

RyC Recommendations for Whois Studies – 29 Oct 08

Reference: WHOIS Study Hypotheses Group Report to the GNSO Council
Prepared by the WHOIS Study Hypothesis Group - 26 August 2008

The gTLD Registries Constituency (RyC) submits the recommendations found in this document for consideration by the GNSO Council with regard to further pursuit of proposed Whois Studies. The RyC developed the recommendations by applying the method described in Appendix A. The results obtained by using that method are contained in Appendix B.

Executive Summary

The RyC recommendations are grouped as follows:

1. *Study Consolidation Recommendations* – This section recommends that several studies with related hypotheses be combined to form three larger studies and those consolidated studies are incorporated in other recommendations that follow.
2. *Study Feasibility Recommendation* – The RyC recommends that proposed studies be evaluated with regard to feasibility before preparing any cost estimates and that estimates should not be attempted for studies that appear to be undoable.
3. *Cost Estimate Recommendations for Formal Studies* – The RyC identified 11 sets of hypotheses that would appear to require a formal empirical study performed by a professional organization. Based on the potential for adding value to future Whois policy development work, five of these were assigned a top priority, three a medium priority and three a low priority.
4. *Fact Gathering & Analysis Recommendations* – The RyC identified four (4) hypotheses for which it is believed that that full blown formal studies are not needed to test the hypotheses because they could be evaluated by 1) gathering available facts and 2) analyzing the facts. Analysis may or may not need to be done by professionals. In cases where professionals are needed to perform analysis, Staff might need to prepare cost estimates. One of these was assigned a top priority, two medium and one low.
5. *Fact Gathering Recommendations* - The RyC identified seven (7) sets of hypotheses for which it believes that formal studies are not needed to test the hypotheses because they could be evaluated by gathering available facts with little need for analysis and without using a professional organization (i.e., direct surveys of registrars, review of existing studies or other documents, consulting with experts, data gathering exercise). two of these were assigned a medium priority and the others were all assigned low priorities.

6. *Studies that should not be pursued further* – The RyC identified three (3) hypotheses that it believes should be handled by ICANN Compliance Staff rather than by a study.

RyC Recommendations

1. Study Consolidation Recommendations

The RyC recommends that several of the proposed studies be combined as indicated in this section.

1.1 Combine Area 1 Studies 1, 14, 21 & GAC data set 2 to create **Study A**.

1	<p>Public access to WHOIS data is responsible for a material number of cases of misuse that have caused harm to natural persons whose registrations do not have a commercial purpose. http://forum.icann.org/lists/whois-comments-2008/msg00001.html</p> <p>Note: In any analysis of misuse, it is critical to determine whether the data was, or could easily have been obtained from a source other than Whois.</p>
14	<p>The Whois database is used only to a minor extent to generate spam and other such illegal or undesirable activities. http://forum.icann.org/lists/whois-comments-2008/msg00017.html</p> <p>Note: The methods employed by previous studies of Whois and the results of those studies should be considered when designing subsequent studies in this area. For example, ICANN's Security and Stability Advisory Committee (SSAC) has already studied email spam arising from Whois data, including an analysis of data protection measures used by ICANN-accredited registrars. See "Is the WHOIS service a source for email addresses for spammers?" at http://gnso.icann.org/correspondence/ssac-whois-study-27oct07.pdf . Other studies of Whois misuse can be found at: http://gnso.icann.org/drafts/whois-available-data-points-04oct07.pdf.</p>

21 & GAC data set 2	<p>There are significant abuses caused by public display of Whois. Significant abuses would include use of WHOIS data in spam generation, abuse of personal data, loss of reputation or identity theft, security costs and loss of data (note – definition is from GAC recommendation 2). http://forum.icann.org/lists/whois-comments-2008/msg00026.html</p> <p>Note: As an example of such abuses, the original submitter noted that public Whois databases are being used and mined regularly by direct mail and related companies for their commercial benefit to compile personal data which they then use, combine, sell and distribute as part of massive lists and databases.</p>
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1.2 Combine the following studies from Areas 4 & 5 to create **Study B**: 13, 17, GAC 1 & GAC 11.

17	<p>The majority of domain names registered by proxy/privacy services are used for abusive and/or illegal purposes. http://forum.icann.org/lists/whois-comments-2008/msg00020.html</p>
GAC 1	<p>The legitimate use of gTLD WHOIS data is curtailed or prevented by the use of proxy and privacy registration services.</p>
13 & GAC 11	<p>13. http://forum.icann.org/lists/whois-comments-2008/msg00016.html</p> <p>a) The number of proxy registrations is increasing when compared with the total number of registrations.</p> <p>b) Proxy and private WHOIS records complicate the investigation and disabling of phishing sites, sites that host malware, and other sites perpetrating electronic crime as compared with non-proxy registrations and non-private registrations.</p> <p>c) Domain names registered using proxy or privacy services are disproportionately associated with phishing, malware, and other electronic crime as compared with non-proxy registrations or non-private registrations.</p> <p>d) (GAC 11) Domain names registered using proxy or privacy services are disproportionately associated with fraud and other illegal activities as compared with non-proxy registrations.</p>

1.3 Combine GAC studies 5 & 6 from Area 7 to create **Study C**.

GAC 5	A significant percentage of registrants who are legal entities are providing inaccurate Whois data that implies they are natural persons. Furthermore the percentage of registrants with such inaccuracies will vary significantly depending upon the nation or continent of registration. (These hypotheses could be combined with GAC 6.)
GAC 6	A significant percentage of registrants who are operating domains with a commercial purpose are providing inaccurate Whois data that implies they are acting without commercial purposes. Furthermore the percentage of registrants with such inaccuracies will vary significantly depending upon the nation or continent of registration. (These hypotheses could be combined with GAC 5.)

2. Study Feasibility Recommendation

Before actually estimating costs for any studies the RyC suggests that Staff attempt to determine the feasibility of each proposed study. Cost estimates should not be attempted for studies that appear to be unfeasible.

3. Cost Estimate Recommendations for Formal Studies

Assuming that the applicable studies appear to be feasible, the RyC recommends that Staff take the steps necessary to prepare cost estimates for performing the studies listed in this Section. In case it is decided that there are too many studies in this section, RyC priorities are shown in parentheses.

Area 1, Study A – Studies 1, 14 & 21 and GAC Data Set 2 (top priority)

Hypotheses:

Study 1: Public access to WHOIS data is responsible for a material number of cases of misuse that have caused harm to natural persons whose registrations do not have a commercial purpose.

<http://forum.icann.org/lists/whois-comments-2008/msg00001.html> (Note: In any analysis of misuse, it is critical to determine whether the data was, or could easily have been obtained from a source other than Whois.)

Study 14: The Whois database is used only to a minor extent to generate spam and other such illegal or undesirable activities.

<http://forum.icann.org/lists/whois-comments-2008/msg00017.html> (Note: The

methods employed by previous studies of Whois and the results of those studies should be considered when designing subsequent studies in this area. For example, ICANN's Security and Stability Advisory Committee (SSAC) has already studied email spam arising from Whois data, including an analysis of data protection measures used by ICANN-accredited registrars. See "Is the WHOIS service a source for email addresses for spammers?" at <http://gnso.icann.org/correspondence/ssac-whois-study-27oct07.pdf> . Other studies of Whois misuse can be found at: <http://gnso.icann.org/drafts/whois-available-data-points-04oct07.pdf>.)

Study 21 & GAC Data Set 2: There are significant abuses caused by public display of Whois. Significant abuses would include use of WHOIS data in spam generation, abuse of personal data, loss of reputation or identity theft, security costs and loss of data (note – definition is from GAC recommendation 2). <http://forum.icann.org/lists/whois-comments-2008/msg00026.html> (Note: As an example of such abuses, the original submitter noted that public Whois databases are being used and mined regularly by direct mail and related companies for their commercial benefit to compile personal data which they then use, combine, sell and distribute as part of massive lists and databases.)

Area 1, Study 15 (medium priority)

Hypothesis: Those using Whois data to facilitate illegal or undesirable activities (such as spam) depend on port 43 access to Whois to obtain Whois data. <http://forum.icann.org/lists/whois-comments-2008/msg00018.html>

The RyC is not sure this study is feasible.

Area 3, Study 2 (low priority)

Hypothesis: The cost of proxy services precludes some registrants from using them. <http://forum.icann.org/lists/whois-comments-2008/msg00002.html>

Areas 4 & 5, Study B - Studies 17 & 13 and GAC Studies 1 & 11 (top priority)

Hypotheses:

Area 4, Study 17: The majority of domain names registered by proxy/privacy services are used for abusive and/or illegal purposes. <http://forum.icann.org/lists/whois-comments-2008/msg00020.html>

Area 5, GAC Study 1: The legitimate use of gTLD WHOIS data is curtailed or prevented by the use of proxy and privacy registration services.

Area 5, Study 13: <http://forum.icann.org/lists/whois-comments-2008/msg00016.html> a) The number of proxy registrations is increasing when compared with the total number of registrations; b) Proxy and private WHOIS records complicate the investigation and disabling of phishing sites, sites that host malware, and other sites perpetrating electronic crime as compared with non-proxy registrations and non-private registrations; c) Domain names registered using proxy or privacy services are disproportionately associated with phishing, malware, and other electronic crime as compared with non-proxy registrations or non-private registrations.

GAC Study11: Domain names registered using proxy or privacy services are disproportionately associated with fraud and other illegal activities as compared with non-proxy registrations.

The RyC is not sure Study 17 is feasible.

Area 4, Studies 18 & 19 and GAC Studies 9 & 10 (top priority)

Hypotheses:

Study 18 - The majority of domain names registered by proxy/privacy services are used for commercial purposes and not for use by natural persons.<http://forum.icann.org/lists/whois-comments-2008/msg00021.html>

Study 19 - A disproportionate share of requests to reveal the identity of registrants who use proxy services is directed toward registrations made by natural persons.<http://forum.icann.org/lists/whois-comments-2008/msg00022.html>

GAC Study 9 - A growing and significant share of proxy/privacy service users are legal persons.

GAC Study 10 - A growing and significant share of domains that are registered using proxy/privacy services are used for commercial purposes.

Area 5, Study 6 (top priority)

Hypothesis: There is a statistically significant correlation between more restrictive ccTLD Whois policies and levels of cybercrime in a domain.<http://forum.icann.org/lists/whois-comments-2008/msg00006.html>

The RyC is not sure this study is feasible.

Area 5, GAC Study 2 (low priority)

Hypothesis: Restrictions on some or all of the legitimate uses of WHOIS have a negative economic impact.

The RyC is not sure this study is feasible.

Area 6, Study 20 (medium priority)

Hypotheses: a) Some proxy and privacy services do not promptly and reliably relay information requests to and from actual registrants; b) Some proxy and privacy services are failing to adhere to RAA 3.7.7.3 – Suggest that this be consolidated with study suggestion #3. <http://forum.icann.org/lists/whois-comments-2008/msg00023.html>

The RyC is not sure this study is feasible.

Area 6, Study 12 (low priority)

Hypothesis: Registrants would be less likely to falsify their Whois data if the sensitive information of private persons can be secured while giving law enforcement access. <http://forum.icann.org/lists/whois-comments-2008/msg00015.html>

The RyC is not sure this study is feasible.

Area 7, GAC Study 4 (medium priority)

Hypothesis: A significant number of Registrars do not apply effective methods to detect fraudulent domain name registrations, and do not take adequate corrective measures when fraudulent information is detected.

Area 7, Study C - GAC Studies 5 & 6 (top priority)

Hypotheses:

GAC Study 5: A significant percentage of registrants who are legal entities are providing inaccurate Whois data that implies they are natural persons. Furthermore the percentage of registrants with such inaccuracies will vary significantly depending upon the nation or continent of registration.

GAC Study 6: A significant percentage of registrants who are operating domains with a commercial purpose are providing inaccurate Whois data that implies they are acting without commercial purposes. Furthermore the percentage of registrants with such inaccuracies will vary significantly depending upon the nation or continent of registration.

The RyC is not sure these studies are feasible.

4. Fact Gathering & Analysis Recommendations

The RyC believes that full blown formal studies are not needed to test the hypotheses for the studies included in this section because they could be evaluated by 1) gathering available facts and 2) analyzing the facts. Analysis may or may not need to be done by professionals. In cases where professionals are needed to perform analysis, Staff might need to prepare cost estimates. RyC priorities of the studies are shown in parentheses.

4.1 Area 3, Study 5 (low priority)

Hypothesis: Whois at present allows resellers and registrars to offer privacy services to differentiate themselves on value. <http://forum.icann.org/lists/whois-comments-2008/msg00005.html>

The RyC is not sure this study is feasible.

4.2 Area 3, GAC Study 7 (medium priority)

Hypothesis: A growing share of registrants is protecting the privacy of their Whois data by using proxy registrations and/or privacy services.

4.3 Area 6, Metalitz Comment b (medium priority)

Hypothesis: A party's use of a proxy/privacy registration service reduces the party's ability to respond to a UDRP proceeding. <http://forum.icann.org/lists/whois-comments-2008/msg00012.html>

4.4 Area 7, Study 11 (top priority)

Hypothesis: The use of non-ASCII character sets in Whois records will detract from data accuracy and readability.

Note: The hypothesis should be considered in light of the fact that this is a proposed technical analysis and not a study. The original submission for this item suggests a technical analysis in lieu of a survey or statistical study. That is, a technical analysis of how the use of non-ASCII characters in Whois data elements might increase risks of inaccurate data, particularly through use of client-side software that fails to properly check the syntax of fields that contain both ASCII and non-ASCII strings. This analysis should examine and recommend methods for web display and Port 43 retrieval of non-ASCII Whois data, such that those accessing Whois can effectively read, recognize, and

reliably use the information to reach registrant contacts and name server resources. <http://forum.icann.org/lists/whois-comments-2008/msg00014.html>

5. Fact Gathering Recommendations

The RyC believes that formal studies are not needed to test the hypotheses for the studies included in this section because they could be evaluated by gathering available facts with little need for analysis and without using a professional organization (i.e., direct surveys of registrars, review of existing studies or other documents, consulting with experts, data gathering exercise). RyC priorities of the studies are shown in parentheses.

5.1 Area 1, GAC Study 3 (low priority)

Hypothesis: There are technical measures available that would effectively curtail misuse of data published on WHOIS databases while preserving legitimate use and open access to the databases.⁹

5.2 Area 2, Study 16 (low priority)

Hypotheses: 1) Registrars do not have a uniform method of disclosing or obtaining consent for collection of data for WHOIS purposes; 2) The methods employed by registrars to disclose and obtain consent have not been adjudicated with regard to their consistency with national law.

<http://forum.icann.org/lists/whois-comments-2008/msg00019.html>. (Note: Because there may be significant variations in consent in different jurisdictions, the analysis should be segmented by common legal consent regimes.)

5.3 Area 2, Study 22 (low priority)

Hypotheses: (a) More restrictive Whois policies than the general ICANN Whois requirements have been adopted by some of the 30 top ccTLDs; (b) ccTLD operators report that Whois policies have been adopted in order to become compliant with the data protection laws of the territory; (c) ccTLDs are moving towards more restrictive WHOIS policies motivated by national data protection laws. <http://forum.icann.org/lists/whois-comments-2008/msg00024.html>

5.4 Area 2, Study 23 (medium priority)

Some national data protection laws explicitly apply, or have been adjudicated to apply, to information submitted by gTLD registrants and made available via Whois. <http://forum.icann.org/lists/whois-comments-2008/msg00025.html>

5.5 Area 2, GAC Studies 12, 13, 14 & 15 (low priority)

Hypotheses:

GAC 12 - As reported by gTLD registries or registrars, as reflected in their contractual documents, or as adjudicated in relevant fora, the WHOIS contractual obligations of gTLD registries and registrars are governed by:

- the laws of their local jurisdiction, or
- the laws of the jurisdictions of their Registrants, or
- the laws of ICANN (California, U.S.), or
- some other jurisdiction.

GAC 13 - Those gTLD registries or registrars that are governed by a local jurisdiction provide a contractual mechanism (or have had a mechanism imposed upon them by law or binding decision) to resolve any conflicts between the law applicable to their WHOIS requirements and the law of any other jurisdiction.

GAC 14 - Incorporated into GAC 12.

GAC 15 - Out of scope for proposed studies of “key factual issues”

5.6 Area 2, Study 24 (low priority)

Hypothesis: Some Registrars are not obtaining agreement to terms required under section 3.7.7 of the RAA. <http://forum.icann.org/lists/whois-comments-2008/msg00013.html>

5.7 Area 3, GAC Study 8 (medium priority)

Hypothesis: A growing share of registrars and affiliates are offering proxy registration and/or privacy services.

6. Studies that should not be pursued further

The RyC does not believe that the studies in this section should be pursued any further for the reasons cited.

Area 6, Study 3

Hypothesis: Some registrars are not revealing registrant data that is shielded by proxy services when presented with requests that provide reasonable evidence

of actionable harm, as required under RAA 3.7.7.3.

<http://forum.icann.org/lists/whois-comments-2008/msg00003.html>

The RyC believes that this is a compliance issue that should be handled by the ICANN Compliance Staff.

Area 6, Metalitz Comment a

Hypothesis: Some registrars operating proxy/privacy services are not revealing registrant data when requested in a UDRP proceeding.

The RyC believes that this is a compliance issue that should be handled by the ICANN Compliance Staff.

Area 7, Study 8

Hypothesis: Some Registrars knowingly tolerate inaccurate or falsified Whois data so as to attract and retain registrations by spammers and other bad actors, and do not face deterrent consequences for doing so.

<http://forum.icann.org/lists/whois-comments-2008/msg00008.html>

The RyC is not sure that this study is feasible. If it is feasible, the RyC believes that this is a compliance issue that should be handled by the ICANN Compliance Staff.

Appendix A

A Method for Developing a RyC Statement on Whois Studies

Version 2 - 13 October 2008

The purpose of this paper is to present a methodology for developing a RyC Statement in response to the report of the GNSO Whois Hypotheses WG. In particular, the RyC needs to provide input to the GNSO Council with regard to which, if any, proposed Whois hypotheses should be pursued further by asking ICANN staff to prepare cost estimates and related information.

Recommended Steps

1. Categorize hypotheses into the following categories:
 - a. Those that could be evaluated by gathering available facts with little need for analysis and without using a professional organization (i.e., direct surveys of registrars, review of existing studies or other documents, consulting with experts, data gathering exercise)
 - b. Those that could be tested by gathering available data and then analyzing the data; the analysis may or may not need to be done by professionals.
 - c. Those that would require significant empirical studies and likely would need to be performed by a professional organization.
2. Combine hypotheses that could be tested in the same or similar study and possibly reduce costs.
3. Using the results of steps 1 & 2 above, apply criteria 1 & 2 below to eliminate studies if possible.
4. Evaluate remaining hypotheses using criterion 3 below; it might be useful to rate the possible value of testing hypotheses relative future policy development (e.g., 1-5 or high/medium/low)
5. Examine the full set of studies that have value from step 4 above and apply criterion 4 below to determine if there is an equitable balance of hypotheses; if not make adjustments.
6. Develop final recommendations for requesting cost estimates of studies.

Criteria for choosing studies for cost estimates

1. Studies should not be pursued further if there is reasonable consensus in the GNSO that evidence is sufficient to substantiate or refute a hypothesis.
2. Studies should not be pursued further if there is reasonable consensus in the GNSO that a hypothesis has already been substantiated or refuted by previous studies.
3. Requests for cost estimates should only be considered for proposed studies if the studies have the potential to substantiate or refute hypotheses and thereby provide results might contribute to the process of

identifying where Whois policy may or may not be needed and, in cases where policy may be useful, provide possible direction for policy development work. (e.g., studies that would not contribute to policy development but might help in other areas like compliance should be handled by the ICANN Compliance Office.)

4. Is the study doable?
5. If it is decided to request cost estimates for any studies, the set of studies requested should provide a reasonable balance between those that focus on privacy concerns and those that focus on legitimate needs for access to Whois data.

Values of Proposed Studies

Values of proposed studies were assigned from zero (0) to five (5) with 5 representing the highest perceived value to future Whois policy development work. A study assigned a value of zero should not be pursued further.

Appendix B

RyC Categorization of Whois Hypotheses v.2 – 13 Oct 08

Ref: WHOIS Study Hypotheses Group Report to the GNSO Council
Prepared by the WHOIS Study Hypothesis Group - 26 August 2008

Whois Study Hypotheses Table

Hypotheses for Whois Studies as developed by the Whois Study Hypotheses WG

Notes regarding the hypotheses:

Note (1): throughout this document the term "registrant" or "registrant data" refers to what is sometimes called the "beneficial user" or customer of a proxy/privacy service. In that regard, note the following from the Registrar Accreditation Agreement (RAA) 3.7.7.3: "Any Registered Name Holder that intends to license use of a domain name to a third party is nonetheless the Registered Name Holder of record and is responsible for providing its own full contact information and for providing and updating accurate technical and administrative contact information adequate to facilitate timely resolution of any problems that arise in connection with the Registered Name. A Registered Name Holder licensing use of a Registered Name according to this provision shall accept liability for harm caused by wrongful use of the Registered Name, unless it promptly discloses the identity of the licensee to a party providing the Registered Name Holder reasonable evidence of actionable harm." See <http://www.icann.org/registrars/raa-agreement-17may01.htm>.

Note (2): The Hypotheses Table below is intended to categorize, consolidate, and add relevant detail to the hypotheses originally submitted. In some cases, as with the GAC recommendations, the hypotheses needed to be inferred from the information submitted. As Council considers which of these studies should be pursued, it will be helpful to refer to the original study submissions (posted at <http://forum.icann.org/lists/whois-comments-2008/>) These original submissions include statements of how study results could lead to an improvement in WHOIS policy. Many submitters also described the type of survey/study needed, including data elements, data sources, population to be surveyed, and sample size. These original submissions should be used by council and its consultants in designing studies and deciding which are worthwhile to pursue. The GAC suggestions can be found at: <http://www.icann.org/correspondence/karlins-to-thrush-16apr08.pdf>.

Note (3): Further work regarding some of the proposed studies should include consultation with ICANN contract compliance staff to minimize overlap or duplication with their work.

Note (4): The GAC has suggested that we collect two data sets, as follows:

- the amount and source of traffic accessing WHOIS servers and the types and numbers of different groups of users and what those users are using WHOIS data for; and
- the types and extent of misuses of WHOIS data and what harm is caused by each type of misuse, including economic, use of WHOIS data in SPAM generation, abuse of personal data, loss of reputation or identity theft, security costs and loss of data.

Note (5): In cases where the original hypothesis offered by a submitter was modified by the group, effort was made to contact the submitter for input and feedback, and to incorporate their views where possible. The Whois study group also provided the GAC with draft hypotheses for the proposals they recommended, but given the abbreviated time frame and the fact that the GAC does not meet on an intercession basis, no substantive response was received by the deadline for this report.

The following study categories are used in the table that follows:

- a. Those that could be evaluated by gathering available facts with little need for analysis and without using a professional organization (i.e., direct surveys of registrars, review of existing studies or other documents, consulting with experts, data gathering exercise)
- b. Those that could be tested by gathering available data and then analyzing the data; the analysis may or may not need to be done by professionals.
- c. Those that would require significant empirical studies and likely would need to be performed by a professional organization.

Study	Hypotheses	Do?	Cat	Value 0-5	Combine w/
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<p>Area 1</p>	<p>WHOIS misuse studies</p> <p>The hypotheses in Area 1 generally regard "public access to Whois", but there are distinct aspects of public access that should be measured separately in any studies designed:</p> <p>1) some registrars prevent automated email harvesting by allowing public web-based access to Whois registrant data only after the user deciphers a "captcha" image.</p> <p>2) registrants who use proxy registration or other privacy services should be measured separately from those registrants whose actual information is open for public access.</p>	-	-	-	-
<p>1</p>	<p>Public access to WHOIS data is responsible for a material number of cases of misuse that have caused harm to natural persons whose registrations do not have a commercial purpose.</p> <p>http://forum.icann.org/lists/whois-comments-2008/msg00001.html</p> <p>Note: In any analysis of misuse, it is critical to determine whether the data was, or could easily have been obtained from a source other than Whois.</p>		c	5	14 & 21

14	<p>The Whois database is used only to a minor extent to generate spam and other such illegal or undesirable activities. http://forum.icann.org/lists/whois-comments-2008/msg00017.html</p> <p>Note: The methods employed by previous studies of Whois and the results of those studies should be considered when designing subsequent studies in this area. For example, ICANN's Security and Stability Advisory Committee (SSAC) has already studied email spam arising from Whois data, including an analysis of data protection measures used by ICANN-accredited registrars. See "Is the WHOIS service a source for email addresses for spammers?" at http://gnso.icann.org/correspondence/ssac-whois-study-27oct07.pdf . Other studies of Whois misuse can be found at: http://gnso.icann.org/drafts/whois-available-data-points-04oct07.pdf.</p>		c	5	1 & 21
15	<p>Those using Whois data to facilitate illegal or undesirable activities (such as spam) depend on port 43 access to Whois to obtain Whois data. http://forum.icann.org/lists/whois-comments-2008/msg00018.html</p>	?	?	3	

21 & GAC data set 2	<p>There are significant abuses caused by public display of Whois. Significant abuses would include use of WHOIS data in spam generation, abuse of personal data, loss of reputation or identity theft, security costs and loss of data (note – definition is from GAC recommendation 2). http://forum.icann.org/lists/whois-comments-2008/msg00026.html</p> <p>Note: As an example of such abuses, the original submitter noted that public Whois databases are being used and mined regularly by direct mail and related companies for their commercial benefit to compile personal data which they then use, combine, sell and distribute as part of massive lists and databases.</p>		c	5	1 & 14
GAC 3	<p>There are technical measures available that would effectively curtail misuse of data published on WHOIS databases while preserving legitimate use and open access to the databases.⁹</p>		a	2	
Area 2	<p>Compliance with data protection laws and the Registrar Accreditation Agreement</p> <p>NOTE: GAC #s 12, 13 and 14 are all interdependent and their hypotheses are also interdependent.</p>	-	-	-	-

16	<p>Two hypotheses:</p> <ol style="list-style-type: none"> 1. Registrars do not have a uniform method of disclosing or obtaining consent for collection of data for WHOIS purposes. 2. The methods employed by registrars to disclose and obtain consent have not been adjudicated with regard to their consistency with national law. <p>http://forum.icann.org/lists/whois-comments-2008/msg00019.html</p> <p>Note: Because there may be significant variations in consent in different jurisdictions, the analysis should be segmented by common legal consent regimes.</p>		a	2	
22	<p>(a) More restrictive Whois policies than the general ICANN Whois requirements have been adopted by some of the 30 top ccTLDs.</p> <p>(b) ccTLD operators report that Whois policies have been adopted in order to become compliant with the data protection laws of the territory.</p> <p>(c) ccTLDs are moving towards more restrictive WHOIS policies motivated by national data protection laws.</p> <p>http://forum.icann.org/lists/whois-comments-2008/msg00024.html</p>		a	2	
23	<p>Some national data protection laws explicitly apply, or have been adjudicated to apply, to information submitted by gTLD registrants and made available via Whois.</p> <p>http://forum.icann.org/lists/whois-comments-2008/msg00025.html</p>		a	3	

<p>GAC 12, GAC 13, GAC 14 & GAC 15</p>	<p>GAC 12 - As reported by gTLD registries or registrars, as reflected in their contractual documents, or as adjudicated in relevant fora, the WHOIS contractual obligations of gTLD registries and registrars are governed by:</p> <ul style="list-style-type: none"> • the laws of their local jurisdiction, or • the laws of the jurisdictions of their Registrants, or • the laws of ICANN (California, U.S.), or • some other jurisdiction. <p>GAC 13 - Those gTLD registries or registrars that are governed by a local jurisdiction provide a contractual mechanism (or have had a mechanism imposed upon them by law or binding decision) to resolve any conflicts between the law applicable to their WHOIS requirements and the law of any other jurisdiction.</p> <p>GAC 14 - Incorporated into GAC 12.</p> <p>GAC 15 - Out of scope for proposed studies of “key factual issues”</p>		a	1	
24	<p>Some Registrars are not obtaining agreement to terms required under section 3.7.7 of the RAA. http://forum.icann.org/lists/whois-comments-2008/msg00013.html</p>		a	1	
Area 3	Availability of privacy services	-	-	-	-
2	<p>The cost of proxy services precludes some registrants from using them. http://forum.icann.org/lists/whois-comments-2008/msg00002.html</p>		c	2	
5	<p>Whois at present allows resellers and registrars to offer privacy services to differentiate themselves on value. http://forum.icann.org/lists/whois-comments-2008/msg00005.html</p>	?	b	1	

GAC 7	A growing share of registrants is protecting the privacy of their Whois data by using proxy registrations and/or privacy services.		b	3	8
GAC 8	A growing share of registrars and affiliates are offering proxy registration and/or privacy services.		a	3	7
Area 4	Demand and motivation for use of privacy services	-	-	-	-
17	The majority of domain names registered by proxy/privacy services are used for abusive and/or illegal purposes. http://forum.icann.org/lists/whois-comments-2008/msg00020.html	?	c	4	GAC 1, 13, GAC 11
18, 19, GAC 9 & GAC 10	18 - The majority of domain names registered by proxy/privacy services are used for commercial purposes and not for use by natural persons. http://forum.icann.org/lists/whois-comments-2008/msg00021.html 19 - A disproportionate share of requests to reveal the identity of registrants who use proxy services is directed toward registrations made by natural persons. http://forum.icann.org/lists/whois-comments-2008/msg00022.html GAC 9 - A growing and significant share of proxy/privacy service users are legal persons. GAC 10 - A growing and significant share of domains that are registered using proxy/privacy services are used for commercial purposes.		c	4	
Area 5	Impact of WHOIS data protection on crime and abuse	-	-	-	-
6	There is a statistically significant correlation between more restrictive ccTLD Whois policies and levels of cybercrime in a domain. http://forum.icann.org/lists/whois-comments-2008/msg00006.html	?	c	5	

GAC 1	The legitimate use of gTLD WHOIS data is curtailed or prevented by the use of proxy and privacy registration services.		c	5	17, 13, GAC 11
13 & GAC 11	<p>13. http://forum.icann.org/lists/whois-comments-2008/msg00016.html</p> <p>a) The number of proxy registrations is increasing when compared with the total number of registrations.</p> <p>b) Proxy and private WHOIS records complicate the investigation and disabling of phishing sites, sites that host malware, and other sites perpetrating electronic crime as compared with non-proxy registrations and non-private registrations.</p> <p>c) Domain names registered using proxy or privacy services are disproportionately associated with phishing, malware, and other electronic crime as compared with non-proxy registrations or non-private registrations.</p> <p>d) (GAC 11) Domain names registered using proxy or privacy services are disproportionately associated with fraud and other illegal activities as compared with non-proxy registrations.</p>		c	4	17, GAC 1
GAC 2	Restrictions on some or all of the legitimate uses of WHOIS have a negative economic impact.	?	c	2	
Area 6	Proxy registrar compliance with law enforcement and dispute resolution requests	-	-	-	-
3	Some registrars are not revealing registrant data that is shielded by proxy services when presented with requests that provide reasonable evidence of actionable harm, as required under RAA 3.7.7.3. http://forum.icann.org/lists/whois-comments-2008/msg00003.html	?	c	0	

Metalitz Comment	a. Some registrars operating proxy/privacy services are not revealing registrant data when requested in a UDRP proceeding. b. A party's use of a proxy/privacy registration service reduces the party's ability to respond to a UDRP proceeding. http://forum.icann.org/lists/whois-comments-2008/msg00012.html		b	a - 0 b - 3	
20	a. Some proxy and privacy services do not promptly and reliably relay information requests to and from actual registrants. b. Some proxy and privacy services are failing to adhere to RAA 3.7.7.3 – Suggest that this be consolidated with study suggestion #3. http://forum.icann.org/lists/whois-comments-2008/msg00023.html	?	c	3	
12	Registrants would be less likely to falsify their Whois data if the sensitive information of private persons can be secured while giving law enforcement access. http://forum.icann.org/lists/whois-comments-2008/msg00015.html	X	c	2	
Area 7	WHOIS data accuracy				
8	Some Registrars knowingly tolerate inaccurate or falsified Whois data so as to attract and retain registrations by spammers and other bad actors, and do not face deterrent consequences for doing so. http://forum.icann.org/lists/whois-comments-2008/msg00008.html	?	?	0	

11	<p>The use of non-ASCII character sets in Whois records will detract from data accuracy and readability.</p> <p>Note: The hypothesis should be considered in light of the fact that this is a proposed technical analysis and not a study. The original submission for this item suggests a technical analysis in lieu of a survey or statistical study. That is, a technical analysis of how the use of non-ASCII characters in Whois data elements might increase risks of inaccurate data, particularly through use of client-side software that fails to properly check the syntax of fields that contain both ASCII and non-ASCII strings. This analysis should examine and recommend methods for web display and Port 43 retrieval of non-ASCII Whois data, such that those accessing Whois can effectively read, recognize, and reliably use the information to reach registrant contacts and name server resources.</p> <p>http://forum.icann.org/lists/whois-comments-2008/msg00014.html</p>		b	5	
GAC 4	A significant number of Registrars do not apply effective methods to detect fraudulent domain name registrations, and do not take adequate corrective measures when fraudulent information is detected.	?	c	3	
GAC 5	A significant percentage of registrants who are legal entities are providing inaccurate Whois data that implies they are natural persons. Furthermore the percentage of registrants with such inaccuracies will vary significantly depending upon the nation or continent of registration. (These hypotheses could be combined with GAC 6.)	?	c	4	GAC 6

GAC 6	A significant percentage of registrants who are operating domains with a commercial purpose are providing inaccurate Whois data that implies they are acting without commercial purposes. Furthermore the percentage of registrants with such inaccuracies will vary significantly depending upon the nation or continent of registration. (These hypotheses could be combined with GAC 5.)	?	c	4	GAC 5
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