

Registration Directory Service Review RDS-WHOIS2

Draft Report

RDS-WHOIS2 Review Team
23 July 2018



TABLE OF CONTENTS

1 EXECUTIVE SUMMARY	5
2 REVIEW TEAM RECOMMENDATIONS	6
3 BACKGROUND ON THE REVIEW	9
4 OBJECTIVE 1: ASSESSMENT OF WHOIS1 RECOMMENDATIONS IMPLEMENTATION	12
<hr/>	
4.1 Introduction	12
4.2 WHOIS1 Rec #1: Strategic Priority	12
4.2.1 Topic	12
4.2.2 Summary of Relevant Research	13
4.2.3 Analysis & Findings	14
4.2.4 Problem/Issue	20
4.2.5 Recommendations	20
4.2.6 Possible impact of GDPR and other applicable laws	22
4.3 WHOIS1 Rec #2: Single WHOIS Policy	22
4.3.1 Topic	22
4.3.2 Summary of Relevant Research	22
4.3.3 Analysis & Findings	24
4.3.4 Problem/Issue	27
4.3.5 Recommendations (if any)	27
4.3.6 Possible impact of GDPR and other applicable laws	27
4.4 WHOIS1 Rec #3: Outreach	27
4.4.1 Topic	27
4.4.2 Summary of Relevant Research	28
4.4.3 Analysis & Findings	28
4.4.4 Problem/Issue	30
4.4.5 Recommendations	30
4.4.6 Possible impact of GDPR and other applicable laws	31
4.5 WHOIS1 Rec #4: Compliance	31
4.5.1 Topic	32
4.5.2 Summary of Relevant Research	33
4.5.3 Analysis & Findings	34
4.5.4 Problem/Issue	44
4.5.5 Recommendations (if any)	47
4.5.6 Possible impact of GDPR and other applicable laws	54
4.6 WHOIS1 Rec #5-9: Data Accuracy	54
4.6.1 Topic	54
4.6.2 Summary of Relevant Research	55
4.6.3 Analysis & Findings	55
4.6.4 Problem/Issue	62
4.6.5 Recommendations (if any)	65
4.6.6 Possible impact of GDPR and other applicable laws	65
4.7 WHOIS1 Rec #10: Privacy/Proxy Services	65
4.7.1 Topic	66
4.7.2 Summary of Relevant Research	67
4.7.3 Analysis & Findings	67
4.7.4 Problem/Issue	70
4.7.5 Recommendations (if any)	70
4.7.6 Possible impact of GDPR and other applicable laws	71

4.8 WHOIS1 Rec #11: Common Interface	71
4.8.1 Topic	71
4.8.2 Summary of Relevant Research	71
4.8.3 Analysis & Findings	72
4.8.4 Problem/Issue	73
4.8.5 Recommendations (if any)	73
4.8.6 Possible impact of GDPR and other applicable laws	74
4.9 WHOIS1 Rec #12-14: Internationalized Domain Names	74
4.9.1 Topic	74
4.9.2 Summary of Relevant Research	75
4.9.3 Analysis & Findings	76
4.9.4 Problem/Issue	79
4.9.5 Recommendations	79
4.9.6 Possible impact of GDPR and other applicable laws	80
4.10 WHOIS1 Rec #15-16: Plan & Annual Reports	80
4.10.1 Topic	80
4.10.2 Summary of Relevant Research	81
4.10.3 Analysis & Findings	81
4.10.4 Problem/Issue	82
4.10.5 Recommendations (if any)	83
4.10.6 Possible impact of GDPR and other applicable laws	84
5 OBJECTIVE 2: ANYTHING NEW	85
5.1 Topic	85
5.2 Summary of Relevant Research	85
5.3 Analysis and Findings	86
5.4 Problem/Issue	88
5.5 Recommendations (if any)	88
5.6 Possible impact of GDPR and other applicable laws	89
6 OBJECTIVE 3: LAW ENFORCEMENT NEEDS	90
6.1 Topic	90
6.2 Summary of Relevant Research	90
6.3 Analysis and Findings	91
6.4 Problem/Issue	91
6.5 Recommendations (if any)	91
6.6 Possible impact of GDPR and other applicable laws	91
7 OBJECTIVE 4: CONSUMER TRUST	91
7.1 Topic	91
7.2 Summary of Relevant Research	92
7.3 Analysis and Findings	92
7.4 Problem/Issue	97
7.5 Recommendations (if any)	97
7.6 Possible impact of GDPR and other applicable laws	99
8 OBJECTIVE 5: SAFEGUARDING REGISTRANT DATA	99
8.1 Topic	99
8.2 Summary of Relevant Research	99
8.3 Analysis and Findings	100
8.4 Problem/Issue	100
8.5 Recommendations	100

8.6 Possible impact of GDPR and other applicable laws	101
APPENDIX A: GLOSSARY OF TERMS	102
APPENDIX B: TERMS OF REFERENCE	103
APPENDIX C: WORKPLAN	123
APPENDIX D: FACT SHEETS	124
APPENDIX E: PARTICIPATION SUMMARY	125
APPENDIX F: BIBLIOGRAPHY	126

1 Executive Summary

[TO BE PROVIDED PRIOR TO POSTING FOR PUBLIC COMMENT]

Including statement about GDPR and how the RT handled the changing landscape\

This report presents the RDS-WHOIS2 Review Team's findings, analysis, issues, and recommendations. Wherever possible, this report reflects the consensus of the full review team. Where consensus was not achieved on a given recommendation, this report identifies the level of support within the team. Following public comment on its draft recommendations, the team's Final Report will be delivered to the ICANN Board, which will then develop an action plan for implementation of those recommendations.

2 Review Team Recommendations

Recommendations are summarized in this table. The full recommendation, with related findings and rationale, may be found in the cited chapters.

#	Recommendation	To	Priority	Consensus
R1.1	The ICANN Board should update the Charter of its BWG-RDS to include forward-looking planning, based on a regular assessment of the RDS' fitness to meet legal requirements and legitimate user needs as outlined in the Bylaws.			
R3.1	All of the information related to WHOIS and by implication to other information related to the registration of 2nd level gTLD Domains needs to be revised with the intent of making the information readily accessible and understandable, and should provide details of when and how to interact with ICANN or contracted parties. Although not the sole focus interactions with Contractual Compliance, such as when filing WHOIS inaccuracy reports, should be a particular focus. This should be done post-GDPR implementation and consideration should be given to deferring this until we have a stable permanent GDPR implementation. The revision of this web documentation and instructional material should not be undertaken as a purely internal operation but should include users and potentially focus groups to ensure that the final result fully meets the requirements.			
R3.2	With community input, ICANN should decide to what extent there is a need to carry out outreach to groups outside of the normal ICANN participant, and should such outreach be deemed necessary, a plan should be developed to carry this out and document it. WHOIS inaccuracy reported was previously an issue requiring additional education and outreach and may require a particular focus. The need for and details of the outreach may vary depending on the ultimate GDPR implementation and cannot be detailed at this point.			
R4.1	Require all new policies implemented to be measured, audited, tracked and enforced as required by the compliance team. Policy should integrate metrics, measurements, and reporting to ensure that the policy is effective in addressing the issue, and when metrics are defined, compliance would audit, track, report, and enforce as applicable for the policy.			
R4.2	Require all domain name registrations to adhere to the WHOIS requirements in the 2013 Registrar Accreditation Agreement or the latest implemented policy for WHOIS. Once a policy is implemented all gTLD registrations must adhere to the new rules within a 12 month period. Assess the grandfathered domain names to determine if information is missing from the registrant field. If statistically significant number of			

	domain name registrations lack registrant data then a new policy should be created to ensure all gTLDs adhere to the requirements of registrant data collection in the 2013 RAA.			
R4.3	Domain names suspended due to inaccurate information and remain in that state until it is due for renewal the WHOIS record should be updated to a new status and the inaccurate data removed, as further described below. (1) Policy or contracts should require that WHOIS indicate whether a domain is on hold due to inaccurate data. (2) Domains on serverHold due to inaccurate data in WHOIS should not be unsuspending without inaccurate data being remedied.			
R4.5	Publicize and encourage use of the Bulk WHOIS inaccuracy reporting tool.			
R4.6	Review the WHOIS ARS domain names sampled for each region to determine whether or not low submission rates to the WHOIS inaccuracy reporting tool are due to the lack of knowledge of the tool or other critical factors.			
R4.7	Following a valid WHOIS ARS ticket, or WHOIS inaccuracy complaint and where there is a pattern of failure to validate as required by the RAA, a full audit targeting the relating registrar should be initiated, to check if the registrar follows the contractual obligations, the consensus policies, etc. Sanctions should be applied if deficiencies identified.			
R4.8	Direct contractual compliance to proactively monitor and enforce as required to address systemic issues. A risk based approach should be executed to assess, and understand inaccuracy issues and then take the appropriate compliance actions to mitigate risk in systemic complaints.			
R11.1	Define metrics or SLAs to be tracked and evaluated to determine consistency of results of queries and use of any common interface (existing or future) used to provide one-stop access to registration data across all gTLDs and registrars/resellers. Specific metrics that should be tracked for any such common interface include: (a) How often are fields returned blank? (b) How often is data displayed inconsistently overall and per gTLD? (c) How overall and for specific gTLDs does the tool not return results?			
R12.1	The implementation of Rec #12-14 should be reviewed again after RDAP is implemented, and the translation and transliteration of the registration data launches.			
R15.1	ICANN should conduct plan and reports in a measurable way. Metrics should be developed to track the effectiveness of the implementation of each recommendation. And impact evaluation of implementation should be included in the annual report.			
CT.1	ICANN should request from resellers more clear			

	<p>information, including the recommendation to include relevant information on their websites. A good location for ICANN to make such a recommendation would be RAA (e.g., Sections 3.7.10, 3.12.2, 3.12.15). ICANN must ensure that RAA provides updated information concerning relevant topics relate to consumers and WHOIS Obligations. ICANN should recommend general policy and website/communication guidelines for resellers.</p>			
SG.1	<p>ICANN should consult with data security expert(s) to identify reasonable and justifiable requirements to place on registrars and in relation to how data is protected from unauthorized access or alteration while under their control. ICANN should similarly consider whether [or require?] any such breaches that are discovered must be reported to ICANN, and in the case of escrow providers, reported to the registrar/registry that provided the data. [ICANN should similarly consider whether contractual requirement are needed to require registrars, registries and escrow provides to notify registrants in the event of data breaches.] In carrying out this review, the external consultants should consider whether requirements within the GDPR could be used as a model, as many ICANN contracted parties must already adhere to those. If changes are deemed to be required based on the results of the above-recommended studies, ICANN must either negotiate appropriate contractual changes or initiate a GNSO PDP to consider effecting such changes.</p>			

3 Background on the Review

The Registration Directory Service (RDS, formerly known as "WHOIS") is the system that can answer the question: *Who is responsible for a domain name?* Every year, millions of individuals, businesses, organizations and governments register domain names. Each of those domain name "registrants" must provide information about themselves and about contacts associated with their domain name. This information is collectively referred to as "registration data" or "WHOIS data." However, the RDS (WHOIS) is not a single, centrally-operated database. Instead, registration data is managed by independent entities known as "registrars" and "registries" which enter into contractual agreements with ICANN.

Based upon existing consensus policies and contracts, ICANN is committed to implementing measures to maintain timely access to accurate and complete registration (WHOIS) data for generic top-level domain names (gTLDs), subject to applicable laws. To accomplish this, ICANN requires registrars and registries to provide access to specified registration data, allowing anyone to query the RDS (WHOIS) to obtain information about each domain name's registrant and associated technical and administrative contacts. In May 2018, ICANN adopted a temporary policy to facilitate compliance with the EU General Data Protection Regulation (GDPR), thereby limiting RDS (WHOIS) access to personally-identifiable information about certain domain name registrants and contacts.

ICANN Bylaws require the ICANN Organization to use commercially reasonable efforts to enforce its policies relating to RDS, while exploring structural changes to improve accuracy and access to generic top-level domain registration data, as well as considering safeguards for protecting such data. ICANN's performance in reaching its commitments is measured through period reviews that are carried out to assess the effectiveness of the current gTLD RDS (today's WHOIS) and whether implementation meets the legitimate needs of law enforcement, promotes consumer trust and safeguards registrant data. The review process was initially created through the [Affirmation of Commitments](#) (AoC) (signed with the US Department of Commerce in 2009), and was later moved to [ICANN Bylaws](#) in 2016, as part of the IANA Functions Transition. This review effort is anchored in the portfolio of Specific Reviews, which address the following range of topics in addition to Registration Directory Services (RDS): Accountability and Transparency (ATRT), Competition, Consumer Trust and Consumer Choice (CCT), and Security and Stability (SSR).

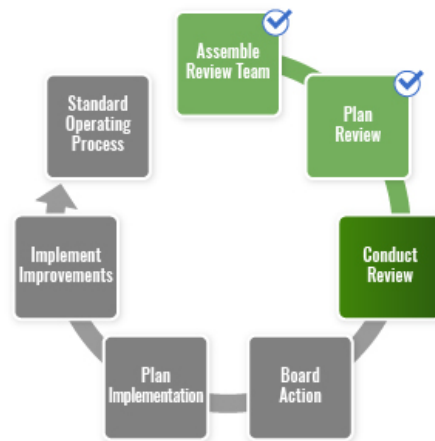
- ⦿ The first review (WHOIS1) was completed in 2012 and produced [16 recommendations](#).
- ⦿ The second review is now being conducted by the RDS-WHOIS2 Review Team (RT). This report details draft findings and recommendations produced by the RDS-WHOIS2 RT.

The RDS-WHOIS2 Review began with a call for qualified volunteers to serve on the RT. Choosing from a pool of candidates seeking nominations, ICANN's Supporting Organizations and Advisory Committees (SO/ACs) nominated a list of candidates to inform SO/AC Chairs' discussions and decision as they assembled composition of the review team. A board member serves on the review team. The Country Code Names Support Organization (ccNSO) opted to not participate in the review after consideration of the scope. Team members are listed below, along with their affiliation.

Name	Sex	Representing	Region
Alan Greenberg (chair)	M	ALAC	NA
Carlton Samuels	M	ALAC	LAC
Dmitry Belyavsky	M	ALAC	EUR

Cathrin Bauer-Bulst (vice chair)	F	GAC	EUR
Lili Sun	F	GAC	AP
Thomas L. Walden, Jr.	M	GAC	NA
Erika Mann	F	GNSO	EUR
Stephanie Perrin	F	GNSO	NA
Susan Kawaguchi (vice chair)	F	GNSO	NA
Volker Greimann	M	GNSO	EUR
Chris Disspain	M	ICANN Board	AP

Together, these team members have conducted the RDS-WHOS2 Review by following ICANN's defined process for Specific Reviews, illustrated below.



Prior to this review, SO/AC leaders considered a [proposal for a limited scope review](#). During the second half of 2017, the assembled review team planned this review by considering that proposal and SO/AC input and then reaching consensus on objectives, methodology, and milestones. The team's agreed objectives are briefly summarized below and presented in detail throughout this report.

1. Evaluate the extent to which ICANN Organization has implemented each prior Directory Service Review (WHOIS1) recommendation (16 in total) and whether implementation of each recommendation was effective.
2. Review changes since WHOIS1 to assess impact on RDS (WHOIS) effectiveness.
3. Assess the extent to which the implementation of today's WHOIS:
 - a. Meets legitimate need of law enforcement for swiftly accessible, accurate and complete data;
 - b. Promotes consumer trust; and
 - c. Safeguards registrant data.
4. Assess effectiveness and transparency of ICANN enforcement of existing policy relating to WHOIS through Contractual Compliance actions, structure and processes.
5. Identify any portions of Bylaws Section 4.6(e), Registration Directory Service Review, which the team believes should be changed, added or removed

These objectives, methodology, and milestones were published in the RDS-WHOIS2 Terms of Reference (see Appendix B) and Work Plan (see Appendix C). These documents were [submitted to the ICANN Board](#) on 9 February. Per [Board resolution 2017.02.03.10](#), the Board was invited to ensure that the RT's scope and timeline were consistent with the requirements of the ICANN Bylaws. A Board Caucus Group was formed to provide input to the RT on the scope of work, feasibility of recommendations and other key matters. The RT also engaged with the Board Caucus Group, as it progressed through its completion of the terms of reference and draft report.

To conduct this review, subgroups consisting of a rapporteur and 2-4 team members were formed to research facts associated with each objective, summarized below:

Review Objective	Assigned To Subgroup
1	WHOIS1 Rec #1 - Strategic Priority
	WHOIS1 Rec #2: Single WHOIS Policy
	WHOIS1 Rec #3: Outreach
	WHOIS1 Rec #4: Compliance
	WHOIS Rec #5-9: Data Accuracy
	WHOIS Rec #10: Privacy/Proxy Services
	WHOIS Rec #11: Common Interface
	WHOIS Rec #12-14: Internationalized Domain Names
	WHOIS Rec #15-16: Plan & Annual Reports
2	Anything New
3	Law Enforcement Needs
4	Consumer Trust
5	Safeguard Registrant Data
6	Contractual Compliance Actions, Structure, & Policies (this subgroup was combined with WHOIS1 Rec #4)

Informed by ICANN Organization briefings and available documentation, these subgroups analyzed facts to identify possible issues and then formulate recommendations (if any) to address those issues.

To ensure full transparency, the review team operated in an open fashion where all review team calls and meetings were public, open to observers, with publicly-accessible recordings and transcripts.

4 Objective 1: Assessment of WHOIS1 Recommendations Implementation

4.1 Introduction

[TO BE DRAFTED PRIOR TO POSTING FOR PUBLIC COMMENT]

[Section to contain over-arching findings and recommendations, including impact of GDPR]

4.2 WHOIS1 Rec #1: Strategic Priority

4.2.1 Topic

Subgroup 1 - WHOIS1 Rec 1 Strategic Priority is tasked with investigating, analyzing, and drafting recommendations (if needed) to address the following Review objective:

Comment [LP1]: Cathrin has an open act to update this section to fill gaps.

Consistent with ICANN's mission and Bylaws, Section 4.6(e)(iv), the Review Team will (a) evaluate the extent to which ICANN Org has implemented each prior Directory Service Review recommendation (noting differences if any between recommended and implemented steps), (b) assess to the degree practical the extent to which implementation of each recommendation was effective in addressing the issue identified by the prior RT or generated additional information useful to management and evolution of WHOIS (RDS), and (c) determine if any specific measurable steps should be recommended to enhance results achieved through the prior RT's recommendations. This includes developing a framework to measure and assess the effectiveness of recommendations, and applying that approach to all areas of WHOIS originally assessed by the prior RT (as applicable).

The specific [WHOIS1 Recommendation](#) assessed by this subgroup appears below:

WHOIS Recommendation #1: Strategic Priority

Recommendation 1.a – It is recommended that WHOIS, in all its aspects, should be a strategic priority for ICANN the organization.

Recommendation 1.b – It is recommended that WHOIS form the basis of staff incentivization (including the CEO's) and organizational objectives

Recommendation 1.c – The Board should create a committee that includes the CEO to be responsible for priority and key actions

- *Implementation of this report's recommendations;*
- *Fulfillment of data accuracy objectives over time;*
- *Follow up on relevant reports (e.g. NORC data accuracy study);*
- *Reporting on progress on all aspects of WHOIS (policy development, compliance, and advances in the protocol / liaison with SSAC and IETF);*
- *Monitoring effectiveness of senior staff performance and the extent to which ICANN Compliance function is effective in delivering WHOIS outcomes, and taking appropriate action to remedy any gaps.*

Recommendation 1.d – ICANN should issue public updates on progress against targets for all aspects of WHOIS

To address this objective, the subgroup agreed to consider two over-arching questions:

- ⦿ Has ICANN.Org made WHOIS a strategic priority from a **formal** perspective, by putting into place the appropriate resources and procedures?
- ⦿ Has ICANN.Org made WHOIS a strategic priority from a **substantive** perspective?

In addition, the subgroup identified two check-in questions to guide its work:

- ⦿ Has ICANN Org issued public updates on progress against targets for all aspects of WHOIS?
- ⦿ Based on findings of other subgroups, how have the updated complaints and other compliance procedures impacted the accuracy and functionality of the WHOIS?

4.2.2 Summary of Relevant Research

To conduct its research, all members of this subgroup reviewed the following background materials, posted on the [subgroup's wiki page](#):

- ⦿ [WHOIS Review Team \(WHOIS1\) Final Report](#) (2012) and [Action Plan](#)
- ⦿ [WHOIS Review Team \(WHOIS1\) Implementation Reports](#), including
 - ⦿ [Executive Summary of Implementation Report](#)
 - ⦿ [Detailed implementation Report](#)
- ⦿ WHOIS1 Implementation Briefings on Recommendations 1, 2, 3, 6, 7, 9, 15, 16: [PPT](#), [PDF](#)
- ⦿ [Answers to RDS-WHOIS2 Questions on Implementation Briefings](#)
- ⦿ Documents cited in briefing on Recommendation 1 include
 - ⦿ [ICANN Five Year Strategic Plan](#)
 - ⦿ [ICANN FY 2017 Operating Plan and Budget](#)
 - ⦿ [ICANN FY 2018 Operating Plan and Budget](#)
 - ⦿ [ICANN FY 2019 Operating Plan and Budget](#)
 - ⦿ [2013 Registrar Accreditation Agreement](#) (RAA), including [RAA WHOIS requirements for Registrants](#)
 - ⦿ [EWG on gTLD Registration Directory Services Final Report](#) (2014)
 - ⦿ [WHOIS Information Portal and Consolidated WHOIS Lookup Tool](#)
 - ⦿ [Roadmap of WHOIS/RDS Activities](#) (as of June 2017)

In addition, this subgroup requested the following additional materials:

- ⦿ Information on incentivization measures for ICANN Org staff including CEO ([standard] contract clauses, internal guidance, memos, meeting minutes etc.)
- ⦿ Records of Board/CEO Committee on WHOIS including Terms of Reference/Charter, minutes of meetings, work plan, objectives and outputs
- ⦿ Any other written materials that can provide responses to the subgroup's questions (detailed below).

To understand in more detail how the WHOIS as a strategic priority has been integrated into the organizational objectives and the impact that this integration has had in practice (as compared to the approach before 2012), the subgroup submitted a series of questions to ICANN, seeking facts to help answer the following:

- ⦿ Has ICANN Org made WHOIS a strategic priority from a formal perspective, by putting into place the appropriate resources and procedures?
- ⦿ Has ICANN Org made WHOIS a strategic priority from a substantive perspective?

ICANN provided [detailed responses](#) to the subgroup's questions, which are referred to in the analysis given in Section 4.2.3 below. The subgroup also agreed to review the output from the other subgroups in assessing the degree to which WHOIS has been made a strategic

priority within the organization. Finally, the subgroup applied the RDS-WHOIS2 review team's [agreed framework](#) to measure and assess the effectiveness of recommendations.

4.2.3 Analysis & Findings

For ease of reference, the RT1's recommendation is broken down into smaller parts, which are addressed in turn here below. The structure followed for each part is: 1) Part of the recommendation covered ("RT1-Recommended Principle"), 2) Relevant questions asked of ICANN Subject Matter Experts (SMEs); 3) Analysis. At the conclusion of this section-by-section assessment, an overall analysis is provided.

4.2.3.1 WHOIS as Strategic Priority

"It is recommended that WHOIS, in all its aspects, should be a strategic priority for ICANN the organization. It should form the basis of staff incentivization and published organizational objectives."

4.2.3.1.1 Questions and Materials Requested

- ⦿ How has WHOIS been integrated into the organizational objectives? Did the ICANN 5-year Operating Plan contain any specific references to WHOIS and what year were they incorporated in that Plan? If it was and is no longer included in the ICANN operational plan, what year did it roll away? Were metrics developed that are connected to any WHOIS activity or outcomes? Are there specific measurable outcomes connected to contracted parties for WHOIS outcomes?
- ⦿ How has the CEO complied with the instruction from the Board to oversee improvements to the contractual conditions relating to gTLD WHOIS data in the gTLD Registry and Registrar agreements? What concrete actions has he taken himself, or staff at his direction, to facilitate improvements to the conditions (e.g. meetings, outreach, suggestions for improvement, facilitation of community dialogue aimed at improvements)? Are there any documents (meeting minutes, internal or external memos, etc.) that can demonstrate these actions?
- ⦿ How has the CEO complied with the instruction from the Board to create appropriate reporting of these improvements and to implement staff incentivisation? Are there standard clauses in relevant employee contracts reflecting such incentivisation, and how is the incentivisation structured? Have any other measures been taken to incentivize staff to implement the strategic priority recommendation? How often does staff report to the CEO or the Board on WHOIS improvements and what form does that take? Are there any documents (internal reporting, meeting minutes, memos etc.) that can demonstrate compliance?
- ⦿ How was this priority reflected in the transition from the AoC to the Bylaws?
- ⦿ Is there evidence to show that the definition as a strategic priority has had a positive impact on the WHOIS in view of the objectives that it serves?

In addition, the RT requested the following materials:

- ⦿ Records of Board/CEO Committee on WHOIS including Terms of Reference/Charter, minutes of meetings, work plan, objectives and outputs
- ⦿ Any other written materials that can provide responses to the subgroup's questions (detailed below).

4.2.3.1.2 Analysis

On 8 November 2012, the ICANN Board adopted an Action Plan on WHOIS as a strategic priority:

"a) Board agrees that gTLD WHOIS is a strategic priority for ICANN

b) Consistent with advice from SSAC (SAC055), Board directs the CEO to create an expert working group to create material to launch GNSO policy work and inform contractual negotiations, as appropriate. Working group output is expected within 90 days and will ideally include a straw-man model for managing gTLD registration data.

c) The working group's output will form the basis for an Issues Report to accompany Board-initiated, expedited GNSO policy work that is expected to result in consensus policy that, at a minimum, addresses the purpose of collecting, maintaining and making available gTLD registration data, and related accuracy, data protection, and access issues.

d) The Board will also call upon the registrars, registries, and the staff to address the working group's output in contractual negotiations and registry contracts, as appropriate.

e) The CEO will oversee improvements to the enforcement of the contractual conditions relating to gTLD WHOIS in the gTLD registry and gTLD registrar agreements. Appropriate reporting of these improvements will be developed, and the CEO will be responsible for appropriate staff incentives.

f) The Board will incorporate performance of the WHOIS strategy into the incentive program for the CEO."

There is also a reflection of these changes in ICANN steering documents:

- ⦿ ICANN included the WHOIS in its 2016-2020 Strategic Plan as part of its objective 2.1 to foster and coordinate a healthy, secure, stable, and resilient identifier ecosystem. As one of the key outcomes/success factors, it lists "Globally accepted, reliable, secure, and trusted services to facilitate access to, and update of, identifier registration data." The strategic plan also recognizes an associated strategic risk, namely that of "Failure of the identifier registration data services to gain acceptance by, or meet the needs of, the users of the identifier ecosystem." ICANN furthermore sets the objective of acting as a steward of the public interest (5.1), of which the WHOIS is an important aspect but is not mentioned specifically here. The associated risk that the "ICANN community does not reach consensus on best practices related to the public interest" is also listed.

In terms of resources specifically dedicated to this process, ICANN furthermore informed the RT that the ICANN Global Domain Division (GDD) had added an overall coordination, oversight, and management role for the RDS portfolio of activities. This role:

- ⦿ monitors both the RDS PDP and Review with an eye toward implementation of the recommendations.
- ⦿ identifies synergistic opportunities across initiatives and explore ways to leverage that synergy to achieve cost-saving, maximum benefit, and effective implementations.
- ⦿ coordinates activities to ensure alignment with overall direction and strategy.
- ⦿ manages interdependencies across activities to ensure streamlined and efficient execution.
- ⦿ provides holistic reporting of all RDS related activities to the community.

This role is reflected in ICANN's most recent FY 2017 Operating Plan and Budget under the WHOIS Core Function/Service and Improvements portfolio and is budgeted with a relatively low resource of 0.6 FTE. It is listed under "Proactively Plan for Changes in the Use of Unique Identifiers and Develop Technology Roadmaps to Help Guide ICANN Activities" rather than under the relevant strategic sub-objective 2.1 Foster and Coordinate a Healthy, Secure, Stable, and Resilient Identifier Ecosystem.

ICANN's proposed 2019 update to its five-year plan lists a number of planned and past activities related to WHOIS, such as the publication of accuracy reports and support for the RDS PDP and Review Team.¹ It does not reference assessment of the impact of compliance efforts on the quality of RDS.

However, ICANN's previous Operating Plans and Budgets did not include specific key performance indicators or measures for success in achieving strategic objective 2.1. To pick an example, the FY 2016 Operating Plan and Budget², like the 2017 one, lists the WHOIS portfolio under strategic objective 2.2 and includes a Technical Reputation Index tracking number of documents published, number of training sessions and other activities related to the CTO team's work on building technical capacity. While this is no doubt useful in tracking the success of technical competence building efforts, it does not seem to be able to reflect any achievements related to WHOIS.

The RT could not find evidence of metrics or other KPIs that would provide a reliable assessment of whether progress has been made on WHOIS as a strategic priority. Reference was made by ICANN to the Accountability Indicators and specifically to indicator 3.2 which refers to the overall availability of digital services provided by ICANN, which include the WHOIS portal and lookup tool.³ ICANN furthermore referred to the contractual compliance reports, which provide an overview of the activities of the ICANN Compliance Team.⁴

As outlined above, the CEO was furthermore instructed by the Board to oversee improvements to the enforcement of the contractual conditions relating to gTLD WHOIS in the gTLD registry and gTLD registrar agreements. For an analysis of these aspects, please see the Compliance section of this report.

In terms of developments not specifically envisaged by this Board instruction, a detailed WHOIS policy has been set out in the 2013 Registrar Accreditation Agreement and in particular in its WHOIS specification.⁵ This WHOIS policy sets out specific details such as the data fields to be provided, formats and access ports. Please also refer to the Single WHOIS Policy section of this report.

In response to the request for minutes, written records of decisions etc., no further information was available.

4.2.3.2 Creation of ICANN Board Committee

"To support WHOIS as a strategic priority, the ICANN board should create a committee that includes the CEO."

¹ <https://www.icann.org/en/system/files/files/proposed-opplan-2016-2020-fy19-19jan18-en.pdf>, p. 18 and following.

² <https://www.icann.org/en/system/files/files/adopted-opplan-budget-fy16-25jun15-en.pdf>, p. 40

³ <https://www.icann.org/accountability-indicators>.

⁴ Latest available report at time of writing: <https://www.icann.org/en/system/files/files/compliance-update-mar18-en.pdf>.

⁵ <https://www.icann.org/resources/pages/approved-with-specs-2013-09-17-en#whois>

4.2.3.2.1 Questions and Materials Requested

- ⦿ Has the Board created a committee including the CEO that is responsible for the WHOIS and for key actions? If yes, has the committee met? And are the activities of the committee recorded and archived? Are the documents available for viewing or sharing?

In addition, the RT requested the following materials:

- ⦿ Records of Board/CEO Committee on WHOIS including Terms of Reference/Charter, minutes of meetings, work plan, objectives and outputs

4.2.3.2.2 Analysis

In July 2015 - more than two and a half years after the adoption of the Action Plan - the ICANN Board formed a Board Working Group on Registration Data Directory Services (BWG-RDS)⁶ to (i) liaise with the GNSO on the policy development process to examine the EWG's recommended model and propose policies to support the creation of the next generation registration directory services, and (ii) oversee the implementation of the remaining projects arising from the Action Plan adopted by the Board in response to the first WHOIS Review Team's recommendations. The Board appointed the ICANN CEO as a member of the BWG.

The BWG-RDS was given a Charter outlining its responsibilities, which in addition to the two items outlined above also included any other issues related to WHOIS or Registration Data Directory Services that may be referred to it by the Board or the Board Governance Committee.⁷

No minutes or other records of specific activities of the BWG-RDS in relation to WHOIS as a strategic priority were available. ICANN pointed out that most Board Working Groups did not have minutes as they were not decisional bodies. Therefore, no archives were available, neither public nor restricted.

Prior to the creation of the BWG-RDS, the implementation of the Recommendations was overseen by the ICANN organization, on the basis of the 2012 Board resolution referred to above. In terms of specific meetings and activities of the BWG-RDS, ICANN referred to the regular Board meeting with the GNSO Council at ICANN meetings where, as relevant, the GNSO PDP on registration data directory services is discussed. There are records of written communication between the chair of the Board and the GNSO Council leadership relating to organizational matters on the RDS PDP. Furthermore, from interventions at ICANN meetings it is clear that the Board, in particular individual members, took an active interest in the progress of the PDP.

The RT could not find evidence that strategic considerations on WHOIS and possible future developments beyond the EWG and RDS PDP took place at the Board or BWG-RDS level. This also would have been beyond the mandate of the BWG-RDS unless a question was specifically referred to it by the Board or the Board Governance Committee.

⁶ <https://www.icann.org/resources/board-material/minutes-2015-07-28-en#1.d>.

⁷ <https://www.icann.org/en/system/files/files/charter-rds-28jul15-en.pdf>.

4.2.3.3 Committee Responsibilities: Implementation of Recommendations

"The committee should be responsible for advancing the strategic priorities required to ensure the following: Implementation of this report's recommendations;"

4.2.3.3.1 Questions

- ⊙ How often does staff report to the CEO or the Board on WHOIS improvements and what form does that take? Are there any documents (internal reporting, meeting minutes, memos etc.) that can demonstrate compliance?
- ⊙ Has ICANN Org taken any other actions reflecting the strategic priority given to the WHOIS, beyond those specifically recommended by the WHOIS RT in its final report? If yes, which actions has it taken? Are there any written traces of these actions?
- ⊙ How was this priority reflected in the transition from the AoC to the Bylaws?

4.2.3.3.2 Analysis

The Board receives CEO updates, on a trimester basis, on the status of ICANN's key organizational activities, including WHOIS improvements. Furthermore, ICANN provided public updates of the implementation of the recommendations, which are also available to the BWG-RDS.⁸ There is no record of BWG-RDS or full Board discussions or decisions on the status of the implementation and on whether implementation has been completed satisfactorily.

4.2.3.4 Committee responsibilities: Data Accuracy

"The committee should be responsible for advancing the strategic priorities required to ensure the following:

[...]

- *Fulfillment of data accuracy objectives over time;*
- *Follow up on relevant reports (e.g. NORC data accuracy study);"*

There is no specific record of BWG-RDS follow-up on efforts to improve data accuracy. Please refer to the [Data Accuracy](#) section of this report for further details on those efforts.

4.2.3.5 Committee responsibilities: Progress Reporting

"The committee should be responsible for advancing the strategic priorities required to ensure the following:

[...]

- *Reporting on progress on all aspects of WHOIS (policy development, compliance, and advances in the protocol / liaison with SSAC and IETF);"*

There is no specific record of BWG-RDS follow-up on efforts to improve reporting. Please refer to the [Annual Report](#) section of this report for further details on those efforts.

4.2.3.6 Committee responsibilities: Monitoring Effectiveness

⁸ <https://community.icann.org/display/WHO/WHOIS+Review+Implementation+Home>

"The committee should be responsible for advancing the strategic priorities required to ensure the following:

[...]

- *Monitoring effectiveness of senior staff performance and the extent to which ICANN Compliance function is effective in delivering WHOIS outcomes, and taking appropriate action to remedy any gaps (see Recommendation 4 for more discussion of compliance)."*

4.2.3.6.1 Questions

- ⊙ How often does staff report to the CEO or the Board on WHOIS improvements and what form does that take? Are there any documents (internal reporting, meeting minutes, memos etc.) that can demonstrate compliance?

4.2.3.6.2 Analysis

[TO BE COMPLETED]

Board receives CEO updates, on a trimester basis, on the status of ICANN's key organizational activities, including WHOIS improvements.

4.2.3.7 Staff incentivization

"Advancement of the WHOIS strategic priority objectives should be a major factor in staff incentivization programs for ICANN staff participating in the committee, including the CEO."

4.2.3.7.1 Questions and materials requested

- ⊙ How has WHOIS been implemented in staff incentivization including for the CEO? Are there specific clauses in staff contracts, including the CEO's, that link compensation to WHOIS implementation or management outcomes?
- ⊙ Were KPIs adduced/developed? Were these part of the at-risk compensation portion or the general compensation? What percentage of the overall compensation, at-risk or otherwise, could be connected to WHOIS matters?
- ⊙ What aspects of the WHOIS are serving as incentive[s] or part of the organizational objectives? Is[are] this[these] aspect[s] amenable to measurement? And if so, what were the measurement criteria adopted? Can the outcomes be shared?

The following materials were requested:

- ⊙ Information on incentivization measures for ICANN Org staff including CEO ([standard] contract clauses, internal guidance, memos, meeting minutes etc.)

4.2.3.7.2 Analysis

ICANN responded that staff is incentivized through ICANN's compensation system, as WHOIS projects are identified in both WorkFront and the Halogen management system, which the RT understands are the systems that serve to organize staff management within the organization. Detailed examples were provided of the types of activities that form part of the annual planning, such as support for the review team and the policy development process.

ICANN also explained that the CEO's compensation was tied to performance against the strategic objectives of ICANN as laid out in the Strategic Plan, which includes references to WHOIS. The Board sets specific goals for the CEO as part of his annual performance process. The strategic goals of the organization are taken into account when setting the

CEO goals. There was no detailed information available on the breakdown of incentivisation, e.g. as relates to the actual impact of the WHOIS performance on contractual compensation.

ICANN's Staff Remuneration Practices document does not address specific incentives for staff, and accordingly also does not cover relevant incentives related to the WHOIS as recommended by the WHOIS RT.⁹ However, as outlined above, there is a link to the strategic objectives and the related activities in the planning. Again, there were no details available on the precise impacts of the incentivisation on staff compensation or other benefits.

Therefore, while WHOIS has clearly been integrated into compensation, a more precise assessment of any impact of the incentivisation cannot be provided. For example, it is unclear whether the lack of timely compliance with legal requirements would have any impact on the compensation of any individual within the organization.

4.2.3.8 Annual reporting

"Regular (at least annual) updates on progress against targets should be given to the Community within ICANN's regular reporting channels, and should cover all aspects of WHOIS including protocol, policy development, studies and their follow up."

⦿ Please refer to the [Annual Report](#) section of this report for further information.

4.2.4 Problem/Issue

The ICANN organization and board have clearly taken a number of steps to work towards implementation of the recommendation. A key element - the creation of a dedicated Board committee including the CEO - was only put into place very late in the process but did eventually take place.

However, from the mandate of the BWG-RDS and the feedback from ICANN in response to specific questions, as well as from the overall documentation available, a clear picture emerges as to ICANN's understanding of the nature of the strategic priority: it was interpreted as making sure that the recommendation was implemented, and to launch the policy development process and support other Community actions related to the WHOIS. While these actions went a long way towards achieving the intended aim, they could not replace a strategic outlook and advance planning for issues not yet explicitly addressed in specific community actions, as became evident in the issues surrounding compliance with GDPR.

Therefore, the recommendation failed to achieve its original aim of instilling a culture of proactive monitoring and improvements on WHOIS.

4.2.5 Recommendations

[Based on its analysis, members of this subgroup agree that this WHOIS1 recommendation has been partially implemented. One further recommendation is provided here to address the problems/issues identified above.](#)

Recommendation R1.1:

The ICANN Board should update the Charter of its BWG-RDS to include forward-looking

⁹ <https://www.icann.org/en/system/files/files/remuneration-practices-fy18-01jul17-en.pdf>

planning, based on a regular assessment of the RDS' fitness to meet legal requirements and legitimate user needs as outlined in the Bylaws.

Findings: While a number of steps were taken towards making WHOIS a strategic priority for the organization, the record of actions over the last year and in particular the challenging situation as concerns compliance with data protection requirements show that implementation of this recommendation is not yet sufficient.

Rationale: The intent behind this recommendation is to ensure that ICANN as an organization is well placed to address future policy issues, such as may arise from legislation or from community concerns.

The issues identified could best be addressed by an improved implementation of the original recommendation. For these purposes, further elements are proposed in a re-shaped recommendation to provide concrete targets for the ICANN Board and Organization.

The potential impact of not addressing the recommendation could consist in further situations of lack of preparedness of the organization to assume its responsibilities and address them in due time. Given the challenging process ahead as compliance with data protection rules and obligations under the Bylaws will take significant additional time, improved implementation could help the organization to better address such issues in the future.

This recommendation is aligned with ICANN's Strategic Plan and Mission, which already seek to reflect the strategic priority given to WHOIS but focus on compliance and support for Community processes, rather than providing a real advance planning and strategy function within the Board and Organization.

This recommendation is also within the scope of the RT's efforts.

Impact of Recommendation: This Recommendation would impact the work of the Board and ICANN leadership. It would contribute to the legitimacy and efficiency of the organization, by ensuring that it is better prepared to meet future challenges and to serve community needs, including RDS users and contracted parties.

Feasibility of Recommendation: Given that the ICANN Board has already resolved in the past to make WHOIS a strategic priority, this updated recommendation should also be feasible.

Implementation: The implementation has to be provided by the ICANN Board and leadership, with staff support. A successful implementation would consist in a revised Charter for the ICANN BWG-RDS, which should be implemented as soon as possible and at the latest within 6 months. This could dovetail with ongoing efforts to ensure swift and constructive cooperation between the Board and ICANN leadership on the one side and the GNSO on the other side for the EPDP to replace the Temporary Specifications on WHOIS.

Priority: This recommendation provides the backbone for ICANN's efforts on WHOIS, which should be driven by a strategic and coherent overall approach. It is therefore considered essential.

Level of Consensus: TBD

4.2.6 Possible impact of GDPR and other applicable laws

[TO BE PROVIDED]

4.3 WHOIS1 Rec #2: Single WHOIS Policy

4.3.1 Topic

Subgroup [2-1](#) - WHOIS1 Rec 2 Single WHOIS Policy is tasked with investigating, analyzing, and drafting recommendations (if needed) to address the following Review objective:

“Consistent with ICANN’s mission and Bylaws, Section 4.6(e)(iv), the Review Team will (a) evaluate the extent to which ICANN Org has implemented each prior Directory Service Review recommendation (noting differences if any between recommended and implemented steps), (b) assess to the degree practical the extent to which implementation of each recommendation was effective in addressing the issue identified by the prior RT or generated additional information useful to management and evolution of WHOIS (RDS), and (c) determine if any specific measurable steps should be recommended to enhance results achieved through the prior RT’s recommendations. This includes developing a framework to measure and assess the effectiveness of recommendations, and applying that approach to all areas of WHOIS originally assessed by the prior RT (as applicable).”

The specific [WHOIS1 Recommendation](#) assessed by this subgroup appears below:

WHOIS Recommendation #2: Single WHOIS Policy

The ICANN Board should oversee the creation of a single WHOIS policy document, and reference it in subsequent versions of agreements with Contracted Parties. In doing so, ICANN should clearly document the current gTLD WHOIS policy as set out in the gTLD Registry and Registrar contracts and GNSO Consensus Policies and Procedure.

This Subgroup addressed the task by:

- Reviewing the ICANN Board’s Comments on reception of the Final Report and pursuant to the Action Plan for addressing the recommendations
- Reviewing Staff reports on implementation
- Analyzing the Implementation Action Plan that emerged from the Board’s instructions to ICANN org
- Assessing the implementation outcomes from staff reports

4.3.2 Summary of Relevant Research

[To conduct its research, all members of this subgroup reviewed the following background materials, posted on the subgroup’s wiki page:](#)

- [Board Resolution Accepting WHOIS RT Recommendation 8 Nov 2012](#)
- [Action Plan to Address WHOIS Review Team Report Recommendations](#)
- [Single Source All WHOIS Related Agreements and Provisions](#)
- [Website Containing All Things WHOIS](#)
- [SAC055: SSAC’s Response to the RDS-WHOIS1 Final Report](#)

- [Announcement of the Expert Working Group on Next Generation Registration Data Services](#)
- [EWG Final Report](#)
- [Board Resolution on Steps to be taken on acceptance of the EWG Final Report](#)
- [Framework to Address Next Generation gTLD Registration Directory Services to Replace WHOIS PDP](#)
- [Issue Report for Next Generation gTLD Registration Directory Services to Replace WHOIS](#)
- [GNSO Resolution Establishing the RDS-WHOIS-PDP WG](#)
- [Charter for PDP WG Next Generation gTLD Registration Directory Services \(RDS\) to Replace WHOIS](#)
- [The Communique from GNSO Next Generation RDS PDP WG Leadership Suspending PDP Meetings](#)
- [Some Evidence of the Work of the Next Generation gTLD RDS PDP WG](#)
- [Temporary Specification for gTLD Registration Data](#)
- [Charter for the ePDP for Specification for Registration Data Directory Service](#)
- [WHOIS1 Implementation Briefings on Recommendations 1, 2, 3, 6, 7, 9, 15, 16: PPT, PDF](#)
- [Answers to RDS-WHOIS2 Questions on Implementation Briefings](#)

The Group followed the timeline from the release of RDS-WHOIS1 RT Final Report to current time. We examined the responses to the Final Report by ICANN Constituencies, records of the Board's discussion on receipt of the Final Report and its subsequent response, the Action Plan developed by ICANN org Staff on the Board's direction, the subsequent published status reports of the Implementation Plan and the evidence of implementation. We also accounted and examined the list of WHOIS-related consensus policies and procedures that have emerged from the GNSO policy making activities between then and now.

In reporting their findings, the previous Review Team (hereinafter referred as RDS-WHOIS1 RT) noted that being guided by the explicit language in the Affirmation of Commitments regarding the existence of a single document labeled "*WHOIS Policy*" and despite assurances of its existence, they could not, after diligent searching, find " *a clear, concise, well-communicated WHOIS Policy.*"

The RT acknowledged that they were able to find elements of "*a WHOIS policy*" in several places; they listed Registrar and Registry contracts, GNSO Consensus Policies and a Consensus Procedure, the IETF Requests for Comments (RFCs) and domain name history as sources. This evidence supports their finding that ICANN's WHOIS policy remained "*poorly defined and decentralized*".

Their Recommendation 2 flows from this finding; that the ICANN Board oversee the creation of a single WHOIS Policy document and in that document, clearly detail the extant WHOIS policies as are now contained in Registry and Registrar contracts and GNSO Consensus Policies and Procedure.

The ALAC, GNSO Constituencies and the SSAC submitted positive endorsement of the Report. In its [response](#), the SSAC noted ""the foundational problem facing all 'WHOIS' discussions is understanding the purpose of domain name registration data", that "*there is a critical need for a policy defining the purpose of collecting and maintaining registration data*" and suggested that "*the formation of a properly authorized committee to drive solutions to these questions first, and to then derive a universal policy from the answers, is the appropriate sequence of steps to address the WHOIS Review Team's report .*"

The ICANN Board called a special meeting to consider the Report. After due consideration of the Final Report and the comments from other interests. The Board [directed](#) the [ICANN] CEO to create and maintain a *single public source* that compiles current gTLD WHOIS requirements for gTLD registries, registrars and registrants (including consensus policies and contractual conditions). It also resolved that the CEO initiate a process to rethink the entire WHOIS framework from a fundamental place, taking due care to consider and establish the purpose for collecting and maintaining registration data.

4.3.3 Analysis & Findings

The Board discussions around the WHOIS1 Review Team Final Report demonstrate that the ICANN Board accepted the lack of a single WHOIS policy as fact. They further acknowledged that the current policy framework was not anchored on first principles as the SSAC opined; the purpose for collecting and maintaining registration data. They were also keenly aware of the contours of the policy making processes in the ICANN environment; the Board itself could only give a temporary policy prescription but permanent consensus policymaking was the province of the Supporting Organizations, in this case the GNSO. In the Action Plan that emerged after the ICANN Board's consideration of the Single WHOIS policy recommendation, the Board reasoned that "... *there is not a comprehensive gTLD WHOIS policy that addresses all of the issues raised in the Review Team report*" but rather "... *There is a set of existing contractual conditions that have been developed over time by negotiation between ICANN and registries and registrars, and a small set of consensus policies that address some aspects of the management of domain name registration data.*" All "*presently available conditions and policies*" would be curated and made accessible from a single source."

They went on: "*The fundamental questions of the purpose of collecting and maintaining gTLD registration data have not been addressed through a successful policy PDP*". The report nevertheless acknowledged earlier attempts by the GNSO to effect such a policy prescription in footnotes.

The implementation of that directive for a single WHOIS policy document was by way of a digital artefact. That is, the [web page](#) from whence all content pertaining WHOIS requirements and conditions via contractual obligations imposed on registries and registrars, inclusive of pertinent GNSO-developed gTLD consensus policies can be accessed was established. That website can be accessed [here](#).

At its special Board Meeting on 8th Nov 2012, the Boards accepted the essence of the SSAC's response as outlined. It acknowledged that the RT's report re-ignited concerns surrounding a fundamental policy prescription of the purpose for collecting and publishing registration data and was a catalyst for "launching a new approach to long-standing directory services challenges." In its [Resolution 1](#), the Board then directs the CEO to "*launch a new effort to redefine the purpose of collecting, maintaining and providing access to gTLD registration data,as a foundation for new gTLD policy and contractual negotiations.....as part of a Board-initiated GNSO policy development process.*"

See the Board Resolution [here](#).

Implementation of that directive resulted in the [establishment of the Expert Working Group on Next Generation Registration Data Services](#) (EWG). The EWG mandate was to "*re-examine and define the purpose of collecting and maintaining gTLD registration data, consider how to safeguard the data, and propose a next-generation solution that will better serve the needs of the global Internet community.*" This was interpreted as to also include

consideration for providing access to gTLD registration (WHOIS) data. The EWG delivered its [Final Report](#) in June 2014.

In April 2015 the Board adopted a series of resolutions that affirmed the EWG Report as the guide and foundation for development of a new comprehensive and unifying gTLD WHOIS policy and outlined the [next steps](#) following on its acceptance of the EWG's Report. That action can be found [here](#).

In its estimation of the complexity of the issues raised, the EWG's Final Report detailed models and principles advised for framing the GNSO PDP and the general controversial nature of the WHOIS matter in and outside the community. The Board prudently raised a collaborative group of select Board members plus GNSO Councilors and interests to seek common ground on a [3-phase framework](#) of action. That group agreed on a Preliminary Issues Report based on this 3-phase framework that would be used to guide the work of the pending GNSO PDP[s].

The [Issues Report](#) was issued in October 2016 and the GNSO [set the first-phase PDP in motion](#) as the Next Generation gTLD Registration Directory Services to Replace WHOIS PDP. The Working Group is now in operation; began January 2016. The charter for the PDP WG can be found [here](#).

After fifteen (15) months of contentious deliberations on the Phase 1 portion of its road mapped work plan, in April 2018, Next Generation RDS PDP WG meetings were [suspended until further](#) notice while awaiting guidance regarding how this PDP will be affected by GDPR compliance efforts. Formal action to suspend or terminate this PDP, in accordance with Policy Development Process procedures, is likely to occur after initiation of the Expedited PDP. The working documents are available for examination [here](#).

Notwithstanding, there are ongoing developments pertaining adoption of a single WHOIS policy. In light of European Union's General Data Protection Regulations (GDPR) that came into force this May 2018 and the projected impact on domain name registration data collection, access and publication, the ICANN Board has provided a [temporary specification](#) in May 2018 that seeks *"to allow ICANN and gTLD registry operators and registrars to continue to comply with existing ICANN contractual requirements and community-developed policies in light of the GDPR."* With this specification, the ICANN Board is maintaining it will conform to the GDPR requirements even as it seeks to maintain *"the existing WHOIS system to the greatest extent possible,"* In fact to that end, [some elements of the Temporary Specification are now in contention by a contracted party and the subject of a lawsuit in a EU state](#).

With the normal policy developed process for registration data upended by the shuttered PDP WG, the Temporary Specification that has emerged to address this matter remains a Board-developed policy adopted under emergency conditions. It must be ratified or adapted for ratification by the GNSO-chartered policy development process within one (1) year. The GNSO has already initiated an [expedited policy development process](#) (ePDP) that will consider the Board's Temporary Specification and hopefully, from here will emerge the single WHOIS Policy all are convinced is necessary. The [charter](#) of the ePDP gives very discrete guidance to the Working Group regarding the questions to be answered for the output fit to purpose.

The primary question to answer in this regard is whether this digital artefact, the web page, is a good and sufficient substitute or facsimile for a 'single WHOIS policy document' and, thusly, conforms to the original WHOIS1 RT Recommendation 2?

On review, we can confirm the web page purposed to collect all WHOIS-related commitments contractually obliged by registries and registrars as well as GNSO developed consensus policies and procedures is available. We can also confirm that it lists a slew of WHOIS-related compacts with registries and registrars plus GNSO consensus WHOIS-related policies and procedures. These are hyperlinked to details of said policies and procedures. On the preponderance of the evidence therefore, the Board's response to the RT's recommendation as outlined in the Action Plan was executed.

Secondly, whether the contents and format of the web page furthers the objective of "a clear, concise, well-communicated WHOIS Policy."?

It is the team's view that the contents of web site manifests collection, curation and publication of all of ICANN's WHOIS-related content. Those include contracts, consensus policies and other peripheral matters.

Thirdly, the question of whether the decision to authorize the EWG and the broad guidelines given for its work constitutes a good faith effort by the Board to initiate the single WHOIS policy framework? And, if this fulfils the commitment to fill out gaps in the WHOIS policy framework and holistically address current fragmented and decentralized WHOIS policy, itself a result of history and the structural framework for the ICANN policy development process?

It is the team's view that on the balance of the evidence provided by the charter for the Expert Working Group, the Final Report delivered to the ICANN Board and subsequent deliberations and published outcomes from those deliberations, the ICANN Board responded to the WHOIS1 RT's recommendation and initiated the broad assault on the fragmented WHOIS policy with the objective of a single WHOIS policy emerging at the end.

Finally, insofar as the EWG's Final Report recommendations are actioned, whether the collaborative 3-phase framework developed to guide action of the GNSO policy-making plus the specific request to the GNSO to initiate the PDP process and reboot green field WHOIS policy making will see an emergence of a single comprehensive WHOIS policy?

It is the team's view that had the plan seen execution to the end, the single comprehensive WHOIS policy would have emerged. In any event, the ICANN Board-supplied Temporary Specification that supplanted and the Expedited PDP that conforms to bye-law and raised to anchor that specification as consensus policy will suffice and produce the single WHOIS policy as anticipated.

Summary Findings:

- ⦿ That the [web page](#) is a good and sufficient substitute for the single authoritative WHOIS policy document but with navigational improvements and further organization of content could be better
- ⦿ The GNSO ePDP chartered to address the next generation Registration Data Directory Services is in progress and guided by the Board-developed Temporary Specification for Registration Data, will likely report a single fit-for-purpose gTLD registration data service (WHOIS) policy for the first time, at last.
- ⦿ When a single fit-for-purpose consensus gTLD registration data policy has emerged, The WHOIS website will be superseded by another digital artefact documenting this policy.

4.3.4 Problem/Issue

While the team believes the website is sufficient as indicator of a single document for WHOIS-related policies, the team believes the organization of the content could be further optimized for navigation and readability. However, in the event that the Temporary Specification takes hold and is affirmed by the ePDP, then the existing website and its contents become archival artefacts. That said, reorganization of its contents is moot and no longer an active matter. We would expect the affirmed Temporary Specification will exist as a digital artefact and will be the new base for a single documented source of all things pertaining gTLD Registration Data (WHOIS).

4.3.5 Recommendations (if any)

There are no further recommendations. However, the team:

1. Accepts that WHOIS1 RT Recommendation 2 is fully implemented.
2. That the adoption of the EWG's Final Report and development of the framework for the Board-initiated GNSO RDS PDP[s] is intended to deliver a holistic next generation WHOIS policy framework that would address current set of fragmented and decentralized WHOIS policies.
3. Notwithstanding its temporary nature – to be sunsetted in one (1) year - that the Temporary Specification for WHOIS promoted by the Board in May 2018 constitutes for the first time the framework for a single WHOIS policy.
4. That the expedited policy development process (ePDP) raised by the GNSO to address the adoption or adaption of the temporary specification will, likely affirm a single WHOIS policy at the end of its work.

4.3.6 Possible impact of GDPR and other applicable laws

[TO BE PROVIDED]

4.4 WHOIS1 Rec #3: Outreach

4.4.1 Topic

Subgroup 1 - WHOIS1 Rec3 Outreach is tasked with investigating, analyzing, and drafting recommendations (if needed) to address the following Review objective:

Consistent with ICANN's mission and Bylaws, Section 4.6(e)(iv), the Review Team will (a) evaluate the extent to which ICANN Org has implemented each prior Directory Service Review recommendation (noting differences if any between recommended and implemented steps), (b) assess to the degree practical the extent to which implementation of each recommendation was effective in addressing the issue identified by the prior RT or generated additional information useful to management and evolution of WHOIS (RDS), and (c) determine if any specific measurable steps should be recommended to enhance results achieved through the prior RT's recommendations. This includes developing a framework to measure and

assess the effectiveness of recommendations, and applying that approach to all areas of WHOIS originally assessed by the prior RT (as applicable).

The specific [WHOIS1 Recommendation](#) assessed by this subgroup appears below:

WHOIS Recommendation #3: Outreach

ICANN should ensure that WHOIS policy issues are accompanied by cross-community outreach, including outreach to the communities outside of ICANN with a specific interest in the issues, and an ongoing program for consumer awareness.

The subgroup reviewed all of the multiple "outreach" resources with a specific focus on:

- Identifying areas where there were inconsistencies, errors and out of date information
- Identifying gaps in the documentation

The subgroup also reviewed the various outreach events and activities.

4.4.2 Summary of Relevant Research

To conduct its research, all members of this subgroup reviewed the following background materials, posted on the [subgroup's wiki page](#):

- [WHOIS Review Team \(WHOIS1\) Final Report](#) (2012) and [Action Plan](#)
- [WHOIS Review Team \(WHOIS1\) Implementation Reports](#), including
 - [Executive Summary of Implementation Report](#)
 - [Detailed implementation Report](#)
- WHOIS1 Implementation Briefings on Recommendations 1, 2, 3, 6, 7, 9, 15, 16: [PPT](#), [PDF](#)
- [Answers to RDS-WHOIS2 Questions on Implementation Briefings](#)
- Documents cited in briefing on Recommendation 3 include
 - [WHOIS Information Portal and Consolidated WHOIS Lookup Tool](#)
 - [Registrant's Benefits and Responsibilities](#)
 - [2013 RAA - see Section 9](#)
 - [Information for Registrars and Registrants](#)
 - [Registrant Educational Series](#)

In addition, the subgroup requested additional materials and briefings from the ICANN Org:

- [Written implementation briefing on Rec 3](#)
- SME answer to the following question:
What has ICANN done, on a one-time basis or ongoing, to address Recommendation 3's requirement to reach out to communities outside of ICANN with an interest in WHOIS issues?

Finally, the subgroup applied the RDS-WHOIS2 review team's [agreed framework](#) to measure and assess the effectiveness of recommendations,

4.4.3 Analysis & Findings

ICANN has implemented a wide variety of documents and resources designed to educate various communities on issues related to WHOIS. Some were undertaken as a result of the WHOIS-RT recommendations on Outreach, and others were done as parts of other processes. WHOIS issues are to a large extent interwoven with other material related to gTLD domain names. This is reasonable, since from a registrant's point of view, WHOIS is just one aspect related to the complex world of domain names.

The Subgroup found that the material associated with the WHOIS Portal created explicitly as a result of the WHOIS-RT Recommendations is well organized and the level of information is reasonable. However, the material is vast, so it is less than clear how it should be used. Moreover, the hierarchical organization is opaque and cannot easily be viewed. There are important things listed on sub-menus that are not listed or implied at the top level, resulting in no practical way to discover such material.

The other material available on the ICANN website generally pre-dates the Portal, and no attempt was made to update this material, or integrate it.

As an example, the Portal points to a document entitled Registrant's Benefits and Responsibilities. The document includes two sections, "Domain Name Registrants' Rights" and "Domain Name Registrants' Responsibilities" (note the lack of a section entitled Benefits). It is written in seemingly simple and clear language, but hidden within it is complexity ("You must review your Registrar's current Registration Agreement, along with any updates." - Sounds simple but doing this is not at all simple). There is only one explicit reference to WHOIS, but there are many implied references.

If you actually go into the 2013 Registrar Accreditation Agreement (RAA), there is a reference to a document called Registrant Rights and Responsibilities as well as a Registrant Benefits and Responsibilities. The Rights and Responsibilities is a rather long and legalistic document which only applies to the 2009 RAA and has been supplanted by the Registrant Benefits and Responsibilities (which as mentioned has section on Rights and Responsibilities).

A third cache of information is a set of registrant education videos. They are on a completely separate part of the ICANN site dedicated to Registrars (not Registrants) and not likely to be found by accident. They are low-level introductions, and done reasonable well, but now VERY dated and do not integrate with the WHOIS Portal. For instance, to perform a WHOIS operation, they point the user to Internic.net instead of the Portal.

In summary, the Recommendation to make information available was carried out, but it was not well integrated with other WHOIS-related information. The review of contractual compliance issues noted that there was a particular problem related to filing WHOIS inaccuracy reports and this will be addressed as well.

With regard to outreach, significant outreach to communities within ICANN has been carried out. There is little evidence that there was any substantive outreach to non-ICANN groups. The RT was told that such outreach would be done by Global Stakeholder Engagement and WHOIS is one of the topics that may touch on, but there were no records that specifically address the outreach described in this recommendation.

To what extent there are parties who are not affiliated with ICANN but interested in WHOIS is a relevant question. Certainly there are examples of civil society consumer protection organizations and government consumer protection organizations that may fall into this category. And one has to wonder whether the entire GDPR issue would have unfolded differently if ICANN had reached out to EU data protection commissioners to educate them about WHOIS and its uses and benefits long before the issue became hot in ICANN in mid-2017. Law enforcement is another area which might have been approached. Lastly, although the ICANN WHOIS Portal targeted those registrant who came looking for information, there is an argument to consider more active outreach to registrants, particularly in relation to whatever changes GDPR brings.

Finding Summary: Recommendation 3 of the WHOIS1 RT was Partially Implemented.

4.4.4 Problem/Issue

There is a wide variety of information related to WHOIS, some is well integrated and some very disjoint. Of necessity this information is somewhat interwoven with other information related to 2nd level gTLD domain names.

The information and documents cover several "generations" and do not integrate well.

Moreover a typical user or registrant will not be able to readily identify where they need to look for information, and identifying one of the multiple locations will not lead them to the others.

The problem is exacerbated by the introduction of the terms RDS (and at times RDDS) to replace WHOIS.

Regarding outreach, there is little strong evidence that any outreach targeted at non-ICANN audiences was contemplated or carried out.

4.4.5 Recommendations

[Based on its analysis, members of this subgroup agree that this WHOIS1 recommendation has been partially-implemented. Further recommendations are provided here to address the problems/issues identified above.](#)

Recommendation R3.1:

All of the information related to WHOIS and by implication to other information related to the registration of 2nd level gTLD Domains needs to be revised with the intent of making the information readily accessible and understandable, and should provide details of when and how to interact with ICANN or contracted parties. Although not the sole focus interactions with Contractual Compliance, such as when filing WHOIS inaccuracy reports, should be a particular focus. This should be done post-GDPR implementation and consideration should be given to deferring this until we have a stable permanent GDPR implementation. The revision of this web documentation and instructional material should not be undertaken as a purely internal operation but should include users and potentially focus groups to ensure that the final result fully meets the requirements.

Findings: The requirement to provide outreach was correctly interpreted as to need significant WHOIS-related documentation and this was carried out. Although the resultant Portal is somewhat lacking in navigation tools, it was generally very well done. However, it was not well integrated with other registrant-related information or with earlier WHOIS-related documentation and tutorial efforts. Documentation related to WHOIS inaccuracy reports was noted as needed a particular focus.

Rationale: The original recommendation was not explicit as to what documentation was required or how it should be integrated. Although the work that was done was of high quality, the lack of integration makes it significantly less effective that it could have been. Although it is currently unclear to what extent WHOIS information will be publicly viewable, such information will always be collected and thus ICANN has an obligation to document it clearly. Moreover if there is tiered access to data at some point, there will have to be extensive documentation on who can access such additional information and how that process is carried out.

Impact of Recommendation: All gTLD registrants should have full information on why their data is collected, how it can be used, and how they may make use of such data. Similarly others who may have an interest in the registrant of a gTLD domain, or how to interact with that registrant should have ready access to such information and how to proceed if there is a problem to be resolved.

Feasibility of Recommendation: The documentation and educational materials requested are standard types of offerings.

Implementation:

The implementation should begin once it is moderately clear how GDPR will be addressed with relation to gTLD WHOIS.

Priority: [TO BE PROVIDED]

Level of Consensus: [TO BE PROVIDED]

Recommendation R3.2:

With community input, ICANN should decide to what extent there is a need to carry out outreach to groups outside of the normal ICANN participant, and should such outreach be deemed necessary, a plan should be developed to carry this out and document it. WHOIS inaccuracy reported was previously an issues requiring additional education and outreach and may require a particular focus. The need for and details of the outreach may vary depending on the ultimate GDPR implementation and cannot be detailed at this point. [Do we want to keep this as is, or remove the uncertainty and say we need outreach?]

Findings: There is little evidence of outreach as described in the original recommendation and such outreach is still felt to have merits.

Rationale: The need for such outreach will be determined during the first phase of consultation, but there are already strong arguments for considering outreach to consumer protection agencies, law enforcement and more active outreach to registrants.

Impact of Recommendation: The impact of such outreach will be determined during the first phase of consultation.

Feasibility of Recommendation: N/A

Implementation:

The implementation should begin once it is moderately clear how GDPR will be addressed with relation to gTLD WHOIS.

Priority: [TO BE PROVIDED]

Level of Consensus: [TO BE PROVIDED]

4.4.6 Possible impact of GDPR and other applicable laws

[TO BE PROVIDED]

4.5 WHOIS1 Rec #4: Compliance

4.5.1 Topic

Comment [LP2]: Susan has an open action item to update this section to fill gaps.

Subgroup 1 - WHOIS1 Rec4 Compliance is tasked with investigating, analyzing, and drafting recommendations (if needed) to address the following Review objectives:

Consistent with ICANN's mission to ensure the stable and secure operation of the Internet's unique identifier systems by enforcing policies, procedures and principles associated with registry and registrar obligations to maintain and provide access to accurate and up-to-date information about registered names and name servers, the review team will (to the extent that this is not already covered in prior RT recommendations), (a) assess the effectiveness and transparency of ICANN enforcement of existing policy relating to WHOIS (RDS) through Contractual Compliance actions, structure and processes, including consistency of enforcement actions and availability of related data, (b) identifying high-priority procedural or data gaps (if any), and (c) recommending specific measurable steps (if any) the team believes are important to fill gaps.

And

Consistent with ICANN's mission and Bylaws, Section 4.6(e)(iv), the Review Team will (a) evaluate the extent to which ICANN Org has implemented each prior Directory Service Review recommendation (noting differences if any between recommended and implemented steps), (b) assess to the degree practical the extent to which implementation of each recommendation was effective in addressing the issue identified by the prior RT or generated additional information useful to management and evolution of WHOIS (RDS), and (c) determine if any specific measurable steps should be recommended to enhance results achieved through the prior RT's recommendations. This includes developing a framework to measure and assess the effectiveness of recommendations, and applying that approach to all areas of WHOIS originally assessed by the prior RT (as applicable).

The specific [WHOIS1 Recommendation](#) assessed by this subgroup appears below:

WHOIS Recommendation #4: Compliance

ICANN should ensure that its compliance function is managed in accordance with best practice principles, including full transparency on resourcing and structure; provide annual reports; appoint a senior executive whose sole responsibility would be to oversee and manage ICANN's compliance function (reporting to Board Committee); provide all necessary resources to manage and scale compliance team's activities.

Questions the subgroup attempted to answer when assessing the first objective include:

1) Review compliance reports initiated since 2012 on policies that existed prior to 2012 and after for the following:

- ⊙ Effectiveness
- ⊙ Transparency
- ⊙ Any issues arise
- ⊙ New compliance issues

Questions the subgroup attempted to answer when assessing the second objective include:

-
- a. Do the current reports provide the details described above? Are they transparent and complete?
 - b. Is the current appointment of a senior executive appropriate? Who does this person report to?
 - c. Does the compliance team have all necessary resources?

4.5.2 Summary of Relevant Research

To conduct its research, all members of this subgroup reviewed the following background materials, posted on the subgroup's wiki page:

- ⊙ [WHOIS Review Team \(WHOIS1\) Final Report](#) (2012) and [Action Plan](#)
- ⊙ [WHOIS Review Team \(WHOIS1\) Implementation Reports](#), including
 - Executive Summary of Implementation Report
 - Detailed implementation Report
- ⊙ WHOIS1 Implementation Briefings on Recommendations 4, 12, 13, 14: [PPT](#), [PDF](#)
- ⊙ [Answers to RDS-WHOIS2 Questions on Implementation Briefings](#)
- ⊙ Documents cited in briefing on Recommendation 4 Compliance include
 - [Contractual Compliance Outreach information and Metrics Reporting](#)
 - [Process and approach for enforcing the contract](#)
 - [Contractual Compliance staff information](#)
 - [Contractual Compliance annual reports and financials](#)
 - [Chief Compliance Officer 2017 announcement](#) and [2014 announcement](#)
 - [Consumer Safeguards Director announcement](#)
- ⊙ Additional documents relevant to Topic 7 Compliance include
 - [WHOIS Review Team \(WHOIS1\) Final Report](#) (2012), Section 1: The Effectiveness of ICANN's WHOIS Compliance Effort
 - [Documents relevant to WHOIS1 Recommendations 5-9 - Accuracy](#)
 - [ICANN Contractual Compliance](#) web pages
 - [Competition, Consumer Trust and Consumer Choice Review Team Draft Report](#)
- ⊙ [2 February Meeting with Compliance Management - Q&A](#), citing additional documents
 - FY18 Operating Plan and Budget
 - [Contractual Compliance 2017 Annual Report](#)
 - [Contractual Compliance Audit Program](#)
 - [Contractual Compliance Monthly Dashboards](#)
 - [WHOIS ARS Contractual Compliance Metrics](#)
 - [ICANN's Contractual Compliance Approach and Processes](#)
 - [Notices of Breach, Suspension, Termination and Non-Renewal](#)
 - [Registrar Formal Notices \(Enforcement\)](#)

In addition, the subgroup requested additional materials and briefings from the ICANN Compliance organization:

- ⊙ [Rec 4 Written Implementation Briefing](#)
- ⊙ [Meeting #3 - with Compliance Management \(1 February 2018\)](#)
 - [Written answers to 1 February 2018 questions](#)
 - [Written answers to 28 March 2018 meeting questions](#)
- ⊙ Brussels Meeting follow-up questions
 - [Written answers to compliance questions](#)
 - [Written answers to data accuracy questions](#)
- ⊙ Follow-up questions on the WHOIS ARS reports (May 2018)

The subgroup met with the Compliance team, Jamie Hedlund, Maguy Serad, Roger Lim and Andrea, twice each time providing a list of questions drafted by the subgroup prior to the meeting. The responses are provided above.

In addition, the subgroup considered the Accuracy Subgroup's findings with respect to compliance issues raised. Refer to the Accuracy Subgroup's report for a list of sources related to the Accuracy Reporting System (ARS).

Finally, the subgroup applied the RDS-WHOIS2 review team's [agreed framework](#) to measure and assess the effectiveness of recommendations,

4.5.3 Analysis & Findings

4.5.3.1 Implementation of Rec #4 - Analysis and Findings

This subgroup's objectives when analyzing its findings were to:

- ⦿ Identify the extent to which ICANN Org has implemented each prior Directory Service Review recommendation (noting differences if any between recommended and implemented steps);
- ⦿ Assess to the degree practical the extent to which implementation of each recommendation was effective in addressing the issue identified by the prior RT or generated additional information useful to management and evolution of WHOIS (RDS); and
- ⦿ Assess the effectiveness and transparency of ICANN enforcement of existing policy relating to WHOIS (RDS) through Contractual Compliance actions, structure and processes, including consistency of enforcement actions and availability of related data.

In the following table, we present the specific compliance principles recommended by the prior RT, the questions this subgroup asked to assess implementation of those principles, and our findings and analysis for each.

RT1-Recommended Principle	Question	Findings and Analysis
a. There should be full transparency regarding the resourcing and structure of its compliance function. To help achieve this ICANN should, at a minimum, publish annual reports that detail the following relevant to ICANN's compliance activities: staffing levels; budgeted funds; actual expenditure; performance against published targets; and organizational structure (including the full lines of reporting and accountability).	Do the current reports provide the details described above? Are they transparent and complete?	The Compliance team has made significant progress in reporting metrics and data in their annual report. They also allocate time during ICANN meetings to meet with the community and provide additional details on their work. The reports are very helpful and quite an improvement over reporting in 2012. In reading the reports it is hard to make an assessment of the issues that are still problematic. 66% of reports to the compliance team are WHOIS inaccuracy reports which comprises the largest areas of the team workload. What is not evident in the data reported is what are the problem areas, what could be improved to assist the team with its work. ICANN Contractual Compliance has an ongoing continuous

		<p>improvement cycle based on survey feedback, working group and review teams, lessons learned and internal reviews which also drive change. We appreciate that the Compliance team is working hard to receive input from the community.</p> <p>The Compliance team provided additional information to the subgroup. This information is reflected in the overall review of Compliance.</p>
<p>b. This senior executive should report directly and solely to a sub-committee of the ICANN Board. This sub-committee should include Board members with a range of relevant skills, and should include the CEO.</p>	<p>Is the current appointment of a senior executive appropriate? Who does this person report to?</p>	<p>The Compliance team provided an organizational chart for the reporting structure of the team. Although, the SVP Contractual Compliance & Consumer Safeguards reports directly to the CEO the recommendation explicitly states “report directly and solely to a Board sub-committee.”</p> <p>There is no indication that the recommended reporting structure was implemented. The Board action on this recommendation indicates they thought the implemented reporting structure to be adequate. The subgroup will need to ask additional questions concerning the reporting structure. At this point in time we do not believe the recommendation was fully implemented. The intention of the first review team was to ensure this role had the independence needed to perform the compliance function without restriction from the rest of the organization.</p>
<p>c. ICANN should provide all necessary resources to ensure that the compliance team has the processes and technological tools it needs to efficiently and pro-actively manage and scale its compliance activities. The Review Team notes that this will be particularly important in light of the new gTLD program, and all relevant compliance processes and tools should be reviewed and improved, and new tools developed where necessary, in advance of any new gTLDs becoming operational.</p>	<p>Does the compliance team have all necessary resources?</p>	<p>It appears that the Compliance team has all the necessary resources to manage compliance activities. They have improved technology over the years and implemented new systems. ICANN organization has provided the budget for the compliance team to grow. They currently have 25? Employees compared to 6 during the first review. They have implemented a bulk WHOIS inaccuracy reporting tool and improved the single input WHOIS inaccuracy tool since the first review team report.</p>

4.5.3.2 Policy Enforcement - Analysis & Findings

In the following subsections, we present the questions this subgroup asked to assess the effectiveness and transparency of ICANN enforcement of existing policy relating to WHOIS (RDS) through Contractual Compliance actions, structure and processes, and our findings and analysis for each.

4.5.3.2.1 WHOIS Accuracy Policy Enforcement

The 2013 Registrar Accreditation Agreement (RAA) requires ICANN-accredited registrars to comply with the WHOIS Accuracy Program Specification. There are several avenues in which the ICANN Compliance team receives reports of inaccurate data in the WHOIS.

- WHOIS Accuracy Reporting System
- Single WHOIS Inaccuracy report tool
- Bulk Submission WHOIS Inaccuracy complaint tool
- Proactive Inaccuracy Trend Analysis

WHOIS ACCURACY REPORTING SYSTEM (ARS)

a) WHOIS ARS Background and Goals

The WHOIS ARS project was created both in response to recommendations compiled and delivered by the 2012 WHOIS Review Team, under the Affirmation of Commitments (AoC), as well as to address GAC concerns on WHOIS accuracy. ICANN committed to proactively identify potentially inaccurate gTLD WHOIS contact data and forward this information to gTLD Registrars for investigation and follow-up.

b) WHOIS ARS Phases

The ARS is divided into three phases based on the types of validation identified in SAC058:

- ⦿ Phase 1: Syntax Accuracy
- ⦿ Phase 2: Syntax + Operability Accuracy
- ⦿ Phase 3: Syntax + Operability + Identity (TBD; requires further consultation with the community as to if and how this phase would be implemented)

c) ARS Accuracy Testing Methods

Syntax and operability accuracy testing were designed to assess the contact information of a WHOIS record by comparing it to the applicable contractual requirements of the RAA.

- ⦿ Syntax testing assessed the format of a record (e.g., does the email address contain an “@” symbol?)
- ⦿ Operability testing assessed the functionality of the information in a record (e.g., did the email not get bounced back?).

The resulting data were analyzed to produce statistics of syntax and operability accuracy for WHOIS contact information across subgroups such as New gTLDs or Prior gTLDs, Region, and RAA type (i.e., 2009 RAA or [2013 RAA](#))

d) ARS Sample Design

A two-stage sampling method is used on the WHOIS ARS project to provide a large enough sample to reliably estimate subgroups of interest, such as ICANN region, New gTLD or Prior gTLD, and RAA type. Two samples are prepared at the beginning of each report cycle:

- ⦿ An initial sample of 100,000-200,000 WHOIS records
- ⦿ A sub-sample of the initial sample of 10,000-12,000 WHOIS records, which is used for accuracy testing

ICANN Contractual Compliance’s participation in the WHOIS Accuracy Reporting System (ARS) is limited to providing guidance for RAA obligations regarding syntax and accuracy, and processing complaints generated by the WHOIS ARS. The WHOIS ARS is managed by ICANN’s GDD.

e) WHOIS ARS report cycle from October 2017

The WHOIS ARS sample of 12,000 domain names are reviewed for WHOIS accuracy and when an inaccuracy is found a ticket is created. The data is sent via a file directly to the compliance ticketing system and uploaded in batches of 200 a day. The WHOIS records are tagged with a reporter identifier WHOIS ARS for tracking and reporting purposes. Of the sample of the October 2017 ARS report cycle domain names, over one third (4,681) required a ticket to be created. Over half of those tickets (2,498) were closed before a 1st notice was sent out.

ICANN Contractual Compliance Metrics for WHOIS ARS Phase 2 Cycle 4 (Data as of 1 October 2017)

Ticket Processing Summary & Breakdown by Process Step	
Total tickets created	4,681
Total tickets closed	4,084
Tickets in process as of 1 October 2017	597
Tickets closed before 1st notice	2,498
Tickets that went to a 1st notice	1,668
Tickets that went to a 2nd notice	175
Tickets that went to a 3rd notice	15
Tickets that went to enforcement	0

Closure Reason for Tickets Closed Before 1st Notice	
WHOIS data when ticket processed different from sampled WHOIS data	47.4%
Domain not registered when ticket processed	19.4%
WHOIS format issue identified for 2013 Grandfathered Domain	13.6%
Domain suspended or canceled	12.3%
Known Privacy/Proxy service	7.3%
Other (remaining closure reasons representing less than 0.5% of cases)	0.1%

Closure Reasons for Tickets Closed After at Least One Notice	
Domain suspended or canceled	72.6%
WHOIS data changed or updated	14.9%
Registrar corrected WHOIS format	5.9%
Registrar verified that sampled WHOIS data is correct	5.5%
Registrar demonstrated compliance with RAA	0.4%
Other (remaining closure reasons representing less than 0.2% of cases)	0.4%

Analysis: Why would over 50% of the tickets created in this process not require any action? According to the chart below 47.4% of the data in the WHOIS records changed between the time it was reviewed as part of the sample and reviewed a second time when the ticket was processed. It is approximately 4 months between when the ARS sampling begins and inaccurate records are provided to Compliance to research. This appears either to be a high percentage of change in a WHOIS record that historically do not see much change. If you extrapolated this data to all the WHOIS records in gTLDs as a whole that could mean that almost 50% of WHOIS records are modified in a short period of time. Or WHOIS ARS criteria of possible inaccuracy is not the same as the Compliance team's criteria

Comment [3]:

See also

<https://whois.icann.org/sites/default/files/2019/01/19/whois-ars-phase-2-report-cycle-5-19dec17.pdf> on p.6 footnote -

It is also interesting that 72.6% of tickets are closed after the 1st notice due to the registration being cancelled or suspended. This would seem to indicate that most inaccurate data entered into the WHOIS record is done so intentionally, otherwise the registrant would respond and update the information to accurate information to maintain the domain name registration. Only 14.9% of the tickets were closed after the 1st notice due to the registrant updating and correcting their registrant data.

Based on this analysis, the subgroup identified the following Problems/Issues:

- ⦿ The WHOIS record still exists with suspended domain names and the registrar can choose to unsuspend at any moment. The inaccuracy issue remains and should be addressed.
- ⦿ There are many reasons a domain name could be suspended that does not relate to an inaccuracy report most of them for abusive activity. The inaccurate data still is visible in the WHOIS this can cause many issues for the individual or entity that have right to the data. If this data is displayed at a future date with only a suspended designation this does not accurately represent the history of the domain name.
- ⦿ A suspended domain name should not be unsuspended by registrar without verification of registrant data.

To address these issues, the subgroup proposes the following recommendation

(further detailed in the next section): Domain names suspended due to inaccurate information and remain in that state until it is due for renewal the WHOIS record should be updated to a new status and the inaccurate data remove as further described below.

1. Policy or contracts should require that WHOIS indicate whether a domain is on hold due to inaccurate data
2. Domains on serverHold due to inaccurate data in WHOIS should not be unsuspended without inaccurate data being remedied

New data could be inserted to indicate this action. Replace the inaccurate registrant data with standard language such as "Data removed by a compliance action" or "Inaccurate Data removed".

f) Grandfathered domain names

In 2013, there were 18 existing legacy TLDs and 146 new gTLDs added for a total of 164 gTLDs. 40% of the WHOIS ARS domain names that are sampled for this program are grandfathered domain names and are not required to adhere to the 2013 RAA. The 2009 RAA does not require the collection and display of Registrant email address, postal address or phone number it also does not require validation or verification of the data. Legacy gTLDs are defined as any domain names registered before 2013.

Analysis: If we assume the sample of ARS domain names of 40% grandfathered domain names then we can extrapolate this to 40% of all domain names registered before 2013 MAY not have this registrant data collected, displayed, verified or validated. (This may account for ? domain names). We have asked the compliance team to provide data on this statistics but they do not track this data.

Comment [SK4]: sent question to Jean-Baptiste and Alice

Based on this analysis, the subgroup identified the following Problems/Issues:

All domain name registrations currently do not have to comply with the current WHOIS policies. A limited transition period is understandable but 5 years seems excessive. These Grandfathered domain name registrations still exist except for those that have been deleted, changed ownership or transferred to a new registrar. It is imaginable that the number of Grandfathered domain names will continue to stay in the 30 – 40% rate for many years to come unless we implement the 2013 RAA requirements and policies on all the domain name registrations ill respective of when they were registered.

To address these issues, the subgroup proposes the following recommendation

(further detailed in the next section): Require all domain name registrations to adhere to the WHOIS requirements in the 2013 Registrar Accreditation Agreement. Once a policy is implemented all gTLD registration must adhere to the new rules within a 12 month period

Assess the grandfathered domain names to see if this is a problem if so a new policy should be created to ensure all gTLDs adhere to the requirements of registrant data collection in the 2013 RAA.

g) Regional WHOIS Inaccuracy Complaints

Region	Volume Received	Volume Closed Before 1st Notice	Volume 1st Notice Sent	Volume 2nd Notice Sent	Volume 3rd Notice Sent	Volume Closed
Africa	94	33	45	11	2	76
Asia/Australia/Pacific	15972	7339	8405	865	154	15906
Europe	6496	3851	2075	280	50	5944
Latin America/Caribbean	597	353	194	139	15	557
North America	22377	13950	7761	635	73	21662
Unknown	6359	5628	267	7	3	5939
Total	51895	31154	18747	1937	297	50084

- **Volume Received** = tickets submitted
- **Volume Closed Before 1st Notice** = number tickets received AND closed with no notices sent to registrars
- **Volume 1st Notice Sent** = number tickets where 1st Notice was sent
- **Volume 2nd Notice Sent** = number tickets where 2nd Notice was sent
- **Volume 3rd Notice Sent** = number tickets where 3rd Notice was sent
- **Volume Closed** = number tickets closed (may include backlog from prior months)

Based on this analysis, the subgroup identified the following Problems/Issues:

It appears that there are regions of the world in which few inaccuracy complaints are submitted. In the chart below the global south, Africa and Latin America are underrepresented in the number of submissions.

To address this issue, the subgroup proposes the following recommendation (further detailed in the next section): Review the ARS domain names sampled for region and

whether or not low submission rates are due to the lack of knowledge of WHOIS Inaccuracy tool.

4.5.3.2.2 Single WHOIS Inaccuracy Report Tool

Anyone can report inaccurate WHOIS data to the compliance team by using the [compliance tool on the ICANN.org website](#):

This form allows you to submit a complaint to ICANN regarding incomplete or incorrect WHOIS data for one domain name, including privacy or proxy contact information. The complaint is then forwarded to the sponsoring registrar, who must take reasonable steps to investigate and correct inaccurate data.

Please note: To update your own contact information, go to Correct My WHOIS Data to find out how.

To avoid delays in processing your complaint, please provide detailed explanation regarding each inaccuracy selected using the "Comment" field(s).
[Items with an asterisk (*) are required]

Top of Form

Name *

Email *

Domain Name *

I do not want my e-mail address disclosed to the registrar who the domain name is registered with. If checked, please give reason below.

The Bottom of Form

When ICANN receives complaints or otherwise has information that suggests these requirements are not being fulfilled by a registrar, ICANN Contractual Compliance will review the registrar's compliance through a WHOIS Inaccuracy complaint. ICANN makes its compliance determination by conducting the following steps during its reviews:

1. Review the complaint to determine whether it is in scope of the requirements.
2. Review what WHOIS information the reporter claims to be inaccurate.
Follow up with reporter if unclear on the inaccuracy reported and request additional information. Such information may include a request for evidence of the alleged inaccuracy (e.g., an email rejection notice or returned postal mail) or further explanation regarding why the data is invalid (e.g., explanation to support an allegation that the contact information does not belong to the listed contact in the WHOIS). Reporters are requested to respond within 5 business days. The complaint is closed absent receipt of adequate information for processing.
3. Confirm the WHOIS information is available from the registrar by querying the domain name(s).
4. Confirm the WHOIS format per Section 1.4.2 of the Registration Data Directory Service (WHOIS) Specification also known as RDDS.
5. Confirm that all required WHOIS fields have values present.
6. Confirm that the WHOIS information has no glaring inaccuracies on its face.
7. Review the reporter's complaint history in the compliance ticketing system to avoid processing of duplicative complaints and obtain additional information from other complaints, as applicable.

8. Once above checks are complete, ICANN will commence the informal resolution process by sending a 1st notice to the sponsoring registrar.
 - o WHOIS Inaccuracy complaints allow the registrar a 15-5-5 business day timeline to respond during the Informal Resolution period for the 1st, 2nd and 3rd notices, respectively.
9. To demonstrate compliance, a 2013 RAA registrar must
 - a. Contact the Registered Name Holder (RNH) 1
 - b. Verify the RNH email address with an affirmative response
 - c. Provide the results of the registrar's investigation
 - d. Validate the format of the WHOIS information
 - e. Suspend domain within 15 days if unable to verify
10. When the registrar demonstrates compliance:
 - a. ICANN assigns a resolution code to the complaint detailing the outcome of the review
 - b. ICANN sends a closure communication to the registrar and the reporter

ICANN Contractual Compliance recently began reporting on closure reasons by complaint type, including those for WHOIS Inaccuracy complaints. These metrics are reported on a quarterly basis and the first quarter of 2018's report is found at

<https://features.icann.org/compliance/dashboard/2018/q1/registrar-resolved-codes>.

These closure codes are very helpful in understanding the data provided.

2018 Quarter One (January-March 2018) Reporter Category Summary

Reporter Category	# Tickets	% of Total
WHOIS Accuracy Reporting System Total	2	0.02%
WHOIS Inaccuracy Bulk Total	263	2.81%
Individual Submission Total	8904	95.01%
ICANN Submission Total	203	2.17%
Total	9372	100.00%

Based on this analysis, the subgroup identified the following Problems/Issues:

In reviewing the additional information in the dashboard report it appears that many inaccuracy reports are not valid reports. We asked what would be helpful for the compliance team when reports are submitted.

- Additional evidence in WHOIS Inaccuracy complaints that compliance might find useful if the reporter provides are listed below:
- Evidence of returned mail sent to the postal address listed in the WHOIS information
- Evidence of a bounce back or undeliverable email notification for email sent to the email address listed in the WHOIS information
- Evidence or explanation why the telephone number listed in the public WHOIS is not accurate
- Evidence or explanation why the person or entity listed in the public WHOIS does not exist or is not the registered name holder (RNH)

To address this issue, the subgroup proposes the following recommendation (further detailed in the next section): Conduct additional outreach and education on how to file a report and what information is critical to provide.

4.5.3.2.3 Bulk Submission WHOIS Inaccuracy Complaint Tool

ICANN Contractual Compliance provides a mechanism for bulk WHOIS inaccuracy reporting, which allows a user to submit multiple complaints through a single file upload. Each user can submit up to 300 total complaints per week. The complaints are processed in the same method and queue for WHOIS inaccuracy complaints. Users of the bulk system must agree to mandatory terms of use, and their complaint quality is monitored by ICANN to ensure submission of complaints are within scope of the RAA and WHOIS requirements. There are currently approximately ten approved users for the bulk system, and within the past six months, three were active users.

Analysis: This tool did not exist until November 2013 and only 10 users are approved to use the tool. Last year only 3 users actually used the tool to report WHOIS records in bulk. Insert the criteria used to approve users of tool

Based on this analysis, the subgroup identified the following Problems/Issues: Users who might benefit from the Bulk Submission tool may not be aware of it.

To address this issue, the subgroup proposes the following recommendation (further detailed in the next section): Publicize and encourage the use of the Bulk WHOIS inaccuracy reporting tool.

4.5.3.2.4 Proactive Inaccuracy Trend Analysis

It appears that the Compliance team does little in proactive actions to discover and remediate issues with WHOIS data. When the subgroup asked the compliance team about this they responded that they performed proactive monitoring of the WHOIS verification review in the APAC region. Other than this, it appears that reactive enforcement is the norm. When a ticket is filed it is actioned and responded to. This is not optimal for the security and stability of the internet.

The compliance team does have access to other sources of data through the DAAR reports. Although DAAR data is non-authoritative, it is used globally to add to the security and stability of the internet.

Based on this analysis, the subgroup identified the following Problems/Issues: Proactive analysis and enforcement by the compliance team would contribute to the security and stability of the internet. By only reacting to reported compliance issues opportunities are missed to find systemic issues. Enforcement against single reports will miss the bigger picture of issues that require deeper analysis.

To address this issue, the subgroup proposes the following recommendation (further detailed in the next section): Direct contractual compliance to proactively monitor and enforce to address systemic issues. Take a risk based approach to assess, and understand the inaccuracy issues and take the appropriate compliance actions to mitigate risk in systemic complaints.

4.5.3.2.5 Across Field Validation of WHOIS information

In February 2018, ICANN completed a Request for Information (RFI) on Across Field Validation, defined as follows:

“The 2013 RAA requires registrars to perform across-field validation of Addresses (e.g., the house number exists on the street, street exists in the city, city exists in the province and the post code is correct); however, this requirement is not currently enforced and will only become effective 6 months after ICANN and a working group of registrar volunteers mutually agree that across-field validation is technically and commercially feasible.”

Nine (9) RFI responses were received. These responses contained updated information regarding current services available to complete across field address validation and verification.

- On 04 May 2018, the Registrar Stakeholder Group requested ICANN org to pause the IRT’s work, pending the creation of a permanent policy to be created, possibly via an expedited process, following the Board’s adoption of the Temporary Specification to comply with GDPR. The Coalition for Online Accountability opposed this request in an 11 May letter.
- ICANN org distributed a response on 18 June 2018, noting that there are no plans to pause the Across Field Validation work.
- The Registrar Working Group is reviewing the criteria from ICANN org that will be used to determine whether any solution exists in the marketplace that is technically and commercially viable. The working group is expected to respond by 31 July 2018.

Based on this analysis, the subgroup identified the following Problems/Issues:
<INSERT HERE, IF ANY, OR STATE NO PROBLEM IDENTIFIED>

To address this issue, the subgroup proposes the following recommendation (further detailed in the next section): A recommendation may not be appropriate at this time.

Comment [SK5]: Review with subgroup

4.5.3.3 Policy Metrics for Monitoring and Enforcement

Look at list of new policies in Anything new and list suggested compliance responsibilities. Subgroup to try testing recommendation on WHOIS policies that are being examined by this review (e.g., PP, IDN) to see if metrics/monitoring/reporting and enforcement have been defined for those – In process

In the Anything new subgroup we reviewed all new policies created since the last WHOIS review team. At least one of these policies The Registry Registration Data Directory Services Consistent Labeling and Display Policy there were no statistics we could gather from the Compliance team. We specifically asked the compliance team about CLDP.

The Registry Registration Data Directory Services Consistent Labeling and Display Policy is a policy imposed on registry operators, with the exception of .com, .jobs and .net. The policy requires registry operators to include in the registry WHOIS output the Registrar Abuse Contact Email and Registrar Abuse Contact Phone fields, among other things. Compliance rate of registrars with this registry operator requirement is not something that ICANN has attempted to measure. Additionally, measuring the cause of a registry operator’s noncompliance with the requirement may be difficult, as it is not obvious from the registry operator’s WHOIS output. For example, the registry operator’s noncompliance may be entirely within its control (e.g., it has obtained the registrar’s abuse contact information but is not displaying it) or, in part, due to the registrar’s (in)action (e.g., the registrar has not yet provided the registry operator with its abuse contact information”

Based on this analysis, the subgroup identified the following Problems/Issues:

The CLDP is included in the 2013 RAA which requires compliance. There may be more policies that are implemented but not audited or tracked. If the community recognizes the need for a policy to be created, works on the issue through the Policy Development Process and then resources are allocated to implement the policy it is appropriate that some level of compliance should be required. Metrics collected in auditing and tracking will assist in a review of the effectiveness of an implemented policy.

To evaluate effectiveness of a policy the following criteria is essential to review:

1. Identify issue
2. Frame issue – determine goal of policy, ability to implement the policy and actual results of the policy
3. Audit outcomes and impacts - Measurable results short term, intermediate and long term impacts
 - a. Sampling
 - b. Metrics
 - c. Monitoring
 - d. Trend analysis
 - e. Determine information gaps
4. Determine whether changes in outcomes are a result of the policy
5. Develop recommendations and good practices

Each policy created and implemented should be evaluated with a similar criteria.

To address this issue, the subgroup proposes the following recommendation (further detailed in the next section): Require all new policies implemented to be required to be measured, audited, tracked and enforced by the compliance team. Policy should integrate metrics, measurements, and reporting to ensure that the policy is effective in addressing the issue, and when metrics are defined, compliance would audit, track, report, and enforce as applicable for the policy.

4.5.4 Problem/Issue

In the following table, we present the specific compliance principles recommended by the prior RT, the questions this subgroup asked to assess implementation of those principles, and the problems/issues identified by the subgroup for each.

RT1-Recommended Principle	Question	Problem/Issue
a. There should be full transparency regarding the resourcing and structure of its compliance function. To help achieve this ICANN should, at a minimum, publish annual reports that detail the following relevant to ICANN's compliance activities: staffing levels; budgeted funds; actual expenditure; performance against published targets; and organizational structure (including the full lines of reporting and accountability).	Do the current reports provide the details described above? Are they transparent and complete?	We appreciate that the Compliance team is working hard to receive input from the community but WHOIS inaccuracy report data provided by the compliance team is not clear on several points. We have heard that there is inconsistency in experience and results received from users submitting inaccuracy reports. From the data we have reviewed it is not easy to assess if there is truly a problem or a perception of a problem. More in depth review should be performed of the responses they provided in the second set of questions.

		<p>Registrars are contractually required by the 2013 Registrar Accreditation Agreement (RAA) to confirm and conduct verification and validation of the accuracy of WHOIS information. ICANN Contractual Compliance receives complaints via web forms, email to compliance@icann.org, the bulk WHOIS inaccuracy submission tool and through proactive monitoring or internal referrals.</p> <p>When ICANN receives complaints or otherwise has information that suggests these requirements are not being fulfilled by a registrar, ICANN Contractual Compliance will review the registrar's compliance through a WHOIS Inaccuracy complaint. ICANN makes its compliance determination by conducting the following steps during its reviews:</p> <ol style="list-style-type: none"> 1. Review the complaint to determine whether it is in scope of the requirements. 2. Review what WHOIS information the reporter claims to be inaccurate. Follow up with reporter if unclear on the inaccuracy reported and request additional information. Such information may include a request for evidence of the alleged inaccuracy (e.g., an email rejection notice or returned postal mail) or further explanation regarding why the data is invalid (e.g., explanation to support an allegation that the contact information does not belong to the listed contact in the WHOIS). Reporters are requested to respond within 5 business days. The complaint is closed absent receipt of adequate information for processing. 3. Confirm the WHOIS information is available from the registrar by querying the domain name(s). 4. Confirm the WHOIS format per Section 1.4.2 of the Registration Data Directory Service (WHOIS) Specification also known as RDDS. 5. Confirm that all required WHOIS fields have values present. 6. Confirm that the WHOIS information has no glaring inaccuracies
--	--	--

		<p>on its face.</p> <p>7. Review the reporter’s complaint history in the compliance ticketing system to avoid processing of duplicative complaints and obtain additional information from other complaints, as applicable.</p> <p>8. Once above checks are complete, ICANN will commence the informal resolution process by sending a 1st notice to the sponsoring registrar.</p> <ul style="list-style-type: none"> o WHOIS Inaccuracy complaints allow the registrar a 15-5-5 business day timeline to respond during the Informal Resolution period for the 1st, 2nd and 3rd notices, respectively. <p>9. To demonstrate compliance, a 2013 RAA registrar must:</p> <ul style="list-style-type: none"> Contact the Registered Name Holder (RNH) Verify the RNH email address with an affirmative response Provide the results of the registrar’s investigation Validate the format of the WHOIS information Suspend domain within 15 days if unable to verify <p>10. When the registrar demonstrates compliance:</p> <ul style="list-style-type: none"> ICANN assigns a resolution code to the complaint detailing the outcome of the review ICANN sends a closure communication to the registrar and the reporter
<p>b. This senior executive should report directly and solely to a sub-committee of the ICANN Board. This sub-committee should include Board members with a range of relevant skills, and should include the CEO.</p>	<p>Is the current appointment of a senior executive appropriate? Who does this person report to?</p>	<p>Additional review is needed to determine whether or not it is feasible to adhere to the intentions of the RT 1 recommendation.</p> <p>Why did the Board make the decision to not implement the recommendation fully?</p> <p>What challenges would ICANN org face in requiring an employee of the org to report to the Board.</p> <p>Are there examples of this reporting structure we could review in other businesses?</p>
<p>c. ICANN should provide all necessary resources to</p>	<p>Does the compliance team</p>	<p>We may want to take a closer look at how long it takes the compliance team</p>

<p>ensure that the compliance team has the processes and technological tools it needs to efficiently and pro-actively manage and scale its compliance activities. The Review Team notes that this will be particularly important in light of the new gTLD program, and all relevant compliance processes and tools should be reviewed and improved, and new tools developed where necessary, in advance of any new gTLDs becoming operational.</p>	<p>have all necessary resources?</p>	<p>to implement new technology.</p> <p>It is the RT's opinion that the Compliance team has sufficient resources but does not utilize the information for proactive assessment and enforcement.</p>
--	--------------------------------------	--

Problems and issues related to the effectiveness and transparency of ICANN enforcement of existing policy relating to WHOIS (RDS) through Contractual Compliance actions, structure and processes are described in Section 4.5.3.

4.5.5 Recommendations (if any)

Based on its analysis, members of this subgroup agree that this WHOIS1 recommendation has been partially-implemented. Further recommendations are provided here to address the problems/issues identified above.

Recommendation R4.1:

Require all new policies implemented to be measured, audited, tracked and enforce as required by the compliance team. Policy should integrate metrics, measurements, and reporting to ensure that the policy is effective in addressing the issue, and when metrics are defined, compliance would audit, track, report, and enforce as applicable for the policy.

Findings:

As detailed in Section 4.5.3.2.2, in reviewing all new policies created since the first WHOIS Review team at least one was identified as not being enforced by the Compliance team. : The impact of a policy can be measured with good statistics. If policy cannot be measured it is not a good policy.

Rationale: This new policy would ensure that all policies are measured, audited, tracked and enforced by the compliance team. The community while in the policy development process should ensure that the policy is developed with compliance in mind. One policy the, CLDP, was identified as not being monitored or enforced. Without statistics on this policy available it is impossible to understand the level of compliance with this policy. Policies not enforced risk being less effective.

Impact of Recommendation:

Registrars and Registries will be impacted by this recommendation, they will have to provide information to the compliance team and ensure that they are implementing the recommendation. The compliance team will have to collect, analyze and enforce each policy as required. This will add to security and transparency. The community should develop policies with enforcement in mind. Successful implementation of this policy would result in

knowledge of compliance with all policies. The Review team requests this recommendation to be implemented immediately upon approval of Board.

If this recommendation is not implemented we will remain in the current state of not knowing if the policies created by the community are implemented and making the impact on the system as expected by the PDP process that created the policy. This recommendation is aligned with ICANN's Strategic Plan and Mission and is within the scope of the review team.

Feasibility of Recommendation: It is feasible to enforce on all policies as it could be included in any of the ongoing audits already performed by the Compliance team including but not limited to the registrar audit, Inaccuracy reports or WHOIS ARS study.

Implementation:

If implemented all policies will be evaluated for impact and effectiveness. If not implemented the community will not know if a policy is effective or has had unexpected consequences. The Community and ICANN.org would be responsible for this implementation.

<REFERENCE ANY WORK UNDERWAY> The Review team would expect a PDP to be created immediately upon approval by the Board.

Level of Consensus: [Document level of RT consensus]

Recommendation 4.2:

Require all domain name registrations to adhere to the WHOIS requirements in the 2013 Registrar Accreditation Agreement or the latest implemented policy for WHOIS. Once a policy is implemented all gTLD registrations must adhere to the new rules within a 12 month period. Assess the grandfathered domain names to determine if information is missing from the registrant field. If statistically significant number of domain name registrations lack registrant data then a new policy should be created to ensure all gTLDs adhere to the requirements of registrant data collection in the 2013 RAA.

Comment [SK6]: Waiting for response from GDD on how many domain names are grandfathered domains.

Findings:

As detailed in Section 4.5.3.2.1,1 (f), in the WHOIS Accuracy Reporting System (ARS) report categorize the domain name registrations that only must adhere to the 2009 RAA WHOIS requirements separately from those that must adhere to the 2013 RAA.

“the only difference between 2013 and 2009 RAA operability requirements is that the 2009 RAA requirements do not require that information be present in the registrant email or telephone number fields, while 2013 RAA require the presence of information in those fields.”

The report estimates that of the 12000 domain names reviewed for compliance 40% were 2009 grandfathered domain names and do not have to meet the same requirements as domain names registered after the 2013 RAA was implemented. Considering that the only way these domain names would have to comply with the 2013 RAA is if they were deleted and registered again. This does not seem likely since early registrations are often the most valuable. They are often sold but not deleted.

Rationale: After 5 years of two existing policies domain name registrant data must comply based on when the domain name was registered a newly created policy with one standard requirement that all registrant data must adhere standardize the Registrant Data record and ease operability.

Currently, the sub group has not found information to determine how many domain name registrations do not contain Registrant email address or telephone number. It may not be an issue if the registrants have proactively provided the information without the requirement to do so. If the policy is updated requiring the same registrant data for all domain name registration this will no longer impact future changes to registrant data policies. This is aligned with the ICANN's strategic plan and mission and It will add to the security and stability of the DNS.

Impact of Recommendation:

Registrars, Registries and registrants will be impacted by this recommendation. The Registrant would have to provide this information upon renewal of the domain name. Registrars will have to collect all the same information for all domain name registrations no matter when it was registered. This may require collecting registrant information from the existing grandfathered registrations that they manage. The registry would be required to collect this information from the registrar. The a compliance. Team will be required to review and analyze compliance with this new policy. If this recommendation is implemented it will resolves the issue of two different standards for collection of registrant data depending on when the domain was registered. If it is not implemented two standards for registrant data will continue to exist. This recommendation is aligned with ICANN's Strategic Plan and Mission and is within the scope of the review team.

Feasibility of Recommendation:

This recommendation would require a review of domain name registered before 2013 and most likely a modification of registrar terms of service It would require the registrar to collect the information from the registrants. This could be done on renewal of the domain name.

Implementation:

This would require the Community to develop a new policy and ICANN.org to implement and the compliance team to enforce. Successful implementation would result in 100% of domain name registrations complying with the same policy on registrant [data]. **<REFERENCE ANY WORK UNDERWAY, ADD TIMELINE>**.

Recommendation R4.3:

Domain names suspended due to inaccurate information and remain in that state until it is due for renewal the WHOIS record should be updated to a new status and the inaccurate data removed, as further described below.

- (1) Policy or contracts should require that WHOIS indicate whether a domain is on hold due to inaccurate data
- (2) Domains on serverHold due to inaccurate data in WHOIS should not be unsuspended without inaccurate data being remedied

Findings: As detailed in Section 4.5.3.2.1.1 (e), currently, when a domain name is suspended for inaccurate information the false information remains in the record. The information in the record may belong to another person or entity so the inaccurate information remaining in the record continues the act of identity theft. At the very least, this information remaining is misleading.

Rationale: Ensure that inaccurate information does not remain in the record and if identity theft has occurred the person or entity doesn't continue to be impacted. Currently, the inaccurate information remains in the record which can cause confusion and harm if this was an act of identity theft. Inaccurate information is often used in the registration data in registration that are perpetuating DNS abuse. Eliminating the use of inaccurate data in any

Comment [SK7]: Volker provided some background around the negotiation of the 2013 RAA in which the grandfathered domain names were not included in requirement to adhere to 2013 RAA. "I have significant concerns about the logistics of this recommendation. Not having to touch legacy domains and their owners unless there is active cause to do so has been a significant part of the agreement between Registrars and ICANN under the 2013 RAA negotiation. I also note that that usually older domains are not as much a cause for

suspended domain name will add to the security and stability of the DNS. We would no longer find inaccurate data lingering in the registrant data. This would not be difficult to implement a new policy would be created that registrar's would follow when suspending a domain name.

Impact of Recommendation: Successful implementation would result in new statuses in the domain name registration record that indicated the domain name was suspended due to inaccurate information. The inaccurate Information would be redacted and result in removal of data that did not have authorization to be included in the registration data. No related work is currently underway. This recommendation should result in a PDP created immediately upon approval by Board.

If this recommendation is not implemented registrant data will continue to be displayed that is not accurate, authorized for inclusion in registrant data and continue to contribute to identity theft. This recommendation is aligned with ICANN's Strategic Plan and Mission and is within the scope of the review team.

Feasibility of Recommendation: [Document feasibility of recommendation]

Implementation:

This implementation would involve the community to create the policy, ICANN.org to implement and the compliance team to enforce.

Level of Consensus: [Document level of RT consensus]

Recommendation R4.4: Moved to Outreach

Recommendation R4.5:

Publicize and encourage the use of the Bulk WHOIS Inaccuracy Reporting tool.

Comment [LP8]: This needs to be tied to the Outreach Subgroup's recommendations

Findings:

As detailed in Section 4.5.3.2.2, according to the information provided by the compliance team only 10 individuals/entities have been approved to use the Bulk WHOIS Inaccuracy Reporting tool. Of those 10, only 3 have reported inaccurate WHOIS records in the last year. If more people understood this tool was available, it would be easier for reporters of large number of inaccurate data in the WHOIS to report these to the Compliance team.

Rationale: This recommendation would enable ease of reporting large numbers of inaccurate WHOIS data records. A small number of users of the Bulk WHOIS Inaccuracy Reporting tool may be a result of lack of knowledge of its availability. If resources are used to create such a tool it is worth spending resources on outreach and education about the tool. The impact would not be drastic but it would lead to an improvement of accurate data in the WHOIS if more individuals/entities used the tool. It would also contribute to the reporting of detected systemic problems. Compliance team should develop system to review, evaluate and enforce on a group of domain names reported through the bulk WHOIS Inaccuracy Reporting tool instead of treating each as an individual report.

Impact of recommendation: If this recommendation is implemented it would result in more inaccuracy reports and lessen the burden on reporters and ease the review of the report by the compliance team if all the registration data is the same. More efficient process.

If it is not implemented multiple domain names with the same inaccurate information will continue to be reported one by one which creates more work for the reporter and require the compliance team to review single reports.

This recommendation will add to the security and stability of the DNS, is aligned with ICANN's Strategic Plan and Mission and is within the scope of the review team.

Feasibility of Recommendation: [Document feasibility of recommendation]

Implementation:

ICANN org, with consultation of the community, could provide more outreach about the Bulk WHOIS Inaccuracy Reporting tool. Outreach and education to those that use the inaccuracy single reporting tool would increase the use of the Bulk WHOIS Inaccuracy Reporting tool. Education and outreach to start Immediately upon approval by Board. <NEED TO ADD IMPACT OF SUCCESSFUL IMPLEMENTATION, IMPACT IF NOT IMPLEMENTED, AND IMPACTED FUNCTIONAL AREAS (e.g., Compliance?), ANY WORK UNDERWAY?, TIMELINE>

Level of Consensus: [Document level of RT consensus]

Recommendation R4.6:

Review the WHOIS ARS domain names sampled for region to determine whether or not low submission rates to the WHOIS inaccuracy reporting tool are due to the lack of knowledge of the tool or other critical factors.

Findings:

As detailed in Section 4.5.3.2.1.1 (g), In the WHOIS ARS report the number of reports of inaccurate data from users in South America and Africa where significantly lower than the other continents. This could be due to lack of knowledge of the ability to report these or other cultural influences.

Rationale: Ensure that users in South America and Africa or any developing countries are aware of the WHOIS record and that they can independently report inaccurate data. This is critical to ensure that developing countries can address issues with inaccurate data in the WHOIS. Continuing to reach out to the Global south to increase awareness of ICANN policies and tools to remedy issues is critical for the security and stability of the internet.

This recommendation is aligned with ICANN's Strategic Plan and Mission and is within the scope of the review team.

Impact of Recommendation: This recommendation could result in an improvement in submission rates by region and may discover other cultural reasons that the inaccuracy reporting tool is not utilized.

No implementation will continue to disadvantage the global south.

<NEED TO ADD IMPACTED FUNCTIONAL AREAS (e.g., Compliance, GDD?) AND GROUPS (e.g., ICANN Org, Registrants?)>

Feasibility of Recommendation: [Document feasibility of recommendation]

Implementation:

Comment [SK9]: Volk's comments - We should add something that submissions remain manageable by registrars of all sizes, since receiving 300 single tickets one ticket with 300 domains can overwhelm the abuse function of smaller registrars. So complaints using such a tool need to be for one issue with multiple domains, not various issues with multiple domains. So if they all use the same incorrect WHOIS for example, that would be a valid use, but if they all use different WHOIS data, they should be submitted individually. Rules for combining UDRP complaints could inform on what should be applied here to keep this tool relevant.

Community and ICANN org would work together on this issue. We would know this recommendation was successful if the WHOIS ARS reports show similar reporting rates by users no matter what country they live in after implementation. Education and outreach is ongoing this could be added to and amplified in this work. This recommendation could be implemented Immediately upon approval by Board.

Level of Consensus: [Document level of RT consensus]

Recommendation R4.7:

Following a valid WHOIS ARS ticket, or WHOIS inaccuracy complaint and **where there is a pattern of failure to validate as required by the RAA** a full audit targeting the relating registrar should be initiated, to check if the registrar follows the contractual obligations, the consensus policies, etc. Sanctions should be applied if deficiencies **identified**.

Findings:

As detailed in Section 4.5.3.2.1, all current compliance activities are separate and conducted individually. WHOIS ARS sampled WHOIS records to do accuracy test, the Audit program sampled registrars to conduct audit, no synergies have been gained through different action tracks.

Rationale: If a WHOIS record is not accurate due to registrar didn't conduct validation and verification, it shouldn't be a standalone case. A follow up audit will help to mitigate all issues regarding the outstanding registrar.

Impact of Recommendation:

Only related registrars will be impacted by this recommendation <HOW> along with the compliance team. **<NEED TO ADD IMPACT OF SUCCESSFUL IMPLEMENTATION AND IMPACT IF NOT IMPLEMENTED>**

This recommendation is aligned with ICANN's Strategic Plan and Mission and is within the scope of the review team.

Feasibility of Recommendation:

This recommendation will make the Audit program more targeted. The compliance team may need further assessment of resources to implement this recommendation.

Implementation: **<NEED TO ADD PARTIES RESPONSIBLE FOR IMPLEMENTATION AND TARGET FOR SUCCESS (how will we know if/when rec has been implemented?), REFERENCE ANY WORK UNDERWAY and TIMELINE >**

Level of Consensus: [Document level of RT consensus]

Recommendation R4.8:

Direct contractual compliance to proactively monitor and enforce as required to address systemic issues. A risk based approach should be executed to assess, and understand inaccuracy issues and then take the appropriate compliance actions to mitigate risk in systemic complaints.

Findings:

As detailed in Section 4.5.3.2.2, currently, the Compliance team's responsibilities are mainly reactive in responding to WHOIS inaccuracy reports and working with GDD on the results of the WHOIS ARS reports. The team could be more proactive in their approach and when they

Comment [LP10]: This recommendation not discussed elsewhere in this report. Need to tie this recommendation to findings and analysis given in Accuracy Report, and to address ICANN62 feedback.

Plenary call Action Item: Susan and Lili to clarify rec 4.7 to indicate the audit would apply only in cases where there is a pattern failure to validate as required by the RAA

Comment [SK11]: We should discuss clarification of this recommendation at the F2F.

see suspected systemic issues research, analyze and enforce against inaccuracy in the registration data. With the number of registered domain names growing daily it becomes more important to security and stability to ensure there is accurate information in the registrant data on record.

Rationale: The DAAR data is an additional resource that the compliance team has available and is not currently including in their research and analysis. The use of DAAR data as one of many input sources would provide a different perspective for the compliance team. Although DAAR data is non-authoritative, it is used globally to add to the security and stability of the internet. Bulk WHOIS Inaccuracy Reports may be helpful in addressing systemic issues. Reports through this tool may be indicative of a wider spread problems and use of these reports could assist in enforcement.

Impact of Recommendation:

This recommendation could positively impact the accuracy of registrant data. The Compliance team could implement this, unless it requires a new policy, in which case a GNSO PDP may be required. If this recommendation is not implemented the effectiveness of compliance actions will be lessened. As systemic issues increase and sophistication of attacks are on the rise the compliance teams needs more effective tools and detection information to resolve issues.

This recommendation is aligned with ICANN's Mission and within scope of the Review Team.

Feasibility of Recommendation: This recommendation would not be difficult for the Compliance team to implement, unless it requires a new policy, in which case a PDP may be required.

Implementation:

The Community and ICANN org would work together on creating a framework/policy for this recommendation. We would know this recommendation was successful when the percentage of accurate registrant data records increase. <REFERENCE ANY WORK UNDERWAY> This recommendation could be implemented immediately upon approval by Board.

Level of Consensus: [Document level of RT consensus]

[PROPOSED NEW RECOMMENDATION FOR PLENARY DISCUSSION:

Recommendation R4. #:

Privacy and Proxy registration data providers must adhere to the current RAA requirements for verification and validation of the underlying registrant data.

The following is from the PPSAI final report and may help in the discussion:.

P/P service providers should be required to inform the P/P service customer annually of his/her requirement to provide accurate and up to date contact information to the P/P service provider. If the P/P service provider has any information suggesting that the P/P service customer information is incorrect (such as the provider receiving a bounced email notification or non-delivery notification message in connection with compliance with data reminder notices or otherwise) for any P/P service customer, the provider must verify or re-verify, as applicable, the email address(es). If, within fifteen (15) calendar days after receiving any such information, the P/P service provider does not receive an affirmative response from the

P/P service customer providing the required verification, the P/P service provider shall verify the applicable contact information manually.

4.5.6 Possible impact of GDPR and other applicable laws

[TO BE PROVIDED]

4.6 WHOIS1 Rec #5-9: Data Accuracy

4.6.1 Topic

Comment [LP12]: Lili has an open action item to update this section to fill gaps and align with changes made to Compliance section to address ICANN62 feedback.

Subgroup 1 - WHOIS1 Rec 5-9 Data Accuracy is tasked with investigating, analyzing, and drafting recommendations (if needed) to address the following Review objective:

Consistent with ICANN's mission and Bylaws, Section 4.6(e)(iv), the Review Team will (a) evaluate the extent to which ICANN Org has implemented each prior Directory Service Review recommendation (noting differences if any between recommended and implemented steps), (b) assess to the degree practical the extent to which implementation of each recommendation was effective in addressing the issue identified by the prior RT or generated additional information useful to management and evolution of WHOIS (RDS), and (c) determine if any specific measurable steps should be recommended to enhance results achieved through the prior RT's recommendations. This includes developing a framework to measure and assess the effectiveness of recommendations, and applying that approach to all areas of WHOIS originally assessed by the prior RT (as applicable).

The specific [WHOIS1 Recommendation](#) assessed by this subgroup appears below:

WHOIS Recommendations #5-9: Data Accuracy

Recommendation 5 – ICANN should ensure that the requirements for accurate WHOIS data are widely and proactively communicated, including to current and prospective Registrants, and should use all means available to progress WHOIS accuracy, including any internationalized WHOIS data, as an organizational objective.

Recommendation 6 – ICANN should take appropriate measures to reduce the number of WHOIS registrations that fall into the accuracy groups Substantial Failure and Full Failure (as defined by the NORC Data Accuracy Study, 2009/10) by 50% within 12 months and by 50% again over the following 12 months.

Recommendation 7 – ICANN shall produce and publish an accuracy report focused on measured reduction in WHOIS registrations that fall into the accuracy groups Substantial Failure and Full Failure, on an annual basis.

Recommendation 8 – ICANN should ensure that there is a clear, unambiguous and enforceable chain of contractual agreements with registries, registrars, and registrants to require the provision and maintenance of accurate WHOIS data. As part of these agreements, ICANN should ensure that clear, enforceable and graduated sanctions apply to registries, registrars and registrants that do not comply with its WHOIS policies. These sanctions should include de-registration

and/or de-accreditation as appropriate in cases of serious or serial non-compliance.

Recommendation 9 – Board should ensure that the Compliance Team develop metrics to track the impact of the annual WHOIS Data Reminder Policy (WDRP) notices to registrants; metrics should be used to As per (1) above, the Board will initiate a policy on the purpose of the gTLD WHOIS service, and this will help drive the principles behind privacy/proxy develop and publish performance targets, to improve data accuracy over time; if this is unfeasible, Board should ensure that an alternative, effective policy is developed and implemented that achieves the objective of improving data quality, in a measurable way.

To address this review objective, the subgroup agreed to find answers to the following questions:

- ⦿ The implementation progress of “WHOIS ACCURACY PROGRAM SPECIFICATION” in 2013 RAA.
- ⦿ The progress of WHOIS Accuracy Reporting System (ARS) project and to what extent the inaccuracy has been reduced.
- ⦿ The accurate rate of WHOIS data which uses Privacy/Proxy service.
- ⦿ Are the measures which have been taken effective in achieving the objectives?
- ⦿ Whether we can measure data accuracy when data becomes mostly hidden?

4.6.2 Summary of Relevant Research

The feeds for this subgroup's review are from 3 sources:

- ⦿ Background materials posted on the [subgroup's wiki page](#)
- ⦿ Views exchanged during the Review Team's plenary calls and subgroup calls
- ⦿ Open source research

[COPY HYPERLINKED LIST OF MATERIALS USED BY SUBGROUP HERE].

[DESCRIBE METHODOLOGY USED - FOR EXAMPLE DID ALL SUBGROUP MEMBERS REVIEW MATERIALS, HOW DID SUBGROUP MEMBERS REACH AGREEMENT ON ANALYSIS AND PROBLEMS/ISSUES]

4.6.3 Analysis & Findings

A handful of measures were either in effect or have been taken by ICANN Org to progress WHOIS accuracy since prior WHOIS review.

1. A WHOIS Informational Website has been established as a WHOIS policy documentation, to educate registrants on WHOIS, their rights and responsibilities, and to allow Internet users to submit complaints on WHOIS inaccuracy.
2. The 2013 RAA introduced contractual obligations for registrars to validate and verify WHOIS data upon registration.
3. ICANN is in the midst of developing a WHOIS Accuracy Reporting System (referred to as the ARS), proactively identify potentially inaccurate gTLD registration data; explore using automated tools, and forward potentially inaccurate records to gTLD registrars for action.
4. The WHOIS Data Reminder Policy (WDRP), adopted by ICANN as a consensus policy on 27 March 2003 and is in effect till today, requires a registrar to present to

the registrant the current WHOIS information at an annual basis, and remind the registrants to review their WHOIS data, and make any corrections.

4.6.3.1 Implementation review of Recommendation 5

A WHOIS Informational Website has been established as a WHOIS policy documentation, to educate registrants on WHOIS, their rights and responsibilities, and to allow Internet users to submit complaints on WHOIS inaccuracy. It is explicitly required by ICANN for the registrants to be solely responsible for the registration and use of the domain name registered, and must provide accurate information for WHOIS data publication, and promptly update this to reflect any changes. These requirements are both elaborated on [WHOIS Informational Website](#) and in 2013 RAA as below.

Domain Name Registrants' Responsibilities:

1. You must comply with the terms and conditions posted by your Registrar, including applicable policies from your Registrar, the Registry and ICANN.
2. You must review your Registrar's current Registration Agreement, along with any updates.
3. You will assume sole responsibility for the registration and use of your domain name.
4. You must provide accurate information for publication in directories such as WHOIS, and promptly update this to reflect any changes.
5. You must respond to inquiries from your Registrar within fifteen (15) days, and keep your Registrar account data current. If you choose to have your domain name registration renew automatically, you must also keep your payment information current.

The 2013 RAA obligates each Registrar to publish on its website(s) and/or provide a link to the Registrants' Benefits and Responsibilities Specification. ICANN's Contractual Compliance Team checks to determine whether registrars are publishing this information and follows up to bring the Registrar into compliance if it is not doing so.

The 2013 RAA clearly indicated that registrant's willful breach of WHOIS accuracy policy above will lead to suspension and/or cancellation of the registered domain name (see below).

3.7.7.2 A Registered Name Holder's willful provision of inaccurate or unreliable information, its willful failure to update information provided to Registrar within seven (7) days of any change, or its failure to respond for over fifteen (15) days to inquiries by Registrar concerning the accuracy of contact details associated with the Registered Name Holder's registration shall constitute a material breach of the Registered Name Holder-registrar contract and be a basis for suspension and/or cancellation of the Registered Name registration.

The WHOIS accuracy policy was depicted both in 2009 RAA and 2013 RAA, it is assumed all new and renewing registrants have been exposed to the above responsibilities, although it is not clear whether or how the above responsibilities have been enforced by registrars (or resellers). In other words, it is uncertain whether the above responsibilities are actually enforceable through the whole chain.

In conclusion, the subgroup has the view that Rec #5 has been fully implemented, while the effectiveness of implementation needs to be further assessed.

4.6.3.2 Implementation review of Recommendation 6

To address Rec #6, ICANN initiated the [Accuracy Reporting System](#) (ARS) project, with the aim to *"proactively identify inaccurate gTLD registration data, explore the use of automated tools, forward potentially inaccurate records to registrars for action, and publicly report on the resulting actions to encourage improvement."*

The ARS was designed to be implemented through three Phases based on the types of validations described in the [SAC058 Report](#)(syntax, operability, and identity).

- (1) [Phase 1](#): Syntax Accuracy
- (2) [Phase 2](#): Syntax + Operability Accuracy
- (3) Phase 3: Syntax + Operability + Identity Accuracy

Phase 1 was completed in August 2015 and assessed the format of a WHOIS record (i.e., Is the record correctly formatted? Is there an "@" symbol in the email address? Is there a country code in the telephone number?)

Phase 2 reviews both the syntax and operability accuracy of WHOIS records by assessing the functionality of the information in a record (e.g., Does the email go through? Does the phone ring? Will the mail be delivered?). Phase 2 is ongoing with a new report published every 6 months, detailing the leading types of nonconformance, trends and comparisons of WHOIS accuracy across regions, Registrar Accreditation Agreement (RAA) versions and gTLD types. The newest Phase 2 Cycle 5 report was published in December 2017.

Phase 3 has not started yet. According to the [latest updates](#) from ICANN Org, due to cost and feasibility issues arising from identity verification or validation, ICANN is not currently pursuing this path. ICANN org is seeking information regarding commercial services that focus on global address validation as part of the [Across-Field Address Validation](#) work.

It is worth mentioning that only a sample of WHOIS records is used for accuracy testing. A two-stage sampling method is used to provide a sample to reliably estimate subgroups of interest, such as ICANN region, New gTLD or Prior gTLD, and RAA type. Two samples are prepared at the beginning of each report cycle:

- (1) An initial sample of 100,000-200,000 WHOIS records
- (2) A sub-sample of the initial sample of 10,000-12,000 WHOIS records, which is used for accuracy testing

Since the sub-sample records falls in both 2009 RAA and 2013 RAA, while the Registrant email address and telephone number are not required for 2009 RAA, the 2013 RAA requires the contact data in a WHOIS record to be more syntactically complete and to be formatted per more specific requirements than that of the 2009 RAA, the accuracy tests were designed in such a way that all records in the analyzed subsample were only evaluated against a set of baseline requirements derived from the requirements of the 2009 RAA.

The subgroup mainly focused on the assessment of Phase 2. All WHOIS ARS Phase 2 reporting could be accessed [here](#). The below table shows syntax and operability accuracy from December 2015 through December 2017 by ICANN region.

	December 2017	June 2017	December 2016	June 2016	December 2015
North America					
Syntax	89.4%	88.3%	85.7%	82.8%	83.9%
Operability	84.9%	81.2%	77.0%	80.2%	73.2%
Latin America					
Syntax	80.7%	78.1%	67.0%	64.7%	56.9%
Operability	70.2%	74.2%	68.0%	71.6%	72.7%
Africa					
Syntax	45.2%	46.1%	31.3%	29.3%	29.8%
Operability	35.2%	51.6%	49.5%	64.6%	57.0%
Asia/Australia/Pacific Islands					
Syntax	73.9%	68.8%	37.0%	45.0%	39.5%
Operability	37.5%	42.1%	51.9%	57.6%	49.4%
Europe					
Syntax	73.0%	74.5%	65.4%	60.6%	58.8%
Operability	41.9%	59.3%	55.6%	63.1%	59.8%
Overall					
Syntax	81.5%	79.3%	66.6%	67.2%	67.2%
Operability	63.4%	65.4%	65.1%	70.2%	64.7%

ICANN's Contractual Compliance team supports the WHOIS ARS effort by receiving reports of identified syntax and operational failures and following up with contracted parties to resolve areas of noncompliance. However, one of the challenges with the ARS process is that it takes approximately four to five months between when the sample population is polled to when the potentially inaccurate records are available for Compliance's follow-up. The result is that some records sent to Compliance are outdated. As such, above 50% of the tickets were closed before 1st notice, due to either WHOIS data when ticket processed different from sampled WHOIS data, or domain not registered when ticket processed, or Domain already suspended or canceled, or WHOIS format issue identified for 2013 Grandfathered Domain, or Known Privacy/Proxy service. For the left tickets went to a 1st or further notice, above 60% tickets led to domain suspension or cancellation.

Phase 2 Metrics are summarized as below:

Cycle 1: Among 10,000 subsample records, 2,688 tickets were created. 1,324 tickets were closed before 1st notice. For the 1,362 tickets went to 1st or further notice, 60.1% of the related domains were suspended or canceled, 28.2% of the tickets led to changing or updating of WHOIS data by registrar. Four registrars received a Notice of Breach for tickets created. Of the four, one registrar was suspended then terminated.

Cycle 2: Among 12,000 subsample records, 4,001 tickets were created. 2,481 tickets were closed before 1st notice. For the 1,524 tickets went to 1st or further notice, 60.6% of the tickets related domains were suspended or canceled. 25.4% of the tickets led to changing or updating of WHOIS data by registrar. There were no registrars received a Notice of Breach for tickets created.

Cycle 3: Among 12,000 subsample records, 4,552 tickets were created. 2,662 tickets were closed before 1st notice. For the 1,897 tickets went to 1st or further notice, 65% of the tickets related domains were suspended or canceled. 21.5% of the tickets led to changing or updating of WHOIS data by registrar. There were no registrars received a Notice of Breach for tickets created

Cycle 4: 12,000 subsample records. 4,681 tickets were created. 2,498 tickets were closed before 1st notice. For the 1,668 tickets went to 1st or further notice, 72.6% of

the tickets related domains were suspended or canceled. 14.9% of the tickets led to changing or updating of WHOIS data by registrar. There were no registrars received a Notice of Breach for tickets created.

Cycle 5: 12,000 subsample records. No ICANN Contractual Compliance Follow-Up Statistics has been published for Cycle 5 yet.

The table below shows the comparison between different Cycles of Phase 2.

	Cycle 1	Cycle 2	Cycle 3	Cycle 4
Sample records	10,000	12,000	12,000	12,000
Tickets created	2,688	4,001	4,552	4,681
Tickets went to 1st or further notice	1,362	1,524	1,897	1,668
Domains were suspended or canceled after 1st or further notice	60.1%	60.6%	65%	72.6%
WHOIS data changed or updated after 1st or further notice	28.2%	25.4%	21.5%	14.9%
Registrar corrected WHOIS format	1.7%	6.1%	7.2%	5.9%
Registrar verified that sampled WHOIS data is correct	6.6%	4.9%	3.9%	5.5%
Domain not registered when ticket processed	0.7%			
Registrar demonstrated compliance with RAA			0.7%	0.4%
WHOIS data when ticket processed different from sampled WHOIS data	2.1%	1.2%	0.9%	
Registry or Registrar remediated issue			0.5%	
Others	0.6%	1.8%	0.6%	0.4%
Registrars received a Notice of Breach	4	0	0	0
Registrar suspended or terminated	1	0	0	0

Looking at the WHOIS ARS reporting and Contractual Compliance Metrics above, several observations could be concluded:

1. Even without identity accuracy testing, WHOIS ARS is an effective way to push registrants and registrars to improve WHOIS data.
2. For those tickets went to 1st or further notice during Phase 2, above 60% of the tickets related domains were suspended or canceled, and around 20% of the tickets led to changing or updating of WHOIS data by registrar. Based on the fact, it is suspected that registrars did not validate and/or verify WHOIS data upon registration.
3. Considering those suspended or canceled domains behind tickets went to 1st or further notice during Phase 2, and those domains had an updated WHOIS data after tickets issued, the confirmed WHOIS data inaccurate rate across the domain space is still high (30~40%), which is also consistent with the overall operability accuracy. If the test is based on the criteria developed by [NORC study in 2010](#), the inaccurate rate will be even higher.
4. There were seldom Notices of Breach issued by ICANN to registrars for tickets created, while validation and verification of WHOIS data is already a contractual obligation of registrar as outlined in 2013 RAA.

In consideration that WHOIS ARS is still ongoing, the subgroup has the view that Rec #6 is partially implemented.

4.6.3.3 Implementation review of Recommendation 7

Instead of an annual WHOIS accuracy report focused on measured reduction in substantial and full failed WHOIS registrations, ICANN has produced and published Annual Report on WHOIS Improvements for [2013](#), [2014](#), [2015](#) and [2016](#) separately, which outlined the progress of all WHOIS policy related working streams.

In 2013 Annual Report on WHOIS Improvements, the conclusion of 2013 RAA, the establishment of the WHOIS Informational Website and Contractual Compliance Function's enhancement were highlighted as the first year of progress towards fulfilling ICANN's commitment to improve WHOIS.

In 2014 Annual Report on WHOIS Improvements, besides the progress of other parallel action streams, ARS was firstly introduced. The pilot study results revealed that Registrars under the 2013 RAA experienced better accuracy rates for email addresses than Registrars under prior versions of the RAA. This improvement may be directly related to the introduction of the new validation and verification requirements from the 2013 RAA. It was indicated in the report that as more registrars and more gTLD registrations transition to the new requirements, accuracy rates should continue to be improved.

In 2015 Annual Report on WHOIS Improvements, a WHOIS quality review process referred to as "WHOIS QR" was introduced. In 2014, ICANN launched the WHOIS QR with the objective is to determine if registrars continue to comply with the WHOIS Accuracy obligations as specified in the 2009 and 2013 Registrar Accreditation Agreements (RAA), with an emphasis on previously closed WHOIS inaccuracy complaints because the domain name was suspended. Staff conducts internal monitoring on regular basis to ensure that registrars are complying with their obligations when removing domain name suspension. Hereafter is a brief summary of WHOIS QR in 2015 from [Contractual Compliance Reports 2015](#).

In 2015, the Contractual Compliance team continued to conduct WHOIS quality review (QR) monitoring efforts. WHOIS QR reviews the previously closed WHOIS inaccuracy complaints to ensure continued compliance with contractual obligations. In 2015, 1,209 WHOIS QR reviews were conducted for the January thru June period of which 32 needed to be resent to the registrar ; a 50% drop from last year 's follow - up with the registrars. The 2015 WHOIS QR effort resulted in one notice of breach to a registrar for non- compliance.

In 2016 Annual Report on WHOIS Improvements, the shift from the Affirmation of Commitments (AoC) to new ICANN Bylaws was highlighted. The WHOIS obligations originally established by the AoC were replaced by ICANN Bylaws. Those Bylaws require ICANN to periodically conduct review of the effectiveness of WHOIS (RDS in Bylaws), and use commercially reasonable efforts to enforce relating policies. According to the report, WHOIS complaints on accuracy and record format were still the most common registrar compliance issue addressed by ICANN in 2016.

The Annual Report on WHOIS Improvements presented a big picture of the improvements on WHOIS policy development, several working streams had a positive impact on WHOIS accuracy. However, the measured reduction in WHOIS registrations that fall into the accuracy groups Substantial Failure and Full Failure were missing from the reports. Thus, the subgroup has the view that Rec #7 has been partially implemented,

4.6.3.4 Implementation review of Recommendation 8

ICANN-accredited registrars have several WHOIS obligations, including:

1. Provision of free public WHOIS service on Port 43 and via web with output appearing in the required format and according to certain service level requirements;
2. Submitting all required data elements to the registries;
3. Obtaining, retaining and updating data elements in a timely manner;
4. Escrowing data elements;
5. Providing for bulk access to WHOIS data in accordance with the required bulk access agreement;
6. Taking reasonable steps to investigate, and where appropriate, correct inaccuracies upon discovery of information or notification suggesting an inaccuracy exists; and
7. Providing annual WHOIS data reminders to registrants.

Similarly, registry operators also have contractual obligations related to WHOIS, including: provision of free public WHOIS service on Port 43 and via web with output appearing in the required format and according to certain service level requirements.

ICANN has an enforceable chain of contractual agreements with registries and registrars. The 2013 RAA includes additional enforcement provisions and sanctions applicable to registrars, registrants, and resellers with regards to WHOIS, including de-accreditation if a registrar fails to respond to reports of inaccurate WHOIS information. New gTLD Registry agreements include enhanced WHOIS obligations Renewals of existing gTLDs to include enhanced WHOIS obligations. Thus, the subgroup has the view that Rec #8 has been fully implemented.

4.6.3.5 Implementation review of Recommendation 9

It was indicated in [2013 WHOIS Improvements Annual Report](#) that the Board's Resolution addressing Rec #9 offered an alternative approach to achieving the intended result of this recommendation, which referred back to the implementation of Rec #5-7. But It is not clear to this subgroup about the Board's justifications on this. And this subgroup still reviewed what have been done about the implementation of WHOIS Data Reminder Policy (WDRP).

The WHOIS Data Reminder Policy (WDRP), adopted by ICANN as a consensus policy on 27 March 2003, requires a registrar to present to the registrant the current WHOIS information at an annual basis, and remind the registrant that provision of false WHOIS information can be grounds for cancellation of their domain name registration. Thus registrants must review their WHOIS data, and make any corrections.

WDRP is intended to be an additional step towards improving WHOIS data accuracy. All ICANN-accredited registrars must comply with the WDRP with respect to registrations they sponsor in all top-level domains for which they are accredited. If the WHOIS information is correct and up-to-date, no further action is needed from registrant side. If the registrant does need to update the WHOIS information, the registrant will be directed by corresponding registrar to options available for updating. Notably, registrations under privacy and/or proxy service are subject to WDRP as well.

According to [Implementation of the WHOIS Data Reminder Policy \(WDRP\) – 30 November 2004](#), a total of 254 registrars (70% of all ICANN-accredited registrars at that time) responded to the "WHOIS Data Reminder Policy Survey and Compliance Audit.", and only 44% (111 out of 254) of the respondent registrars did sent WDRP Notices. Reading from the results of the survey, for those registrars who sent out WDRP Notices, most of them

covered 50% or less of all registrations under sponsorship, and there were considerable WDRP Notices undeliverable. Even with all the aspects above, there were still at least several thousands of WDRP Notices led to changes in registrant data. Thus, there is good reason for this subgroup to believe that if the WDRP were fully enforced at annual basis, there would be a quite positive impact on WHOIS accuracy.

There has been no further updates from ICANN on the implementation of WDRP for the following years, except a [FAQ webpage](#) was online on Feb. 25 2012. WDRP compliance has been then audited since 2012 as one of the many 2009 & 2013 RAA provisions, more detailed information could be found at [Contractual Compliance Audit Program](#). According to the Contractual Compliance Registrar Audit Report of [2012](#), [2013](#), [2014](#), [2015](#), [2016\[1\]](#) and [2016\[2\]](#), only selected (or sampled) registrars were audited during each audit round, and besides a general percentage (20%-35%) of registrars with a deficiency on WDRP compliance, there was no further detail about what exactly the deficiency was, and what actions had been taken by identified registrars to remediate the deficiency. But the above audit reports did indicate that most of the identified registrars were able to completely remediate deficiencies noted in their respective audit reports.

It is not clear to the subgroup what impact this policy has placed in improving WHOIS accuracy. Given there has been no measurable assessment about WHOIS data quality in the implementation of Rec #5-7, this subgroup has the view that Rec #9 is not implemented.

4.6.4 Problem/Issue

WHOIS remains one of the ICANN's toughest issues over the years. In addition to ICANN's initiatives and policy development, [#WHOIS](#) needs more proactive efforts from registrants, registrars to fix it. After looking into the all the measures have been taken and WHOIS improvements have been progressed so far, there are still some gaps to be bridged to meet the prior WHOIS review recommendations [on Data Accuracy](#).

4.6.4.1 The objective of reliable WHOIS data has not been achieved

WHOIS data, with the purpose to be able to contact registrants, needs to be accurate. It is explicitly required by ICANN for the registrants to be solely responsible for the registration and use of the domain name registered, and must provide accurate information for WHOIS data publication, and promptly update this to reflect any changes

How does one determine whether the data displayed in a WHOIS Record is accurate? There may be contact information that appears correct – i.e. that represents a valid and viable name and address (electronic and/or physical) – but is not necessarily accurate, i.e. it does not correspond to the person/entity registering, managing or owning the domain name.

Until the adoption of the 2013 RAA, registrars were not required to verify or validate WHOIS data. The 2013 RAA includes obligations to validate certain WHOIS data fields, and verify either the email address or telephone number displayed. Besides the contractual obligations in the 2013 RAA, ICANN is in the midst of developing a WHOIS ARS with the aim to proactively identify inaccurate WHOIS data for improvement.

However, neither the WHOIS ACCURACY PROGRAM SPECIFICATION (WAPS) in 2013 RAA, nor the WHOIS ARS has touched upon the reliability of WHOIS data yet. Complying with WAPS or WHOIS ARS doesn't necessarily mean the WHOIS record is not falling into the accuracy groups Substantial Failure and Full Failure (as defined by the NORC Data

Accuracy Study, 2009/10). The verification measures [that](#) have been taken are [beating around the bush](#). In other words, a pragmatic approach for the validation and verification of WHOIS data is still missing.

Comment [LP13]: Replace with phrase more likely to be understood globally.

4.6.4.2 WHOIS inaccuracy is believed to be largely under-reported

WHOIS has been a free public lookup service for years. Although ICANN encourages the ICANN community to submit a complaint to ICANN regarding incomplete or incorrect WHOIS data, however, there are no due resources for general public to judge the accuracy of WHOIS data, let alone whether the WHOIS data corresponding to the owner of the domain name. As outlined in the [WHOIS Inaccuracy Complaint Form](#), the general public is only capable to report on missing information, incorrect address, no such person or entity, etc.

Furthermore, as analyzed in the implementation of Rec #6, the inaccurate WHOIS records exposed in the WHOIS ARS are only a small fraction of the whole domain space. Thus, there is reasonable ground to believe that the WHOIS inaccuracy is largely under-reported.

4.6.4.3 Contractual obligations for registrant to provide accurate WHOIS data and for registrars to validate and verify WHOIS data are not properly enforced

Domain name registrants play a key role in ensuring the accuracy of WHOIS. Registrant's willful breach of WHOIS accuracy policy is supposed to lead to suspension and/or cancellation of the registered domain name. However, the reality is as long as the related WHOIS record is not identified by WHOIS ARS, or lodged a complaint by community, there is no risk to falsify the WHOIS data from registrant side, whether for legitimate needs for else.

Looking at the Contractual Compliance Annual Report in [2016](#), [2017](#), the most common issues with regards to registrar compliance on WHOIS inaccuracy are:

1. *Registrars failing to verify or validate WHOIS information as required by the WHOIS Accuracy Program Specification (WAPS) of the 2013 RAA.*
2. *Registrars not distinguishing between the terms "verification" (which means to confirm or correct) and "validate" (which means to ensure data is consistent with standards) as used in WAPS.*
3. *Registrars asking their resellers to confirm the accuracy of the WHOIS information of domain names of which ICANN received complaints, rather than providing confirmation from the registrant.*
4. *Registrars failing to provide supporting documentation for updated or changed WHOIS information.*
5. *Registrars failing to suspend domain names within 15 calendar days of receiving a WHOIS inaccuracy complaint and the Registered Name Holder failing to respond as required by WAPS.*

In other words, the identified registrars usually didn't comply with the contractual obligations. Actually, registrars (or resellers) are in the best position to validate and verify WHOIS data. As indicated in the [Implementation of the WHOIS Data Reminder Policy \(WDRP\) – 30 November 2004](#), one registrar noted that its most accurate contact information is contained in its internal accounting system. It wrote that *"[w]e have been fairly successful in keeping this data up to date as registrants who are interested in keeping their domain keep their*

billing information accurate.” Another registrar also suggested that “the billing contact information” to be showed on any given WHOIS record (see below).

In terms of improving the accuracy of WHOIS information generally, one registrar recommended that enabling a “[r]egistry itself to have a lock code for inaccurate WHOIS information would help greatly.” Another registrar suggested that “the ‘billing contact information’ field on any given WHOIS record be administrated or controlled by the registrar.” It reasoned that “[t]his portion of the WHOIS record could easily be stuffed based on the credit card billing information (name, address, card issuer) used to pay for the registration or renewal of any given domain name. Since banks do not usually issue credit cards to people who do not exist, publishing this information would give interested parties one more reliable method to identify a registrant and make it one degree more difficult for a registrant to shirk responsibility for a domain name.”

Some best practices on verification of WHOIS data has emerged from industry. In the years of fighting Avalanche (phishing group), Interdomain, a Spanish registrar, began [requiring a confirmation code delivered by mobile phone](#) in April 2009 which successfully forced Avalanche to stop registering fraudulent domains with them.

It is also worth mentioning the highly regulated domains where Registry rules require “provide appropriate jurisdictional authorities with the capability at their option and at no cost to make designations in the WHOIS record relevant to the registrant’s organizational status in the registrant’s jurisdiction.” [It](#) should provide more accurate data.

Comment [LP14]: What does “it” refer to

4.6.4.4 The WHOIS accuracy of domain names that utilize Privacy and Proxy Services [is in misty](#)

Comment [LP15]: Replace with a phrase likely to be understood globally

Regarding the WHOIS accuracy of domain names that utilize Privacy and Proxy Service, ICANN’s criteria is whether the service provider’s contact information listed in public WHOIS is accurate, not whether the contact information of the behind registrant which is processed by the Privacy/Proxy service provider, is accurate. This is a deviation from the end user of WHOIS perspective.

Even so, WHOIS data relating to domain names that utilize Privacy/Proxy services was not touched upon by WHOIS ARS project. According to [WHOIS ARS Contractual Compliance Metrics](#), all tickets relating to known Privacy/Proxy service were closed before 1st Notice.

According to the [written briefing of ICANN](#), although ICANN Contractual Compliance receives and processes WHOIS inaccuracy complaints regarding domain names that utilize Privacy/Proxy Services, it does not identify the proportion of complaints this represents. Due to the absence of an accreditation system for Privacy/Proxy service providers, ICANN Contractual Compliance deems it difficult to automate the accurate identification of domain names subject to Privacy/Proxy services in WHOIS inaccuracy complaints.

As such, the accuracy of the contact information behind a domain name utilizing Privacy/Proxy service has not been tested at all.

4.6.4.5 The measures taken so far are not sufficient to reduce WHOIS inaccuracy

Looking back at all the measures have been taken by ICANN to improve WHOIS accuracy, It is hard to say that WHOIS accuracy has been checked broadly or the WHOIS accuracy contractual obligations have been successfully enforced. As analyzed above, the WHOIS ARS project has only checked a small fraction of WHOIS records (less than 10,000), comparing to the [332.4 million registered domain names in Q4 2017](#). Given the fact that above 80% of the tickets generated during WHOIS ARS Phrase 2 that went to 1st or further notice led to domain suspension or cancellation, or changing or updating of WHOIS data by registrar. The perception here is the registrar does not validate and/or verify WHOIS data upon registration, which is already a breach of 2013 RAA.

Although it was indicated in [Written answers to compliance questions](#) and [Written answers to data accuracy questions](#), that besides WHOIS ARS project, ICANN compliance does have some proactive monitoring actions to improve WHOIS accuracy, e.g. Audit program, WHOIS Quality Review, etc. To this subgroup, the audit program (see above analysis about the implementation of Rec #9) is only sample-based, the WHOIS Quality Review is a follow up to WHOIS inaccuracy complaints. As such, the proactive action to oversee WHOIS accuracy across the domain space is missing.

4.6.5 Recommendations (if any)

[Based on its analysis, members of this subgroup agree that:](#)

WHOIS1	Has Been	Rationale
Rec # 5	Fully-implemented	However, effectiveness still needs to be assessed
Rec # 6	Partially-implemented	Because Accuracy Reporting System implementation is on-going
Rec # 7	Partially-implemented	Because Substantial Failure and Full Failure rates are missing from reports
Rec # 8	Fully-implemented	
Rec # 9	Not implemented	Because there has been no measurable assessment of WHOIS data quality improvement either through WDRP or other alternative policies

[Further recommendations are provided in Sections **\[INSERT LIST HERE\]** to address the problems/issues identified above.](#)

4.6.6 Possible impact of GDPR and other applicable laws

[TO BE PROVIDED]

4.7 WHOIS1 Rec #10: Privacy/Proxy Services

4.7.1 Topic

Subgroup 1 - WHOIS1 Rec10 Privacy/Proxy Services is tasked with investigating, analyzing, and drafting recommendations (if needed) to address the following Review objective:

Consistent with ICANN's mission and Bylaws, Section 4.6(e)(iv), the Review Team will (a) evaluate the extent to which ICANN Org has implemented each prior Directory Service Review recommendation (noting differences if any between recommended and implemented steps), (b) assess to the degree practical the extent to which implementation of each recommendation was effective in addressing the issue identified by the prior RT or generated additional information useful to management and evolution of WHOIS (RDS), and (c) determine if any specific measurable steps should be recommended to enhance results achieved through the prior RT's recommendations. This includes developing a framework to measure and assess the effectiveness of recommendations, and applying that approach to all areas of WHOIS originally assessed by the prior RT (as applicable).

The specific [WHOIS1 Recommendation](#) assessed by this subgroup appears below:

WHOIS Recommendation #10: Privacy/Proxy Services

The Review Team recommends that ICANN should initiate processes to regulate and oversee privacy and proxy service providers.

- ⦿ *ICANN should develop these processes in consultation with all interested stakeholders.*
- ⦿ *This work should take note of the studies of existing practices used by proxy/privacy service providers now taking place within the GNSO.*
- ⦿ *The Review Team considers that one possible approach to achieving this would be to establish, through the appropriate means, an accreditation system for all proxy/privacy service providers. As part of this process, ICANN should consider the merits (if any) of establishing or maintaining a distinction between privacy and proxy services.*
- ⦿ *The goal of this process should be to provide clear, consistent and enforceable requirements for the operation of these services consistent with national laws, and to strike an appropriate balance between stakeholders with competing but legitimate interests. At a minimum, this would include privacy, data protection, law enforcement, the industry around law enforcement and the human rights community.*
- ⦿ *ICANN could, for example, use a mix of incentives and graduated sanctions to encourage proxy/privacy service providers to become accredited, and to ensure that registrars do not knowingly accept registrations from unaccredited providers.*
- ⦿ *ICANN could develop a graduated and enforceable series of penalties for proxy/privacy service providers who violate the requirements, with a clear path to de-accreditation for repeat, serial or otherwise serious breaches.*

Noting that:

1. The 2013 RAA introduced a specification on privacy and proxy registrations requiring registrars to comply with certain requirements regarding such registrations through affiliated Privacy/Proxy Service Providers as a first step towards implementing this recommendation; and

-
2. The Privacy/Proxy Services Accreditation Issues (PPSAI) Implementation Review Team (IRT) is currently working on an implementation of this recommendation that will also include unaffiliated providers of such services.

The subgroup agreed that this review should encompass the work completed both through the RAA specification and the PPSAI PDP, and whether the agreed upon details adhere to WHOIS1 Recommendation #10.

4.7.2 Summary of Relevant Research

To conduct its research, all members of this subgroup reviewed the following background materials, posted on the [subgroup's wiki page](#):

- ⊙ [WHOIS Review Team \(WHOIS1\) Final Report](#) (2012) and [Action Plan](#)
- ⊙ [WHOIS Review Team \(WHOIS1\) Implementation Reports](#), including
 - Executive Summary of Implementation Report
 - Detailed implementation Report
- ⊙ WHOIS1 Implementation Briefings on Recommendations 5, 8, 10, 11: [PPT](#), [PDF](#)
- ⊙ [Answers to RDS-WHOIS2 Questions on Implementation Briefings](#)
- ⊙ Documents cited in briefing on Recommendation 10 include
 - [2013 Registrar Accreditation Agreement](#) (RAA), including [RAA WHOIS - requirements for Registrants](#)
 - [Privacy & Proxy Services Accreditation Issues \(PPSAI\) PDP](#)
 - [PDP Final Report](#)
 - [GNSO approval of PDP Final Report](#)
 - [Implementation Plan developed](#)
 - [Board approval of Final Report Recommendations](#)
 - [GAC Advice-Helsinki Communique: Actions and Updates](#)
 - [Current PPAA draft](#) (20 March)

In addition, the subgroup requested additional materials and briefings from the ICANN Org

- ⊙ [Written answers provided by Registrar Services staff leading PP IRT \(20 March\)](#)
- ⊙ [Compliance staff input](#), includes:
 - ⊙ 20 March written answers to PP IRT related questions
 - ⊙ Metrics for P/P Spec in the 2013 RAA
 - ⊙ [Written implementation briefing](#) (27 March)
 - ⊙ [Responses from ICANN Compliance and Global Domains Division to Data Accuracy Subgroup Questions](#)

[INSERT SUBGROUP'S METHODOLOGY HERE - MOVE TEXT FROM 4.7.1?]

Finally, the subgroup applied the RDS-WHOIS2 review team's [agreed framework](#) to measure and assess the effectiveness of recommendations,

4.7.3 Analysis & Findings

For this subgroup, relevant review objectives include:

- ⊙ Topic 1 (a) identify the extent to which ICANN Org has implemented each prior Directory Service Review recommendation (noting differences if any between recommended and implemented steps),

- ⊙ Topic 1 (b) assess to the degree practical the extent to which implementation of each recommendation was effective in addressing the issue identified by the prior RT or generated additional information useful to management and evolution of WHOIS (RDS)]

WHOIS1 Recommendation 10 advises that consideration be given to several specific objectives, enumerated in the table below. The subgroup's initial findings for each objective are also given in the table below.

Recommendation 10 Objective	Subgroup's Initial Findings
3. Clearly labeling WHOIS entries to indicate that registrations have been made by a privacy or proxy service	<ul style="list-style-type: none"> ⊙ Included in PPSAI working group report ⊙ Could this also be added to the Consistent Labeling and Display policy?
4. Providing full WHOIS contact details for the privacy/proxy service provider, which are contactable and responsive	<ul style="list-style-type: none"> ⊙ Included in the PPSAI working group report. While details of the standard report process are still being debated, but there is consensus that providers must provide full data and be contactable and responsive within a reasonable timeframe.
5. Adopting agreed standardized relay and reveal processes and timeframes; (these should be clearly published, and proactively advised to potential users of these services so they can make informed choices based on their individual circumstances)	<ul style="list-style-type: none"> ⊙ Law enforcement relay and reveal processes are still being debated and how this would be implemented in a way that would not be burdensome for each side. ⊙ Final details of such processes are currently being debated, however the recommendation objective has already been met with the basis consensus model. The IP model has been agreed upon. ⊙ Partially defined under 2.4.5 of the RAA spec.
6. Registrars should disclose their relationship with any proxy/privacy service provider;	<ul style="list-style-type: none"> ⊙ Included in PPSAI working group report ⊙ Partially defined under 2.3 of the RAA spec
7. Maintaining dedicated abuse points of contact for each provider	<ul style="list-style-type: none"> ⊙ Partially defined under 2.4.1 and 2.4.2 of the RAA spec ⊙ Already agreed by Implementation Review Team.
8. Conducting periodic due diligence checks on customer contact information	<ul style="list-style-type: none"> ⊙ Already addressed by PPSAI WG: "The WG recommends that P/P service customer data be validated and verified in a manner consistent with the requirements outlined in the WHOIS Accuracy Program Specification of the 2013 RAA (as updated from time to time). Moreover, in the cases where a P/P service provider is Affiliated with a registrar and that Affiliated registrar has carried out validation and verification of the P/P customer data, re-verification by the P/P service provider of the same, identical, information should not be required."

	<ul style="list-style-type: none"> ⦿ Until implementation of the WG recommendations is complete a review of the effectiveness of this recommendation is not feasible. However, based on the positive effects of the WHOIS Accuracy Program Specification of the 2013 RAA on registration data quality and Registered Name Holder contactability, the RT expects that the adoption of its principles for Privacy Proxy services will meet this objective.
<p>9. Maintaining the privacy and integrity of registrations in the event that major problems arise with a privacy/proxy provider</p>	<ul style="list-style-type: none"> ⦿ Included in PPSAI working group report by mandating data escrow. ⦿ Partially defined under 2.5 of the RAA spec.
<p>10. Providing clear and unambiguous guidance on the rights and responsibilities of registered name holders, and how those should be managed in the privacy/proxy environment.</p>	<ul style="list-style-type: none"> ⦿ Partially defined under 2.4.4, 2.4.5 and 2.4.6 of the RAA spec. ⦿ How effective are these rights and responsibility regarding the effectiveness of proxy registrations and the protection of rights of others. ⦿ The 2013 RAA is fairly clear on the rights and responsibilities of the registered name holders. <p><i>3.7.7.3 Any Registered Name Holder that intends to license use of a domain name to a third party is nonetheless the Registered Name Holder of record and is responsible for providing its own full contact information and for providing and updating accurate technical and administrative contact information adequate to facilitate timely resolution of any problems that arise in connection with the Registered Name. A Registered Name Holder licensing use of a Registered Name according to this provision shall accept liability for harm caused by wrongful use of the Registered Name, unless it discloses the current contact information provided by the licensee and the identity of the licensee within seven (7) days to a party providing the Registered Name Holder reasonable evidence of actionable harm.</i></p> <p><i>The Proxy service provider assumes all liabilities of the domain name if they refuse to disclose the contact information.</i></p> <p><i>If the Proxy service provider does disclose the contact information then the underlying registrant assumes all liabilities.</i></p>

4.7.4 Problem/Issue

Between the RAA 2013 Spec and this policy, the original recommendation seems to have been addressed. Anything not addressed was clearly not deemed to be important for inclusion by the community, the GNSO and the board who all approved the PPSAI PDP Final Report.

The subgroup proposes no new recommendations at this time specific to the prior RT's recommendation. However, the subgroup intends to track the progress of the PPSAI IRT and consider recommendation(s) if necessary. At this point, the subgroup has identified the following issues:

Issue #1: The RT views with concern the current intent of ICANN to fund the privacy/proxy service accreditation program by charging providers accreditation and annual fees comparable to the fees payable by ICANN accredited registrars as such fees could have an effect counterproductive to the goal of the program. Creating a cost barrier next to the new policy requirements at a time that the use of such services is expected to decline due to GDPR is likely to cause low adoption of the accreditation program by providers.

Issue #2: As the temporary specification established by ICANN provides for many of the benefits currently provided by privacy or proxy protected registrations to registrants, it is expected that the market for such services will start to shrink. The RT is however unable to assess the exact impact of GDPR data redaction requirements on privacy services at this time.

Issue #3: The RT currently sees no urgency or need to delay the implementation of the accreditation program due to the GDPR.

Issue #4: The recommendation suggests using a mix of incentives and sanctions to encourage and enforce this policy once implemented. The IRT should be encouraged to also discuss incentives, as the current focus of the program seems to solely rely on sanctions.

Issue #5: The RT addressed the issue of potential abuse of privacy and proxy services by RNHs, but was unable to determine whether domain names using such services had a higher propensity for abusive registrations. It may be beneficial that a future review to occur regarding the impact of pp services on abuse, however such a review should take into account any impact of the PPSA program on such abusive registrations. Such a review would depend on the proper collection of data to track over time any trends of abusive use of domain names using privacy services.

[LINK EACH ISSUE TO ANALYSIS IN SECTION 4.7.3 - HOW DID ANALYSIS LEAD IDENTIFICATION OF THESE PROBLEMS. IDENTIFY IMPACTED GROUPS.]

4.7.5 Recommendations (if any)

The RT declines to make any recommendations regarding privacy services as it considers Recommendation 10 as fully implemented.

Comment [LP16]: Volker has an open action items to reflect call discussion in this draft report. See call transcript

https://community.icann.org/download/attachments/88573043/AC%20Chat_RDS%20Privacy%202334_16July2018.pdf

4.7.6 Possible impact of GDPR and other applicable laws

[TO BE PROVIDED]

4.8 WHOIS1 Rec #11: Common Interface

4.8.1 Topic

Subgroup 1 - WHOIS1 Rec11 Common Interface is tasked with investigating, analyzing, and drafting recommendations (if needed) to address the following Review objective:

Consistent with ICANN's mission and Bylaws, Section 4.6(e)(iv), the Review Team will (a) evaluate the extent to which ICANN Org has implemented each prior Directory Service Review recommendation (noting differences if any between recommended and implemented steps), (b) assess to the degree practical the extent to which implementation of each recommendation was effective in addressing the issue identified by the prior RT or generated additional information useful to management and evolution of WHOIS (RDS), and (c) determine if any specific measurable steps should be recommended to enhance results achieved through the prior RT's recommendations. This includes developing a framework to measure and assess the effectiveness of recommendations, and applying that approach to all areas of WHOIS originally assessed by the prior RT (as applicable).

The specific [WHOIS1 Recommendation](#) assessed by this subgroup appears below:

WHOIS Recommendation #11: Common Interface

It is recommended that the Internic Service is overhauled to provide enhanced usability for consumers, including the display of full registrant data for all gTLD domain names (whether those gTLDs operate thin or thick WHOIS services); operational improvements should include enhanced promotion of the service to increase user awareness.

Noting the target of the above recommendation, the subgroup agreed to examine operational improvements, including enhanced promotion of the service to increase user awareness. Specifically, the subgroup agreed to examine these questions:

- ⦿ Has the creation and deployment of the WHOIS microsite at the direction of the board met this recommendation, considering the old Internic service still exists unchanged?
- ⦿ Does the WHOIS query service provided through the microsite (the common interface) provide clear and reliable access to full registrant data for all gTLD domain names?
- ⦿ What promotional efforts has ICANN undertaken to increase user awareness of the common interface?
- ⦿ Does the common interface provide clear instructions on how to notify ICANN, the sponsoring registrar and/or the registrant regarding data accuracy issues?

4.8.2 Summary of Relevant Research

Comment [LP17]: Volker has an open action items to reflect call discussion in this draft report. See call transcript

https://community.icann.org/download/attachments/88573043/AC%20Chat_RDS%20Priority%202334_16July2018.pdf

To conduct its research, all members of this subgroup reviewed the following background materials, posted on the subgroup's wiki page:

- WHOIS Review Team (WHOIS1) Final Report (2012) and Action Plan
- WHOIS Review Team (WHOIS1) Implementation Reports, including
 - Executive Summary of Implementation Report
 - Detailed implementation Report
- WHOIS1 Implementation Briefings on Recommendations 5, 8, 10, 11: PPT, PDF
- Answers to RDS-WHOIS2 Questions on Implementation Briefings
- Documents cited in briefing on Recommendation 11 include
 - WHOIS Informational Microsite
 - WHOIS Consolidated WHOIS Lookup Tool
- <https://www.internic.net/>

In addition, the subgroup requested additional materials from ICANN Org

- Available statistics on: use of the common interface, uptime, requests for help using the tool and what usage data is tracked by ICANN;
- The Team/Department that implemented and maintains the common interface;
- Any challenges with implementation and maintenance of the interface.

These materials included in written responses provided by ICANN Org:

- Written briefing on query failures, and
- Written implementation briefing.

Finally, the subgroup applied the RDS-WHOIS2 review team's agreed framework to measure and assess the effectiveness of recommendations,

4.8.3 Analysis & Findings

This recommendation has been fully implemented and over 4 million queries were made in a 6 month period in 2017. This is significant usage and may become more important after May 25th and the GDPR enforcement is in effect.

The briefing indicates that there has been a 99.9% up time for the common interface but other statistics on usage are not tracked. Clarification on what the definition of uptime is would be helpful. The availability of the tool may not be a problem but not sure that is an indication that all queries result in providing WHOIS information. Anecdotally, I was not able to retrieve WHOIS information for several new gTld look ups. Either user error or it didn't work. I did go back at a later time and the queries worked.

According to information provided by ICANN staff It may not be practical to track other data elements associated with usage.

This number cannot be calculated with precision. Because the current WHOIS protocol does not enforce any standard error handling, failures must be inferred. Failure rate is not currently being calculated or tracked.

Users are encouraged to file a contractual complaint ticket if they identify any issues with the WHOIS record. A link to file a ticket is provided on the page where results are displayed.

ICANN Contractual Compliance proactively monitors registrar WHOIS availability and will send registrars a compliance notice if it is not available. Registrar and registry web-based WHOIS services are also tested during registry and registrar audits.

If the result returned by the registry or registrar is blank or is a very small package of data then the web page could display blank fields. If the returned result is in a format that cannot be parsed this too could cause the web page to display blank fields. In either case, users could look at the raw record displayed below the form for more information. If users identify any issues with the WHOIS record, they are encouraged to file a contractual complaint ticket. A link to file a ticket is provided on the page where results are displayed.

[NEED TO SUMMARIZE KEY FINDINGS/ANALYSIS, LINKED TO SUBGROUP'S QUESTIONS]

4.8.4 Problem/Issue

The common interface recommendation was intended to ensure that anyone looking up a WHOIS record could do that easily and from one source. The InterNIC was not overhauled, but a common interface was provided.

However, the common interface has no metrics that can be used to determine its effectiveness. Metrics and SLAs could be used to address this and also to proactively spot non-compliance. Lack of tracked metrics to ensure the tool provides the data it should or is consistent in providing the data is not acceptable.

Service level agreements could be put in place to ensure the interface works reliably.

Specific metrics should be tracked:

- ⊙ How often are fields returned blank?
- ⊙ Is data displayed consistently?
- ⊙ Do all gTLDs return results consistently?
- ⊙ How often does the tool not return results for specific gTLDs?
- ⊙ How big or small is this problem?

Finally, in any further recommendations made by this subgroup, the recommendation should be more explicit about intent of common interface (i.e., one stop access to data, across all gTLDs and registrars/resellers). Any such recommendation should also apply to either the current common interface or any future replacement for it.

4.8.5 Recommendations (if any)

[Based on its analysis, members of this subgroup agree that this WHOIS1 recommendation has been fully-implemented. One further recommendation is provided here to address the problems/issues identified above.](#)

Recommendation R11.1: Define metrics or SLA's to be tracked and evaluated to determine consistency of results of queries and use of any common interface (existing or future) used to provide one-stop access to registration data across all gTLDs and registrars/resellers.

Specific metrics that should be tracked for any such common interface include:

- How often are fields returned blank?
- How often is data displayed inconsistently (overall and per gTLD)?
- How often does the tool not return any results (overall and per gTLD)?
- What error messages are received that could cause the above metrics?

Comment [LP18]: Problems raised by Compliance Subgroup for discussion here:

(1) As a result of GDPR implementation, RR and Ry interpretations may result in different registration data returned by WHOIS for the same domain name (e.g., the Ry may redact data that the RR displays)

(2) WHOIS access through the common interface has become less reliable (e.g., timeouts more frequent)

From Staff: References that may be helpful:
SAC101: WHOIS Rate Limit Testing Results
<https://www.icann.org/resources/files/12133-2018-06-11-en>
SAC101 Advisory
<https://www.icann.org/en/system/files/files/ac-101-en.pdf>

Findings: The current common interface (whois.icann.org) has no metrics that can be used to determine its effectiveness. It is therefore difficult to determine if effectiveness can and/or needs to be improved and what specific steps would be necessary for such improvement.

Rationale: Metrics and SLAs could be used to address this and also to proactively spot non-compliance or implementation issues that affect the provision of the service.

The significance of the recommendation can only be appropriately assessed after its implementation as the prevalence of lookup failures is currently unknown. Anecdotal evidence suggests the existence of lookup issues. By generating metrics that will assist in recognizing systemic issues or noncompliance, the recommendation aligns well with ICANN's Strategic Plan and Mission as it helps foster a healthy, resilient and secure identifier ecosystem. The recommendation is in compliance with scope Review Team set

Impact of Recommendation: This recommendation will impact WHOIS service SLAs and data accessibility by identifying potential issues with service delivery by contracted parties. ICANN compliance will be impacted by receiving an additional tool to verify compliance with contractual service levels. Users of the WHOIS service will be positively impact by reductions in lookup failures as a result of appropriate use of these metrics.

Feasibility of Recommendation: The RT believes this recommendation is feasible as basic log data for analysis is already being collected and generation of metrics from this data should not create a significant operational or technical impact.

Implementation:

Initially, the ICANN community should define (by public comment or other mechanisms) what metrics should be tracked. Based on this determination ICANN org should analyze whether the logs currently generated for the service provide sufficient data for these metrics, and if necessary (and legally possible) expand the logs generated. Building upon the logs, ICANN should create the recommended metrics in regular intervals for analysis by ICANN compliance to allow them to proactively investigate failure causes and - if possible – create or suggest remedies.

Priority: This recommendation has a low priority and should be implemented by existing teams.

Level of Consensus: [TO BE PROVIDED]

4.8.6 Possible impact of GDPR and other applicable laws

[TO BE PROVIDED]

4.9 WHOIS1 Rec #12-14: Internationalized Domain Names

4.9.1 Topic

Consistent with ICANN's mission and Bylaws, Section 4.6(e)(iv), the Review Team will (a) evaluate the extent to which ICANN Org has implemented each prior Directory Service

Review recommendation (noting differences if any between recommended and implemented steps), (b) assess to the degree practical the extent to which implementation of each recommendation was effective in addressing the issue identified by the prior RT or generated additional information useful to management and evolution of WHOIS (RDS), and (c) determine if any specific measurable steps should be recommended to enhance results achieved through the prior RT's recommendations.

The specific [WHOIS1 Recommendation](#) assessed by this subgroup appears below:

WHOIS Recommendations #12-14: Internationalized Domain Names

Recommendation 12 - ICANN should task a working group within six months of publication of this report, to determine appropriate internationalized domain name registration data requirements and evaluate available solutions (including solutions being implemented by ccTLDs). At a minimum, the data requirements should apply to all new gTLDs, and the working group should consider ways to encourage consistency of approach across the gTLD and (on a voluntary basis) cold space. The working group should report within a year of being tasked.

Recommendation 13 - The final data model, including (any) requirements for the translation or transliteration of the registration data, should be incorporated in the relevant Registrar and Registry agreements within 6 months of adoption of the working group's recommendations by the ICANN Board. If these recommendations are not finalized in time for the next revision of such agreements, explicit placeholders for this purpose should be put in place in the agreements for the new gTLD program at this time, and in the existing agreements when they come up for renewal.

Recommendation 14 - Metrics should be developed to maintain and measure the accuracy of the internationalized registration data and corresponding data in ASCII, with clearly defined compliance methods and targets.

4.9.2 Summary of Relevant Research

The subgroup has studied the provided materials (listed below) and the decisions reached by ICANN after the RT1 Report was published. The subgroup checked whether the measures taken by ICANN covers the recommendations made by RT1 and whether it is necessary to provide any additional measures to fully cover the recommendations.

4.9.2.1 List of relevant materials:

The materials found relevant are enlisted on the [subgroup wiki page](#):

- ① [Translation and Transliteration PDP's Final Issue Report, March 2013](#)
- ① [Translation and Transliteration PDP web page](#)
- ① [Translation and Transliteration PDP Working Group Final Report, Jun 2015](#)
- ① [IRD Expert Working Group Final Report, September 2015](#)
- ① [Translation and Transliteration IRT wiki](#)
- ① [Translation and Transliteration Implementation Project Status](#)
- ① [RDAP Webpage](#)
- ① [WHOIS1 Implementation Briefings on Recommendations 4, 12, 13, 14: PPT, PDF](#)
- ① [Answers to RDS-WHOIS2 Questions on Implementation Briefings](#)

4.9.3 Analysis & Findings

4.9.3.1 Board action related to Recommendations 12-14:

The Board directs the CEO to have Staff:

1. Task a working group to determine the appropriate internationalized domain name registration data requirements, evaluating any relevant recommendations from the SSAC or GNSO
2. Produce a data model that includes (any) requirements for the translation or transliteration of the registration data, taking into account the results of any PDP initiated by the GNSO on translation/ transliteration, and the standardized replacement protocol under development in the IETF's Web-based Extensible Internet Registration Data Working Group
3. Incorporate the data model in the relevant Registrar and Registry agreements within 6 months of adoption of the working group's recommendations by the ICANN Board or put explicit placeholders in place for gTLD program agreements, and existing agreements
4. Evaluate available solutions (including solutions being implemented by ccTLDs)
5. To provide regular updates on technical development of the IRD, including the estimated timeline or roadmap of such technical development, so that the ICANN community, particularly the IDN gTLD applicant, can fully prepare for implementation of IRD features in its operation.
6. Investigate using automated tools to identify potentially inaccurate internationalized gTLD domain name registration data in gTLD registry and registrar services, and forward potentially inaccurate records to gTLD registrars for action.

4.9.3.2 Results related to Recommendation 12:

The ICANN Board adopted an Action Plan in response to the WHOIS Review Team's Final Report that instructs Staff to implement these recommendations. Subsequently a set of related efforts were formed to implement the WHOIS review team recommendations. These are:

- An expert working group to determine the requirements for the submission and display of internationalized registration data.
- A commissioned study to evaluate available solutions for internationalized registration data.
- A Policy Development Process (PDP) to determine whether translation or transliteration of contact information is needed. If so, specify who should bear the burden of the transformation.

WHOIS Review Team Internationalized Registration Data Expert Working Group (IRD Working Group) was created (<https://www.icann.org/en/system/files/bm/briefing-materials-1-08nov12-en.pdf>).

The timeline of IRD Team analysis is enlisted below:

Draft Final Report of IRD Team published for Public Comment – 9 Mar 2015
(<https://www.icann.org/news/announcement-2015-03-09-en>)
Report of Public Comments – 18 May 2015
(<https://www.icann.org/en/system/files/files/report-comments-ird-study-18may15-en.pdf>)
Final Report from the Expert Working Group on Internationalized Registration Data - 23
September 2015 ([http://whois.icann.org/sites/default/files/files/ird-expert-wg-final-23sep15-
en.pdf](http://whois.icann.org/sites/default/files/files/ird-expert-wg-final-23sep15-en.pdf))
Board Approval of IRD recommendations Resolution 2016.03.10.05 – 2016.03.10.07 – 10
March 2016 (<https://www.icann.org/resources/board-material/resolutions-2016-03-10-en#1.e>
)
Implementation Plan to be developed – (TBD) 2016

The IRD Working Group developed three principles of internationalization:
User Capability Principle: In defining a requirement for a particular data element or category of data elements, the capability of the data-submitting user should be the constraining factor. Such users should not be burdened with tasks that cannot be completed under ordinary circumstances (i.e. inputting domain name registration data in a language or script the registrant is not familiar with).
Simplicity and Reusability Principle: Where possible, existing standards that are widely used for handling internationalized data should be applied. Where simpler standards exist for internationalization, they should be preferred rather than more complex standards.
Extensibility - Where possible, the data model should be able to be easily extended to tailor to the evolution of data elements displayed by directory services for various TLD registries and registrars.

Based on these principles, the IRD Working Group proposes two high level requirements for community consideration:
registrants should only be required to input registration data in a language(s) or script(s) that they are skilled at;
unless explicitly stated otherwise, all data elements should Defining Requirements for Internationalized Registration Data be tagged with the language(s) and script(s) in use, and this information should always be available with the data element.

The Board requested that the GNSO Council review the broader policy implications of the IRD Final Report as they relate to other GNSO policy development work on WHOIS issues, and, at a minimum, forward the IRD Final Report as an input to the GNSO PDP on the Next Generation Registration Directory Services to Replace WHOIS that is currently underway (<https://gns0.icann.org/en/correspondence/crocker-to-bladel-11may16-en.pdf>).

Conclusion: The subgroup treats recommendation #12 as fulfilled. See also findings related to Rec #13.

4.9.3.3 Results related to Recommendation 13:

As the requirements for the translation and transliteration of the registration data were not finalized in time for the revision of the documents in 2013, the placeholders can be found both in Registry Agreement (RA) and Registrar Accreditation Agreement (RAA):

RA-2013, Specification 4
([http://newgtlds.icann.org/sites/default/files/agreements/agreement-approved-09jan14-
en.docx](http://newgtlds.icann.org/sites/default/files/agreements/agreement-approved-09jan14-en.docx)) says:
Registration Data Directory Services. Until ICANN requires a different protocol, Registry Operator will operate a WHOIS service available via port 43 in accordance with RFC 3912, and a web-based Directory Service at <whois.nic.TLD> providing free public query-based

access to at least the following elements in the following format. ICANN reserves the right to specify alternative formats and protocols, and upon such specification, the Registry Operator will implement such alternative specification as soon as reasonably practicable. Registry Operator shall implement a new standard supporting access to domain name registration data (SAC 051) no later than one hundred thirty-five (135) days after it is requested by ICANN if: 1) the IETF produces a standard (i.e., it is published, at least, as a Proposed Standard RFC as specified in RFC 2026); and 2) its implementation is commercially reasonable in the context of the overall operation of the registry.

RAA-2013, Registration Data Directory Services(WHOIS)Specification, (<https://www.icann.org/en/resources/registrars/raa/approved-with-specs-27jun13-en.htm#whois>) says:

Registration Data Directory Services. Until ICANN requires a different protocol, Registrar will operate a WHOIS service available via port 43 in accordance with RFC 3912, and a web-based Directory Service providing free public query-based access to at least the elements set forth in Section 3.3.1.1 through 3.3.1.8 of the Registrar Accreditation Agreement in the format set forth in Section 1.4 of this Specification. ICANN reserves the right to specify alternative formats and protocols, and upon such specification, the Registrar will implement such alternative specification as soon as reasonably practicable.

Following the publication by the IETF of a Proposed Standard, Draft Standard or Internet Standard and any revisions thereto (as specified in RFC 2026) relating to the web-based directory service as specified in the IETF Web Extensible Internet Registration Data Service working group, Registrar shall implement the directory service specified in any such standard (or any revision thereto) no later than 135 days after such implementation is requested by ICANN. Registrar shall implement internationalized registration data publication guidelines according to the specification published by ICANN following the work of the ICANN Internationalized Registration Data Working Group (IRD-WG) and its subsequent efforts, no later than 135 days after it is approved by the ICANN Board.

Board has adopted (<https://www.icann.org/resources/board-material/resolutions-2015-09-28-en#1.b>) the recommendations listed here:

Resolved (2015.09.28.02), the Board adopts the GNSO Council Policy Recommendations concerning the translation and transliteration of contact information as presented in the Final Report.

Resolved (2015.09.28.03), the CEO, or his authorized designee(s), is directed to develop and complete an implementation plan for these Recommendations and continue communication and cooperation with the GNSO Implementation Review Team and community on the implementation work.

In Rationale Board noticed that

However, the Registration Data Access Protocol (RDAP) is currently being rolled out as the WHOIS replacement and it [the RDAP] is fully compatible with different scripts.

The IETF produced the RDAP protocol matching the requirements enlisted in the Rec #12 findings. The RDAP protocol is described in RFCs 7480-7484 (<http://datatracker.ietf.org/wg/weirds/documents/>). The efforts taken by ICANN related to the RDAP protocol are enlisted on page <https://www.icann.org/rdap/>.

Conclusion: The subgroup treats recommendation #13 as fulfilled. See also findings related to Rec #12. The implementation of the recommendation depends on RDAP progress.

4.9.3.4 Results related to Recommendation 14:

Regarding the RDS/WHOIS1 Review Team's third IRD recommendation that metrics should be developed to maintain and measure the accuracy of the internationalized registration data and corresponding data in ASCII, this is currently being performed as part of the Accuracy Reporting System (ARS). The page of the Accuracy Reporting System is here: <https://whois.icann.org/en/whoisars>

The ARS project Phases 1 and 2 DO NOT have special requirements related to the accuracy of the internationalized registration data as the data is not available according to the ARS study methodology.

The subgroup treats the metrics and measures developed by ARS are suitable when the internationalized registration data become available for studying.

Conclusion: The subgroup treats recommendation #14 as fulfilled.

4.9.4 Problem/Issue

The subgroup further identified the following issue: The commercial feasibility loophole in the current contracts allows registrars and registries to not implement RDAP.

4.9.5 Recommendations

Based on its analysis, members of this subgroup agree that these WHOIS1 recommendations have been fully implemented. Work was done to the extent it can be done without an RDAP-based WHOIS system. [One further recommendation is provided here to address the problems/issues identified above.](#)

Comment [LP19]: Dmitry has an open action item to update this recommendation fill gaps.

Recommendation R12.1:

The Review Team recommends to review the implementation of Recommendations #12-14 again after RDAP is implemented, and the translation and transliteration of the registration data launches.

Findings: There is no actual IRD in current WHOIS system to review the implementation of Recommendations #12-14 in a pragmatic way. And even after the RDAP was implemented, the IRD can still be waiting for implementation due to lacking of requesting party and financial support.

Rationale: There is still a need to offer IRD, when all prerequisites are ready, a follow up review could be able to close the implementation of Recommendations #12-14.

Impact of Recommendation: [What are the impacted areas, e.g. security, transparency, legitimacy, efficiency, diversity etc. Which group/audience will be impacted by this recommendation]

Feasibility of Recommendation: [Document feasibility of recommendation]

Implementation: [Who are responsible parties that need to be involved in implementation? Community/ICANN org/combination]

What is the target for a successful implementation?

Is related work already underway and how will that dovetail with recommendation?

What is the envisioned implementation timeline? Within 6 months/12 months/more than 12 months]

Priority: [If only 5 recommendations could be implemented due to community bandwidth and other resource constraints, would this recommendation be one of the top 5? Why or why not?]

Level of Consensus:

4.9.6 Possible impact of GDPR and other applicable laws

[TO BE PROVIDED]

4.10 WHOIS1 Rec #15-16: Plan & Annual Reports

4.10.1 Topic

Subgroup 1 - WHOIS1 Rec 15-16 Plan & Annual Reports is tasked with investigating, analyzing, and drafting recommendations (if needed) to address the following Review objective:

Consistent with ICANN's mission and Bylaws, Section 4.6(e)(iv), the Review Team will (a) evaluate the extent to which ICANN Org has implemented each prior Directory Service Review recommendation (noting differences if any between recommended and implemented steps), (b) assess to the degree practical the extent to which implementation of each recommendation was effective in addressing the issue identified by the prior RT or generated additional information useful to management and evolution of WHOIS (RDS), and (c) determine if any specific measurable steps should be recommended to enhance results achieved through the prior RT's recommendations. This includes developing a framework to measure and assess the effectiveness of recommendations, and applying that approach to all areas of WHOIS originally assessed by the prior RT (as applicable).

The specific [WHOIS1 Recommendation](#) assessed by this subgroup appears below:

WHOIS Recommendations #15-16: Plan & Annual Reports

Recommendation 15 – ICANN should provide a detailed and comprehensive plan within 3 months after the submission of the Final WHOIS Review Team report that outlines how ICANN will move forward in implementing these recommendations.

Recommendation 16 – ICANN should provide at least annual written status reports on its progress towards implementing the recommendations of this WHOIS Review Team. The first of these reports should be published one year, at the latest, after ICANN publishes the implementation plan mentioned in recommendation 15, above. Each of these reports should contain all relevant information, including all underlying facts, figures and analyses.

To address this review objective, the subgroup agreed to:

- ⦿ Cross check with other subgroups about whether the Action Plan properly addressed the WHOIS1 recommendations; and
- ⦿ Assess the effectiveness of the already-published WHOIS Annual Reports (e.g., relevance of provided information, quality of the underlying facts).

4.10.2 Summary of Relevant Research

To conduct its research, all members of this subgroup reviewed the following background materials, posted on the [subgroup's wiki page](#):

- [WHOIS Review Team \(WHOIS1\) Final Report](#) (2012) and [Action Plan](#)
- [WHOIS Review Team \(WHOIS1\) Implementation Reports](#), including
 - [Executive Summary of Implementation Report](#)
 - [Detailed implementation Report](#)
- WHOIS1 Implementation Briefings on Recommendations 1, 2, 3, 6, 7, 9, 15, 16: [PPT](#), [PDF](#)
- [Answers to RDS-WHOIS2 Questions on Implementation Briefings](#)
- Documents cited in briefing on Recommendations 15-16 include
 - [ICANN Five Year Strategic Plan](#)
 - [FY 2013 operating plan and budget](#)
 - [FY14 Operating Plan and Budget](#)
 - [FY15 Operating Plan and Budget](#)
 - [FY 16 Operating Plan and Budget](#)
 - [ICANN FY 2017 Operating Plan and Budget](#)
 - [FY 2018 operating plan and budget](#)
 - [Action Plan](#) adopted by the Board
 - [2013 WHOIS Annual Report](#)
 - [2014 WHOIS Annual Report](#)
 - [2015 WHOIS Annual Report](#)
 - [2016 WHOIS Annual Report](#)

This subgroup also requested additional materials and briefings from the ICANN Org:

- [Written briefing on recommendations 15-16](#)
- [Clarifications pertaining to operating plan and annual report](#)

In addition, this subgroup agreed to base its analysis in part upon Subgroup 1 key findings for all other WHOIS1 Recommendations, [provided throughout Section 4 of this document](#).

Finally, the subgroup applied the RDS-WHOIS2 review team's [agreed framework](#) to measure and assess the effectiveness of recommendations.

4.10.3 Analysis & Findings

4.10.3.1 Detailed and Comprehensive Plan

The ICANN Board adopted an [Action Plan](#) to implement the first WHOIS Review Team recommendations on 8 November 2012, which outlined the ICANN Board's proposed action items to address WHOIS1 recommendations respectively, and the rationale behind those action items. To implement Rec #15, according to the [Written briefing on recommendations 15-16](#), the Board agreed that gTLD WHOIS should be a strategic priority. The Board directed the CEO to incorporate a work plan for the improvement of WHOIS into the operating plan, and directed the CEO to provide resources and budget to carry-out these activities, to provide annual public reports on implementation of these activities and related efforts.

WHOIS work has been reflected in ICANN's annual operating plan, beginning with the fiscal year 2013 operating plan. In [FY 2013 operating plan and budget](#), WHOIS Program was the fourth budgeted project (\$969K) within ICANN, after IDN Variant Management Projects

(\$1,250K), New Compliance System/CRM (\$1,200K), and Enhance Multi-lingual strategy (\$980K). A list of various types of WHOIS initiatives were included in the WHOIS Program, including implementation of first WHOIS Review Team recommendations regarding measures to increase accuracy, crafted studies to inform the implementation of these recommendations and a roadmap for additional WHOIS accuracy initiatives, technical work on the WHOIS protocol, and synthesis with contractual compliance activities and reporting.

The [FY14 Operating Plan and Budget](#) had a totally different reporting format, and there was no indication of the exact budget and resources allocated for WHOIS Program. WHOIS work was reflected in 'The WHOIS core function/service & improvements Portfolio' in ICANN's annual operating plan and budget of [2015](#), [2016](#), [2017](#) respectively, and in 'Registration Data Services (WHOIS) Portfolio' under objective 2.1 'Foster and Coordinate a Healthy, Secure, Stable, and Resilient Identifier Ecosystem' in [FY 2018 operating plan and budget](#), with only a total budget indication.

The annual operating plan is the business plan for ICANN as a whole, and WHOIS improvement is only part of it. Going through the above annual Operating Plan and Budget, there has been no details of the implementation plan of the action items outlined in the Action Plan. The work plan, deliverables and reports with regards to implementation have been scattered among different action items, e.g. WHOIS ARS project, and some have been incorporated into other WHOIS initiatives and policy developments.

4.10.3.2 Annual Status Reports

The implementation of the Action Plan was summarized as part of WHOIS annual reports. ICANN published the first [WHOIS Improvements Annual Report](#) on 4 Nov 2013. The Report provided an overview of the WHOIS1 recommendations and implementation activities, as well as links to deliverables for each implementation activity. The Annual Reports on WHOIS Improvements for [2014](#), [2015](#) and [2016](#) were produced by ICANN separately afterwards, which outlined the activities of all WHOIS policy related working streams. In each of the annual report, all implementation activities regarding the Board approved action plan were enumerated with links to deliverables.

The WHOIS Improvements Annual Report provides the overview of the WHOIS policy development, and could serve as a good reference of what has been done to improve WHOIS. So far, all the published WHOIS Improvements Annual Reports were activity-based rather than outcome-based, and there was no the relevant information of figures and analyses included as recommended by Rec #16. There has been no review about the effectiveness of the implementation of the Action Plan in addressing the WHOIS1 recommendations as well.

The annual report for 2016 was published till 1 September 2017, and there has been no annual report afterwards. According to [clarifications pertaining to operating plan and annual report](#) provided by ICANN Org, the annual report for 2016 showed completion of implementation of WHOIS1 recommendations, thus there will be no further annual reports.

4.10.4 Problem/Issue

| As mentioned in [the previous](#) subsection, the action items outlined in the Action Plan went into different implementation tracks, and the annual status reports were generated from different tracks as well. The annual status reports were more activity-based, without efficient underlying facts, figures and analyses as recommended by Rec #16. The overseeing of the

different implementation tracks [place holder, pending ICANN Org's reply on the additional question raised during the subgroup call on 19 July].

Additionally, taking into account of [Subgroup 1 key findings on WHOIS1 Recommendations 1-14](#), to this subgroup, the plan and annual report were not organized in a methodical and coordinated way. The implementation of several WHOIS1 recommendations (e.g. Strategic Priority, Data Accuracy) failed to meet the objectives. Some action items went a long way towards the intended objective, e.g. Identify accuracy check of WHOIS ARS project, Across-Field Address Validation provision of the WHOIS Accuracy Program Specification in the 2013 RAA, and have not yet been addressed. There has been a prolonged process to regulate and oversee privacy and proxy service, which is still ongoing till today. There has been no effectiveness review and measurable outcomes of the implementation. As a result, the WHOIS improvement could not be measured.

4.10.5 Recommendations (if any)

[Based on its analysis, members of this subgroup agree that these WHOIS1 recommendations have been partially-implemented. One further recommendation is provided here to address the problems/issues identified above.](#)

Recommendation R15.1:

ICANN should conduct plan and reports in a measurable way. Metrics should be developed to track the effectiveness of the implementation of each recommendation. And impact evaluation of implementation should be included in the annual report.

Findings: See problem/issue above.

Rationale: The intention behind this recommendation is to ensure that the plan and report on implementation of recommendations generated by this Review Team be pragmatic and efficient.

Impact of Recommendation:

Given plan and annual report is regular activity of ICANN anyway, this recommendation will not impose extra workload for ICANN. Metrics tracking will impact Registrar, Registry, Compliance Team, etc., while the whole community will benefit from the implementation of this recommendation.

[ADD IMPACT IF NOT ADDRESSED, ALIGNMENT WITH ICANN MISSION AND RT SCOPE]

Feasibility of Recommendation: The measuring of implementation should not be easy, the challenging part would be the design of the metrics.

Implementation:

The ICANN Board should take the lead to develop the structure and metrics for plan and report. An overview of the recommendations generated by this review team will be the ground for the design. The envisioned implementation timeline should be within 6 months.

Priority: [TO BE PROVIDED]

Level of Consensus: [TO BE PROVIDED]

4.10.6 Possible impact of GDPR and other applicable laws

[TO BE PROVIDED]

5 Objective 2: Anything New

5.1 **Topic**

Comment [LP20]: Stephanie has an open action item to update this section to fill gap and align older text with ICANN62 slides.

Subgroup 2 - Anything New is tasked with investigating, analyzing, and drafting recommendations (if needed) to address the following Review objective:

Consistent with ICANN's mission and Bylaws, Section 4.6(e)(ii), the review team will assess the effectiveness of today's WHOIS (the now current gTLD RDS, including cumulative changes made to the then-current RDS which was assessed by the prior RT) by (a) inventorying changes made to WHOIS policies and procedures since the prior RT completed its work, (b) using that inventory to identify significant new areas of today's WHOIS (if any) which the team believes should be reviewed, and (c) determining if any specific measurable steps should be recommended to enhance effectiveness in those new areas.

To accomplish this objective, the subgroup reviewed the inventoried policies and procedures to identify significant new areas of today's WHOIS (if any) requiring review. For those significant new areas only, the subgroup planned to answer these questions:

- a. Have these been implemented properly? What challenges have staff faced in the implementation?
- b. Are Registrars/Registries implementing these in a timely manner?
- c. Are any measurable steps that should be taken to make these new policies and procedures more effective?

In addition, GDPR and other data protection laws around the world will impact all WHOIS policies, including those inventoried by this subgroup. After ICANN implements an interim model to comply with GDPR, all WHOIS policies will need to be reviewed again to determine what has changed.

5.2 Summary of Relevant Research

To conduct its research, all members of this subgroup reviewed the following inventoried WHOIS policy and procedure materials, posted on the [subgroup's wiki page](#):

- ⦿ [ICANN web page on WHOIS Policies](#), including the following WHOIS-related policies and procedures adopted since 2012
- ⦿ [Inter-Registrar Transfer Policy](#)
- ⦿ [Additional WHOIS Information Policy](#) (AWIP)
- ⦿ New gTLD [URS Policy](#), [Procedure](#) and [Rules for URS Policy](#)
- ⦿ [Expired Registration Recovery Policy](#) (ERRP)
- ⦿ [Thick WHOIS PDP](#) and [Final Report](#) – see section 7.1 for Thick WHOIS Policy
- ⦿ [Thick RDDS \(WHOIS\) Transition Policy for .COM, .NET and .JOBS](#)
- ⦿ [Registry Registration Data Directory Services Consistent Labeling and Display Policy](#)
- ⦿ [Privacy & Proxy Services Accreditation Issues \(PPSAI\) PDP](#) and [Final Report](#)
- ⦿ [Translation/Transliteration of Contact Information PDP](#) and [Final Report](#)
- ⦿ [Final Report from the Expert Working Group on Internationalized Registration Data](#) (2015)
- ⦿ [Procedure for Handling RDS/WHOIS Conflicts with Privacy Law](#) (2008)

- ⊙ [Review of the ICANN Procedure for Handling WHOIS Conflicts with Privacy Law](#) (2014)
- ⊙ [Final Report on the Implementation Advisory Group Review of Existing ICANN Procedure for Handling WHOIS Conflicts with Privacy Laws](#) (2016)
- ⊙ [Revised ICANN Procedure For Handling WHOIS Conflicts with Privacy Law](#) (2017)
- ⊙ RDS/WHOIS [Data Retention Specification Waiver](#) and [Discussion Document](#)

In addition, the subgroup requested from ICANN Org an [Inventory of New and Changes Made to WHOIS Policies and Procedures Since the First WHOIS Review Team Completed Its Work in 2012](#), received on 19 January 2018.

The subgroup recognized that many policies and procedures may change in the light of GDPR, and therefore work at the moment is preliminary in those cases.

5.3 Analysis and Findings

[The following text was copied from F2F meeting #2 slide and agreements. It needs to be replaced with updated material presented at ICANN62]

New/Updated Policy or Procedure	Questions considered by this review	Subgroup's Findings and Analysis
New WHOIS pages on website (whois.icann.org)	Have these been implemented properly? What challenges have staff faced in the implementation?	
Inter-Registrar Transfer Policy (IRTP)	Will this work with Privacy/Proxy services? Have these been implemented properly? Are Registrars satisfied? Are results of IRT on PPSAI are satisfactory?	
Additional WHOIS Information Policy (AWIP)	Is this a compliance issue? Are Registrars satisfied?	
New gTLD URS Policy, Procedure and Rules for URS Policy		Being discussed in RPM PDP. No specific WHOIS issues.
Expired Registration Recovery Policy (ERRP)	How are fees are being announced when registrar has no website?	We have no metrics on this policy.
Thick WHOIS PDP and Final Report: See section 7.1 for Thick WHOIS Policy, and Thick RDDS (WHOIS) Transition Policy for .COM, .NET and .JOBS		Stalled due to GDPR and RDAP implementation.
Registry Registration Data Directory Services Consistent Labeling and Display Policy		No WHOIS implications.
Privacy & Proxy Services Accreditation Issues (PPSAI)		Subgroup #10 is covering.

Final Report		
Translation/Transliteration of Contact Information PDP and Final Report, and Final Report from the Expert Working Group on Internationalized Registration Data (2015)	Work has completed. What issues have arisen?	Subgroup #12-14 is covering.
Review of the ICANN Procedure for Handling WHOIS Conflicts with Privacy Law (2014)		New IAG was created, New trigger recommended. May need changes due to GDPR . Multi-party dissatisfaction with results.
Final Report on the Implementation Advisory Group Review of Existing ICANN Procedure for Handling WHOIS Conflicts with Privacy Law (2016)		Final report voted through GNSO but new group being formed because of multi-party dissatisfaction with results. New trigger not seen as effective. May need changes due to GDPR.
RDS/WHOIS Data Retention Specification Waiver and Discussion Document	Are Registrars satisfied?	Data retention is an RDS issue. Waiver has been slow for uptake, but working. May need changes due to GDPR.

Based on the subgroup's analysis, the main findings of this subgroup are as follows:

- ⦿ There are a lot of policies and procedures that have been worked on since 2012.
- ⦿ There are not clear metrics for some of them.
- ⦿ Several items with compliance implications to be addressed by that subgroup.
- ⦿ Several items are already covered by WHOIS1 rec subgroups.
- ⦿ Reseller lack of transparency to be covered by the Consumer Trust subgroup.
- ⦿ RT to make general comment (under auspices of overall report) re: dissatisfaction with handling of conflicts with privacy law.
- ⦿ RT to note (under auspices of overall report's preamble) overall that the impact of GDPR has not yet been addressed in this review.

For easy reference, below is copied the table presented at ICANN62:

New/Updated Policy or Procedure	Subgroup's Findings and Analysis
New WHOIS pages on website (whois.icann.org)	Subgroup 1 Rec #3 and #11 are covering.
Inter-Registrar Transfer Policy (IRTP)	No issues found. May need changes due to GDPR.
Additional WHOIS Information Policy (AWIP)	No issues found.
New gTLD URS Policy , Procedure and Rules for URS Policy	Being discussed in RPM PDP. No specific WHOIS issues.
Expired Registration Recovery Policy (ERRP)	We have no metrics on this policy. Subgroup 1 Rec #4 is covering

Thick WHOIS PDP and Final Report (see section 7.1) Thick RDDS (WHOIS) Transition Policy for .COM, .NET and .JOBS	Stalled due to GDPR and RDAP implementation.
Registry RDDS Consistent Labeling and Display Policy	We have no metrics on this policy. Subgroup 1 Rec #4 is covering
Privacy & Proxy Services Accreditation Issues (PPSAI) Final Report	Subgroup 1 Rec #10 is covering.
Translation/Transliteration of Contact Information PDP and Final Report , and Final Report from the Expert Working Group on Internationalized Registration Data (2015)	Subgroup 1 Rec #12-14 is covering.
Review of the ICANN Procedure for Handling WHOIS Conflicts with Privacy Law (2014)	New IAG was created, New trigger recommended. May need changes due to GDPR . Multi-party dissatisfaction with results.
Final Report on the Implementation Advisory Group Review of Existing ICANN Procedure for Handling WHOIS Conflicts with Privacy Law (2016)	Final report voted through GNSO but new group being formed because of multi-party dissatisfaction with results. New trigger not seen as effective. May need changes due to GDPR.
RDS/WHOIS Data Retention Specification Waiver and Discussion Document	Data retention is an RDS issue. Waiver has been slow for uptake, but working. May need changes due to GDPR.

5.4 Problem/Issue

Action Item: Stephanie to formulate text describing the lack of strategic plan for WHOIS leads to disjoint development of policies and procedures. The following text is copied from the ICANN62 slides for this subgroup, as a starting point:

After analysis of facts, the subgroup has identified the following issues:

- ⊙ Given the current focus on compliance with GDPR which appears to have caught ICANN unawares, and the fact that the GDPR was initiated in 2012, the review team notes that more focus on compliance with existing data protection law earlier would have been beneficial and in keeping with ICANN's obligations to comply with national law.
- ⊙ With this in mind, the focus on having a strategic plan that addresses the need for sound consensus policy, compliant with law and in keeping with acceptable risk management practice must be stressed going forward.

5.5 Recommendations (if any)

The following text is copied from the ICANN62 slides for this subgroup, as a starting point:

The subgroup concluded that no recommendations are needed at this time with respect to this objective. However:

- ⊙ Recommendations appropriate for each new or updated WHOIS policy or procedure have been formulated by other subgroups.

© [The review team's report will note that, overall, the impact of GDPR has not yet been comprehensively addressed in this review.](#)

5.6 Possible impact of GDPR and other applicable laws

[TO BE PROVIDED]

6 Objective 3: Law Enforcement Needs

6.1 Topic

Subgroup 3 - Law Enforcement Needs is tasked with investigating, analyzing, and drafting recommendations (if needed) to address the following Review objective:

Consistent with ICANN's mission and Bylaws, Section 4.6(e)(ii), the review team will assess the extent to which the implementation of today's WHOIS (the current gTLD RDS) meets legitimate needs of law enforcement for swiftly accessible, accurate and complete data by (a) establishing a working definition of "law enforcement" used in this review, (b) identifying an approach used to determine the extent to which these law enforcement needs are met by today's WHOIS policies and procedures, (c) identifying high-priority gaps (if any) in meeting those needs, and (d) recommending specific measurable steps (if any) the team believes are important to fill gaps. Note that determining which law enforcement requests are in fact valid will not be addressed by this review.

To accomplish this objective, the subgroup agreed to take into account current and emerging technology and to include:

1. Cybercrime investigations and enforcement;
2. Data protection laws and enforcement;
3. What's required of the Registrar to retain data under the RAA;
4. A clear direction from Law Enforcement of what is needed; and
5. A better understanding of procedures and requirements by both Law Enforcement and the Registrars.

6.2 Summary of Relevant Research

To conduct its research, all members of this subgroup reviewed the following inventoried WHOIS policy and procedure materials, posted on the [subgroup's wiki page](#):

- ⦿ [WHOIS Review Team \(WHOIS1\) Final Report](#) (2012), Chapter 6 and Appendix E: The WHOIS Review team's Law Enforcement Survey
- ⦿ [WHOIS Misuse Study Final Report](#), especially Section 4. Law Enforcement & Researchers survey
- ⦿ [ICANN61 GAC PSWG - OCTO Update](#)
- ⦿ Additional links specific to Subgroup 3 may be added here, once identified by this subgroup

To conduct its research, the subgroup agreed to start with the following steps:

- ⦿ Informal outreach to law enforcement contacts to solicit input on needs, including for example GAC PSWG, APWG, and SSAC members
- ⦿ Review prior RT Law Enforcement Survey
- ⦿ Review the update given by the ICANN Office of CTO to the GAC PSWG

<SUBGROUP TO UPDATE AND DRAFT ADDITIONAL TEXT FOR THIS SECTION TO IDENTIFY ANY ADDITIONAL MATERIALS OR SOURCES OF DATA LEADING TO FINDINGS>

6.3 Analysis and Findings

At this time, the subgroup has not gathered findings, but intends to take this approach:

- ⦿ Establish working definition of “law enforcement” to be used in this review
- ⦿ Each subgroup member will conduct informal outreach to law enforcement contacts
- ⦿ Based on initial findings, subgroup may conduct broader formal outreach
- ⦿ Formalized outreach (if any) would be structured in a transparent and accessible way (e.g., survey)

After conducting this research, all subgroup members will review outreach results to determine the extent to which Law Enforcement needs are met by today’s WHOIS policies and procedures and high-priority gaps (if any).

Note: The timing and approach used for outreach may be impacted by near-term changes to WHOIS resulting from GDPR compliance efforts.

<SUBGROUP TO DRAFT TEXT FOR THIS SECTION AFTER SURVEY RESULTS ARE AVAILABLE TO REFLECT RESEARCH METHODOLOGY, SURVEY QUESTIONS, SURVEY FINDINGS, AND THE SUBGROUP’S ANALYSIS OF FINDINGS>

6.4 Problem/Issue

[TO BE INSERTED AFTER SURVEY RESULTS ARE AVAILABLE]

6.5 Recommendations (if any)

Disclaimer: recommendations are not a requirement.

[TO BE INSERTED AFTER SURVEY RESULTS ARE AVAILABLE]

6.6 Possible impact of GDPR and other applicable laws

[TO BE PROVIDED]

7 Objective 4: Consumer Trust

7.1 Topic

Subgroup 4 - Consumer Trust is tasked with investigating, analyzing, and drafting recommendations (if needed) to address the following Review objective:

Consistent with ICANN’s mission and Bylaws, Section 4.6(e)(ii), the review team will assess the extent to which the implementation of today’s WHOIS (the current gTLD RDS) promotes consumer trust in gTLD domain names by

- (a) agreeing upon a working definition of “consumer” and “consumer trust” used in this review,*
- (b) identifying the approach used to determine the extent to which consumer trust needs are met,*
- (c) identifying high-priority gaps (if any) in meeting those needs, and*
- (d) recommending specific measurable steps (if any) the team believes are important to fill gaps.*

Comment [LP21]: Erika has an open action item to update this section to fill gaps and address ICANN62 feedback.

Questions the subgroup attempted to answer when assessing this objective include:

1. Is the term 'trustworthiness' the best and only option in determining consumer trust in the gTLD environment as mentioned in the relevant WHOIS report(s)?
2. Is the increase in alternative identities (for example FB) an indication that the current use of gTLDs is not sufficiently advocating consumer trust?
3. A key high priority gap in understanding the consumer trust environment is apparently the lack of sufficient data, as mentioned in the various WHOIS report(s). Question: Are there new developments that need to be considered.
4. Is the decline in awareness for some of the legacy gTLDs (.info, .org) an indication for changing pattern in consumer trust.
5. Security and transparency play a major role in defining a trustful Internet environment. Did the current gTLD and WHOIS system achieve this.
6. Are regulations like the European GDPR increasing consumer trust if major information is missing in the publicly available WHOIS.

7.2 Summary of Relevant Research

To conduct its research, all members of this subgroup reviewed the following background materials, posted on the [subgroup's wiki page](#):

- ⦿ [WHOIS Review Team \(WHOIS1\) Final Report](#) (2012), Appendix F: Consumer Study
- ⦿ [Competition, Consumer Trust and Consumer Choice Review Team Draft Report](#)
- ⦿ [Phase Two Global Registrant Survey](#), and announcement:
- ⦿ <https://www.icann.org/news/announcement-2-2016-06-23-en>

To date, the subgroup has requested no additional materials. The subgroup also requested that ICANN's Global Domain Division provide insight into how "consumer trust" is reflected in their approach to WHOIS policy implementation and enforcement.

In addition, the subgroup agreed to a working definition of "consumer" to include any Internet user, of which registrants are a small subset. Noting there may be multiple definitions of "trustworthiness" based on subclass of "consumer," the subgroup agreed to examine "trustworthiness" by determining the extent to which consumer trust needs are met. The subgroup to develop/include working definitions for the above terms in its findings (see below).

The subgroup further agreed upon the following:

- ⦿ The definition of consumer to be addressed in this review must be broad and include Internet users. Users are potential domain name owners and insofar, it's important to approach and address all users, whenever appropriate.
- ⦿ The basic idea is that WHOIS contributes to consumer trust, mostly indirectly. The subgroup notes that here are different opinions about whether the visibility of WHOIS data contributes to trust.

7.3 Analysis and Findings

After reviewing available documents, the subgroup finds that the only document which specifically explores the relationship between WHOIS and "Consumer Trust" is the "WHOIS - POLICY REVIEW TEAM" final report from May 11, 2012. In this document, the topic of Consumer Trust is mentioned in various key context environments. Excerpts are provided below for subgroup analysis. (See below 4.a. WHOIS - POLICY REVIEW TEAM Final Report from May, 11, 2012)

Furthermore, two other documents are referenced in this section because these documents are significant in judging the relevance of consumer trust in the broader context of ICANN's consumer and public interest value system: 4.b Phase 2 Global Consumer Research Survey and 4.c. Bylaws.

4.a WHOIS - POLICY REVIEW TEAM Final Report from May 11, 2012.

Consumer Trust - Principles from Affirmation of Commitments - page 21/22 -

“Additional principles from the Affirmation further guided the Review Team work. While each Review Team member hails from a particular community within or outside of ICANN, the Team agreed to conduct its work pursuant to the broad public interest principles set out the Affirmation, including:

"decisions made related to the global technical coordination of the DNS are made in the public interest and are accountable and transparent" Section 3(a); should “promote competition, consumer trust, and consumer choice in the DNS marketplace” Section 3(c); and should “reflect the public interest...and not just the interests of a particular set of stakeholders” (paragraph 4).¹³

Consumer Trust - Definition - page 23 -

“Consumers and Consumer Trust The Review Team found two potential classes of consumers: • All Internet users, including natural persons, commercial and non-commercial entities, governments and academic entities, and registrants, registries and registrars. • The individuals and organizations who purchase the domain name and provide data for inclusion in the WHOIS. The Review Team found the definition of Consumer Trust, something the ICANN Community is also exploring in the context of its policy-making processes, to be particularly challenging. Consumer Trust can be narrowly construed to mean the level of trust Internet users have in available WHOIS data; or more broadly as the level of trust consumers have in Internet information and transactions in general. The Review Team focused its “consumer trust” research on the WHOIS issues, and reached outside the ICANN community to engage third party researchers for multi-country research. This research and its results are covered in chapter 6, with full research material in the appendices.”

Promotion of Consumer Trust - page 9/10

“Part of the WHOIS Review Team's scope was to evaluate the extent to which ICANN's current WHOIS policy and implementation “promotes consumer trust”. Having struggled with what “consumer” means in the context of WHOIS, and aware of the Affirmation of Commitments' observation that there are key stakeholders who do not engage in the ICANN environment, the WHOIS Review Team commissioned consumer research. This found that drivers of consumer trust include knowing the entity with whom they are dealing, and being able to find reliable contact information. The vast majority of consumers were unaware of the existence of the WHOIS service, and many struggled to understand the format of WHOIS outputs. This led us to conclude that the current implementation of WHOIS services does not help to build consumer trust, and more could be done to raise awareness of the service, and to improve its user-friendliness” (page

. Recommendation 3 - Outreach

ICANN should ensure that WHOIS policy issues are accompanied by cross-community outreach, including outreach to the communities outside of ICANN with a specific interest in the issues, and an ongoing program for consumer awareness.”

Consumer Trust and use of WHOIS - page 74 -

“E. Consumer Study Introduction The Review Team decided to undertake an independent research study to gain a better understanding of consumer trust as it relates to the use of WHOIS. The premise for this decision was based on the AOC, Paragraph 4 which states: “A private coordinating process, the outcomes of which reflect the public interest, is best able to flexibly meet the changing needs of the Internet and of Internet users. ICANN and DOC recognize that there is a group of participants that engage in ICANN's processes to a greater extent than Internet users generally.”

Therefore, the WHOIS Review Team felt that we should solicit input beyond the ICANN constituencies. Specific questions related to consumer trust were: 75 • What factors influence consumer’s perception of trustworthy websites? • Are consumers aware of the WHOIS and WHOIS records for domain name registrations to evaluate trust in a website? • Are consumers able to locate and find domain registrant information with a reasonable ease of use? “

Consumer Trust and Accurate Data - page 12 -

“The low level of accurate WHOIS data is unacceptable, and decreases consumer trust in WHOIS, in the industry which ICANN provides rules for and coordinates, and therefore in ICANN itself. The organization’s priority in relation to WHOIS should be to improve WHOIS data accuracy and sustain improvement over time.

“According to our consumer research, one of the aspects that consumers struggled with (once they had been informed of the existence of WHOIS in many cases) was locating WHOIS services and interpreting WHOIS Data. This is particularly pronounced with 'thin' WHOIS services⁵ which split the WHOIS data between the registry and registrar, and affect .com and .net, which together hold over 100 million domain name registrations at the time of writing.

Consumer Trust and Compliance - page 12 -

“The WHOIS Data Reminder Policy is ineffective in achieving its goal of improving accuracy of data. Despite the dedication of considerable resources both by Registrars in sending out annual WHOIS Data Reminder Policy notices, and ICANN’s Compliance Team in auditing compliance, the lack of follow-up renders the entire action ineffective. Anecdotal evidence suggests that name holders frequently ignore these messages, view them as SPAM or as unwanted marketing approaches by their Registrar. The policy, while well-intentioned, has not measurably improved accuracy but has increased costs to Registrars and ICANN as it monitors compliance with the policy. Simply put, no one knows what impact the policy has in improving the accuracy of WHOIS data. “

“According to our consumer research, one of the aspects that consumers struggled with (once they had been informed of the existence of WHOIS in many cases) was locating WHOIS services and interpreting WHOIS Data. This is particularly pronounced with 'thin' WHOIS services⁵ which split the WHOIS data between the registry and registrar, and affect .com and .net, which together hold over 100 million domain name registrations at the time of writing.”

Consumer Trust and User Friendliness - page 13/14 -

(Recommendation 11) - Data Access – Common Interface Findings According to our consumer research, one of the aspects that consumers struggled with (once they had been informed of the existence of WHOIS in many cases) was locating WHOIS services and interpreting WHOIS Data. This is particularly pronounced with 'thin' WHOIS services⁵ which split the WHOIS data between the registry and registrar, and affect .com and .net, which together hold over 100 million domain name registrations at the time of writing. ⁵ See glossary for explanation of the terms “thick” and “thin” WHOIS services ¹⁶ We understand that ICANN already provides a WHOIS lookup service called Internic. The WHOIS Review Team supports the concept of the Internic service, as a 'go to' place for those wishing to find out information about domain name registrants. It finds that in practice, the Internic service is little known, and is not user friendly. For example, it delivers only the 'thin' WHOIS data for .com and .net. This requires users who are looking up through a web interface to find the relevant registrar's website, and their WHOIS service before they are able to complete their query. The WHOIS Review Team unanimously believes that WHOIS services in general and Internic in particular are not optimized for usability, and could do much more to promote consumer trust. Further, we believe that they prevent the WHOIS from being more widely used and relied on by consumers.”

WHOIS value debate - relates indirectly to consumer trust - page 6 -

Quite early at the beginning of the review, page 6, in a more general comment about the WHOIS debate, the complexity of consumer trust related issues comes up but is not explicitly mentioned. This text is nonetheless significant because it frames key issues related to consumer trust in the WHOIS environment well.

“WHOIS is the source of long-running discussion and debate at ICANN, other Internet Governance institutions, and elsewhere. This team and its successors hopefully will inform future debate and consensus-based decision making.

Issues in the WHOIS debate are varied. Any discussion of WHOIS will likely contain all of the words accuracy, privacy, anonymity, cost, policing, and SPAM. Each of the issues is important. This is sometimes lost in the heat of the debate and it is important to remind ourselves of this on a regular basis.

In order to inform the debate, and perhaps make the decision-making process easier, ICANN has adopted the age-old tradition of "the study" in lieu of or as a precursor to action. Significant sums have been spent studying WHOIS, more is being spent, and yet more is planned with the span of time now stretching into decades. Each study addresses some different aspect of WHOIS; accuracy, proxy/privacy¹ reveal/request, availability, and so on. They take time to be approved, conducted, reported, and of course debated. This time is measured in years and could be called ICANN time as compared to Internet time. The one constant throughout has been WHOIS itself; protocol, service, data.

A gross understatement is that tensions exist between the various ICANN constituencies regarding WHOIS. Issues abound including right to privacy, anonymity, intellectual property protection, security and abuse, among others. Each is important. None more so than the other.

We find little consensus within the ICANN community on the issues. More concerning, there appears to be no coordinated effort to achieve consensus on these important, and admittedly difficult issues. Neither ICANN the corporation nor ICANN the community have seen the need to charge an individual or group as responsible for WHOIS. We find this a

significant oversight and surmise that without such a coordinating effort, the small steps required for consensus may never be taken. It is hoped that the establishment of regular WHOIS Reviews will assist in this regard.

For something so simple as WHOIS the protocol, it is unfortunate that WHOIS the policy has become so complex and unmanageable.

This summary discussion is not a condemnation of the debate, the studies, or the people that invested their time, emotion, and personal capital over the years. Rather, it is an attempt to concisely present in a balanced and fair manner the very real truth that the current system is broken and needs to be repaired.”

4.b. Phase 2 Global Consumer Research Survey

The topic of Consumer Trust comes up in different ICANN environment, for example the <https://www.icann.org/news/announcement-2-2016-06-23-en>

This study is not touching on WHOIS specifically in relation to Consumer Trust issues, therefore we're not “The Internet Corporation for Assigned Names and Numbers (ICANN) today [published](#) [PDF, 2.88 MB] the findings from its Phase 2 Global Consumer Research Survey. Conducted by Nielsen, the study measured current consumer attitudes toward the gTLD landscape and domain name system (DNS), as well as changes in consumer attitudes from the first wave [study](#) in 2015. Internet users were asked about aspects of consumer awareness, consumer choice, experience and trust.

The survey findings will inform the work of the [Competition, Consumer Trust and Consumer Choice \(CCT\) Review Team](#). The team is examining the impact of the New gTLD Program on consumer trust in the DNS.

"Survey results show that overall awareness of generic top-level domain has grown when compared to the baseline study that was conducted last year and continues to grow," said Akram Atallah, president of ICANN's Global Domains Division. "I encourage community members to review this important report to learn more about the current market, as well as to inform the numerous discussions that are occurring about subsequent rounds."

Online survey participants included 5,452 consumers ages 18+ in 24 countries throughout Asia, Europe, Africa, North America and South America. The survey was administered in 18 languages. This year, the study also included a sample of Internet users, ages 15-17.

The CCT Review Team will consider data from a separate survey of domain name registrants about their experiences later this year, when the Phase 2 report on registrants is published. The [phase 1 registrant report](#) was published in September 2015.

4.c. BYLAWS FOR INTERNET CORPORATION FOR ASSIGNED NAMES AND NUMBERS

<https://www.icann.org/en/system/files/files/adopted-bylaws-27may16-en.pdf>

(b) CORE VALUES In performing its Mission, the following “Core Values” should also guide the decisions and actions of ICANN: (i) To the extent feasible and appropriate, delegating coordination functions to or recognizing the policy role of, other responsible entities that reflect the interests of affected parties and the roles of bodies internal to ICANN and relevant external expert bodies; (ii) Seeking and supporting broad, informed participation reflecting the functional, geographic, and cultural diversity of the Internet at all levels of policy

development and decision-making to ensure that the bottom-up, multi-stakeholder policy development process is used to ascertain the global public interest and that those processes are accountable and transparent;

(d) Competition, Consumer Trust and Consumer Choice Review (i) ICANN will ensure that it will adequately address issues of competition, consumer protection, security, stability and resiliency, malicious abuse issues, sovereignty concerns, and rights protection prior to, or concurrent with, authorizing an increase in the number of new top-level domains in the root zone of the DNS pursuant to an application process initiated on or after the date of these Bylaws (“New gTLD Round”). (ii) After a New gTLD Round has been in operation for one year, the Board shall cause a competition, consumer trust and consumer choice review as specified in this Section 4.6(d) (“CCT Review”). (iii) The review team for the CCT Review (“CCT Review Team”) will examine (A) the extent to which the expansion of gTLDs has promoted competition, consumer trust and consumer choice and (B) the Adopted by ICANN Board on 27 May 2016 33 effectiveness of the New gTLD Round’s application and evaluation process and safeguards put in place to mitigate issues arising from the New gTLD Round. (iv) For each of its recommendations, the CCT Review Team should indicate whether the recommendation, if accepted by the Board, must be implemented before opening subsequent rounds of new generic top-level domain applications periods. (v) The CCT Review Team shall also assess the extent to which prior CCT Review recommendations have been implemented and the extent to which implementation of such recommendations has resulted in the intended effect.

7.4 Problem/Issue

Based on the findings and recommendations of the WHOIS1 Review Team, WHOIS policy and implementation have evolved since 2012. Using the 2012 report as a foundation, the subgroup will examine the findings and analysis of other subgroups which are assessing implementation of the WHOIS1 recommendations. This examination will produce a gap analysis which identifies areas of WHOIS which may need to be further enhanced to promote consumer trust. However, the gap analysis will need to be repeated after WHOIS further evolves to comply with GDPR – at least for access to data that impacts WHOIS data from European users.

Action Items from F2F#2:

1. Erika to take feedback on-board and use outputs of other subgroups to assess impact of WHOIS1 rec implementation on consumer trust, being aware of potential for drift into non-WHOIS aspects of CT.
2. Recommends to review the current RAA agreement to evaluate whether a special provision that asks registrars to make relations to resellers public and to request from resellers more transparency concerning information that is relevant for consumers in general. Such information would easily identifiable information about their commitment to data privacy, redress and online contact information.
3. Specifically: Subgroup should formulate a recommendation noting lack of Reseller transparency in WHOIS as a potential gap, to be addressed through policy and/or contractual changes
4. Reseller gaps identified: lack of easy identifiable information about data privacy/data protection practices, redress contact point.

7.5 Recommendations (if any)

Recommendations will be submitted after the work of the other WHOIS subgroups is evaluated, Please see intro to point 5.

The following text is copied from ICANN62 slides, pending Erika's updated subgroup draft.

Recommendation CT.1:

Lack of Reseller transparency in WHOIS is a potential gap that should be addressed through policy and/or contractual changes.

ICANN should request from resellers more clear information, including the recommendation to include relevant information on their websites.

A good location for ICANN to make such a recommendation would be RAA (e.g., Sections 3.7.10, 3.12.2, 3.12.15).

ICANN must ensure that RAA provides updated information concerning relevant topics relate to consumers and WHOIS Obligations.

ICANN should recommend general policy and website/communication guidelines for resellers.

For reference:

3.7.10 Registrar shall publish on its website(s) and/or provide a link to the Registrants' Benefits and Responsibilities Specification attached hereto and shall not take any action inconsistent with the corresponding provisions of this Agreement or applicable law.

3.12.2 Any registration agreement used by reseller shall include all registration agreement provisions and notices required by the ICANN Registrar Accreditation Agreement and any ICANN Consensus Policies, and shall identify the sponsoring registrar or provide a means for identifying the sponsoring registrar, such as a link to the InterNIC WHOIS lookup service.

<https://www.icann.org/resources/pages/approved-with-specs-2013-09-17-en#raa>
<https://www.icann.org/en/system/files/files/resellers-03oct13-en.pdf>

Findings: The subgroup reviewed websites from well-known and less well-known resellers. Based on this research, it is clear that many of the well-known resellers have little information for 'consumers' and, if they do, the information is often very hard to find.

Rationale:

[What is Intent of recommendation and envisioned outcome?

How did the finding lead to this recommendation?

How significant would impact be if recommendation not addressed?

Is it aligned with ICANN's Strategic Plan and Mission?

Is it in compliance with scope Review Team set?]

Impact of Recommendation: [What are the impacted areas, e.g. security, transparency, legitimacy, efficiency, diversity etc. Which group/audience will be impacted by this recommendation]

Feasibility of Recommendation: [Document feasibility of recommendation]

Implementation:

[Who are responsible parties that need to be involved in implementation? Community/ICANN org/combination)

What is the target for a successful implementation?

Is related work already underway and how will that dovetail with recommendation?

What is the envisioned implementation timeline? Within 6 months/12 months/more than 12 months]

Priority: [TO BE PROVIDED]

Level of Consensus: [TO BE PROVIDED]

7.6 Possible impact of GDPR and other applicable laws

[TO BE PROVIDED]

8 Objective 5: Safeguarding Registrant Data

8.1 Topic

Subgroup 5 - Safeguarding Registrant Data is tasked with investigating, analyzing, and drafting recommendations (if needed) to address the following Review objective:

Consistent with ICANN's mission and Bylaws, Section 4.6(e)(ii), the review team will assess the extent to which the implementation of today's WHOIS (the current gTLD RDS) safeguards registrant data by (a) identifying the lifecycle of registrant data, (b) determining if/how data is safeguarded in each phase of that lifecycle, (c) identifying high-priority gaps (if any) in safeguarding registrant data, and (d) recommending specific measureable steps (if any) the team believes are important to fill gaps.

To accomplish this objective, the subgroup considered the above objective and concluded:

- ⦿ Items a), c) and d) are being covered in both the ongoing Next Generation RDS PDP and ICANN Org efforts to comply with data protection laws - specifically, the European GDPR.
- ⦿ For Item b), currently all WHOIS data is made available publicly. Although this will surely change with regard to WHOIS data associated with natural persons (and likely other groups) as a result of ongoing GDPR compliance efforts, currently there is no protection for that data.
- ⦿ However, protection against WHOIS (and other) data loss due to Registrar/Registry failure or de-accreditation is required today in the form of Escrow. The subgroup agreed to consider escrow procedures and associated data safeguards used by those who relay and store escrowed data (i.e., Escrow Providers, Registrars and Registries).

8.2 Summary of Relevant Research

To conduct its research, all members of this subgroup reviewed the following inventoried WHOIS policy and procedure materials, posted on the [subgroup's wiki page](#):

- ⦿ [SAC051, Report on Domain Name WHOIS Terminology](#) (2011)
- ⦿ [SAC054, Report on Domain Name Registration Data Model](#) (June 2012)
- ⦿ RDS/WHOIS Contractual Requirements - Sections pertaining to Data Safeguards:

Comment [LP22]: Alan has an open action item to reflect call discussion in this draft report. See call recording/transcript

<https://community.icann.org/display/WHOIS/Meeting+%2335+-+23+July+2018+@+15%3A00+UTC>

-
- ⦿ [2013 Registrar Accreditation Agreement \(RAA\)](#),
[Section 3.6 - Data Retention Specification](#)
 - ⦿ [2014 New gTLD Registry Agreement](#),
Specification 2 - [Data Escrow Requirements](#)

In addition, the subgroup has requested copies of selected agreements with Escrow providers to better understand what the requirements are on such providers with regard to how data must be protected and how, if applicable, data breaches are reported.

The subgroup is considering reaching out to a sampling of registrars, registries and escrow providers (if any are willing) to learn about how WHOIS data is protected from being changed or erased.

8.3 Analysis and Findings

For the purposes of this review, "Registrant Data" is defined as all of the data provided by a registrant to fulfil the ICANN WHOIS obligations.

The overall findings were:

- a) Currently data is public and therefore there is no effort made to "protect" such registrant data from viewing. That may change as WHOIS policies adapt to GDPR and other legislation, but the details are not known now, and presumably once all of that is complete, we will be in compliance with appropriate regulations.
- b) Safeguarded not only means to protect from viewing, but to ensure that the data is not lost in the case of a registrar/registry failure, and not unknowingly changed. This includes while the data is held by registrar/registries and by escrow agents.
- c) It is known that neither Registry Agreements nor the RAA makes any explicit demands on Registries and Registrars with regard to data protection or actions that must be taken in the case of a discovered data breach (in appropriate access/change but unauthorized third parties). ICANN's agreement with escrow providers do required that they " use commercially reasonable efforts and industry standard safeguards to protect the integrity and confidentiality of Deposits". But they do not explicitly require that both the registrar/registry and ICANN be notified of a breach in a timely manner.

8.4 Problem/Issue

Safeguarding data includes ensuring that it cannot be accessed or changed except as duly authorized.

Traditionally, all RDS data is public. Under GDPR and similar legislation, some or all of that data may no longer be collected or publicly available. Exactly what data may be subject to these new rules is under discussion elsewhere and will not be addressed by the RDS-WHOIS2-RT. Registries and registrars are not explicitly required to use commercially reasonable and industry standard safeguards nor are any parties required to notify ICANN in the event that a breach is discovered.

8.5 Recommendations

Recommendation SD.1:

ICANN should consult with data security expert(s) to identify reasonable and justifiable requirements to place on registrars and in relation to how data is protected from unauthorized access or alteration while under their control. ICANN should similarly consider whether [or require?] any such breaches that are discovered must be reported to ICANN, and in the case of escrow providers, reported to the registrar/registry that provided the data.

[ICANN should similarly consider whether contractual requirement are needed to require registrars, registries and escrow providers to notify registrants in the event of data breaches.]

In carrying out this review, the external consultants should consider whether requirements within the GDPR could be used as a model, as many ICANN contracted parties must already adhere to those.

If changes are deemed to be required based on the results of the above-recommended studies, ICANN must either negotiate appropriate contractual changes or initiate a GNSO PDP to consider effecting such changes.

Findings: To be completed once we have access to contracts between ICANN and escrow providers and Escrow providers and contracted parties.

Rationale: If ICANN has a requirement to safeguard registrant data, as Articles 4.6(e)(ii) and 4.6(e)(iii) imply, then ICANN has an obligation to ensure that its contracted parties act accordingly.

Impact of Recommendation: This recommendation will impact data security and potentially registrants whose data is collected in conjunction with gTLD domain registrations. By helping to ensure that such data is not altered inappropriately, their domain names and associated assets are protected. The recommendation could impose additional contractual requirements on registrars and registries.

<INSERT IMPACT IF NOT ADDRESSED, ALIGNMENT WITH SCOPE>

Feasibility of Recommendation: The RT believes that this recommendation is both feasible and necessary.

Implementation: [INSERT IMPLEMENTATION RESPONSIBILITY, TARGET FOR SUCCESS, WHETHER IMPLEMENTATION IS ALREADY UNDERWAY OR NOT, AND TIMELINE]

Priority: [To Be Completed]

Level of Consensus: [To Be Completed]

8.6 Possible impact of GDPR and other applicable laws

[TO BE PROVIDED]

Appendix A: Glossary of Terms

An assessment of this type requires a common understanding of the key terms associated with the review.

Term	Acronym (if applicable)	Definition

Appendix B: Terms of Reference

Review Name:	Registration Directory Service (RDS) WHOIS2 Review
Section I: Review Identification	
Board Initiation	Resolution 2017.02.03.10
ToR Due Date	Due date for ToR, as per Board Resolution: 15 May, 2017 Revised due date: Late November/Early December 2017 Submission date: February 2018
Announcement of Review Team:	2 June, 2017
Name(s) of RT Leadership:	Alan Greenberg, Chair Cathrin Bauer-Bulst, Vice Chair Susan Kawaguchi, Vice Chair
Name(s) of Board Appointed Member(s):	Chris Disspain
Review Workspace URL:	https://community.icann.org/display/WHO/RDS-WHOIS2+Review
Review Mailing List:	http://mm.icann.org/pipermail/rds-whois2-rt/
Important Background Links:	Bylaws Section: Registration Directory Service Review RT Selection: https://community.icann.org/display/WHO/Selection+Process RT Announcement: https://www.icann.org/news/announcement-2017-06-02-en
Section II: Mission, Purpose, and Deliverables	
Mission & Scope:	
<p>Background</p> <p>At its meeting on 03 February 2017, the ICANN Board initiated the Registration Directory Service (RDS) WHOIS2 Review to “assess the effectiveness of the then current gTLD registry directory service and whether its implementation meets the legitimate needs of law enforcement, promoting consumer trust and safeguarding registrant data.”</p> <p>Mission and Scope</p> <p>This review team is tasked, as per the Bylaws, Section 4.6(e):</p> <p><i>“(i) Subject to applicable laws, ICANN shall use commercially reasonable efforts to enforce its policies relating to registration directory services and shall work with Supporting Organizations and Advisory Committees to explore structural changes to improve accuracy and access to generic top-level domain registration data, as well as consider safeguards for protecting such data.</i></p> <p><i>“(ii) The Board shall cause a periodic review to assess the effectiveness of the then current gTLD registry directory service and whether its implementation meets the legitimate needs of law enforcement, promoting consumer trust and safeguarding registrant data (“Directory Service Review”).</i></p> <p><i>“(iii) The review team for the Directory Service Review (“Directory Service Review Team”) will consider</i></p>	

the Organisation for Economic Co-operation and Development ("OECD") Guidelines on the Protection of Privacy and Transborder Flows of Personal Data as defined by the OECD in 1980 and [amended in 2013](#) and as may be amended from time to time.

(iv) The Directory Service Review Team shall assess the extent to which [prior Directory Service Review recommendations](#) have been implemented and the extent to which implementation of such recommendations has resulted in the intended effect.

(v) The Directory Service Review shall be conducted no less frequently than every five years, measured from the date the previous Directory Service Review Team was convened, except that the first Directory Service Review to be conducted after 1 October 2016 shall be deemed to be timely if the applicable Directory Service Review Team is convened on or before 31 October 2016."

The new ICANN Bylaws required that this review begin as soon as possible after they were enacted on 01 October 2016. In light of the ongoing RDS policy development activities, a reduced scope was proposed limiting Directory Service Review activities to just a review of the first WHOIS-RT Recommendations. Based on ICANN's Supporting Organization/Advisory Committee (SO/AC) feedback and further discussions within the present review team, it was decided to consider all aspects of the Directory Service Review prescribed in the Bylaws, and to further consider other issues deemed to be of importance to the review team and ICANN organization. See appendix 1 for more information.

Objectives

The review team carefully considered the Bylaws, the limited scope proposal and feedback received. Using a table (see appendix 2), the review team held in-detail discussions and called for consensus on each item. To define the scope of the review, the review team developed detailed objectives for each agreed component. The review team's agreed specific, prioritized objectives are as follows:

- ⦿ Consistent with ICANN's mission and [Bylaws](#), Section 4.6(e)(iv), the review team will (a) evaluate the extent to which ICANN Org has implemented each prior Directory Service Review recommendation (noting differences if any between recommended and implemented steps), (b) assess to the degree practical the extent to which implementation of each recommendation was effective in addressing the issue identified by the prior RT or generated additional information useful to management and evolution of WHOIS (RDS), and (c) determine if any specific measurable steps should be recommended to enhance results achieved through the prior RT's recommendations. This includes developing a framework to measure and assess the effectiveness of recommendations, and applying that approach to all areas of WHOIS originally assessed by the prior RT (as applicable).
- ⦿ Consistent with ICANN's mission and [Bylaws](#), Section 4.6(e)(ii), the review team will assess the effectiveness of today's WHOIS (the now current gTLD RDS, including cumulative changes made to the then-current RDS which was assessed by the prior RT) by (a) inventorying changes made to WHOIS policies and procedures since the prior RT completed its work, (b) using that inventory to identify significant new areas of today's WHOIS (if any) which the team believes should be reviewed, and (c) determining if any specific measurable steps should be recommended to enhance effectiveness in those new areas.
- ⦿ Consistent with ICANN's mission and [Bylaws](#), Section 4.6(e)(ii), the review team will assess the extent to which the implementation of today's WHOIS (the current gTLD RDS) meets legitimate needs of law enforcement for swiftly accessible, accurate and complete data by (a) establishing a working definition of "law enforcement" used in this review, (b) identifying an approach used to determine the extent to which these law enforcement needs are met by today's WHOIS policies and procedures, (c) identifying high-priority gaps (if any) in meeting those needs, and (d) recommending specific measurable steps (if any) the team believes are important to fill gaps.

Note that determining which law enforcement requests are in fact valid will not be addressed by this review.

- ⦿ Consistent with ICANN's mission and [Bylaws](#), Section 4.6(e)(ii), the review team will assess the extent to which the implementation of today's WHOIS (the current gTLD RDS) promotes consumer trust in gTLD domain names by (a) agreeing upon a working definition of "consumer" and "consumer trust" used in this review, (b) identifying the approach used to determine the extent to which consumer trust needs are met, (c) identifying high-priority gaps (if any) in meeting those needs, and (d) recommending specific measureable steps (if any) the team believes are important to fill gaps.
- ⦿ Consistent with ICANN's mission and [Bylaws](#), Section 4.6(e)(ii), the review team will assess the extent to which the implementation of today's WHOIS (the current gTLD RDS) safeguards registrant data by (a) identifying the lifecycle of registrant data, (b) determining if/how data is safeguarded in each phase of that lifecycle, (c) identifying high-priority gaps (if any) in safeguarding registrant data, and (d) recommending specific measureable steps (if any) the team believes are important to fill gaps.
- ⦿ Consistent with ICANN's mission to ensure the stable and secure operation of the Internet's unique identifier systems by enforcing policies, procedures and principles associated with registry and registrar obligations to maintain and provide access to accurate and up-to-date information about registered names and name servers, the review team will (to the extent that this is not already covered in prior RT recommendations), (a) assess the effectiveness and transparency of ICANN enforcement of existing policy relating to WHOIS (RDS) through Contractual Compliance actions, structure and processes, including consistency of enforcement actions and availability of related data, (b) identifying high-priority procedural or data gaps (if any), and (c) recommending specific measureable steps (if any) the team believes are important to fill gaps.
- ⦿ The review team considered the OECD Guidelines on the Protection of Privacy and Transborder Flows of Personal Data in relation to WHOIS Policy as mandated by ICANN's Bylaws, Section 4.6.(e)(iii). The team agreed, by unanimous consensus, that current WHOIS policy does not consider the issues of privacy/data protection or transborder dataflows, and that it is within the domain of the ongoing PDP on Next-Generation gTLD Registration Directory Services to Replace WHOIS to determine to what extent a future RDS should factor in the OECD Guidelines or other privacy/data protection and transborder dataflow requirements set at national or multinational levels. Accordingly, the review team decided that further review of the OECD Guidelines would not be an effective use of the team's time and effort.
- ⦿ The review team has considered ICANN's Bylaws, Section 4.6(a)(v): "Each review team may recommend that the applicable type of review should no longer be conducted or should be amended." Consistent with this section, the review team will (a) identify any portions of Section 4.6(e), Registration Directory Service Review, which the team believes should be changed, added or removed, and (b) include any recommended amendments to Section 4.6(e), along with rationale for those amendments, in its review report.
- ⦿ The review team will not conduct a review of Registration Data Access Protocol (RDAP) at this time because policies have not yet been developed to enable assessment of the value and timing of RDAP as a replacement protocol for WHOIS.
- ⦿ The review team will not conduct a review of the WHOIS protocol at this time because activities are already underway to replace the WHOIS protocol.

In recognition that the WHOIS landscape will be changing, perhaps radically, over the coming months

as ICANN addresses how it will respond to the EU General Data Protection Regulation (GDPR), the review team may choose to defer some or all of its work in relation to the scope items on Law Enforcement Needs, Consumer Trust and Safeguarding Registrant Data until it is more clear what path ICANN will be following. Should any work be deferred, individual timelines may slip. However, it is the intent of the review team that the overall schedule calling for the final report to be delivered by the end of December 2018 not change appreciably.

Definitions

An assessment of this type requires a common understanding of the key terms associated with the review. Initially, the RDS-WHOIS2 Review Team is operating under the following definitions:

From [Glossary of WHOIS Terms](#):

- ⦿ **Domain:** A set of host names consisting of a single domain name and all the domain names below it.
- ⦿ **Domain Name:** As part of the Domain Name System, domain names identify IP resources, such as an Internet website.
- ⦿ **GNSO - Generic Names Supporting Organization:** The supporting organization responsible for developing and recommending to the ICANN Board substantive policies relating to generic top-level domains. Its members include representatives from gTLD registries, gTLD registrars, intellectual property interests, Internet service providers, businesses and non-commercial interests.
- ⦿ **gTLD - Generic Top Level Domain:** Most TLDs with three or more characters are referred to as "generic" TLDs, or "gTLDs", such as .COM, .NET, and .ORG. In addition, many new gTLDs such as .HOTELS and .DOCTOR are now being delegated.
- ⦿ **IDNs — Internationalized Domain Names:** IDNs are domain names that include characters used in the local representation of languages that are not written with the twenty-six letters of the basic Latin alphabet "a-z". An IDN can contain Latin letters with diacritical marks, as required by many European languages, or may consist of characters from non-Latin scripts such as Arabic or Chinese. Many languages also use other types of digits than the European "0-9". The basic Latin alphabet together with the European-Arabic digits are, for the purpose of domain names, termed "ASCII characters" (ASCII = American Standard Code for Information Interchange). These are also included in the broader range of "Unicode characters" that provides the basis for IDNs.
- ⦿ **Registrar:** Domain names can be registered through many different companies (known as "registrars") that compete with one another. The registrar you choose will ask you to provide various contact and technical information that makes up the registration. The registrar will then keep records of the contact information and submit the technical information to a central directory known as the "registry." This registry provides other computers on the Internet the information necessary to send you e-mail or to find your web site. You will also be required to enter a registration contract with the registrar, which sets forth the terms under which your registration is accepted and will be maintained.
- ⦿ **Registry:** The "Registry" is the authoritative, master database of all domain names registered in each Top Level Domain. The registry operator keeps the master database and also generates the "zone file" which allows computers to route Internet traffic to and from top-level domains anywhere in the world. Internet users don't interact directly with the registry operator; users can register names in TLDs including .biz, .com, .info, .net, .name, .org by using an ICANN-

Accredited Registrar.

- ① **WHOIS:** WHOIS protocol (pronounced "who is"; not an acronym) An Internet protocol that is used to query databases to obtain information about the registration of a domain name (or IP address). The WHOIS protocol was originally specified in RFC 954, published in 1985. The current specification is documented in RFC 3912. ICANN's gTLD agreements require registries and registrars to offer an interactive web page and a port 43 WHOIS service providing free public access to data on registered names. Such data is commonly referred to as "WHOIS data," and includes elements such as the domain registration creation and expiration dates, nameservers, and contact information for the registrant and designated administrative and technical contacts. WHOIS services are typically used to identify domain holders for business purposes and to identify parties who are able to correct technical problems associated with the registered domain.

From ICANN.org:

[Registration Data Access Protocol \(RDAP\)](#) enables users to access current registration data and was created as an eventual replacement for the WHOIS protocol. RDAP was developed by the technical community in the Internet Engineering Task Force (IETF).

From [SAC051](#), Report on Domain Name WHOIS Terminology and Structure:

- ① **Domain Name Registration Data (DNRD)** – refers to the information that registrants provide when registering a domain name and that registrars or registries collect. Some of this information is made available to the public. For interactions between ICANN Accredited Generic Top Level Domain (gTLD) registrars and registrants, the data elements are specified in the current Registrar Accreditation Agreement. For country code Top Level Domains (ccTLDs), the operators of these TLDs set their own or follow their government's policy regarding the request and display of registration information.
- ① **Domain Name Registration Data Access Protocol (DNRD-AP)** – refers to the elements of a (standard) communications exchange—queries and responses—that make access to registration data possible. For example, the WHOIS protocol (RFC 3912) and Hypertext Transfer Protocol (HTTP) (RFC 2616 and its updates) are commonly used to provide public access to DNRD.
- ① **Domain Name Registration Data Directory Service (DNRD-DS)** – refers to the service(s) offered by registries and registrars to provide access to (potentially a subset of) the DNRD. ICANN Accredited gTLD registries and registrars are required by contracts to provide the DNRD Directory Services via both port 43 and over the web interface. For ccTLDs, the TLD registries determine which service(s) they offer.
- ① **Registration Data Directory Service (RDDS)** – Registration Data Directory Services refers to the collective of WHOIS and Web based WHOIS services. [2013 RAA]

The terms RDDS (Registration Data Directory Service) and RDS (Registration Directory Service) are often used interchangeably.

Deliverables & Timeframes:

The review team shall to the best of its abilities respect the timelines and deliverables as outlined in this document. The review team shall develop a work plan that outlines the necessary steps and expected timing in order to achieve the milestones of this review, as agreed on below. The review team shall follow its published work plan to address review objectives within the available time and specified

resources. The work plan is a roadmap towards reaching milestones and is subject to adjustments as the review team progresses through work. Progress towards time-bound milestones defined in the work plan shall be tracked and published on a Fact Sheet.

Timeline (subject to change):

- ⊙ July 2017-February 2018: Define and approve terms of reference and work plan
- ⊙ December 2017-March 2018: Data analysis
- ⊙ February-March 2018: Assemble draft findings
- ⊙ April-June 2018: Approve draft findings and engagement at ICANN62
- ⊙ June-August 2018: Produce and approve draft report for public comment
- ⊙ October-November 2018: Assemble final recommendations and update draft report based on public comments received; engagement at ICANN63
- ⊙ December 2018: Adopt final report for ICANN Board consideration

Deliverables:

The review team shall produce at least one draft report and a final report. The draft report should include the following:

- ⊙ Overview of the review team's working methods, tools used and analysis conducted
- ⊙ Facts and findings related to the investigation of the objectives identified in the scope
- ⊙ Resolution to all questions raised in the scope or those that arose subsequently during the course of the review (as appropriate)
- ⊙ Summary of public consultations and engagement conducted
- ⊙ Self-assessment of what processes (pertinent to the scope) work well and where improvements can be made; the self-assessment ought to be based on and refer to facts, findings, and data provision wherever possible.
- ⊙ Preliminary recommendations that address significant and relevant issues detected
- ⊙ Preliminary feasibility assessment
- ⊙ A preliminary impact analysis to measure the effectiveness of the recommendations proposed by the current review team, including source(s) of baseline data for that purpose:
 - Identification of issue
 - Definition of desired outcome, including identification of metrics used to measure whether recommendation goals are achieved, where possible
 - Identification of potential problems in attaining the data or developing the metrics
 - A suggested timeframe in which the measures should be performed
 - Define current baselines of the issue and define initial benchmarks that define success or failure
 - Surveys or studies
- ⊙ All recommendations should indicate a preliminary, non-binding level of consensus they have received, as defined in these ToR. This is to inform the community during the public comment period to indicate the level of review team support for each recommendation, without binding the review team on their support level in the final report.

At least one draft report will be submitted for public comment, following standard ICANN procedures. The review team may update the draft Report based on the comments and/or other relevant information received, and submit its final report to the ICANN Board. The final report shall contain the same sections as the draft Report and, in addition, a section detailing the public comments received on the draft Report and an explanation of why and how they were incorporated into the final report or why and how they were rejected by the review team. Each recommendation shall include the level of consensus received from the review team members, as defined in these ToR. As mandated by ICANN's Bylaws, the final report of the review team shall be published for public comment in advance of the Board's consideration.

Considerations with Regard to Review Team Recommendations:

Review teams are expected to develop, and follow a clear process when documenting constructive recommendations as the result of the review.

This includes fact-based analysis, clear articulation of noted problem areas, supporting documentation, and resulting recommendations that follow the S.M.A.R.T framework: **S**pecific, **M**easurable, **A**chievable, **R**ealistic, and **T**ime-Bound.

Additionally, the review team is asked to share its proposed recommendations with ICANN organization to obtain feedback regarding feasibility (e.g., time required for implementation, cost of implementation, and potential alternatives to achieve the intended outcomes.) As stated in the Bylaws, the review team shall attempt to prioritize each of its recommendations and provide a rationale for such prioritization. To the extent practical, proposed recommendations should be provided in priority order to ensure focus on highest-impact areas and priority should be accompanied by.

To help review teams assess whether proposed recommendations are consistent with this guidance, testing each recommendation against the following questions may be helpful:

- ⦿ What is the intent of the recommendation?
- ⦿ What observed fact-based issue is the recommendation intending to solve? What is the “problem statement”?
- ⦿ What are the findings that support the recommendation?
- ⦿ Is each recommendation accompanied by supporting rationale?
- ⦿ How is the recommendation aligned with ICANN’s strategic plan, the Bylaws and ICANN’s mission?
- ⦿ Does the recommendation require new policies to be adopted? If yes, describe issues to be addressed by new policies.
- ⦿ What outcome is the review team seeking? How will the effectiveness of implemented improvements be measured? What is the target for a successful implementation?
- ⦿ How significant would the impact be if not addressed (i.e., Very significant, moderately significant) and what areas would be impacted (e.g., security, transparency, legitimacy, efficiency, diversity, etc.)
- ⦿ Does the review team envision the implementation to be Short-term (i.e., completed within 6 months of acceptance by the Board), Mid-term (i.e., within 12 months), or Longer-term (i.e., more than 12 months)?
- ⦿ Is related work already underway? If so, what is it and who is carrying it out?
- ⦿ Who are the (responsible) parties that need to be involved in the implementation work for this recommendation (i.e., Community, ICANN organization, Board, or combination thereof)
- ⦿ Are recommendations given in order of priority to ensure focus on highest impact areas?

Finally, review teams are encouraged to engage in dialog with the dedicated ICANN Board Caucus Group; for example, when the review team reaches a milestone and could benefit from feedback on agreed scope or any recommendations under development to address that scope.

Section III: Formation, Leadership, Other Organizations

Membership:

As per the ICANN Bylaws, the review team has been selected by the Chairs of ICANN’s Supporting Organizations and Advisory Committees (SO/ACs). Members and their gender, SO/AC affiliation, and region are:

1	Alan Greenberg	M	ALAC	NA
2	Carlton Samuels	M	ALAC	LAC
3	Dmitry Belyavsky	M	ALAC	EUR
4	Cathrin Bauer-Bulst	F	GAC	EUR
5	Lili Sun	F	GAC	AP
6	Thomas L. Walden, Jr.	M	GAC	NA
7	Erika Mann	F	GNSO	EUR
8	Stephanie Perrin	F	GNSO	NA
9	Susan Kawaguchi	F	GNSO	NA
10	Volker Greimann	M	GNSO	EUR
11	Chris Disspain	M	ICANN Board	AP

Note: The ccNSO has reserved the right to appoint up to three review team members once the scope of the review has been determined.

The ICANN Board has appointed Chris Disspain to serve as a member of the RDS-WHOIS2 Review Team.

By consensus, the review team has selected a leadership team, consisting of Alan Greenberg (Chair), Cathrin Bauer-Bulst (Vice Chair), and Susan Kawaguchi (Vice Chair).

Roles and Responsibilities of Review Team Members:

Responsibilities for all review team members include:

- ⦿ Attend all calls and face-to-face meetings whenever feasible.
- ⦿ Provide apologies for planned absences at least 24 hours in advance for all remote meetings; provide apologies for planned absence for face-to-face meetings as early as possible to minimize unnecessary expenses.
- ⦿ Actively engage on email list(s) and other collaborative tools, including providing feedback when requested to do so through that medium.
- ⦿ Actively engage with relevant stakeholder groups within the ICANN community, and within each team member's respective community.
- ⦿ Provide fact-based inputs and comments based on core expertise and experience.
- ⦿ Undertake desk research as required and in accordance with scope of work, including assessment of implementation of recommendations from prior reviews.
- ⦿ Be prepared to listen to others and make compromises in order to achieve consensus recommendations.
- ⦿ Participate in drafting and subgroups as required.
- ⦿ Comply with ICANN's expected standards of behavior.

-
- ⦿ Comply with all review team member requirements, including those described in the “Accountability and Transparency” and “Reporting” sections of this document.

Roles and Responsibilities of Review Team Leadership:

- ⦿ Responsibilities of the review team's leadership include:
- ⦿ Remain neutral when serving as Chair or Vice Chair.
- ⦿ Identify when speaking in individual capacity.
- ⦿ Maintain standards and focus on the aims of the review team as established in these terms of reference.
- ⦿ Drive toward delivery of key milestones according to the work plan.
- ⦿ Ensure effective communication between members and with broader community, Board and ICANN organization.
- ⦿ Set the agenda and run the meetings.
- ⦿ Ensure that all meeting attendees get accurate, timely and clear information.
- ⦿ Determine and identify the level of consensus within the team.
- ⦿ Provide clarity on team decisions.
- ⦿ Ensure decisions are acted upon.
- ⦿ Build and develop team-work.
- ⦿ Manage the review team's budget and work with the ICANN organization team supporting work of the review to provide reporting to maintain accountability and transparency.

Changes to Review Team Membership, Dissolution of Review Team:

Dissolution of review team:

This review team shall be disbanded once it has submitted its final report to the ICANN Board.

Implementation Phase:

The review team shall identify one or two review team members to remain available for clarification as may be needed during the planning phase of implementation of review team recommendations.

Replacement and Removal of Members:

If a review team member is no longer able or willing to serve, or if an SO/AC withdraws its endorsement of the member, the SO/AC making the original endorsement will be requested to refill the position with a new member. The SO/AC will make the selection according to their own processes and will not be bound to consider only those candidates who originally applied requesting their endorsement.

Depending on the remaining time of a review, or any other factors, the relevant SO/AC may choose not to nominate a replacement candidate.

If a review team member is sufficiently inactive or disruptive as to cause at least 70% of review team members (excluding the member in question) to request their removal, the member will be asked to resign. If the member refuses to resign, the SO/AC that endorsed the member will be requested to withdraw their endorsement and replace the member. Should the SO/AC not take action, the member can be removed by a 70% majority vote of the remaining review team members. In all cases, the balloting will be carried out in such a way as to not reveal how individual members voted.

Support from ICANN Organization:

Members of ICANN organization assigned to the review team will support its work, including project management, meeting support, document drafting if/when requested, document editing and distribution, data and information gathering if/when requested, and other substantive contributions when deemed appropriate.

The commitments in this document presume appropriate staff support from ICANN organization. Should that support, in the view of review team leadership, become an issue, this will be communicated first to the ICANN organization member designated as the team leader and then if necessary, to the Board member participating in this review team.

Dependencies on Other Organizations:

The review team will ensure the work it undertakes does not duplicate or conflict with purview and scope of the following efforts. The review team will be briefed/updated on these activities, as appropriate, to avoid unnecessary or unintended overlap.

- ⦿ GNSO PDP on Next-Generation Registration Directory Service (RDS)
- ⦿ Registration Data Access Protocol (RDAP) Implementation
- ⦿ Cross-Field Address Validation
- ⦿ Translation and Transliteration of Contact Information Implementation
- ⦿ Privacy/Proxy Services Accreditation Implementation
- ⦿ ICANN Procedures for Handling WHOIS Conflicts with Privacy Laws
- ⦿ WHOIS Accuracy/GAC Safeguard Advice on WHOIS Verification and Checks
- ⦿ Implementation of THICK WHOIS
- ⦿ ICANN organization's work with the community on GDPR Compliance with existing agreements with registries and registrars

ICANN org will alert the RDS-WHOIS2 review team of any changes to the list and update it.

The review team will engage in dialog with the dedicated ICANN Board Caucus Group; for example, when the review team reaches a milestone and could benefit from feedback on agreed scope or any recommendations under development to address that scope.

Section IV: Decision-Making and Methodologies

Decision-Making Methodologies:

The Bylaws state: "(iii) Review team decision-making practices shall be specified in the Operating Standards, with the expectation that review teams shall try to operate on a consensus basis. In the event a consensus cannot be found among the members of a review team, a majority vote of the members may be taken."

According to the Bylaws, "Any member of a review team not in favor of a recommendation of its review team (whether as a result of voting against a matter or objecting to the consensus position) may record a minority dissent to such recommendation."¹⁰

All minority dissents must detail the analysis or recommendations in the final report with which its author(s) disagree(s), including a rationale for that disagreement.

The authors of minority dissents are encouraged to provide alternative recommendations that include the same details and context as is required from the recommendations in these ToR.

The review team leadership will be responsible for designating each decision as having one of the following designations:

- ⦿ **Full consensus** - no review team members speak against the recommendation in its last

¹⁰ Article IV, Section 4.6(a)(vii)(A).

readings.

- ⦿ **Consensus** - a small minority disagrees, but most agree. A rule-of-thumb for judging consensus is that the decision is supported by 80% of the review team.
- ⦿ **Strong support but significant opposition** - most of the group supports a recommendation but a significant number of members do not.
- ⦿ **Divergence** - no strong support for any particular position, rather 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** - 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 judging the extent to which consensus has been reached, it may be useful for each team member to consider which of the following categories they apply to them.

Disagree: I have a fundamental disagreement with the core of the proposal that has not been resolved. We need to look for a new proposal.

Stand aside: I can't support this proposal because ... But I don't want to stop the group, so I'll let the decision happen without me.

Reservations: I have some reservations but am willing to let the proposal pass.

Agreement: I support the proposal.

In cases of **consensus**, **strong support but significant opposition**, and **no consensus**, an effort should be made to document that variance in viewpoint and to present adequately any **minority views** that may have been made. Documentation of **minority view** recommendations normally depends on text offered by the proponent(s). In all cases of **divergence**, the review team leadership should encourage the submission of minority viewpoint(s).

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

7. After the review team has discussed an issue long enough for all issues to have been raised, understood and discussed, the review team leadership makes an evaluation of the designation and publish it for the group to review.
8. After the review team has discussed the review team leadership's estimation of designation, the leadership should reevaluate and publish an updated evaluation.
9. Steps (i) and (ii) should continue until the leadership makes an evaluation that is accepted by the review team.
10. In rare cases, leadership may decide that the use of a poll is reasonable. Some of the reasons for this might be:
 - ⦿ 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 **consensus and strong support but significant opposition** or between **strong support but significant opposition and divergence**.

Care should be taken in using polls that opinions cast 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 review team's needs, the leadership may direct that review team 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 were taken.

Consensus calls should always involve the entire review team and, for this reason, should take place on the designated mailing list to ensure that all review team members have the opportunity to fully participate in the consensus process. It is the role of the leadership to designate which level of consensus is reached and announce this designation to the review team. Member(s) of the review team should be able to challenge the designation of the leadership as part of the review team's discussion. However, if disagreement persists, review team members may use the process set forth below to challenge the designation.

If several participants in a review team disagree with the designation given to a position by the leadership or any other consensus call, they may follow these steps sequentially:

5. Send email to the leadership, copying the review team explaining why the decision is believed to be in error.
6. If the leadership still disagrees with the opposing member, a straw poll shall be conducted to determine the result.

Accountability and Transparency:

Teleconferences and face-to-face meetings will be recorded and streamed, to the extent practicable, and subject to Confidential Framework provisions. However, the record shall reflect this decision, as well as the underlying considerations that motivated such action.

The review team and supporting members of ICANN organization will endeavor to post (a) action items within 24 hours of any telephonic or face-to-face meeting; and (b) streaming video and/or audio recordings as promptly as possible after any such meeting, subject to the limitations and requirements described above.

The review team will maintain a wiki, <https://community.icann.org/display/WHO/RDS-WHOIS2+Review>, on which it will post: (a) action items, decisions reached, correspondence, meeting agendas, background materials provided by ICANN, members of the review team, or any third party; (ii) audio recordings and/or streaming video; (b) the affirmations and/or disclosures of review team members under the review team's conflict of interest policy; (c) input, whether from the general public, from ICANN stakeholders, from ICANN organization, the ICANN Board, Supporting Organizations and Advisory Committees, etc. Absent overriding privacy or confidentiality concerns, all such materials should be made publicly available on the review team website within 48 business hours of receipt.

Email communications among members of the review team shall be [publicly archived](#) automatically via the review email list, rds-whois2-rt@icann.org. Email communication between team members regarding review team work should be exchanged on this list. In exceptional circumstances, such as when required due to Non-Disclosure Agreement or Confidential Disclosure Agreement provisions, non-public email exchanges may take place between review team members and ICANN organization. When

possible, a non-confidential summary of such discussions will be posted to the public review email list.

Reporting:

Review team members are expected to perform their reporting obligations, and provide details in terms of content and timelines. Reporting should start when a review team is launched and should continue until its conclusion. The review team should include in this section (a) the information to be reported, (b) the report format to be used, and (c) report intervals, to assure accountability and transparency of the RT vis-a-vis the community. In addition, reference to the quarterly Fact Sheets, assembled by ICANN organization, should be made.

Review team members are, as a general matter, encouraged to report back to their constituencies and others with respect to the work of the review team, unless the information involves confidential information.

While the review team will strive to conduct its business on the record to the maximum extent possible, members must be able to have frank and honest exchanges among themselves, and the review team must be able to have frank and honest exchanges with stakeholders and stakeholder groups. Moreover, individual members and the review team as a whole must operate in an environment that supports open and candid exchanges, and that welcomes re-evaluation and repositioning in the face of arguments made by others.

Members of the review team are volunteers, and each will assume a fair share of the work of the team.

Members of the review team shall execute the investigation according to the scope and work plan, based on best practices for fact-based research, analysis and drawing conclusions.

The review team will engage in dialog with the dedicated ICANN Board Caucus Group; for example, when the review team reaches a milestone and could benefit from feedback on agreed scope or any recommendations under development to address that scope.

Subgroups:

The review team can create as many subgroups as it deems necessary to complete its tasks through its standard decision process, as follows:

- ⦿ Subgroups will be composed of review team members and will have a clear scope, timeline, deliverables and leadership.
- ⦿ Subgroups when formed will appoint a rapporteur who will report the progress of the subgroup back to the plenary on a defined timeline.
- ⦿ Subgroups will operate per review team rules and all subgroup requests will require review team approval.
- ⦿ Subgroups can arrange face-to-face meetings in conjunction with review team face-to-face meetings.
- ⦿ All documents, reports and recommendations prepared by a subgroup will require review team approval before being considered a product of the review team.
- ⦿ The review team may terminate any subgroup at any time.

Travel Support:

Members of the review team who request funding from ICANN to attend face-to-face meetings will receive it according to ICANN's standard travel policies and subject to the review team's budget. When a review team face-to-face meeting is held in conjunction with an ICANN meeting, and when outreach sessions have been scheduled, review team members, who are not funded otherwise, may receive

funding for the duration of the ICANN meeting.

Outreach:

The review team will conduct outreach to the ICANN community and beyond to support its mandate and in keeping with the global reach of ICANN's mission. As such the review team will ensure the public has access to, and can provide input on, the team's work. Interested community members will have an opportunity to interact with the review team. The review team will present its work and hear input from communities (subject to budget requirements).

Observers:

Observers may stay updated on the review team's work in several ways:

Mailing-Lists

Observers may subscribe to the observers mailing-list rds-whois2-observers@icann.org by sending a request to mssi-secretariat@icann.org. Calendar invites to RDS-WHOIS2 meetings as well as agendas are forwarded to this mailing-list.

In addition, observers can follow RDS-WHOIS2 review team exchanges by subscribing to the RDS-WHOIS2 review team mailing-list with read-only rights only.

Attend a meeting virtually

All meetings, whether in person or online, will have a dedicated Adobe Connect room for observers to participate: <https://participate.icann.org/rdsreview-observers>.

Attend a meeting in person

When review team members gather for public face-to-face meetings, Observers may attend to share their input and questions with the review team, as appropriate. The calendar of scheduled calls and meetings is published on the wiki: <https://community.icann.org/display/WHO/RDS-WHOIS2+Review>.

Email input to the review team

Observers may send an email to the review team to share input on their work. Remarks and/or questions can be sent to the following address: input-to-rds-whois2-rt@icann.org.

The RDS-WHOIS2-RT observers list is available here.

Independent Experts:

As per the Bylaws (Article 4, Section IV(a)(iv), the review team may engage independent experts "to render advice as requested by the review team. ICANN shall pay the reasonable fees and expenses of such experts for each review contemplated by [Section 4.6 of the Bylaws] to the extent such fees and costs are consistent with the budget assigned for such review."

For the purpose of this review, independent experts are third parties that may be contractually engaged to support the review team's work. Should the need for independent experts arise, the review team will consider the scope of work required, expected deliverables, necessary skills and expertise, and the budget implications associated with the project. To initiate a request for an independent expert, the review team will create and formally approve a statement of work which includes:

- ⦿ A clear, specific project title and concise description of the work to be performed
- ⦿ A description of required skills, skill level, and any particular qualifications
- ⦿ Concrete timelines for deliverables, including milestones and measurable outcomes
- ⦿ Any additional information or reference material as needed to detail requirements

The leadership will communicate the review team's request to ICANN org for processing in accordance with ICANN's standard operating procedures. Selection of experts to support the work of the review team will follow ICANN's procurement processes. The statement of work will inform the procurement path to be followed (Request For Proposals [RFP] or no RFP). In either case, ICANN organization will search for an expert that meets the specified criteria, evaluate each candidate relative to the criteria, negotiate contract terms, and manage the contracting process. Should the review team wish to appoint designated Team Members to participate in the selection process of the third party, the designated Team Members will be expected to sign the Non-Disclosure Agreement.

Considering advice from independent experts

The review team shall give appropriate consideration to any work submitted by an independent expert. While the review team is at liberty to adopt or reject any input or advice provided by an independent expert, it must include a dedicated section in its draft and final reports that details how the independent examiner's work was taken into consideration by the review team.

In case the independent examiner provides concrete advice, and the review team rejects that advice, a rationale shall be provided.

Any work that the independent expert submits to the review team shall be included in full as an annex to the review team's draft and final reports.

Closure & Review Team Self-Assessment:

The review team will be dissolved upon the delivery of its final report to the Board, unless assigned additional tasks or follow-up by the ICANN Board are being requested.

Following its dissolution, review team members shall participate in a self-assessment, facilitated by supporting members of ICANN organization, to provide input, best practices, and suggestions for improvements for future review teams.

APPENDIX 1

A [Limited Scope Proposal](#) was developed in November 2016, at the request of SO/AC leaders, to reflect discussions about how to conduct the RDS-WHOIS2 Review more effectively, while minimizing the impact of the review on the community. The following text from [“RDS Review - Guidance for Determining Scope of Review”](#) summarizes the limited scope proposal and feedback on that proposal received from SO/AC leaders, highlighting key points that the review team should consider when determining the scope of this Review:

The proposed limited scope suggests that

- *The scope be limited to “post mortem” of implementation results of the previous WHOIS review recommendations*
- *ICANN Org report on implementation of WHOIS review recommendations:*
 - *How well were the identified issues addressed?*
 - *How well were the recommendations implemented?*
- *Review scope exclude issues already covered by RDS PDP effort*

The [GNSO feedback](#) indicates their support for excluding issues already covered by the RDS PDP efforts, to avoid duplication of work, and the proposed limited scope. Additionally, GNSO suggests the scope to include and assess:

- *Whether RDS efforts meet the “legitimate needs of law enforcement, promoting consumer trust and safeguarding registrant data.”*
- *How RDS current & future recommendations might be improved and better coordinated*
- *Privacy and Proxy Services Accreditation Issues and Implementation*
- *The progress of WHOIS cross-departmental validation implementation*
- *Compliance enforcement actions, structure, and processes*
- *Availability of transparent enforcement of contractual obligations data*
- *The value and timing of RDAP as a replacement protocol*
- *The effectiveness of any other steps ICANN Org has taken to implement WHOIS Recommendations*

The [GAC feedback](#) noted that, while many of its members have no objection to the proposal to limit the scope of the review, a few members expressed concerns that this would not be appropriate given that a) the current WHOIS may still be in use for a while and its improvement should not be neglected; and b) the scope of a review should best be determined by the Review Team itself. At the relevant plenary, GAC members expressed general support for the GNSO feedback, noting that overlap with the RDS PDP might not be entirely avoided.

The ALAC and SSAC have both indicated support of the proposed limited scope, and exclusion of issues covered by RDS PDP.

In summary, the majority of the SOs and ACs agree that the RDS-WHOIS2 Review scope should be determined in very close coordination with other ongoing community efforts to avoid duplication of work. Moreover, given the concerns regarding the community bandwidth, sheer amount of work associated with a full Review scope, and the length of time it takes to conduct a full Review (12-18 months) compared to the proposed limited scope (approximately six (6) months), the proposed limited scope may be the most feasible approach and best use of community resources.

APPENDIX 2 – SCOPE TABLE

The review team prioritized this review’s objectives using the table below. The “F2F Results” column indicates the priority assigned to each objective by review team, using a scale of 1 to 5 (highest).

Reference	Original Issue	Objective to be inserted into ToR (draft text for RT consideration)	F2F Results
Bylaws 4.6(e)(iv)	<i>(iv) The Directory Service Review Team shall assess the extent to which prior Directory Service Review recommendations have been implemented and the extent to which implementation of such recommendations has resulted in the intended effect.</i>	Consistent with ICANN’s mission and Bylaws, Section 4.6(e)(iv), the review team will (a) evaluate the extent to which ICANN Org has implemented each prior Directory Service Review recommendation (noting differences if any between recommended and implemented steps), (b) assess to the degree practical the extent to which implementation of each recommendation was effective in addressing the issue identified by the prior RT or generated additional information useful to management and evolution of WHOIS (RDS), and (c) determine if any specific measurable steps should be recommended to enhance results achieved through the prior RT’s recommendations. This includes developing a framework to measure and assess the effectiveness of recommendations, and applying that approach to all areas of WHOIS originally assessed by the prior RT (as applicable).	4-5
Bylaws 4.6(e)(ii)	<i>(ii) The Board shall cause a periodic review to assess the effectiveness of the then current gTLD registry directory service...</i>	Consistent with ICANN’s mission and Bylaws, Section 4.6(e)(ii), the review team will assess the effectiveness of today’s WHOIS (the now current gTLD RDS, including cumulative changes made to the then-current RDS which was assessed by the prior RT) by (a) inventorying changes made to WHOIS policies and procedures since the prior RT completed its work, (b) using that inventory to identify significant new areas of today’s WHOIS (if any) which the team believes should be reviewed, and (c) determining if any specific measurable steps should be recommended to enhance effectiveness in those new areas.	3
Bylaws 4.6(e)(ii)	<i>(ii) ...and whether its implementation meets the legitimate needs of law enforcement</i>	Consistent with ICANN’s mission and Bylaws, Section 4.6(e)(ii), the review team will assess the extent to which the implementation of today’s WHOIS (the current gTLD RDS) meets legitimate needs of law enforcement for swiftly accessible, accurate and complete data by (a) establishing a working definition of “law enforcement” used in this review, (b) identifying an approach used to determine the extent to which these law enforcement needs	4-5

		are met by today's WHOIS policies and procedures, (c) identifying high-priority gaps (if any) in meeting those needs, and (d) recommending specific measureable steps (if any) the team believes are important to fill gaps. Note that determining which law enforcement requests are in fact valid will not be addressed by this review.	
Bylaws 4.6(e)(ii)	<i>(ii) ...and whether its implementation promotes consumer trust</i>	Consistent with ICANN's mission and Bylaws, Section 4.6(e)(ii), the review team will assess the extent to which the implementation of today's WHOIS (the current gTLD RDS) promotes consumer trust in gTLD domain names by (a) agreeing upon a working definition of "consumer" and "consumer trust" used in this review, (b) identifying the approach used to determine the extent to which consumer trust needs are met, (c) identifying high-priority gaps (if any) in meeting those needs, and (d) recommending specific measureable steps (if any) the team believes are important to fill gaps.	2
Bylaws 4.6(e)(ii)	<i>(ii) ...and whether its implementation safeguards registrant data</i>	Consistent with ICANN's mission and Bylaws, Section 4.6(e)(ii), the review team will assess the extent to which the implementation of today's WHOIS (the current gTLD RDS) safeguards registrant data by (a) identifying the lifecycle of registrant data, (b) determining if/how data is safeguarded in each phase of that lifecycle, (c) identifying high-priority gaps (if any) in safeguarding registrant data, and (d) recommending specific measureable steps (if any) the team believes are important to fill gaps.	2
Bylaws 4.6(e)(iii)	<i>(iii) The review team for the Directory Service Review will consider the Organisation for Economic Co-operation and Development ("OECD") Guidelines on the Protection of Privacy and Transborder Flows of Personal Data as defined by the OECD in 1980 and amended in 2013 and as may be</i>	The review team considered the OECD Guidelines on the Protection of Privacy and Transborder Flows of Personal Data in relation to WHOIS Policy as mandated by ICANN's Bylaws, Section 4.6.(e)(iii). The team agreed, by unanimous consensus, that current WHOIS policy does not consider the issues of privacy/data protection or transborder dataflows, and that it is within the domain of the ongoing PDP on Next-Generation gTLD Registration Directory Services to Replace WHOIS to determine to what extent a future RDS should factor in the OECD Guidelines or other privacy/data protection and transborder dataflow requirements set at national or multinational levels. Accordingly, the review team decided that further review of the OECD Guidelines would not be an effective use of the team's time and effort.	Agreed to drop as review objective but provide rationale in ToR

	<i>amended from time to time</i>		
GNSO Scope Msgs Page 3	<i>Assess WHOIS Policy Compliance enforcement actions, structure, and processes; Availability of transparent enforcement of contractual obligations data</i>	Consistent with ICANN's mission to ensure the stable and secure operation of the Internet's unique identifier systems by enforcing policies, procedures and principles associated with registry and registrar obligations to maintain and provide access to accurate and up-to-date information about registered names and name servers, the review team will (to the extent that this is not already covered in prior RT recommendations), (a) assess the effectiveness and transparency of ICANN enforcement of existing policy relating to WHOIS (RDS) through Contractual Compliance actions, structure and processes, including consistency of enforcement actions and availability of related data, (b) identifying high-priority procedural or data gaps (if any), and (c) recommending specific measurable steps (if any) the team believes are important to fill gaps.	3
GNSO Scope Msgs Page 3	<i>Assess the value and timing of RDAP as a replacement protocol</i>	The review team will not conduct a review of Registration Data Access Protocol (RDAP) at this time because policies have not yet been developed to enable assessment of the value and timing of RDAP as a replacement protocol for WHOIS.	Agreed to drop as review objective but provide rationale in ToR
GNSO Scope Msgs Page 3	<i>Assess current WHOIS protocol for current purposes</i>	The review team will not conduct a review of the WHOIS protocol at this time because activities are already underway to replace the WHOIS protocol.	Agreed to drop as review objective but provide rationale in ToR
GNSO Scope Msgs Page 1	<i>Assess progress made on supporting Internationalized Domain Names (IDNs)</i>		Merged into RT1 Rec Eval
	<i>Assess sections of ICANN's ByLaws relating to RDS</i>	The review team has considered ICANN's Bylaws, Section 4.6(a)(v): "Each review team may recommend that the applicable type of review should no longer be conducted or should be amended." Consistent with this section, the review team will (a) identify any portions of Section 4.6(e), Registration Directory Service Review, which the team believes should be changed, added or removed, and (b) include any recommended	Objective added after F2F

amendments to Section 4.6(e), along with rationale for those amendments, in its review report.

Appendix C: Workplan

Workplan is available at the following wiki page: <https://community.icann.org/x/dtjRAw>.

Key Milestones

Milestone	Estimated Delivery Date	Final Delivery Date
Appoint RDS-WHOIS2 Review Team		2 June 2017
Adopt and Publish Terms of Reference and Work Plan	2 February 2018	
Publish Draft Report for Public Comment	7 August 2018	
Send Final Report to ICANN Board	21 December 2018	

Appendix D: Fact Sheets

The Fact Sheet captures attendance of review team members, costs associated with professional services and travel to attend face-to-face meetings, and milestones. The Fact Sheet are updated and posted on a quarterly basis at the following wiki page: <https://community.icann.org/x/eNjRAw>.

Appendix E: Participation Summary

[INSERT TABLE]

The statements of interests of the Review Team members can be found at <https://community.icann.org/x/RopEB>.

The email archives can be found at <https://community.icann.org/x/clfDAw>.

Appendix F: Bibliography

Title (Month, Year Publication Date), link

[TO BE EXTRACTED FROM SUBGROUP OUTPUTS, ONCE COMPLETED]

ICANN.ORG

