letter was written - prior to the application
deadline - there were no official bidders or partners. ICANN had no basis for
disregarding the legitimate concerns about the process expressed by VeriSign.

As it turns out, the lack of weighting of criteria has caused the majority of bidders to believe the process was arbitrary and unfair. We have attached quotations from many of the bidders illustrating their views.

The non-commercial domain name holders evaluation team was highly subjective, and in many cases just plain inaccurate. They decided how to weight the criteria after the application deadline, during their review of the applications. In their report, they state:

We considered positioning, lack of restriction, innovation, and relations to registrars to be the most important evaluation criteria in the differentiation realm; these criteria were weighted at one. 'Defensive registration' and 'market research' were weighted at one half.

In addition, the non-commercial team decided to weight the support letters into "A" and "B" categories. None of this was made clear before the application deadline.

Further, it was never made clear whether or not letters of support arriving after the application deadline would be counted, and if so, how much weight would be given to such expressions of support. It is ironic that the organization with one of the highest scores on this criterion did not appear to have a single letter of support prior to the application deadline.

The staff report indicates that the Gartner technical evaluation also decided how to weight the criteria after the application deadline: "Gartner also combined the criteria into a single overall assessment, using its own judgment as to what weight to assign the results of each individual criterion based on Gartner's reading of the RFP."

Many bidding organizations also expressed concern that the Gartner team may not have had the required technical expertise to do such an evaluation. While Gartner has argued that their team had expertise in certain areas, UIA has not received a specific answer to its questions on this front, and we would like to see the names of the individuals involved in the evaluation, as well as information on their technical background.

These are just a few examples of the arbitrary nature of ICANN's handling of the .org bid process. We have attached a table providing more detail, as well as a list of some essential steps ICANN must take to prevent an arbitrary approach during their next RFP process. We believe that if ICANN embraces these steps, it will go a long way towards a more fair, open and transparent process.
Sincerely,

Roger Cochetti

Senior Vice President and Chief Policy Officer

ATTACHMENTS:


7. Comment from Eric Brunner-Williams

The public comments of Eric Brunner-Williams

- To: dotnet-criteria@xxxxxxxxx
- Subject: The public comments of Eric Brunner-Williams
- From: Eric Brunner-Williams <brunner@xxxxxxxxx>
- Date: Thu, 08 Jul 2004 09:12:29 +0000
- Cc: brunner@xxxxxxxxx

Howdy folks,

An invitation for "public comments" on some proposed policy or implementation plan by some policy making or policy implementing body, if not a fiction for some undisclosed purpose, such as maintaining the facades of seeking comments, and being having no covert purposes which make the invited comments moot prior to their receipt by the inviting body, must have an observable outcome.

It is my experience, when submitting information in support of ICANN's very first reconsideration (RC 99-1), and when submitting information on the .ORG redelegation application evaluator Gartner, Inc., and when submitting information of the WLS issue, that silence would have had the same effect as comment, and taken a great deal less of my time and attention.

The central issue in my mind is not idle recitation of contractual continuity phrases, which forms the totality of the initial draft report from the GNSO subcommittee. The central issue is which well-qualified existing or potential registry operators will risk the bid preparation cost and compete for the NET registry.

There were several qualified proposals in the set of applications for the ORG redelegation, SWITCH, Paul Vixie's group, and Afilias (the winner, due to sponsor affiliation). In addition, there are several qualified operators of existing (actual, not fictive) ccTLDs. Each member of either pool could implement the recitation of contractual continuity phrases, or any variation that could rationally arise from them.
However, even though the terms of the existing contract, in particular its period of expiry, are publically known, not one of these qualified parties have even bothered to comment, or sought to participate in the subcommittee charged with authoring

[a] consensus statement defining criteria and conditions to be applied in the selection of a registry operator.

The most important criteria and condition is that the selection PROCESS not be corrupt, and the ORG application technical criteria evaluation by the Gartner Group was corrupt. The Staff evaluation wasn’t much better.

The next most important criteria and condition is that the SELECTION process have a range of competing proposals to from which to select. If ICANN is unable to elicit no more than two token bids, the criteria, the process, and the selection of an operator to undertake operations from mid-2005 is really uninteresting.

Assuming that ICANN's intent is not malign, an assumption that is very, very difficult to maintain, even with the alternative choice of very, very incompetent to select from, it needs to drastically simplify the bid response pro forma. I made this comment at the Rome meeting to Miriam Shapiro and the BoD -- The new gTLD pro forma and the ORG pro forma and the 2nd-round new gTLD pro forma impose very high production costs for a bid respondant, and require outright lies by the respondant. This in turn forces very high evaluation costs for the bid evaluator, and requires them to believe, or pass in silence on, outright lies by applicants.

If nothing more than a few book-length obscurantist texts are submitted by VGRS and NeuStar and some new speculative party that has retained bid preparation authors, then there is no selection or process.

ICANN has qualified, well written bids in its possession, from SWITCH and the Vixie group, and Afilias, which simply require a TLA substitution to make current to the NET operator selection. ICANN can solicit bids from the operators of leading ccTLDs as well.

Prior qualified bids for equivalent contracts must be considered on their merits. The criteria and conditions should result in interesting bids, not a charade.
All spelling errors are mine. Errors by others referenced here are still the property of those others, whether admitted or still submerged in the river de Nile.

I bring the following experience to writing this note: technical author of portions of the NeuStar BIZ and US bids, portions of the SWITCH and RCOM ORG bids, portions of the EPP protocol specification, and so on.

Eric Brunner-Williams
GM, Wampumpeag, LLC
Operator, USAWebhost (ICANN Registrar #439, CORE #124)
8. **Comment from Melbourne IT**

Melbourne IT comments on the .net criteria submitted to the GNSO Council 9 July 2004

Clarification

These comments are submitted by Bruce Tonkin in his role as Chief Technology Officer of Melbourne IT, and are the views from a single registrar.

Declaration of Conflict of Interest

Melbourne IT is a 10% shareholder in Neulevel, the operator of the .biz registry.

(0) Executive summary

This is a brief summary of the suggested changes to the criteria described in detail below.

- recommend the .net subcommittee reference its particular recommendations against the mission and core values of ICANN as listed in the bylaws.

- recommend the .net subcommittee consider and include a reference to the criteria used in the first round of new TLDs: [http://www.icann.org/tlds/tld-criteria-15aug00.htm](http://www.icann.org/tlds/tld-criteria-15aug00.htm)

- provide tighter minimum criteria for performance specifications for the .net registry. Use the definitions of the .biz agreement as a guide, and also review the actual performance of the .net registry operator averaged over the past 12 months as detailed in the public monthly reports as a benchmark. The objective should be to enhance the current service. The current criteria in the .net registry agreement are well below that acceptable for a registrar. Melbourne IT would prefer to see a reliability figure of 99.95% for the registry/registrar provisioning system.

- add "migration strategy" as a selection criteria. The objective should be to minimise the overall .net service cost for existing registrars (ie the migration cost should be outweighed by savings elsewhere), and also maximise the choice available for registrars (e.g choice of thin versus thick registry on a per registrar basis).
- remove "maximisation of consumer choice" as a criteria. This is meaningless, as .net is already available to consumers. ICANN is exercising its choice in a competitive registry operator market to choose a registry operator for .net that best meets the needs of its registrar customers.

- add a new criteria: "maximise the service provided to registrars". Registrars have no individual choice of registry operator. The service a registrar can provide to a consumer or reseller, will ultimately be determined by the quality and level of service provided by the monopoly .net registry operator. If a registry operator can lower a registrars costs through new and improved services, this will be able to passed onto consumers in the competitive registrar market.

- remove the section on "pricing". Pricing is a term best used in the context of consumers, and the price a consumer pays is determined by registrars or their resellers.

- add a new criteria "impact on registrar cost". Registrar cost is defined as the impact on a registrar's costs of the .net registry service. The cost consists of migration costs, the registry fees charged to the registrar, ICANN's fee, and may be influenced by any cost savings possible from improved registry service. Applicants should describe how their proposal would reduce a registrars overall costs.

- request ICANN to review the registry licence fee for .net, and include it as a condition of the tender. An increase in the .net registry operator fee may allow a reduction in the fees paid to ICANN by registrars, and potentially may lead to a reduction in the retail prices paid by consumers.

- under the innovation and value criteria, require applicants to specifically describe how they will enhance three main services: registrar transfers, WHOIS, and allocation of deleted names. These three areas have been the most discussed issues in the GNSO over the past several years, and the tender process is an opportunity for ICANN to seek, on behalf of registrars, innovative solutions that provide a benefit for registrars and their customers. These three areas are significant contributors to registrars costs.

- generalize the relative criteria to improve the existing stability, reliability, and security of the registry. Applicants should indicate how their proposed solution compares against the current service as reporting in the current .net operator's monthly reports over the past 12 months, and indicate how they could enhance the service. For example an applicant should provide the mean time to resolution for additions or changes to the .net zone file.

- improve the wording regarding suppliers and vendors to avoid the impression that this is targeted at registry operators as suppliers. Here is some suggested wording: "Applicants should indicate how they will implement the registry solution to maximise stability, security and reliability. It is
preferable for the .net registry operator to use a diversity of computer hardware vendors, software vendors, telecommunications vendors, Internet service providers, and also locate services across a geographically diverse area."

(1) General comments
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I recommend that the GNSO report specifically reference its recommendations against ICANN's mission and relevant core values.

ICANN's basic mission is: "to coordinate, at the overall level, the global Internet's systems of unique identifiers, and in particular to ensure the stable and secure operation of the Internet's unique identifier systems."

The core values relevant to the .net tender are:

1. Preserving and enhancing the operational stability, reliability, security, and global interoperability of the Internet.
   - this is a core requirement

2. Respecting the creativity, innovation, and flow of information made possible by the Internet by limiting ICANN's activities to those matters within ICANN's mission requiring or significantly benefiting from global coordination.
   - should encourage creativity and innovation

4. Seeking and supporting broad, informed participation reflecting the functional, geographic, and cultural diversity of the Internet at all levels of policy development and decision-making.
   - ensure broad participation in deciding on changes in the .net registry operation.

5. Where feasible and appropriate, depending on market mechanisms to promote and sustain a competitive environment.
   - putting out the operation of the .net registry for tender is itself a market mechanism to get the best result.

6. Introducing and promoting competition in the registration of domain names where practicable and beneficial in the public interest.

The GNSO .net subcommittee may also wish to review aspects of the criteria used in the first round of new TLDs:
As a registrar, Melbourne IT is a customer of the .net registry operator. We believe that ICANN is now taking advantage of the competitive registry operator market to operate a tender process to select a registry operator that can provide the best result to its customers (registrars), and also ensure that the new registry operator ENHANCES the operational stability, reliability, security, and global interoperability of .net in accordance with ICANN's mission. As the .net registry operator is in a monopoly position with respect to .net, it is necessary for ICANN to operate the process on behalf of all the registrars, as registrars can't independently select their own registry operator. Melbourne IT would like to see a better service provided as an outcome of the tender process, and thus ICANN needs to properly benchmark the current performance provided by the existing .net operator.

(2) Absolute criteria related to stability, security, technical and financial competence
=======================================================================
==============
The performance specifications in the current .net registry agreement are below what Melbourne IT would like to receive as a registrar. For example the performance specifications in the .biz agreement are both at a higher standard (e.g. 99.9% uptime for the provisioning system) and more specific.

A registrar is very dependent on the uptime available from the registry provisioning system. Although a registry may queue transactions when a registry is done, there is a diminished service offered to customers (for example the availability of a name or the success of registration cannot be guaranteed). The current .net agreement allows for 4 hours unplanned outage per month.

A review of the current .net registry operator's actual performance for 2003, shows that most months there was zero unplanned outage. To ensure that registrars do not receive a lower level of service from the .net operator in future, I recommend ICANN establish the average performance measured over a 12 month period, and set this as a benchmark to be met in the tender. Remember it is ICANN's responsibility to ENHANCE the current reliability of Internet services.

I would like to see a minimum reliability figure of above 99.95% for the registry provisioning systems (excluding planned outages). The growth in collective industry experience and improvements in technology should be reflected in an improvement in the service levels available with .net. There should also be financial penalty clauses to ensure that registrars are compensated when a registry operator fails its service
level agreement. This ensures that there is an economic motivation for
the registry operator to operate at the highest levels.

(3) Migration issues
====================

When a company considers changing supplier, a key component of the
consideration is the cost of migration to the new supplier. Any
benefits in a lower price of service need to take into account the
migration cost.

In the case of the recent .org migration, registrars received no
benefit
in terms of a lower per transaction cost, and they were forced to
 accept
a high migration cost. Thus the .org process actually led to a net
increase in expenses for registrars. It is notable that the number of
.org names as a proportion of .com names has slightly dropped since the
change in registry operator.

Ideally as a registrar, I would like to see the new operator continue
to
support the RRP protocol and thin registry model, as well as offer the
option for registrars to migrate to the EPP protocol (especially useful
for new registrars entering the market), and the option to elect to
operate with a thick registry model.

I would recommend that the "migration strategy" be considered a key
criteria (under the relative criteria section) in the selection of the
new .net operator, and ensure that the cost of migration for existing
registrar customers is properly evaluated (perhaps using a subcommittee
of registrars that are not associated with any of the tenders).

(4) Competition
===============

I see little impact on consumer choice with respect to the .net tender.
The .net TLD already exists, and consumers already can choose .net over
other TLDs. The recent experience with the change in the .org
operator,
showed that a change in registry operator has almost no influence on
the
market (ie the proportion of .org names compared to .com names is
slightly below (as of the most recent monthly report on the ICANN
website) the proportion prior to the change in operator).

Once a company is operating a particular TLD, it is in a monopoly
position and there is often little incentive to significantly improve
the service for registrars (and their customers). The recent focus of
the current .net operator has been on finding new services (e.g WLS)
for
which it can charge registrars, rather than improving the current
services (e.g improving the implementation of the transfers function).
Instead I see the tender process itself, if run at regular intervals, giving registrars (and ultimately consumers) the best chance of getting an improved service at an improved cost.

I recommend removing the "maximisation of consumer choice" as one of the criteria.

It would be better to say: "maximise the service provided to registrars". Registrars have no choice of .net registry operator, but ICANN does have the opportunity as part of the tender process to choose the operator most likely to provide better service.

(5) Pricing
=========

The prices charged to consumers are determined by registrars and their resellers. The monopoly cost components of a registrars price for .net names, consist of the fees charged by the .net registry operator, and the fee charged by ICANN.

Every year ICANN has increased the fees charged to registrars, but has not increased the fees charged to registry operators. Even if ICANN did increase the registry operator fee, the registry operator has a contractual right to pass on this increase to registrars. As the market has grown the monopoly registry operators (which have not lowered their registrar fees in proportion to the growth in domain name volumes) have benefited far more than the registrars (that have generally lowered their prices in an increasingly competitive market).

I would like to see ICANN establish as part of the tender process an increase in the fee paid by the registry operator to ICANN for the .net registry licence. Thus ICANN could reduce the fees it charges registrars. The registry operator would need to announce the service fee it will charge registrars, and this may have a net effect of a lower overall cost to registrars.

Note that a registry operator should not be constrained in the model it proposes to charge registrars (e.g a registry operator could reduce the costs of registration to encourage growth in the market, or charge for other transactions such as creating name server records).

The other cost considerations that are relevant to a registrar, are the cost of migration to a new .net operator, and also the cost savings possible through improved registry services. The three main areas where a registry operator could potentially decrease registrar costs are:

- transfers (currently a customer service nightmare)
- WHOIS (registrars are being requested to improve accuracy at their cost - potentially a registry could provide services in this area)
- Deleted names (the current mechanisms for obtaining desirable recently deleted domain names are inefficient and ultimately expensive for the consumer)

The current criteria under the heading "pricing" in the GNSO criteria is too narrow, and implies that this narrow criteria should be considered above other criteria which all have a bearing on cost. The word "pricing" is often confused with the price paid by consumers.

Thus I recommend that the section on "pricing" be restated as:

"- registrar cost. Registrar cost is defined as the impact on a registrar's costs of the .net registry service. The cost consists of migration costs, the registry fees to the registrar, ICANN's fee, and may be influenced by any cost savings possible from improved registry service. Applicants should describe how their proposal would reduce a registrars overall costs."

(6) Innovation and value

The service areas that have attracted the most policy development time in the GNSO in the past few years are:
- transfers
- WHOIS
- delete processes

I recommend that the GNSO specifically include these three areas in the criteria related to innovation and value. Each applicant should be required to explain how they would improve the services offered to registrars (and hence ultimately to consumers) in these three areas.

The current .net operator has not implemented any improvements in the transfer process. There is a new transfers policy, but it has not been implemented by ICANN or registry operators. Areas where a registry operator could improve service are: authentication techniques (such as the EPP auth-code), dispute resolution processes (establishing a dispute resolution process between registrars and agreeing to implement the outcome of the dispute resolution), transfer undo processes (ensure that a transfer made in error can be completely rolled back).

With respect to WHOIS, there are issues associated with data mining and accuracy. A registry operator could propose solutions to improve the WHOIS service in both of these areas. For example, a registry operator could run scans on registrar addresses (with the consent of the registrar) to identify addresses that do not seem real (e.g. a street, suburb or country that does not seem to match). Obtaining address information on a global basis is expensive - and very expensive if each registrar is required to obtain such databases. A registry operator could make a significant contribution by obtaining address information for at least part of the world. This information would not stop a
registrant from deliberately using false information, but may help improve the accuracy of information provided by registrants that supply bad data by mistake.

The current process for re-registering deleted names for the .com and .net domain names is very inefficient. The first-come, first-served allocation method has been very effective for registration of new names where there is little contention between registrars for the same name at the same time. With deleted names, several registrars may wish to acquire the name on behalf of their customer. This is done by saturating the registry with as many add requests as possible at the time the name is scheduled to be deleted. As the more requests that are submitted, the higher the chance just one will succeed, some registrars collude with other smaller registrars (as each registrar is given the same number of registry connections regardless of size) to attempt to pool their connections together and share the proceeds from any names acquired (ie they agree not to compete against each other). This then disadvantages a registrar that does not participate in a pool of registrars. The overall cost of this process is high, and these costs are then passed onto the consumer that eventually receives the recently deleted name. Perhaps the best model in these circumstances, where there is contention amongst consumers for a single name, is an auction model. A registry operator may be able to propose an auction model, as part of the tender process. The model could include how the proceeds of an auction could be distributed (e.g between the original registrant, the original registrar, the registry operator, ICANN, and the new registrar). Note the present .net registry operator has proposed the WLS solution, but it is only a partial solution to the problem, and there is also likely to be contention for WLS entries. The .net registry tender is an opportunity for applicants to offer alternative solutions.

(7) Relative criteria relating to stability, security, technical and financial competence

The minimum criteria discussed in section (2) above with respect to stability and reliability could be considered to be the basic criteria necessary to be accredited by ICANN to be a TLD operator. With respect to the .net registry tender, ICANN should be giving weight to those applications that ENHANCE the existing stability, reliability and security of the .net service. The current .net operator has published in its public monthly reports its performance, and applicants should be required to state how their service would match or exceed the current service provided as part of the relative criteria.

Thus I recommend adding a relative criteria:
- applicants should be required to how their proposed solution compares against the current service as reported in the current .net operator's monthly reports over the past 12 months, and indicate how they could
enhance the service. The existing point in the criteria related to the
zonefile is put one performance measure. It would be better to state this as an example under a more general point.

Here is some proposed text:
"- applicants should indicate how their proposed solution compares against the current service as reporting current .net operator's monthly reports over the past 12 months, and indicate how they could enhance the service. For example an applicant should provide the mean time to resolution for additions or changes to the .net zone file."

With respect to the text about multiple suppliers and vendors. It is not clear whether this is intended to mean that it is preferable for .net to with a different registry operator compared to .com. This would tend to create a bias against one of the existing registry operators. It may be better to restate as follows:

"- Applicants should indicate how they will implement the registry solution to maximise stability, security and reliability. It is preferable for operators to use a diversity of computer hardware vendors, software vendors, telecommunications vendors, Internet service providers, and also locate services across a geographically diverse area."

Registry operators should also be required to state whether they plan to support IPv6, and their plans for improving the security of the .net registry solution (e.g trials of DNSSEC).
9. **Comments from the Registry Constituency**

Registry Constituency Statement on the Criteria for Selection of a New Operator of the .NET Registry

The following are comments of the Registry Constituency in response to the request for comments on the draft report (ver.7) of the subcommittee established by the GNSO Council for the purpose of developing recommendations for "a consensus statement defining criteria and conditions to be applied in the selection of a successor registry operator," consistent with the current .net Registry Agreement and other applicable requirements:

1. The Constituency believes that each applicant should be judged primarily on its showing that its operation of the .net registry will contribute to the stability and security of the Internet. This absolute criterion should not simply be a matter of meeting or exceeding the technical specifications spelled out in the subcommittee’s recommendations.

2. The Constituency believes that the subcommittee’s recommendation that “preference should be given to proposals offering lower pricing of the domain name” is a mistake. There is ample evidence that the prices charged by registries to their immediate customers, the registrars, has no effect on the prices charged to the public, i.e., the registrants of second level domains.

3. The Constituency discussed the subcommittee’s recommendation that “positive consideration should be given to ICANN's mission to improve consumer choice and competition.” With regard to “consumer choice”, it should be acknowledged that consumer choice for .net happens primarily at the registrar level. At the same time, when consumers do choose the .net TLD through their registrar of choice, it is very important that they be assured the highest levels of security and stability. With regard to “competition”, the GNSO should clearly define what is meant by this criterion.

4. The Constituency supports the soliciting of public comment at four critical stages of the selection process: (1) with respect to the draft criteria and timeline (the instant comment cycle); (2) with respect to the revised version of the GNSO Subcommittee Report; (3) with respect to the draft RFP; and, finally (4) with respect to the proposals submitted by each bidder. However, the Constituency believes that it is also important that feedback is provided by ICANN on which comments were accepted or rejected and the rationale behind such actions.

5. The Constituency urges ICANN to adhere to the schedule proposed and to avoid adopting a timeframe that would effectively exclude any bidder other than the incumbent from competing on a level playing field for the registry.

6. The Constituency urges ICANN, prior to the issuance of the RFP, to establish and articulate criteria to govern the qualifications and selection of those individuals, groups and organizations that will assist in evaluating the proposals.

7. The Constituency urges ICANN to establish and articulate the processes and procedures to be used to ensure the impartiality of persons selecting the successor .net registry operator and/or evaluating the proposals. Specifically, ICANN should define and announce the criteria for selecting evaluators that have no preconceived bias or financial interest in the outcome. ICANN should also establish an express prohibition on oral *ex parte* contacts between bidders and
bid evaluators and other selecting officials from the time the RFP is issued until a subsequent .net registry operator is announced. Further, written *ex parte* contacts (and oral, if made despite the prohibition) must be promptly made public.

8. In the event ICANN needs to change or modify the requirements of the RFP after its issuance, The Constituency urges ICANN to do so through written amendments that are made public and to include reasonable timeframes for bidders to accommodate changes made.

9. The Constituency urges ICANN to establish, well in advance of issuance of the RFP, the Independent Review Panel required by Article 4.3.2 of the .net Registry Agreement to review any challenge by the .net registry operator to “Consensus Policies” established by the ICANN Board.

10. The Constituency urges ICANN to issue a written report evaluating the proposals with regard to the selection criteria and demonstrating how the successor registry was chosen consistent with those criteria. Such a report should be made public promptly upon the announcement of the .net successor registry operator.

11. The Constituency urges that ICANN (1) make clear the extent to which bidders are comparatively evaluated on the absolute criteria; and (2) further elaborate as to the specific elements and/or level of capability sought with respect to the various criteria, both absolute and relative.

12. The Constituency urges ICANN to ensure that its technical criteria and measurement of such criteria allow for, and are appropriate to, either thin or thick registry models.

These are not the sole and exclusive criteria that the registries believe should be contained within the RFP. Several Registries have submitted separate comments on the .net procurement process that deserve further consideration. These comments are intended to supplement those separate comments. They are by no means intended to be a substitute for or to replace the commands submitted by the individual registries.
10. Comments from NeuLevel

July 14, 2004

Dotnet-comments@icann.org
Dotnet-criteria@icann.org
Internet Corporation for Assigned Names and Numbers (ICANN)
4676 Admiral Way, Suite 330
Marina del Rey, CA 90292-6601

Re: Procedure for Designating a Subsequent .net Registry Operator

Dear ICANN and the GNSO:

NeuLevel, Inc. (“NeuLevel”) very much appreciates this second opportunity to offer its thoughts on the .net registry operator selection process and hereby submits its comments on the Final Dot Net Subcommittee Report (the “GNSO Final Report”), which outlines the proposed selection criteria.

The Selection Process

Before commenting on the GNSO Final Report, NeuLevel would like to reiterate several key points made in its original comments submitted on June 18, 2004 (the “Initial Response”) in response to the Draft Procedure for Designating Subsequent .net Registry Operator (the “Draft Procedure”). Although NeuLevel’s original comments were not included in the Final Procedure for Designating Subsequent .net Registry Operator released by ICANN on June 29, 2004, NeuLevel believes that such comments can, and should be, incorporated into the actual Request for Proposals (“RFP”). These include:

• Criteria for Selecting Evaluators. In the RFP, ICANN should establish and articulate criteria to govern the qualifications and selection of those individuals who will assist in evaluating the proposals. See page 2 of the Initial Response.

• Maintaining the Impartiality of Evaluators. ICANN should establish and articulate the processes and procedures to be used to ensure the impartiality of persons selecting the successor .net registry operator and/or evaluating the proposals. See page 2-3 of the Initial Response.

• Putting Changes in Writing. In the event ICANN needs to change or modify the requirements of the RFP after its issuance, ICANN should do so through written amendments that are made public. See page 3 of the Initial Response.

• Public Disclosure of Contacts with Evaluators. In order to ensure transparency and fairness, any exchanges between actual or potential bidders and evaluators from the time the RFP issues until the subsequent .net registry operator is announced must occur in writing and be made publicly available. In addition, the RFP should indicate whether ICANN plans to allow a question and answer period once the RFP is released or interview candidates once bids are submitted – both of which should be subject to public disclosure requirements. See page 3 of the Initial Response.
• Form of RFP Response. NeuLevel would strongly urge ICANN not to so drastically limit .net submissions as it did for the latest round of sponsored TLD applications. 10,000 characters of text with no opportunity for the submission of figures, diagrams or spreadsheets is simply not adequate for a bidder to demonstrate its ability to satisfy the criteria. Indeed, such severe content limitations actually discourage the submission of specific evidence of practical (as opposed to theoretical) experience – the kind of information ICANN should be seeking in the comparative process. See page 6 of the Initial Response.

The Selection Criteria

NeuLevel again reiterates that it generally supports the selection criteria identified in the GNSO Final Report. However, more clarification of the criteria is necessary to properly inform bidders and evaluators as to the desired qualifications and to ensure the selection process is fully transparent. Specifically, NeuLevel urges that ICANN (1) make clear the extent to which bidders are comparatively evaluated on the absolute criteria; and (2) further elaborate as to the specific elements and/or level of capability sought with respect to the various criteria, both absolute and relative.

The language of the GNSO Subcommittee Report is somewhat ambiguous on these points. ICANN should use the absolute criteria collectively to separate the bidders into classes of technical competency. As in the .org selection process, only those bidders earning the highest class of technical ranking should be further evaluated based upon the relative criteria. Again, as in .org, once bidders in the highest technical class are identified, their individual technical scores should no longer be considered and selection should be made only on the basis of their scores on the relative criteria.

With regard to further elaboration of the elements of the various criteria, NeuLevel has already submitted specific suggestions with its Initial Response. To further assist ICANN in considering these suggestions, NeuLevel has included as Attachment A a redlined version of the GNSO Final Report that specifically highlights NeuLevel’s proposed additions and modifications to that document. Most importantly, these suggestions include:

• Appropriate and Specific Minimum Technical Standards. ICANN should articulate minimum technical standards for .net based upon an appropriate and established level of technical service, including SRS, Nameserver and Whois Availability and frequency of updates. NeuLevel urges ICANN to adopt technical standards similar to those prescribed in ICANN’s recently awarded contracts, such as for .org and .biz. In establishing minimum technical requirements for .net and evaluating the technical capabilities of the bidders, ICANN must focus on what is appropriate and relevant to the operation of .net—and only .net. For instance, it would be unfair to most bidders and unnecessary to .net’s operation to establish minimum standards reflective of certain aspects of .net’s current operation in conjunction with .com, a database that alone contains over 26 million domain names, or the equivalent of well over 70 percent of all gTLD domain names.

2 Id.
Please refer to pages 4-6 of the Initial Response for a further discussion of these and other items.

For example, it would be unnecessary and unfair to most bidders to require that they demonstrate that they already have experience operating a database of 5 million names, as VeriSign is the only registry that currently has that volume.

- Clarification that .net Consumers are the Registrars. Relative Criterion 1 emphasizes that bidders will be evaluated on their ability to maximize and enhance choice, price, innovation and value for the “consumer.” To be clear, the consumers or customers of the .net registry operator are the registrars. ICANN should therefore clarify that this Criterion involves the maximization of choice, price, innovation and value for registrars, not for the general Internet public.

- Price As a Function of Value. Statements in Relative Criterion 1 create confusion as to the relationship of price and value for purposes of the .net evaluation process. ICANN should thus make clear that, while price is important, the overall evaluation must be one of value. The relevant inquiry should not be which offering is less expensive, but rather which offering provides the most value for the lowest price.

- Existing Registry Services Should be Defined as Those Offered at RFP Issuance. ICANN should make clear that “existing registry services” includes only those services actually being offered by the .net registry on the date the RFP is issued. It would be unreasonable and unfair to bidders to require them to address services that are not launched in advance of the time the RFP is issued, as bidders would not have an opportunity to determine what those services are or how those services are administered. Further, so as not to disrupt users of .net, the .net registry operator should be directed to maintain the status quo and be prohibited from introducing any new service beginning on the date the RFP is issued and to release any relevant details regarding the administration of any services launched prior to such date. Such an operational freeze is standard practice with respect to competitive contract rebids. Thus, if the Wait List Service proposed by VeriSign is not launched with respect to .net by the date on which the RFP is issued, such service should not be allowed to be launched in .net until after the .net procurement has been finalized. Allowing the service to go forward after the RFP could not only put any transition of such service in jeopardy if a new operator is selected, but it would also provide an unfair advantage to the incumbent operator – the only entity who would know the details of the new service and how to best support it.

NeuLevel again appreciates the opportunity to offer its thoughts on the .net successor registry operator designation process, specifically on the GNSO Final Report. NeuLevel hopes that ICANN finds these comments to be useful and constructive. Please feel free to contact me should you have any questions or should you require further clarification of the information presented in this letter and the attachment.

Sincerely,
Richard Tindal
For example, a $6.05 service may offer much more value in terms of additional capabilities than a $6.00 service, and thus should be evaluated more highly.
CRITERIA TO BE CONSIDERED

Criteria to be considered—Criteria are divided into absolute and relative criteria. Absolute criteria are thresholds which an applicant is expected to meet. Failure to do so should imply disqualification. Relative criteria become relevant once absolute criteria are met and are proposed as a basis for comparison and evaluation of competing applications. Absolute criteria are listed in no particular order, disqualify the Applicant. Given the technical nature of the .net registry contract and that technical expertise and experience will be essential to successfully executing its functions, award of the contract should require further consideration of each bidder’s technical expertise beyond the mere achievement of minimum thresholds. Accordingly, ICANN should use the absolute criteria collectively to separate the bidders into classes of technical competency. Only those bidders earning the highest class of technical ranking should be further evaluated based upon the relative criteria. Once bidders in the highest technical class are identified, their individual technical scores should no longer be considered and selection should be made only on the basis of their scores on the relative criteria. Relative criteria are listed with weighting with the highest weight at the top of the list.

Absolute criteria

Absolute criteria related to the Targeting
- Dot .net should remain unsponsored.
- Dot .net should remain unchartered.

Absolute criteria related to Continuity
- Grandfathering—There are a number of organisations and individuals that have made an investment in .net domain names. The cost of migrating to a new domain name is potentially significant. Existing registrants should not be penalized by changes in policy as a result of this process. Existing registrants in .net should be entitled to maintain their registrations on terms materially consistent with their existing contracts under current policy, including the right to transfer a .net domain to another party.

Absolute criteria related to Policy Compliance
- Consensus policies—In the operation of the .net domain name registry, the registry operator must comply with all consensus policies of ICANN, both existing—those that exist today (UDRP, WHOIS, Deletes, Transfers etc), and any which that are developed via the ICANN process in the future.
- Policy development—Any future .net registry agreement must specify that policy development for .net will take place in an open bottom-up process, which enables input from the full Internet community via ICANN’s processes.
- Registrars—All ICANN-accredited registrars must be allowed to qualify to register names in .net. All registrars that have qualified to operate as .net registrars must be treated equitably by the registry operator.

Absolute criteria related to stability, security, technical and financial competence
The .net registry operator should meet or exceed the following specifications of the current .net registry contained in the following sections of the current .net registry agreement:

- Nameserver Functional Specifications and Patch, Update and Upgrade Policy. Applicants should comply with appendices C.4 and C.5 of the current .net Agreement;
- Performance specifications. Applicants should have a track record of performance sufficient to demonstrate their ability to measure and perform against industry standard Service Level Requirements (SLRs). Because each of the registries currently have different SLRs and different measurement methodologies, registry performance should be measured against the average of all unsponsored registry SLRs rather than measuring each registry against its own SLRs. For example, the incumbent Registry Operator for .net currently has an SLR of approximately 99.4% for SRS availability, while .info has an SLR of 99.45% and .biz has an SLR of 99.95% for SRS availability (each measured differently). At first glance, the track record of a registry with a lower SLR (99.4%) may appear to be better than the track record of one with a higher SLR (99.95%) in terms of meeting its own SLRs, even though the registry operator with the higher SLR may have, in actuality, achieved a higher level of performance. Any measurement of SLRs should be made with consistent criteria. Examples of appropriate SLAs to measure include:
  - appendix C.4, "Nameserver functional specifications":
    - Shared Registration System
    - SRS Availability
    - SRS Processing Time (Add, Modify, Delete)
    - SRS Processing Time (Query Domain)
    - SRS Planned Outage (Duration)
    - SRS Extended Planned Outage (Duration)
  - appendix C.5, "Patch, update and upgrade policy":
    - Nameserver Performance Specs
    - Nameserver Availability
    - Nameserver Resolution Processing Time
    - Nameserver Update Frequency
    - Cross-Network Nameserver Performance
  - appendix D, "Performance specifications":
    - Whois Performance Specs
    - Whois Availability
    - Whois Processing Time
    - Whois Update Frequency
    - Whois Planned Outage (Duration)
    - Whois Extended Planned Outage
- Service-Level Agreement. SLA measurements and credits should be commensurate with the current industry standards amongst all unsponsored gTLDs.
- Whois Specification – Public Whois. Requirement that the entity operating .net shall act as the authoritative Whois service for all second-level Internet domain names registered in the .net top-level domain and for all hosts registered using such names). The Whois service should offer the ability to search by “Domain Name”, “Registrar” and “Nameserver.”
o appendix E, "Service Level Agreement", Similar formats to Appendix O of .net Agreement if "Thin Registry Model"

o appendix O*, "Whois Specification — Public Whois", Similar formats to Appendix O of .org, .info or .biz Agreements if "Thick Registry Model"

• appendix P*, "Whois Data Specification — Independent Whois Provider". Registry Operator shall provide bulk access to up-to-date data concerning domain name and nameserver registrations maintained by Registry Operator in connection with the Registry TLD on a daily schedule, only for purposes of providing free public query-based access to up-to-date data concerning domain name and nameserver registrations in multiple TLDs to a party designated from time to time in writing by ICANN. The Content, Format and Process shall be as set forth in:
  o Appendix P of .net Agreement if "Thin Registry Model"
  o appendix Q*, "Whois Data Specification — ICANN", Appendix P of .org, .info or .biz Agreements if "Thick Registry Model"

• Whois Data Specification — ICANN. Registry Operator shall provide bulk access by ICANN to up-to-date data concerning domain name and nameserver registrations maintained by Registry Operator in connection with the Registry TLD on a daily schedule, only for purposes of verifying and ensuring the operational stability of Registry Services, the DNS, and the Internet. The Content, Format and Process shall be as set forth in:
  o appendix R, "Data Escrow Specification", * reference the .org agreement if a thick registry model is proposed. Similar to Appendix Q of .net Agreement if "Thin Registry Model"

• In addition annex 3 contains a reference to documents submitted to the subcommittee including submissions from Neulevel and Verisign Inc. Due account has been taken of the relevant parts of these while maintaining the characteristic broad approach of this report. Should implementation of these broad criteria be required beyond the specifications of the current .net agreement the GNSO leaves that to the expertise of the ICANN SESAC (Security and Stability Advisory Committee) and ICANN staff. Similar to Appendix Q of .org, .info or .biz Agreements if "Thick Registry Model"

• Data Escrow Specification. The Data Escrow requirements should comport with the latest industry standards as reflected in Appendix R of the .org, .biz and .info unsponsored gTLD agreements.

• Security, Stability & Scalability. The entity chosen to operate the .net registry must:
  o be able to demonstrate that they possess the capability to maintain .net registry functions in an efficient and reliable manner, while at the same time be scalable to support future growth, including:
    Scale sufficient to handle the existing number of names and projected growth.
    Scale to handle existing DNS query loads including normal peaks and projected growth.
    Scale to handle events such as DDoS attacks and traffic generated by viruses, worms and spam. RFC 2870, “Root Name Server Operational Requirements”, requires excess query capacity of three times the measured peak rate for those critical name servers.
    Demonstrated capability of restarting from complete outage to avoid prolonged outage due to initial overload.
Multiple geographically dispersed points of presence to handle simultaneous attacks across the network.

- **demonstrate disaster recovery capability.** Commit to 100% accuracy of .net zone data for resolution
- **show its commitment to a high quality of service for all .net users worldwide.** Demonstrate a diversity of DNS resolution infrastructure to prevent single points of failure
- **Make registration, assistance and other registry services available to ICANN, accredited registrars in different time zones and different languages.**

**Migration/Transition Plan.** If applicable, applicants should document their plan for migrating .net from the current registry operator with specific attention paid to maintaining existing functional capabilities existing at the time the RFP is issued, performance specifications and protocol interfaces (i.e. registry registrar protocol RRP to extensible registry protocol EPP migration). Applicants should demonstrate that the migration will have a minimal impact on performance of the registration system and no impact on the resolution of existing .net domain names.

**Security of Infrastructure.** Applicants should be required to demonstrate their capability to establish the following:
- A secure environment in which the registry infrastructure is to be operated.
- Their Failure/Disaster Recovery Capability, including a plan and assets to support failure of any or all of the infrastructure

**Operational Expertise.** Subject to the provision of the following data to the Applicants, Applicants should demonstrate that they have staff in place with technical skills, expertise and experience to operate the Registry in order to maintain current levels of performance, including:
- To operate at current volume and expected growth volumes.
- To maintain operation during periods of increased traffic or activity such as DDoS.
- To minimize vulnerabilities in infrastructure.
- To manage any planned outages to minimize impact to Registrars and end users.
- To contribute to standards creation and other issues of Internet development.

**Customer Service.** Applicants should possess:
- Skilled staff operating 24x7 to support Registrars’ hours of operation.
- Sufficient staff to support current and expected registrar volumes.
- International language skills.
- Technical on-site assistance available (engineering) on 24x7 basis.

**Minimum financial stability should**

- Financial Stability: Significant investment will be required to ensure the operator has the means to meet its ambitions and the likelihood of continuity. Establish the initial registry system to support the scale and performance levels of .net. The applicant should be required to demonstrate resources sufficient to make an investment at levels required to scale the operation initially and maintain and grow the domain base and infrastructure. The applicant also should possess substantial cash reserves and a record of sustained growth in revenue and profitability.

**Relative criteria**
Relative Criteria

1. Relative criteria related to promotion of competition

- Maximization of consumer choice. Once an applicant has qualified by meeting baseline stability, technical and financial criteria, positive consideration should be given to ICANN’s mission to improve consumer choice and competition. For the purpose of this criteria, the consumers or customers of the .net registry operator are the registrars.
  
  - Pricing. Price is here defined as the registry price (currently $6.00). Once an applicant has qualified by meeting the absolute criteria, preference should be given to proposals offering lower pricing of the domain name.

- Innovation and value. It is possible that applications will offer innovation or new services, and hence affect the value proposition. An assessment based on price should be balanced with the value proposition offered. Any proposed innovation or new service should be described together with an assessment of their value by the affected stakeholders (typically registrars or registrants). Once the absolute criteria are met, the entity selected should be the one that presents the greatest value to ICANN, the Registrars and Registrants.
  
  - should be described,
  - together with an assessment of the value of them to the affected stakeholders (typically registrants or registrars),
  - and applicants must identify their capability to offer such services based on their prior experience in this area.

- Industry Relations. Consideration will be given to the applicant's track record in constructively contributing to the competitive nature and smooth functioning of the Internet through participation in the ICANN policy development process and through its dealings with other industry players.

2. Relative criteria relating to stability, security, technical and financial competence

- Consideration should be given to technical stability based on a plural supply base diversity of suppliers and vendors in order to reduce the impact of any one provider failure.

- Mean time to resolution for additions or changes to the .net zone file should not exceed the current time with the existing registry operator. Preference should be given to proposals offering enhanced or faster resolution.

- Industry Standards. In the operation of the .net domain name registry, including any proposed registry services, the registry operator must demonstrate a commitment to abide by industry best practices and standards as they affect the technical stability of the DNS.

3. Relative criteria related to existing registry services Dot.

. net currently offers registry services such as the Redemption Grace Period, and the support of internationalized domain names in accordance with the IDN Guidelines (http://www.icann.org/general/idn-guidelines-20jun03.htm), and the pending Wait List Service (WLS). Applicants should be asked “Does the applicant wish to maintain all existing registry services existing at the time the RFP is released?”
• ☐ If yes, please provide specifics and demonstrate the technical and legal ability of the registry to maintain existing services.
• ☐ If no, please expand on any issues relating to the withdrawal of such services.

1 Although it is contemplated by VeriSign to introduce the Wait List Service (WLS) in the near future, the .net registry operator should be directed to maintain the status quo and be prohibited from introducing any new service beginning on the date the RFP is issued.