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| Registration Directory Service ReviewRDS-WHOIS2 |
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| Draft Report |
| RDS-WHOIS2 Review Team |
| 4 July 2018 |
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# 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.

# Review Team Recommendations

Recommendations are summarized in this table. The full recommendation, with related

findings and rationale, may be found in the cited chapters.

[RECOMMENDATIONS TO BE COPIED HERE PRIOR TO PUBLIC COMMENT]

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| # | Recommendation | To | Priority Level | Consensus Reached |
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# 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](https://www.icann.org/resources/pages/governance/aoc-en) (AoC) (signed with the US Department of Commerce in 2009) , and was later moved to [ICANN Bylaws](https://www.icann.org/resources/pages/governance/bylaws-en) in 2016, as part of the IANA Functions Transition. This review effort in 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](https://www.icann.org/resources/files/final-report-2012-05-11-en).
* 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](https://community.icann.org/display/WHO/Proposal%2Bfor%2BLimited%2BScope). 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:
	1. Meets legitimate need of law enforcement for swiftly accessible, accurate and complete data;
	2. Promotes consumer trust; and
	3. 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](https://www.icann.org/en/system/files/correspondence/greenberg-et-al-to-chalaby-09feb18-en.pdf) on 9 February. Per [Board resolution 2017.02.03.10](https://www.icann.org/resources/board-material/resolutions-2017-02-03-en#1.f), 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:

|  |  |
| --- | --- |
| ReviewObjective | Assigned ToSubgroup |
| 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.

# Objective 1: Assessment of WHOIS1 Recommendations Implementation

## Introduction

[TO BE DRAFTED PRIOR TO POSTING FOR PUBLIC COMMENT]
[Section to contain over-arching findings and recommendations, including impact of GDPR]

## WHOIS1 Rec #1: Strategic Priority

### Topic

Subgroup 1 - WHOIS1 Rec 1 Strategic Priority 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](https://www.icann.org/en/system/files/files/final-report-11may12-en.pdf) assessed by this subgroup appears below:

|  |
| --- |
| WHOIS Recommendation #1: Strategic PriorityRecommendation 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 objectivesRecommendation 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?

### Summary of Relevant Research

To conducts its research, all members of this subgroup reviewed the following background materials, posted on the [subgroup's wiki page](https://community.icann.org/display/WHO/WHOIS1%2BRec%2B%25231%2B-%2BStrategic%2BPriority):

* + [WHOIS Review Team (WHOIS1) Final Report](https://www.icann.org/en/system/files/files/final-report-11may12-en.pdf) (2012) and [Action Plan](https://www.icann.org/en/system/files/files/implementation-action-08nov12-en.pdf)
	+ [WHOIS Review Team (WHOIS1) Implementation Reports](https://community.icann.org/display/WHO/WHOIS%2BReview%2BImplementation%2BHome), including
		- [Executive Summary of Implementation Report](https://community.icann.org/download/attachments/54691767/WHOIS%20Recs%201_16%2030Sept2016.pdf)
		- [Detailed implementation Report](https://community.icann.org/download/attachments/54691767/WHOIS%20Quarterly%20Summary%2031December2016.pdf)
	+ WHOIS1 Implementation Briefings on Recommendations 1, 2, 3, 6, 7, 9, 15, 16: [PPT](https://community.icann.org/download/attachments/63145823/WHOIS1%20Implementation%20briefings%201%2C%202%2C%203%2C%206%2C%207%2C%209%2C%2015%2C%2016.pptx?version=1&modificationDate=1511776488000&api=v2), [PDF](https://community.icann.org/download/attachments/69279139/WHOIS%20Briefing%20-%2003October2017%20-%20V2.0.pdf?version=1&modificationDate=1506780907000&api=v2)
	+ [Answers to RDS-WHOIS2 Questions on Implementation Briefings](https://community.icann.org/download/attachments/63145823/WHOIS1-Implementation%20Briefings_final.docx?version=1&modificationDate=1510566466000&api=v2)
	+ Documents cited in briefing on Recommendation 1 include
		- [ICANN Five Year Strategic Plan](https://www.icann.org/en/system/files/files/strategic-plan-2016-2020-10oct14-en.pdf)
		- [ICANN FY 2017 Operating Plan and Budget](https://www.icann.org/en/system/files/files/adopted-opplan-budget-fy17-25jun16-en.pdf)
		- ICANN FY 2018 Operating Plan and Budget
		- [ICANN FY 2019 Operating Plan and Budget](https://www.icann.org/public-comments/fy19-budget-2018-01-19-en)
		- [2013 Registrar Accreditation Agreement](https://www.icann.org/resources/pages/approved-with-specs-2013-09-17-en) (RAA), including [RAA WHOIS requirements for Registrants](https://www.icann.org/resources/pages/approved-with-specs-2013-09-17-en#whois)
		- [EWG on gTLD Registration Directory Services Final Report](https://www.icann.org/en/system/files/files/final-report-06jun14-en.pdf) (2014)
		- [WHOIS Information Portal and Consolidated WHOIS Lookup Tool](http://whois.icann.org/)
		- [Roadmap of WHOIS/RDS Activities](https://community.icann.org/download/attachments/63145823/Whois%20Activities%20Slides_Jun2017_final.pptx?version=1&modificationDate=1503321636000&api=v2) (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](https://community.icann.org/download/attachments/71604702/Responses%20to%20Strategic%20Priority%20Subgroup_Additional%20Questions.pdf?version=1&modificationDate=1523712022000&api=v2) 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](https://community.icann.org/download/attachments/71604697/FinalRDS-WHOISRT2Effectivenes.docx?version=1&modificationDate=1519138360000&api=v2) to measure and assess the effectiveness of recommendations.

### 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."

##### 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).

##### 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 recognises 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]](#footnote-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 Budget](https://www.icann.org/en/system/files/files/adopted-opplan-budget-fy16-25jun15-en.pdf)[[2]](#footnote-2), 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]](#footnote-3) ICANN furthermore referred to the contractual compliance reports, which provide an overview of the activities of the ICANN Compliance Team.[[4]](#footnote-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]](#footnote-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.

#### Creation of ICANN Board Committee

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

##### 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

##### 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]](#footnote-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]](#footnote-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 organisation, 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 organisational 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.

#### 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;"

##### 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?

##### 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]](#footnote-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.

#### 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.

#### 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.

#### Committee responsibilities: Monitoring Effectiveness

"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)."

##### 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?

##### Analysis

[TO BE COMPLETED]

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

#### 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."

##### 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.)

##### 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 organise staff management within the organisation. 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]](#footnote-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 organisation.

#### 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.

### Problem/Issue

The ICANN organisation 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.

### Recommendations

Recommendation 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.

Findings: While a number of steps were taken towards making WHOIS a strategic priority for the organisation, 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 organisation 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 Organisation.

The potential impact of not addressing the recommendation could consist in further situations of lack of preparedness of the organisation 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 signification additional time, improved implementation could help the organisation 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 Organisation.

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 organisation, 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

### Possible impact of GDPR and other applicable laws

[TO BE PROVIDED]

## WHOIS1 Rec #2: Single WHOIS Policy

### Topic

The specific [WHOIS1 Recommendation](https://www.icann.org/en/system/files/files/final-report-11may12-en.pdf) assessed by this subgroup appears below:

|  |
| --- |
| WHOIS Recommendation #2: Single WHOIS PolicyThe 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. |

### Summary of Relevant Research

### Analysis & Findings

### Problem/Issue

### Recommendations (if any)

Disclaimer: recommendations are not a requirement.

Recommendation:

Findings: [what are the findings that support the recommendation]

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: [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:

### Possible impact of GDPR and other applicable laws

[TO BE PROVIDED]

## WHOIS1 Rec #3: Outreach

### 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](https://www.icann.org/en/system/files/files/final-report-11may12-en.pdf) assessed by this subgroup appears below:

|  |
| --- |
| WHOIS Recommendation #3: OutreachICANN 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 we inconsistencies, errors and out of date information
	+ Identifying gaps in the documentation

The subgroup also reviewed the various outreach events and activities.

### Summary of Relevant Research

To conducts its research, all members of this subgroup reviewed the following background materials, posted on the [subgroup's wiki page](https://community.icann.org/display/WHO/WHOIS1%2BRec%2B%25233%253A%2BOutreach):

* [WHOIS Review Team (WHOIS1) Final Report](https://www.icann.org/en/system/files/files/final-report-11may12-en.pdf) (2012) and [Action Plan](https://www.icann.org/en/system/files/files/implementation-action-08nov12-en.pdf)
* [WHOIS Review Team (WHOIS1) Implementation Reports](https://community.icann.org/display/WHO/WHOIS%2BReview%2BImplementation%2BHome), including
	+ [Executive Summary of Implementation Report](https://community.icann.org/download/attachments/54691767/WHOIS%20Recs%201_16%2030Sept2016.pdf)
	+ [Detailed implementation Report](https://community.icann.org/download/attachments/54691767/WHOIS%20Quarterly%20Summary%2031December2016.pdf)
* WHOIS1 Implementation Briefings on Recommendations 1, 2, 3, 6, 7, 9, 15, 16: [PPT](https://community.icann.org/download/attachments/63145823/WHOIS1%20Implementation%20briefings%201%2C%202%2C%203%2C%206%2C%207%2C%209%2C%2015%2C%2016.pptx?version=1&modificationDate=1511776488000&api=v2), [PDF](https://community.icann.org/download/attachments/69279139/WHOIS%20Briefing%20-%2003October2017%20-%20V2.0.pdf?version=1&modificationDate=1506780907000&api=v2)
* [Answers to RDS-WHOIS2 Questions on Implementation Briefings](https://community.icann.org/download/attachments/63145823/WHOIS1-Implementation%20Briefings_final.docx?version=1&modificationDate=1510566466000&api=v2)
* Documents cited in briefing on Recommendation 3 include
	+ [WHOIS Information Portal and Consolidated WHOIS Lookup Tool](http://whois.icann.org/)
	+ [Registrant's Benefits and Responsibilities](https://www.icann.org/resources/pages/benefits-2013-09-16-en)
	+ [2013 RAA - see Section 9](https://www.icann.org/resources/pages/approved-with-specs-2013-09-17-en)
	+ [Information for Registrars and Registrants](https://www.icann.org/resources/pages/registrars-0d-2012-02-25-en)
	+ [Registrant Educational Series](https://www.icann.org/resources/pages/educational-2012-02-25-en)

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

* [Written implementation briefing on Rec 3](https://community.icann.org/download/attachments/71604708/Written%20Implementation%20Request%20for%20Recommendation%203.pdf?version=1&modificationDate=1522314097000&api=v2)
* 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](https://community.icann.org/download/attachments/71604697/FinalRDS-WHOISRT2Effectivenes.docx?version=1&modificationDate=1519138360000&api=v2) to measure and assess the effectiveness of recommendations,

### 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-menues 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.

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.

### 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.

### Recommendations

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. 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.

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.

Feasibility of Recommendation: The documentation and educational materials requested standard type 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. The need for and details of the outreach may vary depending on the ultimate GDPR implementation and cannot be detailed at this point.

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]

### Possible impact of GDPR and other applicable laws

[TO BE PROVIDED]

## WHOIS1 Rec #4: Compliance

### Topic

The specific [WHOIS1 Recommendation](https://www.icann.org/en/system/files/files/final-report-11may12-en.pdf) assessed by this subgroup appears below:

|  |
| --- |
| WHOIS Recommendation #4: ComplianceICANN 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. |

### Summary of Relevant Research

### Analysis & Findings

### Problem/Issue

### Recommendations (if any)

Disclaimer: recommendations are not a requirement.

Recommendation:

Findings: [what are the findings that support the recommendation]

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: [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:

### Possible impact of GDPR and other applicable laws

[TO BE PROVIDED]

## WHOIS1 Rec #5-9: Data Accuracy

### Topic

The specific [WHOIS1 Recommendation](https://www.icann.org/en/system/files/files/final-report-11may12-en.pdf) assessed by this subgroup appears below:

|  |
| --- |
| WHOIS Recommendations #5-9: Data AccuracyRecommendation 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. |

### Summary of Relevant Research

### Analysis & Findings

### Problem/Issue

### Recommendations (if any)

Disclaimer: recommendations are not a requirement.

Recommendation:

Findings: [what are the findings that support the recommendation]

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: [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:

### Possible impact of GDPR and other applicable laws

[TO BE PROVIDED]

## WHOIS1 Rec #10: Privacy/Proxy Services

### Topic

The specific [WHOIS1 Recommendation](https://www.icann.org/en/system/files/files/final-report-11may12-en.pdf) assessed by this subgroup appears below:

|  |
| --- |
| WHOIS Recommendation #10: Privacy/Proxy ServicesThe 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.
 |

### Summary of Relevant Research

### Analysis & Findings

### Problem/Issue

### Recommendations (if any)

Disclaimer: recommendations are not a requirement.

Recommendation:

Findings: [what are the findings that support the recommendation]

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: [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:

### Possible impact of GDPR and other applicable laws

[TO BE PROVIDED]

## WHOIS1 Rec #11: Common Interface

### Topic

The specific [WHOIS1 Recommendation](https://www.icann.org/en/system/files/files/final-report-11may12-en.pdf) assessed by this subgroup appears below:

|  |
| --- |
| WHOIS Recommendation #11: Common InterfaceIt 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. |

### Summary of Relevant Research

### Analysis & Findings

### Problem/Issue

### Recommendations (if any)

Disclaimer: recommendations are not a requirement.

Recommendation:

Findings: [what are the findings that support the recommendation]

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: [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:

### Possible impact of GDPR and other applicable laws

[TO BE PROVIDED]

## WHOIS1 Rec #12-14: Internationalized Domain Names

### 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](https://www.icann.org/en/system/files/files/final-report-11may12-en.pdf) assessed by this subgroup appears below:

|  |
| --- |
| WHOIS Recommendations #12-14: Internationalized Domain NamesRecommendation 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. |

### 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.

#### List of relevant materials:

The materials found relevant are enlisted on the subgroup page [https://community.icann.org/display/WHO/WHOIS1+Rec+%2312-14%3A+Internationalized+Domain+Names](https://community.icann.org/display/WHO/WHOIS1%2BRec%2B%2312-14%3A%2BInternationalized%2BDomain%2BNames)

Translation and Transliteration PDP’s Final Issue Report, March 2013

<https://gnso.icann.org/en/issues/gtlds/transliteration-contact-final-21mar13-en.pdf>

Translation and Transliteration PDP web page

<https://gnso.icann.org/en/group-activities/active/transliteration-contact>

Translation and Transliteration PDP Working Group Final Report, Jun 2015

[https://community.icann.org/download/attachments/53779599/Final%20Report%20Final%20(with%20links%20working).pdf](https://community.icann.org/download/attachments/53779599/Final%20Report%20Final%20%28with%20links%20working%29.pdf)

IRD Expert Working Group Final Report, September 2015

<http://whois.icann.org/sites/default/files/files/ird-expert-wg-final-23sep15-en.pdf>

Translation and Transliteration IRT wiki

[https://community.icann.org/display/gnsottcii/Translation+and+Transliteration+of+Contact+Information+IRT+Home](https://community.icann.org/display/gnsottcii/Translation%2Band%2BTransliteration%2Bof%2BContact%2BInformation%2BIRT%2BHome)

Translation and Transliteration Implementation Project Status

<https://www.icann.org/resources/pages/transliteration-contact-2016-06-27-en>

RDAP Webpage

<https://www.icann.org/rdap>

### Analysis & Findings

#### 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.

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.

#### The 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](https://www.icann.org/news/announcement-2015-03-09-en) – 9 Mar 2015 (<https://www.icann.org/news/announcement-2015-03-09-en>)

[Report of Public Comments](https://www.icann.org/en/system/files/files/report-comments-ird-study-18may15-en.pdf) – 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](http://whois.icann.org/sites/default/files/files/ird-expert-wg-final-23sep15-en.pdf) - 23 September 2015 (<http://whois.icann.org/sites/default/files/files/ird-expert-wg-final-23sep15-en.pdf>)

Board [Approval](https://www.icann.org/resources/board-material/resolutions-2016-03-10-en#1.e) 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 detailed classification provided by IRD WG is available in Appendix A.

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://gnso.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.

#### The 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>) 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.

The recommendations of the Translation and Transliteration of Contact Information Policy Development Process are available in the Appendix B.

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.

#### The 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 methodology is available in the Appendix C.

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. The subgroup notices that

#### Overall conclusion

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.

### 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.

### Recommendations

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:

### Possible impact of GDPR and other applicable laws

[TO BE PROVIDED]

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

### Topic

The specific [WHOIS1 Recommendation](https://www.icann.org/en/system/files/files/final-report-11may12-en.pdf) assessed by this subgroup appears below:

|  |
| --- |
| WHOIS Recommendations #15-16: Plan & Annual ReportsRecommendation 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. |

### Summary of Relevant Research

### Analysis & Findings

### Problem/Issue

### Recommendations (if any)

Disclaimer: recommendations are not a requirement.

Recommendation:

Findings: [what are the findings that support the recommendation]

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: [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:

### Possible impact of GDPR and other applicable laws

[TO BE PROVIDED]

# Objective 2: Anything New

## Topic

## Summary of Relevant Research

## Analysis and Findings

## Problem/Issue

## Recommendations (if any)

Disclaimer: recommendations are not a requirement.

Recommendation:

Findings: [what are the findings that support the recommendation]

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: [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:

## Possible impact of GDPR and other applicable laws

# Objective 3: Law Enforcement Needs

## Topic

## Summary of Relevant Research

## Analysis and Findings

## Problem/Issue

## Recommendations (if any)

Disclaimer: recommendations are not a requirement.

Recommendation:

Findings: [what are the findings that support the recommendation]

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: [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:

## Possible impact of GDPR and other applicable laws

[TO BE PROVIDED]

# Objective 4: Consumer Trust

## Topic

## Summary of Relevant Research

## Analysis and Findings

## Problem/Issue

## Recommendations (if any)

Disclaimer: recommendations are not a requirement.

Recommendation:

Findings: [what are the findings that support the recommendation]

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: [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:

## Possible impact of GDPR and other applicable laws

[TO BE PROVIDED]

# Objective 5: Safeguarding Registrant Data

## 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).

## Summary of Relevant Research

To conducts its research, all members of this subgroup reviewed the following inventoried WHOIS policy and procedure materials, posted on the [subgroup's wiki page](https://community.icann.org/pages/viewpage.action?pageId=71604740):

* [SAC051, Report on Domain Name WHOIS Terminology](https://www.icann.org/en/system/files/files/sac-051-en.pdf) (2011)
* [SAC054, Report on Domain Name Registration Data Model](https://www.icann.org/en/system/files/files/sac-054-en.pdf) (June 2012)
* RDS/WHOIS Contractual Requirements - Sections pertaining to Data Safeguards:
* [2013 Registrar Accreditation Agreement](https://www.icann.org/resources/pages/approved-with-specs-2013-09-17-en) (RAA),
[Section 3.6](https://www.icann.org/resources/pages/approved-with-specs-2013-09-17-en#data-retention) - Data Retention Specification
* [2014 New gTLD Registry Agreement](http://newgtlds.icann.org/sites/default/files/agreements/agreement-approved-09jan14-en.htm),
Specification 2 - [Data Escrow Requirements](https://newgtlds.icann.org/sites/default/files/agreements/agreement-approved-31jul17-en.html#_DV_M206)

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.

## 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:

1. 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 incompliance with appropriate regulations.
2. 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.
3. 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.

## 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.

## 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 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.

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.

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

Implementation: [To Be Completed]

Priority: [To Be Completed]

Level of Consensus: [To Be Completed]

## 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](https://www.icann.org/resources/board-material/resolutions-2017-02-03-en#1.f) |
| ToR Due Date | Due date for ToR, as per Board Resolution: 15 May, 2017Revised due date: Late November/Early December 2017Submission date: February 2017 |
| Announcement of Review Team:  | [2 June, 2017](https://www.icann.org/news/announcement-2017-06-02-en) |
| Name(s) of RT Leadership: | Alan Greenberg, ChairCathrin Bauer-Bulst, Vice ChairSusan Kawaguchi, Vice Chair |
| Name(s) of Board Appointed Member(s): | Chris Disspain |
| Review Workspace URL: | [https://community.icann.org/display/WHO/RDS-WHOIS2+Review](https://community.icann.org/display/WHO/RDS-WHOIS2%2BReview) |
| Review Mailing List: | <http://mm.icann.org/pipermail/rds-whois2-rt/>  |
| Important Background Links:  | Bylaws Section: [Registration Directory Service Review](https://www.icann.org/resources/pages/governance/bylaws-en/#article4)RT Selection: [https://community.icann.org/display/WHO/Selection+Process](https://community.icann.org/display/WHO/Selection%2BProcess)RT Announcement: <https://www.icann.org/news/announcement-2017-06-02-en>  |
| Section II: Mission, Purpose, and Deliverables |
| Mission & Scope: |
| BackgroundAt 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.”Mission and ScopeThis review team is tasked, as per the [Bylaws](https://www.icann.org/resources/pages/governance/bylaws-en#article4.6), Section 4.6(e): “(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.(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").(iii) The review team for the Directory Service Review ("Directory Service Review Team") 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](https://www.oecd.org/sti/ieconomy/2013-oecd-privacy-guidelines.pdf) 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](http://www.icann.org/en/about/aoc-review/whois/final-report-11may12-en.pdf) 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. ObjectivesThe 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](https://www.icann.org/resources/pages/governance/bylaws-en), 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](https://www.icann.org/resources/pages/governance/bylaws-en), 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](https://www.icann.org/resources/pages/governance/bylaws-en), 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 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.
* Consistent with ICANN’s mission and [Bylaws](https://www.icann.org/resources/pages/governance/bylaws-en), 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](https://www.icann.org/resources/pages/governance/bylaws-en), 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.DefinitionsAn 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](https://whois.icann.org/en/glossary-whois-terms):* [Domain](https://whois.icann.org/en/glossary-whois-terms#field-section-20): A set of host names consisting of a single domain name and all the domain names below it.
* [Domain Name](https://whois.icann.org/en/glossary-whois-terms#field-section-21): As part of the Domain Name System, domain names identify IP resources, such as an Internet website.
* [GNSO - Generic Names Supporting Organization](https://whois.icann.org/en/glossary-whois-terms#field-section-24): 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](https://whois.icann.org/en/glossary-whois-terms#field-section-25): 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](https://whois.icann.org/en/glossary-whois-terms#field-section-29)— 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](https://whois.icann.org/en/glossary-whois-terms#field-section-38): 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](https://whois.icann.org/en/glossary-whois-terms#field-section-39): 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.
* [WHOIS](https://whois.icann.org/en/glossary-whois-terms#field-section-46): 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](https://www.icann.org/rdap) (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](https://www.icann.org/en/system/files/files/sac-051-en.pdf), Report on Domain Name WHOIS Terminology and Structure:* 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.
* 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.
* 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.
* Registration Data Directory Service (RDDS) – Registration Data Directory Services refers to the collective of WHOIS and Web based WHOIS services. [[2013 RAA](https://www.icann.org/resources/pages/approved-with-specs-2013-09-17-en#whois)]

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: Specific, Measurable, Achievable, Realistic, and Time-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 ICANNs 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]](#footnote-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 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:1. 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.
2. After the review team has discussed the review team leadership’s estimation of designation, the leadership should reevaluate and publish an updated evaluation.
3. Steps (i) and (ii) should continue until the leadership makes an evaluation that is accepted by the review team.
4. 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 where 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:1. Send email to the leadership, copying the review team explaining why the decision is believed to be in error.
2. 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](https://community.icann.org/display/WHO/RDS-WHOIS2%2BReview), 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](https://mm.icann.org/mailman/listinfo/rds-whois2-rt) 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-ListsObservers 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 virtuallyAll 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 personWhen 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](https://community.icann.org/display/WHO/RDS-WHOIS2%2BReview).Email input to the review teamObservers 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](https://community.icann.org/display/WHO/List%2Bof%2BObservers). |
| 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 measureable 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 expertsThe 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](https://community.icann.org/download/attachments/64948923/Proposal%20for%20a%20Limited%20Scope%20of%20the%20RDS%20-%20v4-4-11-16.pdf?version=1&modificationDate=1512720582808&api=v2) 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](https://community.icann.org/download/attachments/64948923/RDS%20Review%20Scope%20Guidance_17Feb2017link.pdf?version=1&modificationDate=1512721028781&api=v2)” 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](https://gnso.icann.org/mailing-lists/archives/council/pdfTcnqRblET6.pdf) 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](https://community.icann.org/pages/viewpage.action?pageId=63145764&preview=/63145764/63156249/GAC%20RDS%20Limited%20Scope%20Response.pdf) 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 |
| Bylaws4.6(e)(iv) |  (iv) The Directory Service Review Team shall assess the extent to which prior [Directory Service Review recommendations](http://www.icann.org/en/about/aoc-review/whois/final-report-11may12-en.pdf) have been implemented and the extent to which implementation of such recommendations has resulted in the intended effect. | Consistent with ICANN’s mission and [Bylaws](https://www.icann.org/resources/pages/governance/bylaws-en), 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 |
| Bylaws4.6(e)(ii) |  (ii) The Board shall cause a periodic review to assess the effectiveness of the then current gTLD registry directory service… | Consistent with ICANN’s mission and [Bylaws](https://www.icann.org/resources/pages/governance/bylaws-en), 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 |
| Bylaws4.6(e)(ii) |  (ii) …and whether its implementation meets the legitimate needs of law enforcement | Consistent with ICANN’s mission and [Bylaws](https://www.icann.org/resources/pages/governance/bylaws-en), 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 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.  | 4-5 |
| Bylaws4.6(e)(ii) |  (ii) …and whether its implementation promotes consumer trust | Consistent with ICANN’s mission and [Bylaws](https://www.icann.org/resources/pages/governance/bylaws-en), 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 |
| Bylaws4.6(e)(ii) |  (ii) …and whether its implementation safeguards registrant data | Consistent with ICANN’s mission and [Bylaws](https://www.icann.org/resources/pages/governance/bylaws-en), 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 |
| Bylaws4.6(e)(iii) |  (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](https://www.oecd.org/sti/ieconomy/2013-oecd-privacy-guidelines.pdf) and as may be amended from time to time | 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 |
| GNSO ScopeMsgs Page 3 | Assess WHOIS Policy Compliance enforcement actions, structure, and processes; Availability of transparent enforcement of contractual obligations data | 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. | 3 |
| GNSO ScopeMsgs Page 3 | Assess the value and timing of RDAP as a replacement protocol |  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 ScopeMsgs Page 3 | Assess current WHOIS protocol for current purposes | 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 ScopeMsgs Page 1 | Assess progress made on supporting Internationalized Domain Names (IDNs) |  | Merged into RT1 Rec Eval |
|  | Assess sections of ICANN’s ByLaws relating to RDS | 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. | Objective added after F2F |

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/cIfDAw>.

Appendix F. WHOIS1 Rec #12-14: Internationalized Domain Names Subgroup

The IRD WG Classification

The IRD WG categorized the common registration data elements into twelve groups and proposed the following internationalization requirements for each category, which are supported by a consensus of its members.

The IRD classification and requirements were summarized in the final report Table 1 - Requirements for contact data
elements and Table 2 - Requirements for other data elements.







The recommendations of the Translation and Transliteration of Contact Information Policy Development Process

According to the Final Report on the Translation and Transliteration of Contact Information Policy Development Process (<https://gnso.icann.org/en/issues/gtlds/translation-transliteration-contact-final-12jun15-en.pdf>) the following recommendations were worked out:

The Working Group recommends that it is not desirable to make transformation of contact information mandatory. Any parties requiring transformation are free to do so on an ad hoc basis outside WHOIS or any replacement system, such as the Registration Data Access Protocol (RDAP). If not undertaken voluntarily by registrar/registry (see Recommendation #5), the burden of transformation lies with the requesting party.

Whilst noting that a WHOIS replacement system should be capable of receiving input in the form of non-ASCII script contact information, the Working Group recommends its data fields be stored and displayed in a way that allows for easy identification of what the different data entries represent and what language(s)/script(s) have been used by the registered name holder.

The Working Group recommends that the language(s) and script(s) supported for registrants to submit their contact information data may be chosen in accordance with gTLD provider business models.

The Working Group recommends that, regardless of the language(s)/script(s) used, it is assured that the data fields are consistent to standards in the Registrar Accreditation Agreement (RAA), relevant Consensus Policy, Additional WHOIS Information Policy (AWIP) and any other applicable policies. Entered contact information data are verified, in accordance with the aforementioned Policies and Agreements and the language/script used must be easily identifiable.

The Working Group recommends that if the transformation of contact information is performed, and if the WHOIS replacement system is capable of displaying more than one data set per registered name holder entry, these data should be presented as additional fields (in addition to the authoritative local script fields provided by the registrant) and that these fields be marked as transformed and their source(s) indicated.

The Working Group recommends that any WHOIS replacement system, for example RDAP, remains flexible so that contact information in new scripts/languages can be added and expand its linguistic/script capacity for receiving, storing and displaying contact information data.

The Working Group recommends that these recommendations are coordinated with other WHOIS modifications where necessary and are implemented and/or applied as soon as a WHOIS replacement system that can receive, store and display non-ASCII characters, becomes operational.

The ARS studying methodology

A subsample of 12,000 records was taken from an initial sample of approximately 200,000 WHOIS records. The 12,000 records were then evaluated using criteria based on requirements from the 2009 RAA, which acts as a baseline to assess the overall accuracy of WHOIS records in gTLDs. As noted above, Phase 2 reports focus on rates of syntax and operability accuracy by contact mode (email address, telephone number, and postal address) to the requirements of RAAs (2009 RAA or 2013 RAA). The results from the analyzed subsample are then used to estimate the results for the entire gTLD population or the particular subgroup of interest. These data are presented in this report at a 95 percent confidence interval with an estimated percentage plus or minus approximately two standard errors. Based on sampling error, there is a 95 percent chance that the true parameter is within the confidence interval.

Appendix G: Bibliography

Title (Month, Year Publication Date), link

1. <https://www.icann.org/en/system/files/files/proposed-opplan-2016-2020-fy19-19jan18-en.pdf>, p. 18 and following. [↑](#footnote-ref-1)
2. <https://www.icann.org/en/system/files/files/adopted-opplan-budget-fy16-25jun15-en.pdf>, p. 40 [↑](#footnote-ref-2)
3. https://www.icann.org/accountability-indicators. [↑](#footnote-ref-3)
4. Latest available report at time of writing: https://www.icann.org/en/system/files/files/compliance-update-mar18-en.pdf. [↑](#footnote-ref-4)
5. https://www.icann.org/resources/pages/approved-with-specs-2013-09-17-en#whois [↑](#footnote-ref-5)
6. https://www.icann.org/resources/board-material/minutes-2015-07-28-en#1.d. [↑](#footnote-ref-6)
7. https://www.icann.org/en/system/files/files/charter-rds-28jul15-en.pdf. [↑](#footnote-ref-7)
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9. https://www.icann.org/en/system/files/files/remuneration-practices-fy18-01jul17-en.pdf [↑](#footnote-ref-9)
10. Article IV, Section 4.6(a)(vii)(A). [↑](#footnote-ref-10)