	Thick Whois Policy Development Process Date:	
1		
2		
3		
	Initial Papart on the	
4	Initial Report on the	
5	Thick Whois	
6	Policy Development Process	
7		
8		
9	STATUS OF THIS DOCUMENT	
10	This is the Initial Report on thick Whois, prepared by ICANN Staff for submission to the GNSO Council on	
11	[Date]. ICANN Staff will prepare a Final Report following review of the public comments received on this Initial	
		Berry Cobb 6/6/13 17:08
12	Report.	
12 13	Report.	Comment [1]: Enter date
	Report.	
13	Report.	
13 14	Report.	
13 14 15	Report.	
13 14 15 16	Report.	
13 14 15 16 17	SUMMARY	
13 14 15 16 17 18		
13 14 15 16 17 18	SUMMARY	
13 14 15 16 17 18 19	SUMMARY This report is submitted to the GNSO Council and posted for public comment as a required step in this GNSO	
13 14 15 16 17 18 19 20 21	SUMMARY This report is submitted to the GNSO Council and posted for public comment as a required step in this GNSO	
13 14 15 16 17 18 19 20 21 22	SUMMARY This report is submitted to the GNSO Council and posted for public comment as a required step in this GNSO	
13 14 15 16 17 18 19 20 21 22 23	SUMMARY This report is submitted to the GNSO Council and posted for public comment as a required step in this GNSO	
13 14 15 16 17 18 19 20 21 22 23	SUMMARY This report is submitted to the GNSO Council and posted for public comment as a required step in this GNSO	

TABLE OF CONTENTS

26	1.	EXECUTIVE SUMMARY	<u>3,</u>	Marika Konings 10/6/13 13:44 Deleted: 4
27	2.	OBJECTIVE AND NEXT STEPS	4	Marika Konings 10/6/13 13:44 Deleted: 5
28	3.	BACKGROUND	<u>5,</u>	Marika Konings 10/6/13 13:44 Deleted: 6
29	4.	APPROACH TAKEN BY THE WORKING GROUP	<u>13,</u>	Marika Konings 10/6/13 13:44 Deleted: 14
30	5.	DELIBERATIONS OF THE WORKING GROUP	<u>15,</u>	Marika Konings 10/6/13 13:44 Deleted: 16
31	6.	COMMUNITY INPUT	40,	Marika Konings 10/6/13 13:44 Deleted: 41
32	7.	WORKING GROUP PRELIMINARY RECOMMENDATIONS AND OBSERVATIONS	41,	Marika Konings 10/6/13 13:44 Deleted: 42
33	8.	CONCLUSIONS AND NEXT STEPS	<u>46,</u>	Marika Konings 10/6/13 13:44 Deleted: 47
34	ANN	NEX A – PDP WG CHARTER	47,	Marika Konings 10/6/13 13:44 Deleted: 48
35	ANN	NEX B – TEMPLATE FOR CONSTITUENCY & STAKEHOLDER GROUP STATEMENT	<u>57,</u>	Marika Konings 10/6/13 13:44 Deleted: 58
36	ANN	NEX C – REQUEST FOR INPUT FROM ICANN SO / ACS	<u>61,</u>	Marika Konings 10/6/13 13:44 Deleted: 62
37	ANI	NEX D – TOPICS POLL RESULTS	<u>63</u> ,	Marika Konings 10/6/13 13:44 Deleted: 64
38	ANI	NEX E – AGREEMENT EXCERPTS ON WHOIS RESPONSE FORMAT	<u>69</u> ,	Marika Konings 10/6/13 13:44 Deleted: 70
39	ANI	NEX F – TABLE COMPARISON MATRIX	<u>71,</u>	Marika Konings 10/6/13 13:44 Deleted: 72

Initial Report on thick Whois Author: Marika Konings

1. Executive Summary

TO BE COMPLETED

575859

56

1.1 Background

60 61

62

63

64 65

66

- 1.2 Deliberations of the Working Group
 - The thick Whois Working Group started its deliberations on [date] where it was decided to continue the work primarily through weekly conference calls, in addition to e-mail exchanges.
 - Section 5 provides an overview of the deliberations of the Working Group conducted both by conference call as well as e-mail threads.

676869

- 1.3 WG Preliminary Recommendations
 - NOTE TO WG MEMBERS: Sections 5 and 7 will be summarized here, once editing is complete. For now, look to those sections for current draft of recommendations

71 72

73

70

1.4 Stakeholder Group / Constituency Statements & Initial Public Comment Period

.

74 75

76

77

78

- 1.5 Conclusions and Next Steps
 - The Working Group aims to complete this section of the report in the second phase of the PDP, following a second public comment period.

79

2. Objective and Next Steps

82	This Initial Ren	ort on thick	Whois is no	anarod as ro	auired by the	a GNSO Police	/ Development	Drocace
04	THIS IIIILIAI NED	OIL OII LIIICK	WITOIS IS DI	epareu as re	quired by the	e diviso Policy	, Developilielit	Process

- as stated in the ICANN Bylaws, Annex A (see http://www.icann.org/general/bylaws.htm#AnnexA).
- The Initial Report will be posted for public comment for at least 30 days, plus a 21-day reply period.
- 85 The comments received will be analyzed and used for redrafting of the Initial Report into a Final
- $\,\,86\,\,$ $\,$ Report to be considered by the GNSO Council for further action.

87

81

88

3. Background

3.1 Process background

■ The IRTP B Working Group recommended requesting an Issue Report on the requirement of thick Whois for all incumbent gTLDs in its 30 May 2011 Final Report. That recommendation went on to state:

The benefit would be that in a thick registry one could develop a secure method for a gaining registrar to gain access to the registrant contact information. Currently there is no standard means for the secure exchange of registrant details in a thin registry. In this scenario, disputes between the registrant and admin contact could be reduced, as the registrant would become the ultimate approver of a transfer.

■ Following that recommendation, the GNSO Council requested an Issue Report on thick Whois at its meeting on 22 September 2011. The Issue Report was expected to 'not only consider a possible requirement of thick Whois for all incumbent gTLDs in the context of IRTP, but should also consider any other positive and/or negative effects that are likely to occur outside of IRTP that would need to be taken into account when deciding whether a requirement of thick Whois for all incumbent gTLDs would be desirable or not'.

In accordance with the proposed revised GNSO Policy Development Process, <u>a Preliminary Issue</u>

Report was published for public comment on 21 November 2011. Following review of the public comments received, the Staff Manager updated the Issue Report accordingly and included a summary of the comments received, which was submitted as the <u>Final Issue Report</u> to the GNSO Council on 2 February 2012.

The GNSO Council initiated a Policy Development Process at its meeting of 14 March 2012 (see http://gnso.icann.org/resolutions/#20120314-1), but decided subsequently to delay next steps due to workload concerns. In the end, a drafting team to develop a charter for the PDP WG was formed in August 2012 and presented the proposed charter to the GNSO Council for

consideration in October 2012. The GNSO Council adopted the charter on 17 October 2012 (see http://gnso.icann.org/en/council/resolutions#20121017-3) following which a call for volunteers was launched and the PDP Working Group formed.

3.2 Issue background

■ Difference between thick vs. thin Whois¹:

For the generic top-level domain (gTLD) registries, ICANN specifies Whois service requirements through the Registry Agreement (RA) and the Registrar Accreditation Agreement (RAA).

Registries satisfy their Whois obligations using different services. The two common models are often characterized as "thin" and "thick" Whois registries. This distinction is based on how two distinct sets of data are managed. One set of data is associated with the domain name, and a second set of data is associated with the registrant of the domain name. A thin registry only stores and manages the information associated with the domain name. This set includes data sufficient to identify the sponsoring registrar, status of the registration, creation and expiration dates for each registration, name server data, the last time the record was updated in its Whois data store, and the URL for the registrar's Whois service. With thin registries, registrars manage the second set of data associated with the registrant of the domain and provide it via their own Whois services, as required by Section 3.3 of the RAA for those domains they sponsor. COM and NET are examples of thin registries.

Thick registries maintain and provide both sets of data (domain name and registrant) via Whois. INFO and BIZ are examples of thick registries.

To illustrate thick and thin Whois, consider the Whois response for two domains, cnn.com and cnn.org. Both domains are registered by Turner Broadcasting System and have the same technical and administrative contact information, but one of the registrations is managed in a thin registry (COM) manner and the other is in managed as a thick registry (ORG).

¹ From the Whois Service Requirements Report (July 2010)

148	If we query COM's Whois server for cnn.com, we get the following results:
149	
150	Domain Name: CNN.COM
151	Registrar: CSC CORPORATE DOMAINS, INC.
152	WHOIS Server: whois.corporatedomains.com
153	Referral URL: http://www.cscglobal.com
154	Name Server: NS1.TIMEWARNER.NET
155	Name Server: NS3.TIMEWARNER.NET
156	Name Server: NS5.TIMEWARNER.NET
157	Status: clientTransferProhibited
158	Updated Date: 04-feb-2010
159	Creation Date: 22-sep-1993
160	Expiration Date: 21-sep-2018 ²
161	
162	However, if we query the .org's Whois server, we get both the domain and registrant Whois
163	information:
164	
165	Domain ID:D5353343-LROR
166	Domain Name: CNN.ORG
167	Created On:16-Apr-1999 04:00:00 UTC
168	Last Updated On:04-Feb-2010 22:48:15 UTC
169	Expiration Date:16-Apr-2011 04:00:00 UTC
170	Sponsoring Registrar: CSC Corporate Domains, Inc. (R24-LROR)
171	Status:CLIENT TRANSFER PROHIBITED
172	Registrant ID:1451705371f82308
173	Registrant Name:Domain Name Manager
174	Registrant Organization: Turner Broadcasting System, Inc.
175	Registrant Street1:One CNN Center
176	Registrant Street2:13N
177	Registrant Street3:
178	Registrant City:Atlanta

² To get the registrant's information, the user or client application must make a referral query to the registrar's Whois service, which in this case is whois.corporatedomains.com

179	Registrant	State/Province:GA
180	Registrant	Postal Code:30303
181	Registrant	Country:US
182	Registrant	Phone:+1.4048273470
183	Registrant	Phone Ext.:
184	Registrant	FAX:+1.4048271995
185	Registrant	FAX Ext.:
186	Registrant	Email:tmgroup@turner.com
187	3	
188		

The content of registration data provided via Whois may differ across gTLD registries. Some gTLD registry agreements, such as .tel, have provisions in place that in certain circumstances exclude personal information from the public Whois. For example, .tel Whois output for individuals may only mention registrant's name with no other contact information.

It is noted that there has been considerable debate on the merits of thin Whois versus thick Whois⁴. From a technical perspective, a thick Whois model provides a central repository for a given registry whereas a thin Whois model is a decentralized repository⁵. Historically, the centralized databases of thick Whois registries are operated under a single administrator that sets conventions and standards for submission and display, archival/restoration and security have proven easier to manage. By contrast, registrars set their own conventions and standards for submission and display, archival/restoration and security registrant information under a thin Whois model. Today, for example, Whois data submission and display conventions vary among registrars. The thin model is thus criticized for introducing variability among Whois services, which can be problematic for legitimate forms of automation. It is this problem that prompted

 $^{^{3}}$ In addition, contact information of administrative and technical contact are also provided, but have been truncated here.

⁴ See for example discussions outlined in this thread: http://gnso.icann.org/mailing-lists/archives/registrars/thrd35.html

⁵ To be more precise, the data model for a thin registry has two "chunks". The registry still centrally manages all the domain name **related** data (it's in one place, under one administrator, etc.). Each registrar, in turn, manages its set of sponsored names – but these are **separate** databases, each is a unique database and not part of a decentralized one. The more accurate term might therefore be a hierarchical vs flat (monolithic) database model.

the IRTP B Working Group to recommend requiring thick Whois across incumbent registries – in order to improve security, stability and reliability of the domain transfer process.

205206207

208

209210

211

212

204

A thick Whois model also offers attractive archival and restoration properties. If a registrar were to go out of business or experience long-term technical failures rendering them unable to provide service, registries maintaining thick Whois have all the registrant information at hand and could transfer the registrations to a different (or temporary) registrar so that registrants could continue to manage their domain names. A thick Whois model also reduces the degree of variability in display formats. Furthermore, a thick registry is better positioned to take measures to analyze and improve data quality since it has all the data at hand.

213214215

• **Situation of incumbent gTLDs**: The following table was developed by the IRTP Part A Working Group and has been updated with the recent addition of .xxx as a gTLD:

216217

gTLD	Thin	Thick
.AERO		✓
.ASIA		✓
.BIZ		✓
.CAT		√ 6
.сом	✓	
.COOP		✓
.INFO		✓
.JOBS	✓	
.МОВІ		✓
.MUSEUM		✓

 6 .CAT has requested changes to its agreement to allow for tiered access to Whois data in a similar way that

Author: Marika Konings

[.]TEL currently provides (see http://www.icann.org/en/registries/rsep/index.html#2011007).

Initial Report on thick Whois

223

224

225

226

227

228

229

230

231

232

233

.NAME		√ ⁷
.NET	✓	
.ORG		✓
.PRO		✓
.TEL		√ 8
.TRAVEL		✓
.xxx		✓

Thick Whois in new gTLDs: Within the context of the new gTLD programme, new gTLD registries
 will be required to operate a thick Whois model⁹. As outlined in the new gTLD Program
 Explanatory Memorandum thick vs. thin Whois for new gTLDs:

While current registry agreements have differing provisions with regards to the Whois output specification, ICANN's intent with the next round of new gTLDs has been to have the agreements as standard as possible, with minimal or no individual negotiation and variation of provisions such as a registry's Whois output specification. In an attempt to standardize on a one-size fits-all approach for new gTLDs, the first draft of the proposed new registry agreement suggested a least-common denominator approach under which all registries would have been required to be at least thin, but registries could opt on their own to collect and display more information at their discretion. This was consistent with the approach used by ICANN for at least the past five years in which registry operators have been free to suggest their own preferred Whois data output and whatever specification each registry proposed was incorporated into the that registry operator's agreement.

⁷ Thick Whois information is available at the registry, but public access to the data is organized in four tiers. Full set of data is available to requesters if the requester enters into an agreement with the registry under the Extensive Whois Data tier. See http://www.icann.org/en/tlds/agreements/name/appendix-05-15aug07.htm for further details.

⁸ Thick Whois information is available, but tiered access is provided consistent with a registry request approved by ICANN in order for the registry to harmonize with UK data protection requirements.

⁹ To clarify, as was pointed out in the public comments, the requirement for 'thick' Whois for new gTLDs was not the result of a policy development process.

Registrars would continue to display detailed contact information associated with registrations, so there is no question about the total set of data elements that will be published concerning each registration, the only question is whether all of the data will be maintained/published by both the registry and the registrar, or whether the full data will be displayed by the registrar only and the registry could, if it so elected, maintain just a subset of data as in the example above.

Many commenters on the proposed registry agreement have requested a change to the agreement to mandate thick Whois for all new registries. The commenters have suggested that such a requirement would be in line with the status quo since most gTLD agreements require thick Whois output (all except com, net and jobs, as noted above). Comments have suggested substantial benefits from mandating thick instead of thin Whois, including enhanced accessibility and enhanced stability.

Critics of the proposed thick Whois mandate have raised potential privacy concerns as a reason to require thin Whois only, but proponents of thick Whois point to ICANN's community-developed "Procedure For Handling Whois Conflicts with Privacy Law" http://www.icann.org/en/processes/icann-procedure-17jan08.htm as a means for resolving any potential situations where a registry operator's Whois obligations are alleged to be inconsistent with local legal requirements concerning data privacy. Also it could be argued that, as indicated above, all of the data that might be published by a thick registry is already public data since it would already be published by the registrar. ICANN's Registrar Accreditation Agreement obligates registrars to ensure that each registrant is notified and consents to the purposes and recipients of any personal data collected from the registrant in association with every domain registration http://www.icann.org/en/registrars/ra-agreement-17may01.htm#3.7.7.4.

Proponents of requiring thick Whois argue that being able to access the thick data at both the registry and the registrar level will ensure greater accessibility of the data. The draft report of the Implementation Recommendations Team put together by ICANN's Intellectual

264	Property Constituency sto
265	registry level under the Ti
266	consumers and intellectu
267	report-trademark-protect
268	additional option of retrie
269	1. Where the registrar V
270	violation of the regist
271	2. Where the registrar h
272	to prevent large-scale
273	
274	Also, in the event of a reg
275	and registrants to have t
276	organizations (the registr
277	escrow agent) instead of
278	agent).
279	

Property Constituency stated "the IRT believes that the provision of Whois information at the registry level under the Thick Whois model is essential to the cost-effective protection of consumers and intellectual property owners." http://icann.org/en/topics/new-gtlds/irt-draft-report-trademark-protection-24apr09-en.pdf. There are at least two scenarios in which the additional option of retrieving the data at the registry would be valuable:

- Where the registrar Whois service might be experiencing a short- or long-term outage (in violation of the registrar's accreditation agreement), and
- 2. Where the registrar has implemented strong (or sometimes overly-defensive) measures to prevent large-scale automated harvesting of registrar data.

Also, in the event of a registrar business or technical failure, it could be beneficial to ICANN and registrants to have the full set of domain registration contact data stored by four organizations (the registry, the registry's escrow agent, the registrar, and the registrar's escrow agent) instead of just two organizations (the registrar and the registrar's escrow agent).

4. Approach taken by the Working Group

287288

289

290

286

The thick Whois PDP WG started its deliberations on 13 November 2012 where it was decided to continue the work primarily through weekly conference calls, in addition to e-mail exchanges. Furthermore, the WG decided to create a number of sub-teams to conduct some of the preparatory work on the different topics identified in its charter (see https://community.icann.org/x/v4BZAg).

291292293

294

295

296

The Working Group also prepared a work plan, which was reviewed on a regular basis. In order to facilitate the work of the constituencies and stakeholder groups, a template was developed that could be used to provide input in response for the request for constituency and stakeholder group statements (see Annex B). This template was also used to solicit input from other ICANN Supporting Organizations and Advisory Committees early on in the process.

297298299

4.1 Members of the Working Group

300301

The members of the Working group are:

Name	Affiliation*	Meetings Attended
		(Total # of Meetings:)
Wilson Abigaba	NCUC	
Marc Anderson	RySG	
Titi Akinsanmi	At Large	
Roy Balleste	NCUC	
Iliya Bazlyankov	RrSG	
Don Blumenthal	RySG	
Bob Bruen	At Large	
Avri Doria	NCSG	
Amr Elsadr	NCSG	
Ray Fassett	RySG	
Christopher George	IPC	
Alan Greenberg	ALAC	
Volker Greimann (Council Liaison)	RrSG	
Frederic Guillemaut	RrSG	

Carolyn Hoover	RySG
Susan Kawaguchi	CBUC
Evan Leibovitch	ALAC
Marie-Laure Lemineur	NPOC
Steve Metalitz	IPC
Jeff Neuman	RySG
Ope Odusan	At Large
Mikey O'Connor (Chair)	ISPCP
Susan Prosser	RrSG
Norm Ritchie	RySG
Tim Ruiz	RrSG
Carlton Samuels	ALAC
Michael Shohat	RrSG
Salanieta T. Tamanikaiwaimaro	At Large
Christa Taylor	Individual
Jill Titzer	RrSG
Joe Waldron	RySG
Rick Wesson	Individual
Jennifer Wolfe	NomCom
Jonathan Zuck	IPC

305

307

303 The statements of interest of the Working Group members can be found at

304 https://community.icann.org/x/v4g3Ag.

306 The attendance records can be found at https://community.icann.org/x/ oVwAg.

The email archives can be found at http://forum.icann.org/lists/gnso-thickwhoispdp-wg/. 308

309

- 310 RrSG – Registrar Stakeholder Group
- 311 RySG – Registry Stakeholder Group
- 312 CBUC – Commercial and Business Users Constituency
- 313 NCUC - Non Commercial Users Constituency
- 314 IPC – Intellectual Property Constituency
- 315 ISPCP – Internet Service and Connection Providers Constituency

316

Initial Report on thick Whois Author: Marika Konings

5. Deliberations of the Working Group

318	
319	

320

321

322

323

324

317

This chapter provides an overview of the deliberations of the Working Group conducted both by conference call as well as e-mail threads. The points below are just considerations to be seen as background information and do not necessarily constitute any suggestions or recommendations by the Working Group. It should be noted that the Working Group will not make a final decision on which solution(s), if any, to recommend to the GNSO Council before a thorough review of the comments received during the public comment period on the Initial Report.

325326

327

328

5.1 Initial Fact-Finding and Research

- Per its Charter, the WG was tasked to review the following topics as part of its deliberations to consider the use of thick Whois by all gTLD registries:
- 329 Response consistency
- 330 Stability
- 331 Access to Whois data
- Impact on privacy and data protection
- 333 Cost implications
- 334 Synchronization / migration
- 335 Authoritativeness
- 336 Competition in registry services
- 337 Existing Whois applications
- 338 Data escrow
- 339 Registrar Port 43 Whois requirements

340341

342

343

344

345

In order to obtain as much information as possible at the outset of the process and identify whether WG members had specific expertise and/or interest to support the deliberations on these topics, a survey was conducted amongst the WG membership (see results in Annex D). In addition, the WG requested input from GNSO Stakeholder Groups and Constituencies, as well as other ICANN Supporting Organizations and Advisory Groups (see Annex C and section 6 for further details).

Initial Report on thick Whois Author: Marika Konings

Furthermore, the WG formed an ad-hoc expert group 10 consisting of a number of individuals that
had been involved in the transition of .org from thin to thick that took place in 2004 and reviewed
the PIR Post Transition Report.
Substantial preparatory work was carried out through the work of a number of sub-teams (see
https://community.icann.org/x/v4BZAg) that have contributed to the following sections of this

346347348349350351

5.2 Response Consistency

355356

357

358

359

360

361

Issue Description

report.

A thick registry can dictate the labelling and display of Whois information to be sure the information is easy to parse, and all registrars / clients would have to display it accordingly. This could be considered a benefit (response consistency) but also a potential cost (registrars / clients would be required to display it as dictated by the registry). This might also be a benefit in the context of internationalized registration data as even with the use of different scripts, uniform data collection and display standards could be applied.

362363364

365

366

367

Response Consistency in the current environment

Currently there are no labelling or display requirements for thin or thick gTLD registries. As a result, registrars, even for the same gTLD, may currently display data in inconsistent ways, which affects efficiency in accessing and using the information. These problems may be exacerbated with internationalized data items that do not employ Latin characters.

368369370

However the proposed 2013 RAA contains language that would require registrars to provide uniform Whois output (see http://www.icann.org/en/resources/registrars/raa/proposed-whois-22apr13-en.pdf for further details).

372373

¹⁰ For the list of experts and mailing list archives, please see http://forum.icann.org/lists/gnso-thickwhoispdp-experts/msg00000.html.

Response Consistency in a thick Whois environment

A thick gTLD registry could dictate labelling and display requirements for Whois information for all of its gTLDs and that would result in consistency across its gTLDs, but that would not create consistency across other gTLDs offered by different registry operators. In order to achieve consistency across gTLDs, registry operators would need to be required to use the same labelling and display requirements. In advance of possible changes to the Registry Agreement, the WG is considering recommending that all thick gTLD registries follow the same labelling and display requirements, as per the model outlined in Specification 4 of the proposed RA (See Annex E), but would welcome community input on this proposal before taking a final decision. The WG recognizes that a recommendation of this nature will require special consideration of the timing, cost and implementation implications for existing Thick Whois Registries.

Improvements to response consistency under a thick Whois model

Establishing requirements such as collecting uniform sets of data, and display standards, would improve consistency across all gTLDs at all levels and result in better access to Whois data for all users of Whois databases.

Collecting and displaying registration data presents difficult challenges when that data is being provided by registrants whose primary language uses a script that does not employ Latin characters. Those challenges are currently under study within ICANN; but however they are resolved, the implementation of those recommendations will almost certainly be less complex if Whois data is centralized at the registry level, rather than being held by hundreds or thousands of registrars, who may apply data collection or display standards inconsistently.

Possible downsides to response consistency under a thick Whois model

The WG received comments suggesting that the opportunity for innovation and ingenuity may be lost in the pursuit of response consistency. For example registrar innovation in the handling and processing of different scripts might overcome barriers and challenges that centralized systems organizations may not see or know. The working group concluded that on balance the opportunities for improved response consistency dramatically outweighed these opportunities missed.

Initial Report on thick Whois Author: Marika Konings

404	
405	Conclusion
406	The working group finds that requiring thick Whois would improve response consistency.
407	
408	5.3 Stability
409	
410	Issue Description
411	The Working Group used the following definition in its deliberations about the issue of stability:
412	"Availability of Whois data in the case of a business or technical failure".
413	
414	Stability in a thin Whois environment
415	In a thin Whois model, there are two sources of copies of Whois information in case of a business or
416	technical failure; the registrar and the escrow service used by the registrar. In case of the failure of
417	one of these two sources, there is one fallback copy of Whois data available for recovery efforts.
418	
419	Stability in a thick Whois environment
420	Under the current policies, under a thick Whois model, the two sources identified in the 'Stability in
421	a thin Whois environment' section are available as well as two additional sources, namely the
422	registry and the escrow service used by the registry. This results in a total of up to four separate
423	locations where the data is stored, depending on whether the same escrow provider is used by the $% \left(1\right) =\left(1\right) \left(1\right$
424	registry and registrar. In the cases of a failure there are at least two remaining sources of data
425	available for recovery.
426	
427	Possible advantages for stability in a thick Whois environment
428	The WG noted that a thick Whois model provides at least two fallback sources in the case of a
429	$failure, compared \ to \ one \ in \ the \ thin \ model. \ Since \ most \ catastrophic \ failures \ are \ of ten \ the \ result \ of$
430	multiple failures, having multiple geographically dispersed backups is preferred.
431	
432	Possible downsides for stability in a thick Whois environment

Some WG participants noted that having personal data at multiple sites makes that data more
susceptible to attack or misuse. This issue is addressed in the section on privacy and data protection.

437

433

Some WG participants asked if there might be an increased risk of inconsistencies by having up to four copies of the same data. The working group concluded that there are well-established mechanisms to mitigate this risk through the use of various techniques¹¹.

438439

441

- 440 Conclusion
 - The working group finds that requiring thick Whois would improve stability.

442

443 5.4 Access to Whois Data

444445

446

447

Issue Description

Per its charter the WG addressed the issue of whether the ability to access Whois information at the registry level under the thick Whois model is more efficient and cost-effective than a thin model in protecting consumers and users of Whois data and intellectual property owners.

448449450

451

452

453

454

455 456

- Access to Whois data in the current Whois environment
- In thin gTLD registries, data associated with the registrant of the domain is only available via the registrar's Whois services, while the data associated with the domain name is published both by the registrar as well as the registry. In thick registries both sets of data (that associated with the domain name as well as with the registrant) are published by the registrar and the registry. It was noted that the NORC Draft Report for the Study of the Accuracy of Whois Registrant Contact Information¹² (commissioned by ICANN in 2010) found that the Whois data for the domain names selected was

through escrow. See http://en.wikipedia.org/wiki/Multi-master_replication

¹¹ The working group discussed one example of such a mitigation approach — the use of multi-master replication across the data. However the WG identified several issues that indicate that this probably isn't the best approach. Registrars currently escrow their data on a particular schedule that is inconsistent with the schedule at which registries escrow data. Similarly, registrars are not required to post new data to registries instantaneously so a registry and registrar could reasonably be out of sync frequently. Finally, at least four sets of contracts would have to be amended in order to change the current model by which data is backed up

¹² See http://www.icann.org/en/compliance/reports/whois-accuracy-study-17jan10-en.pdf

457 accessible 100% of the time for the thick Whois registries sampled (.org, .biz and .info), while Whois 458 data availability was only 97.5% for .com and 98.5% for .net. The WG received comments pointing 459 out difficulties that have been experienced in accessing registrar-based Whois services. 460 Commenters also noted restrictions on access to data due to Registrar-imposed limits to queries under thin registries as certain information is only available at the registrar. Others pointed out that 461 462 the Whois Audit Access Report¹³ (2012) produced by ICANN Contractual Compliance found that only 463 94% of registrars provided consistent access to Whois data compliant with Section 3.3 of the RAA. 464 The report did point out that 'Registrar compliance rate with the RAA to provide Whois access 465 service has declined from last year's results from 99% to 94%. This decline is likely due to proactive 466 monitoring, tool enhancements and enforcement of this RAA obligation'.

467 468

469

470

Access to Whois data in a thick Whois environment

If all registries were to operate under a thick Whois model, all Whois information associated with the domain name as well as the registrant would be accessible via both the registrar and registry Whois services¹⁴.

471472473

474

475

476

477

478

479

Possible advantages for access to Whois data under a thick Whois model

Proponents of requiring thick Whois argue that being able to access the thick data at both the registry and the registrar level will improve accessibility of the data. The draft report of the Implementation Recommendations Team put together by ICANN's Intellectual Property

Constituency stated, "the IRT believes that the provision of Whois information at the registry level under the Thick Whois model is essential to the cost-effective protection of consumers and intellectual property owners." There are at least two scenarios in which the additional option of retrieving the data at the registry would be valuable:

480 481 482

• The registrar Whois service is experiencing a short- or long-term outage (in violation of the

¹³ See https://www.icann.org/en/resources/compliance/update/update-whois-access-audit-report-port43-30apr12-en.pdf

¹⁴ Note: under the proposed 2013 RAA the requirement for registrars to provide Whois in thick registries at port 43 would be eliminated, but leaving the web-based Whois service in place.

¹⁵ See http://icann.org/en/topics/new-gtlds/irt-draft-report-trademark-protection-24apr09-en.pdf.

483	registrar's accreditation agreement), and
484	The registrar has implemented strong (or sometimes overly-defensive) measures to prevent
485	large-scale automated harvesting of registrar data.
486	
487	It would also be beneficial to ICANN and registrants to have the full set of domain registration
488	contact data stored by four organizations (the registry, the registry's escrow agent, the registrar, and
489	the registrar's escrow agent) instead of just two organizations (the registrar and the registrar's
490	escrow agent) in the event of a registrar business or technical failure.
491	
492	The IRTP-B Working Group and comments received by this working group have also pointed out that
493	the use of a common format and location to find information for a given gTLD is an advantage for
494	Whois users.
495	
496	Possible downsides for access to Whois data under a thick Whois model
497	The WG received comments suggesting that it may be difficult to suppress data that has already
498	been published should there be any changes in the future to the Whois model, e.g. if certain
499	information is no longer required to be published. The WG concluded that this would be a broader
500	issue as all the Whois registrant information is currently already publicly available both in the thin
501	model (published by the registrar) as well as the thick model (published by both the registrar and
502	registry).
503	
504	As discussed in the section on data escrow, there is some question as to whether four sets of the
505	same data are really necessary and whether maintaining them result in additional costs for
506	contracted parties as well as registrants. The WG concluded that this is at most an incremental cost
507	increase and further concluded that this is a topic better pursued in broader discussions of data
508	escrow for all thick registries (such as the RAA negotiation).
509	
510	The WG received comments pointing out that centralizing the accessibility of Whois information at
511	the registry is a natural efficiency for users of Whois data when considering one gTLD at a time in

the current environment. However, with the introduction of new gTLDs the number of registries

may exceed the number of registrars; therefore, a Whois user may need to access dozens or hundreds of registries to obtain responses for a common second level string that is registered across multiple registries. Thus there may be an advantage to the thin Whois model in that information from multiple gTLDs could be obtained through a single registrar, although identifying the appropriate registrar is not certain from the domain name itself. The WG concluded that this advantage is incremental at best, especially considering that ICANN is implementing the Whois Review Team recommendation #11 ("Overhaul of the Internic to provide enhanced usability for consumers, including the display of full registrant data for all gTLD domain names; operational improvements to include enhanced user awareness"). The WG also notes that 3rd party services are available that provide aggregation of Whois from multiple sources, which can be used when efficient and cost-effective accessibility across multiple gTLDs is needed.

Conclusion

The working group finds that requiring thick Whois would improve access to Whois data.

5.5 Impact on privacy and data protection

Issue Description

Whois records contain domain registrants' names, addresses, email addresses, and phone numbers. These details would be considered personal information in colloquial use and are provided legal protection in regimes that provide data protection to personal information. The fundamental question before the thick Whois PDP WG is whether thin and thick registry models present different risks with respect to data protection and privacy. These risks might arise with respect to data at rest, information held in registry databases, and data in motion, records being transferred from registrars to registries in a thick model.

"Risks" include unauthorized disclosure in a security sense and issues related to information disclosure in violation of local law and regulations. They also include the possibility that information could be deleted or altered inadvertently or deliberately, possibly a more significant consideration

542	for those individuals who believe that Whois information is public and therefore cannot be
543	"disclosed" in an unauthorized manner.
544	
545	The WG notes that its discussions of information security were simplified for purposes of clarity.
546	Detailed risk analyses were beyond the capacity and scope of the WG given the complexity of issues
547	and variety of possible system configurations. As an example, the WG will focus on the necessity for
548	data to be transferred in a thick Whois model. The WG will not discuss whether data may in fact
549	move when a registrar in a thin environment has redundant systems.
550	
551	As an explanation in advance, "data at rest" is stored information. For our simplified purposes, it
552	includes data in use, a common term that is not useful for our construct. "Data in motion" is
553	information that is being transferred between computer systems.
554	
555	Data Protection and Privacy in a thin Whois environment
556	<u>Data at rest</u> : Information will be protected to the extent that registrars' security safeguards are in
557	place. Such safeguards, both here and in the discussions that follow, include measures to protect
558	against unauthorized duplication, deletion, or alternation of information.
559	
560	<u>Data in motion</u> : Information is not transferred to registries in a thin model.
561	
562	<u>Data protection laws</u> : Whois records must be made public under ICANN rules. At first glance, any
563	applicable data protection laws will be the rules of the location of a registrar. However, it is possible
564	that a registrant's location might be determinative where a registrant and registrar are not in the
565	same jurisdiction.
566	
567	Data Protection and Privacy in a thick Whois environment
568	
569	<u>Data at rest</u> : Information will be protected to the extent that security safeguards are in place in
570	registrar or registry systems.
571	

572	<u>Data in motion</u> : Information transfer between registrar and registry introduces the need for
573	additional information security safeguards beyond measures required for data that remains with a
574	registrar. These additional safeguards have purposes similar to those measures that must be in
575	place for data at rest, but have the added complexity of protections interception and possibly
576	reinsertion of information while it is in transit.
577	
578	<u>Data protection laws</u> : Whois records must be made public under ICANN rules. Thick Whois models
579	present additional challenges with respect to possible data protection conflicts. Do rules governing
580	registrars apply because registrant contracts are signed in their countries, or does a registry's regime
581	govern because the registry publishes the data? How relevant is the location of the registrant?
582	
583	Possible advantages for Data Protection and Privacy in a thick Whois environment
584	<u>Data at rest</u> : Whois databases would be held by the registry and not necessarily multiple registrars.
585	This single point of failure instead of multiple ones would increase data protection. In addition, it
586	may be that a registry, being in most cases larger than registrars, will be able to institute better
587	security safeguards.
588	
589	<u>Data in motion</u> : Thick registries provide no advantage in this category.
590	
591	<u>Data protection laws</u> : To the extent that controlling data protection laws and regulations are
592	deemed to be those of the registry, a thick Whois environment will provide additional assurances
593	where local rules limit information disclosure more than in the locale of an applicable registrar. The
594	WG must stress however, that any discussion of laws that might apply is speculation. It is beyond
595	the capacity and scope of the work group to do an exhaustive review of applicable rules and
596	contract provisions.
597	
598	Possible downsides for Data Protection and Privacy in a thick Whois environment
599	<u>Data at rest</u> : More copies of Whois records will exist. The level of risk will depend on decisions
600	concerning, for example, who must maintain escrow systems, but registrars certainly still will have
601	the Whois information even if it is not contained in defined Whois databases.

603

604 605

system.

Discussion

606

00

607 608

609 610

611

612

613

614

615

616 617

618

619

620

621 622

623

624 625

626

627 628

> 629 630

•

Initial Report on thick Whois Author: Marika Konings

Page 25 of 73

confusion for a registrant. We do note however that we are unaware of any such instances that have arisen in current thick Whois environments.

Data at rest: The WG cannot identify an advantage between a thin and thick environment. The same

<u>Data in motion</u>: Thick Whois models introduce the necessity for data transfer, which requires

additional security measures beyond what are needed for information that remains in a single

Data protection laws: As a counterpoint to possible increased legal protection when laws in a

governing a registry's may in fact be less restrictive. In addition, questions concerning whether

registry or registrar location controls may add a level of complexity for the overall system and of

registry's jurisdiction allow less information disclosure than an applicable registrant's, rules

information is contained in Whois databases in the two models. While ostensibly all Whois data as such will be in a single system in a thick environment, the data elements still will be kept by registrars. While more official copies of Whois information may exist in a thick environment, the fact is that bulk record access¹⁶ is available to the public and the likely magnitude of those copies in the hands of individual analysts or of aggregators makes the value of a discussion questionable.

<u>Data in motion</u>: The WG cannot identify an advantage between a thin and thick environment. On the surface, the need for Whois transfers from registrars to registries presents an additional point of data vulnerability and need for additional security measures. However, Whois information regularly moves through downloads and replication, as well as through transfer of data from registrars to registries in the existing thick registries. The WG finds it hard to conclude that risks of data leakage will increase at an identifiable level when thin registries move to a thick model.

<u>Data Protection Laws</u>: This subject is especially complex when it comes to drawing conclusions. It raises a level of complexities, uncertainties, and emotions that are beyond the capacity of the WG to

address conclusively given available resources and time constraints, and that also may spill beyond the bounds of the scope of this WG in the case of certain issues.

Thick registries have existed for many years, and the .org registry transitioned from a thin to a thick environment. The WG has not been able to identify a formal analysis of data protection laws in the context of Whois information with respect to thin or thick models or the transition from one to another. The WG would hope that analyses have been done, and the fact that it can find no public objections from the registry or registrar community indicates that no problems have been identified.

In addition, the WG is not aware of any formal government actions against registries or registrars for maintaining Whois systems in accordance with ICANN requirements. In particular, no registrar has sought to adjust contract requirements pursuant to ICANN Procedure for Handling Whois Conflicts with Privacy Laws (http://www.icann.org/en/resources/registrars/whois-privacy-conflicts-procedure-17jan08-en.htm), which permits exceptions if a government begins an inquiry under data protection laws and regulations. Further, the comment on thick vs. thin Whois that was submitted by the Registrar Stakeholder Group did not raise privacy or data protection concerns.

However, the fact that the WG has not seen analyses or objections from the contracted party community does not prove a lack of problems. In addition, data protection and privacy laws and regulations change over time so any analyses from the past might need to be revisited periodically. RSEPs (Registry Services Evaluation Panel) initiated by .cat and .tel suggest that they have identified data protection and privacy legal issues that they considered valid even if no formal government action was initiated. While registrars are required under the Registrar Accreditation Agreement to obtain registrants' consent to uses made of data collected from them, whether registrants are aware of the full ramifications of data publication, legal or real, might be questioned, and local rules concerning coercive contract provisions conceivably could come into play.

The WG has made every effort to examine thin vs. thick registry models in a broad sense. However, any requirement that all registries use the thick model will require that existing thin registries move to thick environments. This situation will raise concerns that, while limited in the long run, are

Initial Report on thick Whois Author: Marika Konings Page 26 of 73

Berry Cobb 3/6/13 10:52

Deleted:

significant given the numbers of domains and registrants involved. The WG expects that data transfers will be in volumes unprecedented in Whois operations and urges that increased information systems and protections are put in place, which are appropriate to handle the volumes.

Some registrations may have occurred based on a registrant's consideration of local rules governing a registrar or registry. In that event, registrants' data protection expectations will be affected when publication of Whois data moves to a registry that is in a different jurisdiction from the relevant registrar. Thorough examination must be given to the extent to which data protection guarantees governing a registrar can be binding on a registry. Should data protections in the jurisdiction of a registrant, registrar, or registry control? Should registry or registrar accreditation agreements contain language that specifies whose protection environment applies?

Again, these questions must be explored in more depth by ICANN Staff, starting with the General Counsel's Office, and by the community, with registries and registrars taking the lead. As an added benefit, analyses concerning change of applicable laws with respect to transition from a thin to a thick environment also may prove valuable in the event of changes in a registry's management, presumably an increasing likelihood given the volume of new gTLDs on the horizon.

Conclusion

Data Protection: The WG finds that requiring thick Whois for all gTLD registries does not raise data protection issues that are specific to thin vs. thick Whois, as those that have been identified already exist in the current environment and should be considered as part of the broader Whois debate.

Privacy: There are currently issues with respect to privacy related to Whois, and these will only grow in the future. Those issues apply to other gTLDs as well, and thus will need to be addressed by ICANN. Existing registry policy and practice allows flexibility when needed, and the new draft RAA provides similar options for registrars. None of these issues seem to be related to whether a thick or thin Whois model is being used. The support of the Registrar Stakeholder Group related to a thin-to-thick transition implies that they perceive no immediate issue. There are still WG participants who

692	feel uneasy with the vast amounts of data that will need to be transferred across jurisdictional
693	boundaries, but those have not translated into concrete concerns. So although privacy issues may
694	become a substantive issue in the future, and should certainly be part of the investigation of a
695	replacement for Whois, it is not a reason to not proceed with this PDP WG recommending thick
696	Whois for all.
697	

5.6 Cost implications

699700

701

702

Issue Description

What are the cost implications of a transition to thick Whois for registries, registrars, registrants and other parties for all gTLDs? Conversely, what are the cost implications to registries, registrars, registrants and other parties if no transition is mandated?

703704

706

707

708

709

705 Discussion

The WG has chosen to identify broad components of on-going and transition costs, and in some cases base its analysis on projects that are of comparable scope and complexity. The WG did not have the capacity to develop detailed cost comparisons and does not consider them to be required in order to reach valid conclusions regarding the cost impact of requiring thick Whois for all gTLD registries.

713	Cost Implications of requiring thick Whois – On going costs
714	
715	Escrow costs
716	
717	Registrars: No change
718	Registries: Incrementally higher increased data-storage and data transfer costs. Estimating
719	guideline: data volume will increase from domain-information-only to domain-and-contact
720	information. The WG offers a SWAG estimate of roughly doubled volume of escrow data-storage
721	and transfer. The cost is paid by the registry.
722	Data consumers: No change
723	
724	Port 43 Whois server costs
725	
726	Registrars: No change or lower – depending on whether Port 43 Whois requirements for thick
727	Whois registries are eliminated in the new RAA
728	Registries: Incrementally higher – due to increase in the size of the data payload for each Whois
729	query (roughly double). Estimating guideline: Whois server costs are a small fraction of the cost of
730	$operating \ the \ front-facing \ server \ for \ a \ registry, \ and \ the \ incremental \ impact \ of \ increased \ processing$
731	and bandwidth by these relatively simple systems is negligible.
732	$\underline{\textbf{Data consumers}} : \textbf{Lower} - \texttt{due to reduced cost of automation resulting from more consistent access}$
733	methods and format of the data
734	
735	Web-based Whois server costs
736	
737	Registrars: No change or incrementally lower – depending on the extent to which Whois-query
738	demand shifts from registrars to registries
739	Registries: No change or incrementally higher – depending on the extent to which Whois-query
740	demand shifts from registrars to registries. Estimating guideline: Whois server costs are a small
741	fraction of the cost of operating the front-facing server for a registry, the incremental impact of
742	increased processing and bandwidth is negligible.

Data consumers: Lower – due to reduced errors resulting from more consistent access methods and
 format of the data

745746

Cost Implications of requiring thick Whois - Transition costs

747748

749

750

751

752753

754

758

759

760

761

Registrars: Less than adding a new gTLD – the WG anticipates that registrars will only be required to reconfigure systems and processes that they already support rather than having to develop new ones. Those changes will require reconfiguring Whois systems from the exception (process in a thin-Whois manner) to the norm (process in a thick-Whois manner). The WG views the initial transfer of contact data to the registry as similarly straightforward – and could be as simple as using the escrow data as the data-source for the transfer. Estimating guideline: a comparable effort might be a project to start up escrow.

Registries: Less than adding a new gTLD – the WG similarly anticipates that registries will also be reconfiguring systems and processes that they already support, as all of them support thick Whois

Registries: Less than adding a new gTLD – the WG similarly anticipates that registries will also be reconfiguring systems and processes that they already support, as all of them support thick Whois for other gTLDs already. Again the WG anticipates a highly automated process will be used to

transfer and populate contact data, which is likely to require minimal training or manual

intervention. Estimating guideline: a comparable effort might be a project to start up escrow.

<u>Data consumers</u>: **Less than adding a new gTLD** – data consumers will likewise be required to reconfigure systems and processes to switch from the exception (thin Whois) to the norm (thick

Whois), but again they will merely be reconfiguring systems and not developing new ones.

762763764

765

766

767

Cost Implications of not requiring thick Whois

The WG received comments that noted that the costs associated with not having easy access to Whois data is significant, not only to rights owners, but also victimized Internet users. The WG acknowledges that this may be true, but has concluded that analysing the nature and scale of costs of this type are outside its charter

768769

770 Conclusion

Initial Report on thick Whois Author: Marika Konings

Berry Cobb 6/6/13 17:08

Comment [2]: This is where we stopped on 4 June

Marika Konings 6/6/13 17:08

Comment [3]: This may not be completely accurate. What happens to the registrars who do nothing? Some may not undertake any action until they are threatened with termination.

The working group finds that requiring thick Whois would not have overly burdensome cost impacts on providers of Whois data and could reduce acquisition and processing costs for consumers of that data.

773774

771

772

5.7 Synchronization / migration

775

776777

778

779

780

781

782

Issue Description

Synchronization refers to updating the Whois information in an immediate and accurate manner so that both data sets, registrar and registry, are exact duplicates. Synchronization of data must occur when either the registrar provides new information to the registry or the registry updates a Whois record directly. The WG was asked to address the impact on synchronization between the registry and registrar Whois and EPP systems for those Registries currently operating a thin registry, both in the migration¹⁷ phase to thick Whois as well as ongoing operations.

783 784 785

786

787

Synchronization in a thin Whois environment

The registrar collects the Whois data from the registrant but only transmits a limited subset of that data to the registry. This limited subset must be updated in an immediate and accurate manner to insure that both subsets of data are exactly the same.

788 789 790

791

792

Synchronization in a thick Whois environment

The only difference in a thick Whois environment is that all of the Whois data collected by the registrar is transmitted to the registry. As in the thin Whois environment the information must be updated in an immediate and accurate manner 18.

 $^{^{17}}$ Please note that issues related to a possible transition of existing thin gTLD registries to a 'thick' model are covered in a different section of this report.

¹⁸ The RAA gives registrars a matter of days to update registry data (5 business days under the 2009 RAA and 7 calendar days under the proposed 2013 RAA) and up to 24 hours to update their own Whois records.

Possible disadvantages for synchronization in a thick Whois environment

The WG received no concrete examples of synchronization issues in converting from a thin Whois environment to a thick Whois environment in the comments received. Most of the comments addressing this topic emphasized the need for being mindful of the following:

- 800 1. Cos
- 801 2. Stability when transitioning the data
- 802 3. Number of records involved

Synchronization Inconsistencies

The WG notes that there are risks of inconsistencies between the data output of the registrar and the registry under both the thin and thick models. By having additional data shared between a registry and registrar in a thick Whois model, this risk for inconsistencies may increase.

For example, inconsistencies may arise when the registry updates Whois records directly, as may be required by a (closed) court order. In circumstances where a domain name is being transferred by the registry without the losing registrar's knowledge, this may lead to the losing registrar publishing outdated Whois data for a domain name no longer under it's control. Effectively, one domain name could have two or more registrars publishing completely different data for the same domain name. While the registry will reference the correct registrar, a third party may obtain differing results depending on where they perform their lookup. In thick registries, inconsistencies between the registrar Whois and the registry Whois contact information may also arise, as again such modifications are not necessarily transmitted to the losing registrar. Effectively, registries and losing registrars could conceivably output completely different Whois data. It was suggested that this could be fixed by removing the port 43 Whois requirement¹⁹ for registrars in thick registries, although some explained that currently some registrars already pass on registrar port 43 queries to the registry in the case of thick Whois, which also eliminates the risk of inconsistencies. The WG

¹⁹ Only the port 43 Whois requirement is an issue as it cannot be mirrored to the registry web-based Whois output and can therefore cause synchronization issues, for web-based Whois registrars would actually be permitted to mirror the registry web-based Whois output or use the registry port 43 Whois.

notes that the proposed 2013 Registrar Accreditation Agreement (RAA) <u>provides for</u> the removal of the port 43 requirement for thick gTLD registries (see section 3.3.1 - https://www.icann.org/en/resources/registrars/raa/proposed-agreement-22apr13-en.pdf).

826 Conclusion

The WG finds that a transition to thick Whois for all gTLD registries will have no detrimental effects on data synchronization.

828829830

822

823

824

825

827

5.8 Authoritativeness

831 832

833

834

835

836837

838

839

840

841

842

Issue Description

Here is the working definition used by the WG while analysing this issue: "Authoritative, with respect to provision of Whois services, shall be interpreted as to signify the single database within a hierarchical database structure holding the data that is assumed to be the final authority regarding the question of which record shall be considered accurate and reliable in case of conflicting records; administered by a single administrative [agent] and consisting of data provided by the registrants of record through their registrars." A proposed shorter version is "the data set to be relied upon in case of doubt". There is currently no definition of an 'authoritative' Whois record/source, but the RAA requires registrars to update their own Whois services sooner (within 1 day) than they are required to update registries (who could not publish the updated data until they receive it). Therefore, in case of conflict, the registrar's Whois output should generally be considered more accurate (though some exceptions could exist).

843844845

846

847

848849

850

Authoritativeness in a thin Whois environment

Since the registrar alone holds most Whois data, its data is necessarily authoritative as to those data elements (e.g., name of registrant). For that data held by both registrar and registry (e.g., name of registrar), it appears that registry data is generally treated as authoritative, but the WG is not aware of any official ICANN policy statement on this. The WG observes that in the case of the Uniform Dispute Resolution Policy (UDRP), UDRP Providers treat the registrar Whois information as

Initial Report on thick Whois Author: Marika Konings Marika Konings 31/5/13 17:29

Deleted: recommends

Marika Konings 6/6/13 17:08

Comment [4]: For review / discussion – based on the WGs feedback, additional changes may need to be made to other parts of this section.

authoritative, which may be the result of the UDRP having been adopted prior to the emergence of thick gTLD registries.

Authoritativeness in a thick Whois environment

Most comments that addressed this question stated that registry data is considered authoritative in the thick environment. Only one stated that the registrar data was authoritative. Again, the WG is not aware of any official ICANN policy statement on this question. The WG notes that the registrar remains responsible for the accuracy of the data under either the thick or thin model, as the relationship with the registrant remains with the registrar.

Possible advantages for authoritativeness in a thick Whois environment

Several comments cited efficiency and trust as advantages of treating the registry Whois data as authoritative. The WG supports the view that the registry will hold the entire data set, and is able to change the data without informing the registrar (due to closed court orders or similar events). Therefore, the only authoritative data source can be the registry as it holds the ultimate sway over the data. A registrar updates the data at customer request and is responsible for its accuracy, but such changes would only become authoritative once the registry Whois reflects the change.

Possible downsides for authoritativeness in a thick Whois environment

Several comments noted that registrars remain responsible for collecting the data and (to an extent governed by contract with ICANN) for its accuracy. One contribution felt this was inconsistent with a conclusion that registry Whois would be authoritative in the thick environment. The WG did not agree that this inconsistency was problematic (primarily on the grounds stated above that the WG assumes that any data collected by the registrar becomes authoritative only after it is incorporated in the registry database ²⁰).

²⁰ It should be noted though that there may be exceptions, for example, the registered name holder is the person with whom the registrar holds a registration agreement, not necessarily the person the registry thinks

Conclusion

is the registrant (because the update by the registrar wasn't instantaneous). See also footnote 18.

Initial Report on thick Whois
Author: Marika Konings

The WG finds that a transition from thin to thick Whois will have no detrimental effect on
authoritativeness. The WG reviewed the question as to whether it is necessary for this WG to
recommend a policy on this issue. Based on that review, the WG has concluded that this is not
$necessary, given \ that \ thick \ registries \ have \ functioned \ for \ many \ years \ without \ requiring \ a \ formal \ and \ an all \ formal $
position on authoritativeness, and the lack of evidence that this created any problem during
previous thin-to-thick transitions such as .org.

879880881882883

5.9 Competition in registry services

887 888

889

890

Issue Description

The WG was tasked to consider what the impact would be on competition in registry services should all registries be required to provide Whois service using the thick Whois model – would there be more, less or no difference with regard to competition in registry services.

891892893

894

895

Competition in registry Services in the current Whois environment

Today, the two largest gTLD registries (.com and .net) are exempt from the requirement to operate under the thick Whois model, as well as .jobs. All other registries, including new gTLDs, are required to operate under a thick Whois model.

896897898

Competition in registry Services in a thick Whois environment

The WG observes that all registries would be operating on a level playing field as they would all operate under the same model in a thick Whois environment.

900901902

903

904

899

Possible advantages for competition in registry services under a thick Whois model

The WG concludes that requiring thick Whois would create a level playing field among registries. The WG also observes that diversity in Whois data models is inappropriate as a matter of competitive advantage among registries.

905906907

Possible downsides for competition in registry services under a thick Whois model

Initial Report on thick Whois Author: Marika Konings

The position was put forward that creating a level playing field and requiring the provision of the
same Whois services would reduce competition as there would be no difference in the Whois model
offered and registrants could only choose the same standardized Whois services. As noted above,
the WG did not find this to be a compelling argument and is of the view that standardized Whois
services are much more attractive than any innovations that were restricted to a single registry
provider.

916

917

918

908 909

910911912

Conclusion

The working group finds that requiring thick Whois would provide a more level playing field between registry providers. Furthermore, the WG was not able to identify any substantive examples as to why a differentiated approach in provision of Whois services would be better for competition.

919920

5.10 Existing Whois applications

921922923

924

925

Issue Description

What, if anything, are the potential impacts on the providers of third-party Whois-related applications if thick Whois would be required for all gTLDs? Do these applications need to be updated / changed and how would that impact users of those applications?

926927928

929

930

931

932

Possible advantages to existing Whois Applications under a thick Whois model

The WG observes that the transition to thick gTLD registries may have a small transitional impact on third-party providers. But in the long term that transition would allow them to use a simpler datagathering model and they could eliminate the issues associated with registrar-specific Whois data access. Whois data providers will also benefit from having to implement and parse only one authoritative data source instead of one per registrar.

933934935

936

937

Possible downsides to existing Whois Applications under a thick Whois model

There is the possibility that the transition to thick Whois may disrupt third-party Whois applications due to the change in location and format of the data. Furthermore, the ability and incentive for

Initial Report on thick Whois Author: Marika Konings third-party providers to innovate in providing new services to address the yet unsolved problems of internationalized domain name data may be diminished.

939940941

942

943 944

938

Conclusion

The WG finds that a transition from thin to thick Whois will have no substantive detrimental effect on existing 3rd-party Whois service providers and will reduce the variability and cost of data acquisition for those providers.

945 946

5.11 Data escrow

947948

949

950

951

952

Issue Description

Data Escrow is the act of storing data with a neutral third party in case of registry or registrar failure, accreditation termination, or accreditation expiration, without renewal. ICANN requires all registrars and gTLD registries to contract with a data escrow provider in order to safeguard registrants. Both registrar and registry escrows follow the same system: a weekly full deposit on Sundays, and a partial deposit on all other days containing all new data since the last full deposit.

953954955

956

957

958

959

960

Data Escrow in a thick Whois environment

Registrars and the registries store Whois data in different, unrelated escrow accounts. In the case of thick registries, personal Whois data is also escrowed by the registry. Thus the Whois data is stored in four logical locations (registry, registrar, escrow accounts). In the case of a failure, the data could be available from up to three other locations. The WG notes that this number may decline if the registry and the registrar use the same data escrow provider and care is not taken to store the data in separate physical locations.

961962963

964

965

966

Data Escrow in a thin Whois environment

Under the thin Whois model, the registrar stores its Whois data (the contact data) in its escrow location and the registry stores its domain data in its escrow account. Thus, for any single data element there is one location available for backup data in the event of a failure.

Initial Report on thick Whois Author: Marika Konings Marika Konings 31/5/13 17:42

Deleted: relapse

Marika Konings 31/5/13 17:43

Deleted: registry

Marika Konings 6/6/13 17:08

Comment [5]: This is not correct. Registrars don't deposit on the same schedule as each other registrars and registries do not deposit on the same schedule as registrars.

Marika Konings 31/5/13 17:44

Deleted: Under the thick Whois model, the

Marika Konings 31/5/13 17:44

Deleted: r

Marika Konings 31/5/13 17:45

Deleted: registry

Marika Konings 31/5/13 17:45

Deleted: two

Marika Konings 31/5/13 17:45

Deleted: different

Marika Konings 31/5/13 17:46

Deleted: may

[.]

²¹ http://icannwiki.com/index.php/Data_Escrow

977

Conclusion

The working group finds that requiring thick Whois would result in more copies of escrowed data in the event of a failure 22 .

978 979

5.12 Registrar Port 43 Whois requirements

980 981 982

Issue Description

983 Under the current Registrar Accreditation Agreement (RAA), registrars are required to provide 984 access to Whois data to the public via two ways:

- 1. An interactive web page provided on the registrar's website, and
- 986 2. Port 43 lookup accessed in several ways (such as through command line utility, Whois lookup software, and third party websites)

988 989

990

991

992

993

985

Registrars suggest that with thick registries online, the need for Port 43 access on the registrar level is becoming irrelevant. In their view it does not make sense to provide this data if it is not referred to by the registry and the duplication of the services from multiple data sources may lead to inconsistencies in the results displayed (see also the section on synchronization / migration). If the registry displays the Whois data, and therefore the registry no longer points to the Whois server of the registrar, that server becomes redundant.

994 995 996

997

998

999 1000

Recent developments

The proposed 2013 RAA includes a provision that the current requirement for registrars to provide Port 43 Whois service is no longer required for thick gTLD registries. The proposed language reads: 'At its expense, Registrar shall provide an interactive web page and, with respect to any gTLD operating a "thin" registry, a port 43 Whois service (each accessible via both IPv4 and IPv6) providing free public query---based access to up---to---date (i.e., updated at least daily) data

Initial Report on thick Whois Author: Marika Konings Berry Cobb 3/6/13 11:19

Deleted: s

¹⁰⁰¹

²² ICANN Staff noted that in the case of registrar failure, the registrar escrow data has often been found to be incomplete or formatted incorrectly, and in some cases not available at all. In those instances, thick registry data has proven invaluable in standing up failed registrars.

1002	concerning all active Registered Names sponsored by Registrar in any gTLD'. As a result, the WG did
1003	not consider this issue in further detail,

Marika Konings 1/6/13 12:07

Deleted: [and defers to the conclusions arrived at through those negotiations]

Conclusion

The WG finds that the RAA negotiation is on track to resolve this question and defers to the conclusions arrived at through that process.

10071008

1004

1005

1006

1009

1012 **Community Input**

6.1 Request for Input

101310141015

1016

1017

1018

1019

1020

1021

- As outlined in its Charter, 'the PDP WG is also expected to consider any information and advice provided by other ICANN Supporting Organizations and Advisory Committees on this topic. The WG is strongly encouraged to reach out to these groups for collaboration at an early stage of its deliberations, to ensure that their concerns and positions are considered in a timely manner'. As a result, the WG reached out to all ICANN Supporting Organizations and Advisory Committees as well as GNSO Stakeholder Groups and Constituencies with a request for input (see Annex B and C) at the start of its deliberations. In response, statements were received from:
- 1022 The GNSO Business Constituency (BC)
- 1023 The GNSO Intellectual Property Constituency (IPC)
- 1024 The GNSO Non-Commercial Users Constituency (NCUC)
- 1025 Verisign
- 1026 The GNSO Registry Stakeholder Group (RySG)
- 1027 The GNSO Registrar Stakeholder Group (RrSG)
- 1028 The At-Large Advisory Committee (ALAC)

1029

The full statements can be found here: https://community.icann.org/x/WIRZAg.

10301031

6.2 Review of Input Received

103210331034

1035

1036

The WG developed a matrix (located in Annex F) that it used to assess the input received in relation to the Charter Topics. This matrix, in addition to the <u>summary of the comments</u>, formed the basis for sub-team as well as Working Group discussions in relation to the different topics, the results of which have been outlined in section 5 of this report.

10371038

Working Group Preliminary Recommendations and Observations

104110427.

1039

1040

1043

1044

1045

1046

7.1 Preliminary Recommendation

The WG was tasked to provide the GNSO Council with 'with a policy recommendation regarding the use of thick Whois by all gTLD registries, both existing and future'. Following its analysis of the different elements, as outlined in the WG Charter, which has been detailed in section 5 of this report, on balance the Working Group concludes that there are more benefits than disadvantages to requiring thick Whois for all gTLD registries. As a result, the Working Group recommends that:

104710481049

The provision of thick Whois services should become a requirement for all gTLD registries, both existing and future.

10501051

1052

1053

1054

Preliminary level of consensus for this recommendation: The Working Group has arrived at preliminary consensus on this recommendation. A final consensus call will be conducted once the recommendation is finalized following review of the public comments received on this Initial Report.

1055 1056 1057

1058

1059

1060

As outlined in section 5, the WG expects numerous benefits as a result of requiring thick Whois for all gTLD registries. Nevertheless, the WG recognizes that a transition of the current thin gTLD registries would affect over 120 million domain name registrations and as such it should be carefully prepared and implemented. In section 7.3 the WG also provides other observations that emerged

from this discussion which while not directly related to the question of thin or thick did and should

1062 receive due consideration by other bodies.

10631064

1065

1066

7.2 Implementation Considerations

Expected impact of the proposed recommendation:

Per its Charter and given the recommendation that thick Whois services become a requirement for all gTLD registries, the WG is also charged with considered the following questions:

- 1067
- 1068
- 1069 1070 1071
- 1072 1073
- 1074 1075 1076
- 1077
- 1078
- 1079 1080

forum.

- 1081
- 1082 1083
- 1084 1085
- 1085
- 1080
- 1087
- 1089
- 1090 1091
- 1092
- 10931094
- 1095 1096

The WG notes that some of these considerations have already been covered in section 5.6 - cost implications. Overall, the WG expects that there will be a one-off cost involved in the actual

Cost implications for gTLD registries, registrars and registrants of a transition to thick Whois

- transition from thin to thick, but the WG also notes that considering synergies in the implementation process may minimize such costs. For example, instead of requiring all registrar
- data to be transferred to the registry at a certain point in time, this could coincide with the
- submission by the registrar of the data to the escrow agent so that it may only involve minor
- adjustments to submit that data to the gTLD operator. Also, as virtually all registrars already deal with thick TLDs and the only registry currently operating thin gTLDs also operates thick
- ${\it gTLDs, it is the expectation that there is hardly no learning curve or software development}\\$
- needed. The WG would welcome further input on this question as part of the public comment
- Guidelines as to how to conduct such a transition (timeline, requirements, potential changes to Registration Agreements, etc.)
 - The WG notes that valuable information may be learned from the PIR Post Transition Report
 - that describes the transition of .org from thin to thick and is considering whether specification 4 of the proposed new gTLD Registry Agreement could serve as a model for implementation, but
 - would welcome further community input before making a final decision on its implementation
 - recommendations, The WG does recommend that as part of the implementation a team is
 - formed consisting of experts from the parties that will be most affected by this transition,
 - together with ICANN Staff, to work out such details. It is the expectation that any implementation plan would be shared with the ICANN Community for input. Any further input
- Are special provisions and/or exemptions needed for gTLD registries which operate a thick
 - The WG notes that ICANN already has a <u>Procedure for Handling Whois Conflicts with Privacy</u>

 Law in place. Furthermore, the WG notes that the proposed 2013 RAA also includes a proposed

Initial Report on thick Whois Author: Marika Konings

on this question would be welcomed.

Whois but provide tiered access, for example?

Page 42 of 73

Marika Konings 1/6/13 12:10

Deleted: the WG does not have any further guidance to offer at this stage

mechanism for a registrar to request a waiver if the collection and/or retention of any data element violate applicable local law. The WG does not intend or expect that any of these exemptions or special provisions granted under these procedures are affected by a requirement for thick Whois for all gTLD registries.

The WG would like to encourage commenters on this Initial Report to raise any other issues or questions that the WG should consider as part of possible implementation guidance on this issue as part of the public comment forum.

7.3 Additional Observations

The WG would like to share the following observations that emerged as part of its deliberations on the different elements as outlined in section 5. These are not within scope of its Charter, but the WG would nevertheless like to document them so that the GNSO Council / ICANN Staff can take further action if deemed appropriate and timely.

Data Escrow: The WG suggests that ICANN consider exploring the implications of two escrows, which could conceivably be stored at the same site removing the benefit of the duplication, and the implications of registrar/registry integration which could result in those "two" sites being co-located.

Authoritativeness: The WG observes that UDRP providers consider registrar data to be authoritative (whether it is thick or thin), while in all other circumstances the registry data is considered authoritative under the thick Whois model. The WG suggests that the GNSO Council further consider this issue.

Privacy & Data Protection: The WG notes the increasing number of data protection and privacy laws and regulations around the world, as well as specific Whois-related concerns raised by the public. While recognizing that this exceeds the scope of our remit, we suggest that, as part of the development of the registration data directory system model currently in process, ICANN ensure that the ramifications of data protection and privacy laws and regulations with respect to Whois requirements be examined thoroughly. We make these points as part of that suggestion:

1129	
1130	

1132

1133

1134

1) Examinations must include data collection, data disclosure, and data retention laws, as well as data quality requirements under data protection principles. These examinations must be ongoing, as new data protection laws take effect and old ones are amended on a continual basis. The European Union Data Privacy Framework is well known and proposed amendments have received much attention. Additionally, the Singapore Personal Data Protection Commission will just begin its work in May, 2013.

113511361137

1138

1139

1140

2) Government inquiries can be expensive for a registrar or registry even if they do not lead to formal action. We suggest specifically that the procedures cited above for handling conflicts with privacy laws be reviewed to ensure that they can be invoked on the basis of documented and objectively well-founded concrete concerns about conflicts with local rules.
Accommodations for conflicts between Whois requirements and data protection laws have be

Accommodations for conflicts between Whois requirements and data protection laws have been made without a requirement of law enforcement inquiry through RSEPs initiated by .cat and .tel;

11431144

1145

1146

3) Reviews of the relevant questions already are occurring or have occurred, as evidenced by, for example, the Data Retention Specification in the Draft RAA currently open for public comment and Section 7.13, Severability; Conflicts with Laws of the draft RA also in the ICANN comment phase. However,

114711481149

1150

1151

1152

1153

4) Given the dynamic nature of laws and contracts that may address what data protections should be in place, as well as increasing complexities, the examinations must be limited to: provisions that have the force of law at any given time, authoritative statements from relevant governments about those provisions, or contract provisions that are final. If a decision is made to examine broader frameworks, those analyses must focus on what exists, not changes that may happen. It is not possible to anticipate what will happen or address all possibilities.

115411551156

1157

1158

5) Some level of real world review of the efficacy of data protection provisions must occur as part of any reviews. As examples, a) what is the real effect of data retention provisions or b) do safe harbor laws really provide data protection assurances.

Date:

1159

1160

Initial Report on thick Whois Author: Marika Konings

Page 45 of 73

7. Conclusions and Next Steps

- $1162 \qquad \hbox{The Working Group aims to complete this section of the report in the second phase of the PDP,}\\$
- 1163 following a public comment period on this Initial Report.
- 1164

1161

1165

Initial Report on thick Whois Author: Marika Konings

Page 46 of 73

1166 Annex A – PDP WG Charter

WG Name:	Thick Whois PDP Working Group			
Section I: Working Gro	Section I: Working Group Identification			
Chartering Organization(s):	GNSO Council			
Charter Approval Date:	17 October 2012	2		
Name of WG Chair:	Mikey O'Connor			
Name(s) of Appointed Liaison(s):	Volker Greimanı	n		
WG Workspace URL:	https://commur	nity.icann.org/display/PDP/Home		
WG Mailing List:	http://forum.ica	nn.org/lists/gnso-thickwhois-wg/		
GNSO Council Resolution:	Title:	Motion to approve the Charter for the thick Whois PDP Working Group		
Resolution.	Ref # & Link:	http://gnso.icann.org/en/resolutions#20121017-3		
Important Document Links:	 Thick Whois Final Issue Report (http://gnso.icann.org/issues/whois/final-report-thick-whois-02feb12-en.pdf) GNSO Working Group Guidelines (http://gnso.icann.org/council/annex-1-gnso-wg-guidelines-08apr11-en.pdf) GNSO PDP Manual (http://gnso.icann.org/council/annex-2-pdp-manual-16dec11-en.pdf) Annex A – GNSO Policy Development Process of the ICANN Bylaws (http://www.icann.org/en/about/governance/bylaws#AnnexA) 			
Section II: Mission, Pur	rpose, and Delive	rables		

Mission & Scope:

Background

ICANN specifies Whois service requirements through Registry Agreements (RAs) and the Registrar Accreditation Agreement (RAA) for the generic top-level domain (gTLD) registries.

Registries have historically satisfied their Whois obligations under two different models. The two models are often characterized as "thin" and "thick" Whois registries. This distinction is based on how two distinct sets of data are maintained.

Whois contains two kinds of data about a domain name; one set of data is associated with the domain name (this information includes data sufficient to identify the sponsoring registrar, status of the registration, creation and expiration dates for each registration, name server data, the last time the record was updated in the registry database, and the URL for the registrar's Whois service), and a second set of data that is associated with the registrant of the domain name.

In a thin registration model the registry only collects the information associated with the domain name from the Registrar. The registry in turn publishes that information along with maintaining certain status information at the registry level. Registrars maintain data associated with the registrant of the domain and provide it via their own Whois services, as required by Section 3.3 of the RAA for those domains they sponsor [1].

In a thick registration model the registry collects both sets of data (domain name and registrant) from the Registrar and in turn publishes that data via Whois.

Mission and Scope

The PDP Working Group is tasked to provide the GNSO Council with a policy recommendation regarding the use of thick Whois by all gTLD registries, both existing and future. As part of its deliberations on this issue, the PDP WG should, at a minimum, consider the following elements as detailed in the Final Issue Report:

Response consistency: a thick registry can dictate the labeling and display of Whois information to be sure the information is easy to parse, and all registrars/clients would have to display it accordingly. This could be considered a benefit but also a potential cost. This might also be a benefit in the context of internationalized registration data as even with the use of different scripts, uniform data collection and display standards could be applied.

- Stability: in the event of a Registrar business or technical failure, it could be beneficial to ICANN and registrants to have the full set of domain registration contact data stored by four organizations (the registry, the registry's escrow agent, the Registrar, and the Registrar's escrow agent), which would be the case in a thick registry.
- Accessibility: is the provision of Whois information at the registry level under the thick Whois model more effective and cost-effective than a thin model in protecting consumers and users of Whois data and intellectual property owners?
- Impact on privacy and data protection: how would thick Whois affect privacy and data protection, also taking into account the involvement of different jurisdictions with different laws and legislation with regard to data privacy as well as possible cross border transfers of registrant data?
- Cost implications: what are the cost implications of a transition to thick Whois for registries, registrars, registrants and other parties for all gTLDs? Conversely, what are the cost implications to registries, registrars, registrants and other parties if no transition is mandated?
- Synchronization/migration: what would be the impact on the registry and registrar Whois and EPP systems for those registries currently operating a thin registry, both in the migration phase to thick Whois as well as ongoing operations?
- Authoritativeness: what are the implications of a thin registry possibly becoming authoritative for registrant Whois data following the transition from a thin-registry model to a thick-registry model. The Working Group should consider the term "authoritative" in both the technical (the repository of the authoritative data) and policy (who has authority over the data) meanings of the word when considering this issue.
- Competition in registry services: what would be the impact on competition in registry services should all registries be required to provide Whois service using the thick Whois model – would there be more, less or no difference with regard to competition in registry services?
- Existing Whois Applications: What, if anything, are the potential impacts on the providers of third-party Whois-related applications if thick Whois is required for all gtLDs?
- Data escrow: thick Whois might obviate the need for the registrar escrow program and attendant expenses to ICANN and registrars.
- Registrar Port 43 Whois requirements: thick Whois could make the requirement for registrars to maintain Port 43 Whois access redundant.

Should the PDP WG reach consensus on a recommendation that thick Whois should be required for all gTLDs, the PDP WG is also expected to consider:

- Cost implications for gTLD registries, registrars and registrants of a transition to thick Whois
- Guidelines as to how to conduct such a transition (timeline, requirements, potential changes to Registration Agreements, etc.)
- Are special provisions and/or exemptions needed for gTLD registries which operate a thick Whois but provide tiered access [2], for example?

In addition, the PDP WG should take into account other ICANN initiatives that may help inform the deliberations limited to this specific topic such as;

- Registry/registrar separation and related developments with regards to access to customer data;
- Output from any/all of the four Whois Studies chartered by the GNSO Council, if completed in time for consideration by the WG;
- The 2004 transition of .ORG from thin to thick;
- The work being done concurrently on the internationalization of Whois and the successor to the Whois protocol and data model;
- Results of the RAA negotiations, and
- Recommendations of the Whois Review Team.

The PDP WG is also expected to consider any information and advice provided by other ICANN Supporting Organizations and Advisory Committees on this topic. The WG is strongly encouraged to reach out to these groups for collaboration at an early stage of its deliberations, to ensure that their concerns and positions are considered in a timely manner.

Objectives & Goals:

To develop, at a minimum, an Initial Report and a Final Report regarding the use of thick Whois by all gTLD registries, both existing and future to be delivered to the GNSO Council, following the processes described in Annex A of the ICANN Bylaws and the GNSO PDP Manual.

Deliverables & Timeframes:

The WG shall respect the timelines and deliverables as outlined in Annex A of the ICANN Bylaws and the PDP

Manual. As per the GNSO Working Group Guidelines, the WG shall develop a work plan that outlines the necessary steps and expected timing in order to achieve the milestones of the PDP as set out in Annex A of the ICANN Bylaws and the PDP Manual and submit this to the GNSO Council.

Section III: Formation, Staffing, and Organization

Membership Criteria:

The Working Group will be open to all interested in participating. New members who join after certain parts of work has been completed are expected to review previous documents and meeting transcripts.

Group Formation, Dependencies, & Dissolution:

This WG shall be a standard GNSO PDP Working Group. The GNSO Secretariat should circulate a 'Call For Volunteers' as widely as possible in order to ensure broad representation and participation in the Working Group, including:

- Publication of announcement on relevant ICANN web sites including but not limited to the GNSO and other Supporting Organizations and Advisory Committee web pages; and
- Distribution of the announcement to GNSO Stakeholder Groups, Constituencies and other ICANN
 Supporting Organizations and Advisory Committees

Working Group Roles, Functions, & Duties:

The ICANN Staff assigned to the WG will fully support the work of the Working Group as requested by the Chair including meeting support, document drafting, editing and distribution and other substantive contributions when deemed appropriate.

Staff assignments to the Working Group:

- GNSO Secretariat
- 1 ICANN policy staff member (Marika Konings)

The standard WG roles, functions & duties shall be applicable as specified in Section 2.2 of the Working Group Guidelines.

Statements of Interest (SOI) Guidelines:

Each member of the Working Group is required to submit an SOI in accordance with Section 5 of the GNSO Operating Procedures.

Section IV: Rules of Engagement

Decision-Making Methodologies:

{Note: The following material was extracted from the Working Group Guidelines, Section 3.6. If a Chartering Organization wishes to deviate from the standard methodology for making decisions or empower the WG to decide its own decision-making methodology, this section should be amended as appropriate}.

The Chair will be responsible for designating each position as having one of the following designations:

- <u>Full consensus</u> when no one in the group speaks against the recommendation in its last readings. This is also sometimes referred to as <u>Unanimous Consensus</u>.
- Consensus a position where only a small minority disagrees, but most agree. [Note: For those that are unfamiliar with ICANN usage, you may associate the definition of 'Consensus' with other definitions and terms of art such as rough consensus or near consensus. It should be noted, however, that in the case of a GNSO PDP originated Working Group, all reports, especially Final Reports, must restrict themselves to the term 'Consensus' as this may have legal implications.]
- <u>Strong support but significant opposition</u> a position where, while most of the group supports a recommendation, there are a significant number of those who do not support it.
- <u>Divergence</u> (also referred to as <u>No Consensus</u>) a position where there isn't strong support for any
 particular position, but many different points of view. Sometimes this is due to irreconcilable
 differences of opinion and sometimes it is due to the fact that no one has a particularly strong or
 convincing viewpoint, but the members of the group agree that it is worth listing the issue in the report
 nonetheless.
- Minority View refers to a proposal where a small number of people support the recommendation.
 This can happen in response to a Consensus, Strong support but significant opposition, and No
 Consensus; or, it can happen in cases where there is neither support nor opposition to a suggestion made by a small number of individuals.

In cases of <u>Consensus</u>, <u>Strong support but significant opposition</u>, and <u>No Consensus</u>, an effort should be made to document that variance in viewpoint and to present any <u>Minority View</u> recommendations that may have been made. Documentation of <u>Minority View</u> recommendations normally depends on text offered by the proponent(s). In all cases of <u>Divergence</u>, the WG Chair should encourage the submission of minority

viewpoint(s).

The recommended method for discovering the consensus level designation on recommendations should work as follows:

- i. After the group has discussed an issue long enough for all issues to have been raised, understood and discussed, the Chair, or Co-Chairs, make an evaluation of the designation and publish it for the group to review.
- ii. After the group has discussed the Chair's estimation of designation, the Chair, or Co-Chairs, should reevaluate and publish an updated evaluation.
- iii. Steps (i) and (ii) should continue until the Chair/Co-Chairs make an evaluation that is accepted by the group.
- iv. In rare case, a Chair may decide that the use of polls is reasonable. Some of the reasons for this might be:
- o A decision needs to be made within a time frame that does not allow for the natural process of iteration and settling on a designation to occur.
- It becomes obvious after several iterations that it is impossible to arrive at a designation. This will happen most often when trying to discriminate between <u>Consensus</u> and <u>Strong support</u>
 <u>but Significant Opposition</u> or between <u>Strong support but Significant Opposition</u> and
 <u>Divergence.</u>

Care should be taken in using polls that they do not become votes. A liability with the use of polls is that, in situations where there is **Divergence** or **Strong Opposition**, there are often disagreements about the meanings of the poll questions or of the poll results.

Based upon the WG's needs, the Chair may direct that WG participants do not have to have their name explicitly associated with any Full Consensus or Consensus view/position. However, in all other cases and in those cases where a group member represents the minority viewpoint, their name must be explicitly linked, especially in those cases where polls where taken.

Consensus calls should always involve the entire Working Group and, for this reason, should take place on the

designated mailing list to ensure that all Working Group members have the opportunity to fully participate in the consensus process. It is the role of the Chair to designate which level of consensus is reached and announce this designation to the Working Group. Member(s) of the Working Group should be able to challenge the designation of the Chair as part of the Working Group discussion. However, if disagreement persists, members of the WG may use the process set forth below to challenge the designation.

If several participants (see Note 1 below) in a WG disagree with the designation given to a position by the Chair or any other consensus call, they may follow these steps sequentially:

- 1. Send email to the Chair, copying the WG explaining why the decision is believed to be in error.
- 2. If the Chair still disagrees with the complainants, the Chair will forward the appeal to the CO liaison(s). The Chair must explain his or her reasoning in the response to the complainants and in the submission to the liaison. If the liaison(s) supports the Chair's position, the liaison(s) will provide their response to the complainants. The liaison(s) must explain their reasoning in the response. If the CO liaison disagrees with the Chair, the liaison will forward the appeal to the CO. Should the complainants disagree with the liaison support of the Chair's determination, the complainants may appeal to the Chair of the CO or their designated representative. If the CO agrees with the complainants' position, the CO should recommend remedial action to the Chair.
- In the event of any appeal, the CO will attach a statement of the appeal to the WG and/or Board report. This statement should include all of the documentation from all steps in the appeals process and should include a statement from the CO (see Note 2 below).

Note 1: Any Working Group member may raise an issue for reconsideration; however, a formal appeal will require that that a single member demonstrates a sufficient amount of support before a formal appeal process can be invoked. In those cases where a single Working Group member is seeking reconsideration, the member will advise the Chair and/or Liaison of their issue and the Chair and/or Liaison will work with the dissenting member to investigate the issue and to determine if there is sufficient support for the reconsideration to initial a formal appeal process.

Note 2: It should be noted that ICANN also has other conflict resolution mechanisms available that could be

considered in case any of the parties are dissatisfied with the outcome of this process.

Status Reporting:

As requested by the GNSO Council, taking into account the recommendation of the Council liaison to this group.

Problem/Issue Escalation & Resolution Processes:

{Note: the following material was extracted from Sections 3.4, 3.5, and 3.7 of the Working Group Guidelines and may be modified by the Chartering Organization at its discretion}

The WG will adhere to <u>ICANN's Expected Standards of Behavior</u> as documented in Section F of the ICANN Accountability and Transparency Frameworks and Principles, January 2008.

If a WG member feels that these standards are being abused, the affected party should appeal first to the Chair and Liaison and, if unsatisfactorily resolved, to the Chair of the Chartering Organization or their designated representative. It is important to emphasize that expressed disagreement is not, by itself, grounds for abusive behavior. It should also be taken into account that as a result of cultural differences and language barriers, statements may appear disrespectful or inappropriate to some but are not necessarily intended as such. However, it is expected that WG members make every effort to respect the principles outlined in ICANN's Expected Standards of Behavior as referenced above.

The Chair, in consultation with the Chartering Organization liaison(s), is empowered to restrict the participation of someone who seriously disrupts the Working Group. Any such restriction will be reviewed by the Chartering Organization. Generally, the participant should first be warned privately, and then warned publicly before such a restriction is put into place. In extreme circumstances, this requirement may be bypassed.

Any WG member that believes that his/her contributions are being systematically ignored or discounted or wants to appeal a decision of the WG or CO should first discuss the circumstances with the WG Chair. In the event that the matter cannot be resolved satisfactorily, the WG member should request an opportunity to discuss the situation with the Chair of the Chartering Organization or their designated representative.

In addition, if any member of the WG is of the opinion that someone is not performing their role according to

the criteria outlined in this Charter, the same appeals process may be invoked.

Closure & Working Group Self-Assessment:

Konings

The WG will close upon the delivery of the Final Report, unless assigned additional tasks or follow-up by the GNSO Council.

Section V: Charter Document History

Version	Date		Description	
1.0	8 October	2012	Final version sub	mitted by the DT to the GNSO Council for consideration
			·	
Staff Conta	ct:	Marika	Email:	Policy-staff@icann.org

1167

1168

1169 1170

1171

1172

1173

1174 1175

1176 1177

1178

into the registry. Sponsorship of a registration may be changed at the express direction of the Registered Name Holder or, in the event a registrar loses accreditation, in accordance with then-current ICANN

[1] 'A Registered Name is "sponsored" by the registrar that placed the record associated with that registration

specifications and policies' (see http://www.icann.org/en/resources/registrars/raa/ra-agreement-21may09en.htm_)

[2] For some registries, Thick Whois information is available at the registry, but public access to the data is organized in tiers. For example, for .name, the full set of data is available to requesters if the requester enters into an agreement with the registry under the Extensive Whois Data tier. See

http://www.icann.org/en/tlds/agreements/name/appendix-05-15aug07.htm for further details.

Statement
Stakeholder Group / Constituency / Input Template
thick Whois PDP Working Group
PLEASE SUBMIT YOUR RESPONSE AT THE LATEST BY 9 January 2013 TO THE GNSO SECRETARIAT
(gnso.secretariat@gnso.icann.org), which will forward your statement to the Working Group. If
additional time is needed by your SG / C to provide your feedback, please inform the secretariat
accordingly, including the expected delivery date so that this can be factored in by the WG.
$ \label{thm:constraints} \mbox{The GNSO Council has formed a Working Group of interested stakeholders and Stakeholder Group / } \\$
Constituency representatives, to collaborate broadly with knowledgeable individuals and
organizations, in order to consider recommendations in relation to thick Whois.
Part of the working group's effort will be to incorporate ideas and suggestions gathered from
Stakeholder Groups, Constituencies through this template Statement. Please note that the WG is
currently in an information-gathering phase. Inserting your response in this form will make it much
easier for the Working Group to summarize the responses. This information is helpful to the
community in understanding the points of view of various stakeholders. However, you should feel
free to add any information you deem important to inform the working group's deliberations, even
if this does not fit into any of the questions listed below.
For further information, please visit the WG Workspace
(https://community.icann.org/display/PDP/Home).
Process
- Please identify the member(s) of your stakeholder group / constituency who is (are)
participating in this working group

- Please identify the members of your stakeholder group / constituency who participated in
 developing the perspective(s) set forth below
- 1209 Please describe the process by which your stakeholder group / constituency arrived at the 1210 perspective(s) set forth below
 - If not indicated otherwise, the WG will consider your submission a SG / C position / contribution. Please note that this should not prevent the submission of individual and/or minority views as part of your submission, as long as these are clearly identified.

12161217

1218

1219

1220

1221

1222

1223

1211

1212

1213

Topics:

The WG is tasked to provide the GNSO Council with a policy recommendation regarding the use of thick Whois by all gTLD registries, both existing and future. As part of its deliberations, the WG is expected to consider the topics listed below in the context of thick Whois. Please provide your stakeholder group's / constituency's views, including quantitative and/or empirical information supporting your views, on these topics in relation to whether or not to require thick Whois for all gTLDs and/or provide any information that you think will help the WG in its deliberations (for further information on each of these topics, please see the WG Charter https://community.icann.org/x/vlg3Ag):

12241225

1226

1227

1228

1229

1230

Response consistency - a thick registry can dictate the labeling and display of Whois information
to be sure the information is easy to parse, and all registrars/clients would have to display it
accordingly. This could be considered a benefit but also a potential cost. This might also be a
benefit in the context of internationalized registration data as even with the use of different
scripts, uniform data collection and display standards could be applied.

1231 Your view:

12321233

1234

1235

1236

• Stability - in the event of a Registrar business or technical failure, it could be beneficial to ICANN and registrants to have the full set of domain registration contact data stored by four organizations (the registry, the registry's escrow agent, the Registrar, and the Registrar's escrow agent), which would be the case in a thick registry.

1237	Yo	ur view:
1238		
1239	•	Accessibility - is the provision of Whois information at the registry level under the thick Whois
1240		model more effective and cost-effective than a thin model in protecting consumers and users of
1241		Whois data and intellectual property owners?
1242	Yo	ur view:
1243		
1244	•	Impact on privacy and data protection - how would thick Whois affect privacy and data
1245		protection, also taking into account the involvement of different jurisdictions with different laws
1246		and legislation with regard to data privacy as well as possible cross border transfers of registrant
1247		data?
1248	Yo	ur view:
1249		
1250	•	Cost implications - what are the cost implications of a transition to thick Whois for registries,
1251		registrars, registrants and other parties for all gTLDs? Conversely, what are the cost implications
1252		to registries, registrars, registrants and other parties if no transition is mandated?
1253	Yo	ur view:
1254		
1255	•	Synchronization/migration - what would be the impact on the registry and registrar Whois and
1256		EPP systems for those registries currently operating a thin registry, both in the migration phase
1257		to thick Whois as well as ongoing operations?
1258	Yo	ur view:
1259		
1260	•	Authoritativeness - what are the implications of a thin registry possibly becoming authoritative
1261		for registrant Whois data following the transition from a thin-registry model to a thick-registry
1262		model. The Working Group should consider the term "authoritative" in both the technical (the
1263		repository of the authoritative data) and policy (who has authority over the data) meanings of
1264		the word when considering this issue.
1265	Yo	ur view:
1266		

1267	• Competition in registry services - what would be the impact on competition in registry services
1268	should all registries be required to provide Whois service using the thick Whois model – would
1269	there be more, less or no difference with regard to competition in registry services?
1270	Your view:
1271	
1272	• Existing Whois Applications - What, if anything, are the potential impacts on the providers of
1273	third-party Whois-related applications if thick Whois is required for all gtLDs?
1274	Your view:
1275	
1276	Data escrow - thick Whois might obviate the need for the registrar escrow program and
1277	attendant expenses to ICANN and registrars.
1278	Your view:
1279	
1280	• Registrar Port 43 Whois requirements - thick Whois could make the requirement for registrars
1281	to maintain Port 43 Whois access redundant.
1282	Your view:
1283	
1284	Based on your assessment of these topics, you are also encouraged to indicate whether you think
1285	there should or there shouldn't be a requirement for thick Whois by all gTLD registries.
1286	Your view:
1287	
1288	If there is any other information you think should be considered by the WG as part of its
1289	deliberations, please feel free to include that here.
1290	Other information:

Annex C – Request for input from ICANN SO / ACs

12931294 Dear SO/AC Chair,

As you may be aware, the GNSO Council recently initiated a Policy Development Process (PDP) on thick Whois. As part of its efforts to obtain input from the broader ICANN Community at an early stage of its deliberations, the Working Group that has been tasked with addressing this issue is looking for any input or information that may help inform its deliberations. You are strongly encouraged to provide any input or information you or members of your respective communities may have to the GNSO Secretariat (gnso.secretariat@gnso.icann.org).

For further background information on the WG's activities to date, please see https://community.icann.org/display/PDP/Home. Below you'll find an overview of the issues that the WG's has been tasked to address per its charter.

If possible, the WG would greatly appreciate if it could receive your input by 9 January 2012 at the latest. If you cannot submit your input by that date, but your group would like to contribute, please let us know when we can expect to receive your contribution so we can plan accordingly. Your input will be very much appreciated.

1312 With best regards,

Mikey O'Connor, Chair of the thick Whois PDP Working Group

From the Charter (see https://community.icann.org/x/vlg3Ag):

The PDP Working Group is tasked to provide the GNSO Council with a policy recommendation regarding the use of thick Whois by all gTLD registries, both existing and future. As part of its deliberations on this issue, the PDP WG should, at a minimum, consider the following elements as detailed in the Final Issue Report:

- Response consistency: a thick registry can dictate the labeling and display of Whois information
 to be sure the information is easy to parse, and all registrars/clients would have to display it
 accordingly. This could be considered a benefit but also a potential cost. This might also be a
 benefit in the context of internationalized registration data as even with the use of different
 scripts, uniform data collection and display standards could be applied.
- Stability: in the event of a Registrar business or technical failure, it could be beneficial to ICANN
 and registrants to have the full set of domain registration contact data stored by four
 organizations (the registry, the registry's escrow agent, the Registrar, and the Registrar's
 escrow agent), which would be the case in a thick registry.
- 1332 Accessibility: is the provision of Whois information at the registry level under the thick Whois
 1333 model more effective and cost-effective than a thin model in protecting consumers and users
 1334 of Whois data and intellectual property owners?

1346

1347

1348

1349

1353

1354

1355

1356

1357

1358 1359 1360

1361

1363

1364

1367 1368

1369

1370

1373

1374

1375

1378

- 1335 Impact on privacy and data protection: how would thick Whois affect privacy and data
 1336 protection, also taking into account the involvement of different jurisdictions with different
 1337 laws and legislation with regard to data privacy as well as possible cross border transfers of
 1338 registrant data?
- Cost implications: what are the cost implications of a transition to thick Whois for registries,
 registrars, registrants and other parties for all gTLDs? Conversely, what are the cost
 implications to registries, registrants and other parties if no transition is mandated?
- 1342 Synchronization/migration: what would be the impact on the registry and registrar Whois and EPP systems for those registries currently operating a thin registry, both in the migration phase to thick Whois as well as ongoing operations?
 - Authoritativeness: what are the implications of a thin registry possibly becoming authoritative
 for registrant Whois data following the transition from a thin-registry model to a thick-registry
 model. The Working Group should consider the term "authoritative" in both the technical (the
 repository of the authoritative data) and policy (who has authority over the data) meanings of
 the word when considering this issue.
- Competition in registry services: what would be the impact on competition in registry services
 should all registries be required to provide Whois service using the thick Whois model would
 there be more, less or no difference with regard to competition in registry services?
 - Existing Whois Applications: What, if anything, are the potential impacts on the providers of third-party Whois-related applications if thick Whois is required for all gtLDs?
 - Data escrow: thick Whois might obviate the need for the registrar escrow program and attendant expenses to ICANN and registrars.
 - Registrar Port 43 Whois requirements: thick Whois could make the requirement for registrars to maintain Port 43 Whois access redundant.

Should the PDP WG reach consensus on a recommendation that thick Whois should be required for all gTLDs, the PDP WG is also expected to consider:

- 1362 Cost implications for gTLD registries, registrars and registrants of a transition to thick Whois
 - Guidelines as to how to conduct such a transition (timeline, requirements, potential changes to Registration Agreements, etc.)
- Are special provisions and/or exemptions needed for gTLD registries which operate a thick
 Whois but provide tiered access, for example?

In addition, the PDP WG should take into account other ICANN initiatives that may help inform the deliberations limited to this specific topic such as;

- Registry/registrar separation and related developments with regards to access to customer data;
- Output from any/all of the four Whois Studies chartered by the GNSO Council, if completed in
 time for consideration by the WG;
 - The 2004 transition of .ORG from thin to thick;
 - The work being done concurrently on the internationalization of Whois and the successor to the Whois protocol and data model;
- 1376 $$ $$ Results of the RAA negotiations, and
- Recommendations of the Whois Review Team.

1379	Annex D – Topics Poll Results
1380	
1381	thick Whois PDP WG - Topics Poll
1382	
1383	Introduction
1384	
1385	This is a quick survey to collect two kinds of information – your interest in participating in
1386	sub-groups focused on each of our topics, and your suggestions as to sources of information
1387	or experts about those topics.
1388	
1389	You are welcome to offer information-source and expert suggestions for all topics, not just
1390	the ones that you are volunteering to focus on.
1391	
1392	Questions
1393	
1394 1395 1396 1397 1398 1399	1. Authoritativeness: what are the implications of a thin registry possibly becoming authoritative for registrant Whois data following the transition from a thin-registry model to a thick-registry model. The Working Group should consider the term "authoritative" in both the technical (the repository of the authoritative data) and policy (who has authority over the data) meanings of the word when considering this issue.
1400	I would like to participate in the sub-team for this topic:
1401 1402 1403 1404 1405 1406 1407	 Jill Titzer (RrSG) Titi Akinsanmi (ALAC) Amr Elsadr (NCSG) Tim Ruiz (RrSG) Jeff Neuman (RySG) Steve Metalitz (IPC)
1408	Here are my suggested information-sources (or experts who would be good advisors)
1409	about this topic:

1410		
1411 1412 1413 1414 1415	2.	Stability: in the event of a Registrar business or technical failure, it could be beneficial to ICANN and registrants to have the full set of domain registration contact data stored by four organizations (the registry, the registry's escrow agent, the Registrar, and the Registrar's escrow agent), which would be the case in a thick registry.
1416	l w	ould like to participate in the sub-team for this topic:
1417 1418 1419 1420 1421 1422 1423	• •	Alan Greenberg (ALAC) Carolyn Hoover (RySG) Tim Ruiz (RrSG) Jeff Neuman (RySG) Christopher E George (IPC) re are my suggested information-sources (or experts who would be good advisors)
1424	ab	out this topic:
1425		
1426 1427 1428	3.	Data escrow: thick Whois might obviate the need for the registrar escrow program and attendant expenses to ICANN and registrars.
1429	l w	ould like to participate in the sub-team for this topic
1430 1431 1432 1433 1434 1435	• •	Alan Greenberg (ALAC) Carolyn Hoover (RySG) Frederic Guillemaut (RrSG) Tim Ruiz (RrSG) re are my suggested information-sources (or experts who would be good advisors)
1436		out this topic:
1436	aυ	out this topic.
1438 1439 1440 1441	4.	Synchronization/migration: what would be the impact on the registry and registrar Whois and EPP systems for those registries currently operating a thin registry, both in the migration phase to thick Whois as well as ongoing operations?
1442	l w	ould like to participate in the sub-team for this topic:
1443	•	Jill Titzer (RrSG)

1444 • 1445	Susan Kawaguchi (BC)
1446 He	ere are my suggested information-sources (or experts who would be good advisors)
1447 ab	out this topic:
1448	
1449 5. 1450 1451 1452 1453 1454 1455	Response consistency: a thick registry can dictate the labeling and display of Whois information to be sure the information is easy to parse, and all registrars/clients would have to display it accordingly. This could be considered a benefit but also a potential cost. This might also be a benefit in the context of internationalized registration data as even with the use of different scripts, uniform data collection and display standards could be applied.
1456 I v	ould like to participate in the sub-team for this topic:
1457 • 1458 • 1459 • 1460 • 1461 • 1462 • 1463 • 1465 • 1466 1467 • He	Jill Titzer (RrSG) Carlton Samuels (ALAC) Carolyn Hoover (RySG) Michael Shohat (RrSG) Susan Prosser (RrSG) Tim Ruiz (RrSG) Marie-laure Lemineur (NPOC) Susan Kawaguchi (BC) Christopher E George (IPC) ere are my suggested information-sources (or experts who would be good advisors)
1468 ab	out this topic:
1469	
1470 6. 1471 1472 1473	Accessibility: is the provision of Whois information at the registry level under the thick Whois model more effective and cost-effective than a thin model in protecting consumers and users of Whois data and intellectual property owners?
1474 I v	vould like to participate in the sub-team for this topic:
1475 • 1476 • 1477 • 1478 •	Jill Titzer (RrSG) Carlton Samuels (ALAC) Titi Akinsanmi (ALAC) Amr Elsadr (NCSG)

1479 1480 1481 1482	 Jennifer Wolfe (NomCom) Michael Shohat (RrSG) Evan Leibovitch (ALAC) Susan Prosser (RrSG)
1483 1484 1485 1486	 Tim Ruiz (RrSG) Jeff Neuman (RySG) Susan Kawaguchi (BC) Christopher E George (IPC)
1487 1488	Here are my suggested information-sources (or experts who would be good advisors)
1489	about this topic:
1490 1491 1492 1493 1494	 NORC study commissioned by ICANN. See http://www.icann.org/en/compliance/reports/whois-accuracy-study-17jan10-en.pdf); Whois Policy Review Team Final Report, http://www.icann.org/en/about/aocreview/whois/final-report-11may12-en.pdf, at 15. (suggested by Steve Metalitz)
1495 1496 1497 1498 1499	7. Impact on privacy and data protection: how would thick Whois affect privacy and data protection, also taking into account the involvement of different jurisdictions with different laws and legislation with regard to data privacy as well as possible cross border transfers of registrant data?
1500	I would like to participate in the sub-team for this topic:
1501 1502 1503 1504 1505 1506 1507 1508 1509 1510	 Alan Greenberg (ALAC) Carlton Samuels (ALAC) Titi Akinsanmi (ALAC) Amr Elsadr (NCSG) Roy Balleste (NCUC) Jennifer Wolfe (NomCom) Michael Shohat (RrSG) Susan Prosser (RrSG) Marie-laure Lemineur (NPOC)
1511	Here are my suggested information-sources (or experts who would be good advisors)
1512	about this topic:
1513 1514	 Dr. Joanna Kulesza, Faculty of Law and Administration, University of Lodz (Suggested by Roy Balleste, NCUC)

1515	
1516 1517 1518 1519 1520	8. Competition in registry services: what would be the impact on competition in registry services should all registries be required to provide Whois service using the thick Whois model – would there be more, less or no difference with regard to competition in registry services?
1521	I would like to participate in the sub-team for this topic:
1522 1523 1524 1525 1526 1527 1528	 Alan Greenberg (ALAC) Jill Titzer (RrSG) Amr Elsadr (NCSG) Jeff Neuman (RySG) Jonathan Zuck (IPC) Steve Metalitz (IPC)
1529	Here are my suggested information-sources (or experts who would be good advisors)
1530	about this topic:
1531 1532 1533	 Need to look at survey and sales data for both kinds of registries (suggested by Jonathan Zuck)
1534 1535 1536 1537	9. Existing Whois Applications: What, if anything, are the potential impacts on the providers of third-party Whois-related applications if thick Whois is required for all gtLDs?
1538	I would like to participate in the sub-team for this topic:
1539 1540 1541 1542 1543	 Titi Akinsanmi (ALAC) Susan Prosser (RrSG) Susan Kawaguchi (BC) Here are my suggested information-sources (or experts who would be good advisors)
1544	about this topic:
1545	
1546 1547 1548	10. Registrar Port 43 Whois requirements: thick Whois could make the requirement for registrars to maintain Port 43 Whois access redundant.

1549	I would like to participate in the sub-team for this topic:
1550 1551 1552 1553 1554 1555 1556	 Alan Greenberg (ALAC) Carlton Samuels (ALAC) Frederic Guillemaut (RrSG) Tim Ruiz (RrSG) Steve Metalitz (IPC) Here are my suggested information-sources (or experts who would be good advisors)
1557	about this topic:
1558 1559	Registrar Constituency (Suggested by Frederic Guillemaut, RrSG)
1560 1561 1562 1563 1564	11. Cost implications: what are the cost implications of a transition to thick Whois for registries, registrars, registrants and other parties for all gTLDs? Conversely, what are the cost implications to registries, registrars, registrants and other parties if no transition is mandated?
1565	I would like to participate in the sub-team for this topic
1566 1567 1568 1569 1570 1571	 Alan Greenberg (ALAC) Jill Titzer (RrSG) Michael Shohat (RrSG) Jeff Neuman (RySG) Christopher E George (IPC)
1572	Here are my suggested information-sources (or experts who would be good advisors)
1573	about this topic:
1574	

Annex E – Agreement Excerpts on WHOIS Response Format

1576

- Excerpt from Proposed RA (Spec 4)²³:
- 1.1. The format of responses shall follow a semi-free text format outline below, followed by a blank
- 1579 line and a legal disclaimer specifying the rights of Registry Operator, and of the user querying the
- 1580 database.

1575

1577

- 1.2. Each data object shall be represented as a set of key/value pairs, with lines beginning with keys,
- 1582 followed by a colon and a space as delimiters, followed by the value.
- 1.3. For fields where more than one value exists, multiple key/value pairs with the same key shall be
- allowed (for example to list multiple name servers). The first key/value pair after a blank line should
- 1585 be considered the start of a new record, and should be considered as identifying that record, and is
- used to group data, such as hostnames and IP addresses, or a domain name and registrant
- 1587 information, together.
- 1588 1.4. The fields specified below set forth the minimum output requirements. Registry Operator may
- output data fields in addition to those specified below, subject to approval by ICANN.

1590

- 1591 Excerpt From Proposed RAA (REGISTRATION DATA DIRECTORY SERVICE (WHOIS)
- 1592 **SPECIFICATION**)²⁴:
- 1593 1.1. The format of responses shall follow a semi---free text format outline below, followed by a
- 1594 blank line and a legal disclaimer specifying the rights of Registrar, and of the user querying the
- 1595 database.
- 1.2. Each data object shall be represented as a set of key/value pairs, with lines beginning with keys,
- followed by a colon and a space as delimiters, followed by the value.
- 1.3. For fields where more than one value exists, multiple numbered key/value pairs with the same
- 1599 key shall be allowed (for example to list multiple name servers). The first key/value pair after a
- 1600 blank line should be considered the start of a new record, and should be considered as identifying

 $[\]frac{^{23}}{^{24}} RA: http://newgtlds.icann.org/en/applicants/agb/base-agreement-specs-29apr13-en.pdf}{^{24}} http://www.icann.org/en/resources/registrars/raa/proposed-whois-22apr13-en.pdf}$

- 1601 that record, and is used to group data, such as hostnames and IP addresses, or a domain name and
- registrant information, together.
- 1603 1.4. Domain Name Data:
- 1604 1.4.1. Query
- $1605 \qquad \text{format: whois--h whois.example---registrar.tld EXAMPLE.TLD}$
- 1606 1.4.2. Response format:
- 1607 The format of responses shall contain all the elements and follow a semi---free text format outline
- 1608 below.
- 1609 Additional data elements can be added at the end of the text

1610 Annex F – Table Comparison Matrix

Expected Impacted of Requiring thick Whois	IPC	ВС	ALAC	NPOC	Verisign	RySG	RrSG	NCUC	Preliminary Conclusion	
Response Consistency	•	>	*	*	•	*	*	×	Almost all agree that from the perspective of response consistency, requiring thick Whois could be considered a benefit	✓ = Positive impact X = Negative impact
Stability	*	*	*	×	×	*	*	×	Most agree that from the perspective of stability, requiring thick Whois could be considered a benefit	✓ = Positive impact X = Negative impact
Accessibility	*	*	*	×	×	*	*	Х	Most agree that from the perspective of accessibility, requiring thick Whois could be considered a benefit	✓ = Positive impact X = Negative impact
Cost Implications	×	×	×	?	?	×	×	?	More information needed, but in principle most agree that there is no negative impact expected with regard to cost implications from requiring thick Whois	X = no negative impact expected with regard to costs? = More information needed

Synchronization / Migration	?	√	*	?	?	?	?	?	More information needed	✓= No significant impact expected ? = More information needed
Competition in registry services	*	,	,	х	0	/	/	х	Most agree that there will be more, or no difference in competition if thick Whois would be required.	✓= More competition / = no difference X = less competition 0 = no comment
Existing Whois applications	/	*	*	0	0	/	*	Х	Almost all agree that there will a positive, or no impact on existing Whois applications if thick Whois would be required.	✓ = Positive impact / = no difference X = Negative impact 0 = no comment
Registrar Port 43 Whois Requirements	х	х	х	0	0	х	,	0	Almost all agree that Port 43 Whois Requirements should be maintained if thick Whois would be required	✓ = Makes Port 43 redundant X = Does not make Port 43 redundant 0 = no comment
Privacy & Data Protection	•	•	•	×	×	•	•	×	Most agree that from the perspective of Privacy & Data Protection there are no significant issues if thick Whois would be required	✓ = Not an issue / not specific to thick Whois X = Is a problem

Authoritativeness	ý	•	ŗ	ŗ	?	•	•	Х	More information needed	 ✓ = registry would become authoritative X = Registrar should remain authoritative ? = More information needed
Data Escrow	0	*	*	0	*	0	×	*	Almost all agree that there should be no change to the current data escrow requirements if thick Whois is mandated	✓ = Current escrow requirements should be maintained X = No need to maintain current escrow requirements 0 = no comment

1612

1613

1614

1615

1616