

Final Issue Report on a Next-Generation gTLD Registration Directory Service (RDS) to replace WHOIS

STATUS OF THIS DOCUMENT

This is the Final Issue Report in response to the Board-initiated Policy Development Process (PDP) to define the **purpose of collecting, maintaining and providing access to generic Top-Level Domain (gTLD) registration data and consider safeguards for protecting that data, determining if and why a next-generation Registration Directory Service (RDS) is needed to replace WHOIS, and creating policies and coexistence and implementation guidance to meet those requirements.**

This Final Issue report reflects feedback received through the public comment forum on the [new Preliminary Issue Report](#), published in July 2015. That new Preliminary Issue Report replaced the [original Preliminary Issue Report](#), published in March 2013. In accordance with the PDP Rules, the new Preliminary Issue Report was published for public comment for at least thirty (30) days, followed by consideration of public comments and publication of this Final Issue Report.

SUMMARY

This Final Issue Report on a next-generation RDS to replace WHOIS is hereby submitted to the GNSO Council in response to a request received from the ICANN Board, pursuant to a Resolution during a meeting of the ICANN Board on 26 April, 2015.

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1. Executive Summary

1.1. Background

- Created in the 1980s, the collection and publication of domain name registration data began as a service by Internet operators to identify and contact individuals or entities responsible for the operation of a network resource on the Internet – then (and still today) referred to as WHOIS.
- ICANN’s requirements for domain name registration data collection, access and accuracy for gTLD registries have undergone some important changes, including registration data publication service specifications with the 2013 Registrar Accreditation Agreement (RAA). Yet, after nearly 15 years of GNSO task forces, working groups, workshops, surveys and studies, WHOIS policy and the underlying WHOIS protocol are still in need of comprehensive reforms to address the significant number of issues related to gTLD registration data.
- Comprehensive WHOIS policy reform remains the source of long-running discussion and debate related to issues such as purpose, accuracy, privacy, anonymity, cost, policing, intellectual property protection, security, etc.
- Following submission of the [WHOIS Policy Review Team’s Final Report](#), the ICANN Board passed a resolution on [8 November, 2012](#), launching an Expert Working Group on gTLD Registration Directory Services (EWG) to (1) help redefine the purpose of gTLD registration data and consider how to safeguard the data, and (2) propose a model for gTLD registration directory services to address accuracy, privacy, and access issues.
- Upon publication of the [EWG’s Final Report](#) in June, 2014, an informal group of Generic Names Supporting Organization (GNSO) Councilors and ICANN Board members collaborated to propose a [Process Framework](#) for structuring a GNSO Policy Development Process (PDP) to successfully address these challenging issues.
- On [26 May, 2015](#), the ICANN Board adopted that Process Framework and reaffirmed its 2012 request for a Board-initiated PDP to define the purpose of collecting, maintaining and providing access to gTLD registration data, and to consider

safeguards for protecting data, using the recommendations in the EWG's Final Report as an input to, and, if appropriate, as the foundation for a new gTLD policy.

- In accordance with the PDP Rules, a new Preliminary Issue Report was published for public comment on 13 July 2015. Following review of the public comments received, the Staff Manager has updated the Issue Report accordingly and included a summary of the comments received (see Annex D), which is now submitted as the Final Issue Report to the GNSO Council for its consideration.

1.2. Discussion of the Issue

- The Board requests explicitly that the PDP Working Group address the issue of the purpose of published gTLD registration data, as well as safeguards for that data, and related accuracy, privacy, and access concerns.
- The EWG's Final Report provides a foundation and frame of reference to facilitate GNSO evaluation of the many complex areas to be addressed by a completely new policy framework for a next-generation Registration Directory Service to replace the legacy WHOIS system for gTLD domain names.
- In its resolution, the Board notes that the complex nature of the EWG's recommendations, along with the contentious nature of WHOIS within the ICANN community over the last decade, and calls for a very structured approach to conducting a policy development process of this magnitude.
- To enable effective consideration of the many significant and interdependent policy areas that the GNSO must address, the Board approved a Process Framework, developed in collaboration by GNSO Councilors and Board members, to structure the PDP for success. This phased process includes:
 - Establishing gTLD registration data requirements to determine if and why a next-generation RDS is needed;
 - Designing policies that detail functions that must be provided by a next-generation RDS to support those requirements; and
 - Providing guidance for how a next-generation RDS should implement those policies, coexisting with and eventually replacing legacy WHOIS.

- The many inter-related policy areas that must be addressed by the PDP include:
 - Users/Purposes: Who should have access to gTLD registration data and why?
 - Gated Access: What steps should be taken to control data access for each user/purpose?
 - Data Accuracy: What steps should be taken to improve data accuracy?
 - Data Elements: What data should be collected, stored, and disclosed?
 - Privacy: What steps are needed to protect data and privacy?
 - Coexistence: What steps should be taken to enable next-generation RDS coexistence with and replacement of the legacy WHOIS system?
 - Compliance: What steps are needed to enforce these policies?
 - System Model: What system requirements must be satisfied by any next-generation RDS implementation?
 - Cost: What costs will be incurred and how must they be covered?
 - Benefits: What benefits will be achieved and how will they be measured?
 - Risks: What risks do stakeholders face and how will they be reconciled?

- Each of these policy areas and available inputs are discussed in further detail in Section 4 of this Final Issue Report, along with a summary of views expressed by GNSO Stakeholder Groups, Constituencies, and ICANN Advisory Committees, including the Governmental Advisory Committee (GAC), as well as others.

1.3. Staff Recommendation

- ICANN staff has confirmed that the proposed issue is within the scope of the GNSO's Policy Development Process (see section 5). The EWG's Final Report provides specific recommendations to the questions that are the focus of the PDP, including principles for a next-generation RDS to replace WHOIS and a proposed system model. As requested by the ICANN Board, the EWG Final Report and FAQs, Tutorials, and EWG Member Statements should be used as key inputs to the PDP, along with other available inputs identified throughout this Issue Report.

- A successful outcome of the PDP is important to resolve a multitude of concerns surrounding gTLD registration data. ICANN staff therefore recommends that the PDP

proceed by considering carefully the recommendations of the EWG and work to create a new policy framework for a next-generation RDS to replace WHOIS.

- ICANN staff further recommends that the PDP begin with and build upon the Process Framework to structure a PDP Working Group in a manner that is not only consistent with PDP Rules but facilitates substantive and timely progress on the complex set of inter-related questions that must be addressed by the PDP. Annex C of this report also contains a draft PDP WG charter which incorporates that Process Framework for consideration by the GNSO Council.
- The Preliminary Issue Report was published for public comment to allow for community input on information that might be missing from the Preliminary Issue Report, or necessary corrections or updates to information in the Preliminary Issue Report. Following review of the public comments received, the Staff Manager has updated the Issue Report accordingly and included a summary of the comments received (see Annex D), which is now submitted as the Final Issue Report to the GNSO Council for its consideration.

2. Objective

2.1. Submission

This report is submitted in accordance with Section 4 of the Policy Development Process, as described in [Annex A of the ICANN Bylaws](#).¹

2.2. Issue

In this context, and in compliance with ICANN Bylaw requirements:

a. The proposed issue raised for consideration:

Analysis of the purpose of collecting, maintaining and providing access to gTLD registration data and consider safeguards for protecting that data, determining if and why a next-generation Registration Directory Service (RDS) is needed to replace WHOIS, and creating policies and coexistence and implementation guidance to meet those requirements.²

b. The identity of the party submitting the issue:

ICANN Board.

c. How that party is affected by the issue:

The [Affirmation of Commitments \(AoC\)](#)^{3,4} between ICANN and the U.S. Department of Commerce commits ICANN to enforcing its existing policy relating to WHOIS (subject to applicable laws), which "requires that ICANN implement measures to maintain timely, unrestricted and public access to accurate and complete WHOIS information, including registrant, technical, billing, and administrative contact information." Therefore, collection, maintenance, and provision of gTLD registration data, as well as potential solutions to safeguard and improve the accuracy and accessibility of that data, is an issue that affects many (if not all) of ICANN's stakeholders and in particular GNSO Stakeholder Groups and Constituencies. Parties affected by this issue and potential impacts are discussed in Section 4.12 of this report.

¹ <https://www.icann.org/resources/pages/governance/bylaws-en/#AnnexA>

² This issue statement reflects the Board Resolution and the Process Framework adopted by that resolution, as detailed in Sections 3.5 and 3.7 of this report.

³ <https://www.icann.org/resources/pages/governance/aoc-en>

⁴ Note that an AoC-related discussion is now underway within the CCWG-Accountability group concerning which elements of the AoC should be incorporated in the ICANN Bylaws and how; see <https://community.icann.org/display/acctcrosscomm/CCWG+on+Enhancing+ICANN+Accountability>

d. Support for the issue to initiate the PDP:

On 8 November 2012, after consideration of the 2012 WHOIS Policy Review Team Final Report, the ICANN Board passed a resolution in favor of initiating this GNSO PDP:

<https://www.icann.org/resources/board-material/resolutions-2012-11-08-en>

On 26 April 2015, after consideration of the EWG's Final Report as well as the PDP Process Framework proposed by GNSO Councilors and ICANN board members, the ICANN Board reaffirmed its request for this Board-initiated GNSO PDP:

<https://www.icann.org/resources/board-material/resolutions-2015-04-26-en#1.f>

e. Staff Recommendations

- (i) Whether the issue is within the scope of ICANN's mission statement, and more specifically the role of the GNSO:

ICANN's mission statement includes the coordination of the allocation of certain types of unique identifiers, including domain names, and the coordination of policy development reasonably and appropriately related to these technical functions, which includes gTLD registration data-related activities.

- (ii) Whether the issue is broadly applicable to multiple situations or organizations:

As gTLD registration data affects all gTLD registrants, registrars and registries, as well as other parties using that data, the issue is broadly applicable to multiple situations or organizations. Any changes to the policy or the rules that may result from the PDP would also be broadly applicable to multiple situations or organizations.

- (iii) Whether the issue is likely to have lasting value or applicability, albeit with the need for occasional updates:

Changes to policy for collecting, maintaining, and providing access to gTLD registration data is expected to have lasting applicability as the PDP may produce a new policy framework to support the next generation of registration data directory services to replace WHOIS, or may lead to improvements to the WHOIS policy, to better serve the needs of the global Internet community.

(iv) Whether the issue will establish a guide or framework for future decision-making:

Changes to policy for collecting, maintaining, and providing access to gTLD registration data are expected to establish a framework for future decision-making in relation to this issue.

(v) Whether the issue implicates or affects an existing ICANN policy.

WHOIS has been an important policy issue for the GNSO and the wider ICANN community. Changes to policy for collecting, maintaining, and providing access to gTLD registration data is expected to impact existing WHOIS policies.

2.3. Scope

Based on the above, the launch of a dedicated policy development process limited to consideration of this issue has been confirmed by the General Counsel to be properly within the scope of the ICANN policy process and within the scope of the GNSO.

2.4. Report

In accordance with the GNSO Policy Development Process, the Staff Manager published the Preliminary Issue Report for public comment in order to allow for community input on additional information that might be missing from the Preliminary Issue Report, or the correction or updating of any information in the Preliminary Issue Report. Following review of the public comments received, the Staff Manager has updated the Issue Report accordingly and included a summary of the comments received (see Annex D), which is now submitted as the Final Issue Report to the GNSO Council for its consideration.

3. Background

3.1. Introduction

Created in the 1980s, WHOIS began as a service used by Internet operators to identify and contact individuals or entities responsible for the operation of a network resource on the Internet. The WHOIS service has since evolved into a tool used for many purposes, such as determining whether a domain name is available for registration, identifying the registrant of a domain name that has been associated with malicious activities, contacting domain name registrants on matters related to trademark protection, and verifying online merchants. As usage of WHOIS evolved, few changes were made to the protocol or the services that make use of that protocol. There are increasing community concerns that the current WHOIS service is deficient in a number of ways, ranging from data accuracy and reliability, to other technical areas, such as accessibility and readability of WHOIS contact information by users whose local languages cannot be represented in US-ASCII. The WHOIS program also raises data protection related concerns, such as whether the current policy adequately protects privacy interests and complies with evolving privacy laws. These deficiencies are noted in reports from ICANN's Security and Stability Advisory Committee (SSAC),⁵ in reports of other ICANN supporting organizations and advisory committees,⁶ and by external sources.

ICANN's requirements for domain name registration data collection, access and accuracy for gTLD registries have undergone some important changes, including updated Registration Data Publication Service Specifications with the 2013 RAA.⁷ Yet after nearly 15 years of GNSO task forces, working groups, workshops, surveys and studies, the policy and underlying WHOIS protocol is still in need of comprehensive reforms to address the significant number of issues related to gTLD registration data services. In addition, this topic is of great interest, inter alia, to law enforcement, privacy and human rights advocates, data protection authorities, trademark interest groups, and many others. Top issues and concerns within the WHOIS debate are varied, reflecting the diversity of the many ICANN stakeholders that collect, maintain, provide, or use WHOIS today. Any discussion of gTLD registration data typically includes topics such as purpose, accuracy, availability, privacy, anonymity, cost, policing, intellectual property protection, security, and malicious use and abuse. Each of these topics is important in its own right and

⁵ See, e.g., <https://www.icann.org/en/system/files/files/sac-055-en.pdf>

⁶ See, e.g., https://gacweb.icann.org/download/attachments/28278834/WHOIS_principles.pdf

⁷ <https://www.icann.org/resources/pages/approved-with-specs-2013-09-17-en#whois>

there are many different views amongst the various ICANN stakeholders on how each these topics and associated concerns should be addressed.

3.2. History of 'WHOIS' Policy Development

The WHOIS protocol and domain name registration data have both been a constant topic of ICANN policy discussion and ICANN's formal Policy Development Process (PDP) over the last 15 years or so. The most noteworthy of these policy efforts are described below.

3.2.1 WHOIS Task Force Final Report (2003)

The first WHOIS Task Force was created by the Domain Name Supporting Organization (DNSO – the predecessor of the GNSO) “[t]o consult with the community with regard to establishing whether a review of any questions related to ICANN's WHOIS policy is due and if so to recommend a mechanism for such a review.”

This Task Force conducted a survey to determine the key questions to be considered by the Task Force. The key questions identified were improving data accuracy and avoiding data abuse. These two questions were addressed in the [Task Force Final Report](#) published on 6 February 2003.⁸

In March 2003, the ICANN Board adopted two consensus policies recommended by the Task Force that became the [WHOIS Data Reminder Policy](#)⁹ and the [WHOIS Marketing Restriction Policy](#).¹⁰ These policies can be summarized as follows:

- With regard to the accuracy of WHOIS data:
 - At least annually, a registrar must present to the Registrant the current WHOIS information, and remind the registrant that provision of false WHOIS information can be grounds for cancellation of their domain name registration.
 - Registrants must review their WHOIS data, and make any corrections.
- With regard to restrictions on bulk access to WHOIS Data:

⁸ <https://archive.icann.org/en/gnso/whois-tf/report-19feb03.htm>

⁹ <https://www.icann.org/resources/pages/registrars/consensus-policies/wdrp-en>

¹⁰ <https://www.icann.org/resources/pages/registrars/consensus-policies/wmrp-en>

- Use of bulk access WHOIS data for marketing should not be permitted... that the obligations contained in the relevant provisions of the RAA be modified to eliminate the use of bulk access WHOIS data for marketing purposes.¹¹

3.2.2 WHOIS Task Force Final Report (2007)

This Task Force was created by the GNSO to combine the work of preparatory task forces¹² to:

1. Define the purpose of WHOIS in the context of ICANN's mission and core values, international and national privacy laws, and other specified factors; and
2. Define the purpose of the Registered Name Holder, technical, and administrative contacts, in the context of the purpose of WHOIS, and the purpose for which the data was collected.
3. Determine what data collected should be available for public access in the context of the purpose of WHOIS. Determine how to access data that is not available for public access.
4. Determine how to improve the process for notifying a registrar of inaccurate WHOIS data, and the process for investigating and correcting inaccurate data.
5. Determine how to resolve differences between a Registered Name Holder's, gTLD Registrar's, or gTLD Registry's obligation to abide by all applicable laws and governmental regulations that relate to the WHOIS service, as well as the obligation to abide by the terms of the agreements with ICANN that relate to the WHOIS service.

In its [Final Task Force Report on WHOIS Services](#),¹³ the Task Force made majority and minority recommendations. The majority recommendation, supported by the Registry, Registrar, and Non-Commercial Users Constituencies as well as the Nominating Committee appointee, proposed an Operational Point of Contact (OPoC) that would require registrants to use an OPoC in place of the current administrative and technical contact details in the published WHOIS. The OPoC proposal also included a mechanism for notifying and correcting inaccurate WHOIS data. It did not include any new mechanism that would alter the status quo with regard to data access – either through imposing restrictions or through recommending the collection or display of additional data.

¹¹ See RAA Section 3.3.6.5: <https://www.icann.org/resources/unthemed-pages/raa-2001-05-17-en#3.3.6.5>

¹² See 1.2. Genesis of the Task Force in <http://gns0.icann.org/en/issues/whois-privacy/Whois-tf2-preliminary.html>

¹³ <http://gns0.icann.org/en/issues/whois-privacy/whois-services-final-tf-report-12mar07.htm>

A minority proposal called for a procedure to accommodate the needs of certain individual, non-commercial registrants with regard to restricting public access to some of their contact data.¹⁴ Similarly, the Statement by the Commercial and Business Users Community that is included in the Task Force Report noted that a new technical protocol might be required.¹⁵

The final report of this Task Force provides an excellent source of information for learning the types of data collected and the purposes of data collection. However, the GNSO did *not* adopt the Task Force proposals. Instead, the GNSO recommended pursuing formal, targeted studies to generate empirical data to inform future policy discussions.¹⁶

3.2.3 Procedure for Handling Conflicts with National Laws (2003-2014)

This effort began in 2003, when [WHOIS Task Force 2](#),¹⁷ which was part of the three preparatory task forces of the amalgamating 2005-07 WHOIS Task Force,¹⁸ recommended developing a procedure that would allow gTLD registries and registrars to demonstrate when they are legally prevented by local laws from complying with ICANN contract terms regarding the display of personal data in WHOIS. In November 2005, the GNSO concluded a PDP recommending such a procedure. On 10 May 2006, the recommendation was approved by the ICANN Board, which directed development and publication of this procedure.

The procedure ([ICANN Procedure For Handling WHOIS Conflicts with Privacy Law](#))¹⁹ describes a methodology by which ICANN will respond to a situation where a registrar or registry indicates that it is legally prevented by local or national privacy laws or regulations from complying with the provisions of its ICANN contract regarding the collection, display and distribution of personal data via WHOIS. This process may be invoked by the contracted party upon receiving notification of an investigation, litigation, regulatory proceeding or other government or civil action that might affect its compliance with the provisions of the RAA or other contractual agreement with ICANN dealing with the collection, display or distribution of personally

¹⁴ <http://gns0.icann.org/en/issues/whois-privacy/whois-services-final-tf-report-12mar07.htm>

¹⁵ <http://gns0.icann.org/en/issues/whois-privacy/whois-services-final-tf-report-12mar07.htm>

¹⁶ See Staff Report from October 2007 <http://gns0.icann.org/en/drafts/icann-staff-overview-of-whois11oct07.pdf>

¹⁷ <http://gns0.icann.org/en/issues/whois-privacy/tor2.shtml>

¹⁸ See 1.2. Genesis of the Task Force in <http://gns0.icann.org/en/issues/whois-privacy/WHOIS-tf2-preliminary.html>

¹⁹ <https://www.icann.org/resources/pages/whois-privacy-conflicts-procedure-2008-01-17-en>

identifiable data via WHOIS.

A WHOIS Requirements and National Law Conflicts review process was subsequently initiated in 2014 to solicit community feedback about effectiveness in addressing issues concerning contractual obligations and applicable law and how the process could potentially be improved. The resulting report ([Review of the ICANN Procedure for Handling WHOIS Conflicts with Privacy Law](#))²⁰ examines the procedure and outlines registry operators' and registrars' options for requesting changes to their agreements with ICANN to ensure consistency with local or national data retention laws. This review found that, although no registrar or registry had formally invoked this procedure, there were instances where contracted parties had successfully negotiated changes to their contractual agreements to accommodate their local data privacy restrictions through other available channels, such as the [Registry Service Evaluation Process \(RSEP\)](#)²¹, or the 2013 RAA's [Data Retention Specification Waiver](#).²² In addition, ICANN posted a [discussion document](#)²³ clarifying what is meant by certain data elements described in the Data Retention Specification and describing potentially legitimate purposes for collection and retention of those data elements. An implementation advisory group (IAG) has been convened to determine how to improve the current procedure for handling WHOIS conflicts with privacy law, consistent with the consensus policy adopted by the GNSO.²⁴

3.2.4 WHOIS Studies (2012-2014)

Following the 2005-07 WHOIS Task Force, lengthy discussion and gathering of public comments, including statements and key questions posed by the Governmental Advisory Committee (see Section 3.4.1), took place to determine a way forward. The GNSO Council eventually decided to undertake further studies of WHOIS in order to inform policy discussions with information necessary to make future policy decisions; see also [Recommendation on Further Studies of WHOIS](#)²⁵ for a summary of GNSO Board discussion and vote on this issue.

Ultimately, the GNSO Council approved four WHOIS Studies that were conducted by third-party

²⁰ <https://www.icann.org/public-comments/whois-conflicts-procedure-2014-05-22-en>

²¹ <https://www.icann.org/resources/pages/rsep-2014-02-19-en>

²² <https://www.icann.org/resources/pages/approved-with-specs-2013-09-17-en#data-retention>

²³ <https://www.icann.org/en/system/files/files/draft-data-retention-spec-elements-21mar14-en.pdf>

²⁴ For more information on the status of this advisory group, see the wiki page <https://community.icann.org/display/WNLCI/WHOIS+and+national+law+conflicts+IAG+Home>

²⁵ <http://gnso.icann.org/en/issues/whois/gnso-whois-study-group-report-to-council-22may08.pdf>

researchers between 2012 and 2014, summarized as follows.

- [WHOIS Misuse Study](#).²⁶ This study examined the extent to which public WHOIS contact information for gTLD domain names is misused to send harmful communications such as spam, phishing or identity theft. The [Carnegie Mellon University Cylab](#) in Pittsburgh, PA, USA performed this study. Although hindered by low survey response rate, this study found a statistically-significant occurrence of misuse affecting email and postal addresses and phone numbers published in WHOIS for gTLD domain names. This study also found that WHOIS anti-harvesting techniques, applied at the registry and registrar levels, are statistically significant in reducing email address misuse. The [Final Study Report](#)²⁷ was published in March 2014 following public comment.
- [WHOIS Registrant Identification Study](#).²⁸ This study uses WHOIS to classify entities that register gTLD domain names, including natural persons, legal persons, and Privacy/Proxy service providers. Using associated Internet content, it then classifies entities using those domains and potentially commercial activities. [NORC at the University of Chicago](#) performed this study; key findings are summarized in Section 3.2.5 of this report. The [Final Study Report](#)²⁹ was published in June 2013 following public comment.
- [WHOIS Privacy and Proxy Services Abuse Study](#).³⁰ This study examines the extent to which gTLD domain names used to conduct illegal or harmful Internet activities are registered via Privacy or Proxy services to obscure the perpetrator's identity. The [National Physical Laboratory](#) in the United Kingdom performed this study. In summary, NPL found that Privacy or Proxy services are used more often than average for domains registered for harmful or illegal Internet activities (ranges from 29.5% to 54.8%). However, Privacy/Proxy usage rate for registrations intended for some legal and harmless activities examined by this study are also above average (e.g., banks 28.2%; adult websites 44.2%). The [Final Study Report](#)³¹ was published in March 2014 following public comment.

²⁶ <http://www.icann.org/en/announcements/announcement-28sep09-en.htm>

²⁷ <http://whois.icann.org/sites/default/files/files/misuse-study-final-13mar14-en.pdf>

²⁸ <https://www.icann.org/news/blog/norc-at-the-university-of-chicago-selected-to-conduct-a-gtld-whois-registrant-identification-study>

²⁹ <http://gns0.icann.org/en/issues/whois/registrant-identification-summary-23may13-en.pdf>

³⁰ <http://www.icann.org/en/announcements/announcement-2-18may10-en.htm>

³¹ <http://whois.icann.org/sites/default/files/files/pp-abuse-study-final-07mar14-en.pdf>

- [WHOIS Privacy and Proxy Relay/Reveal Survey](#).³² This survey assessed the feasibility of conducting an in-depth study into communication Relay and identity Reveal requests sent for gTLD domain names registered using Proxy and Privacy services. The [Interisle Consulting Group](#) in Boston, MA, USA performed this survey and posted [Final Survey Results](#)³³ in August 2012 following public comment. This survey identified several key study barriers, concluding that an in-depth study defined to overcome these barriers could provide some but not all of the desired data. The GNSO did not then pursue an in-depth study on Relay and Reveal.

3.2.5 WHOIS Registrant Identification Study (2013)

As noted above, NORC's [WHOIS Registrant Identification Study](#)³⁴ attempted to classify the types of entities that register domains, including natural persons, legal persons, and Privacy and Proxy service providers. Classification was based upon examination of WHOIS data for a representative sample of gTLD domain names, as well as web content hosted at those domain names. Key findings of this study include the following:

Nature of Registrants:

NORC analysis of WHOIS records retrieved from a random sample of 1,600 domains from the top five gTLDs found that:

- 39 percent (± 2.4 percent) appear to be registered by legal persons.
- 33 percent (± 2.3 percent) appear to be registered by natural persons.
- 20 percent (± 2.0 percent) were registered using a privacy or proxy service.

Percentage of domain name uses that are commercial versus non-commercial:

NORC's analysis of web content retrieved from this same sample of domains found that:

- When pay-per-click ads are included in the monetary activities that make up potentially commercial activity, 57 percent (± 2.4 percent) of all sampled domains were perceived to have potentially commercial activity.
- When pay-per-click ads are not included in the monetary activities that make up potentially commercial activity, approximately 45 percent (± 2.4 percent) of all sampled domains were perceived to have potentially commercial activity.

Relative percentage of Privacy/Proxy use:

³² <http://gns0.icann.org/issues/whois/whois-pp-relay-reveal-feasibility-survey-28mar11-en.pdf>

³³ <http://gns0.icann.org/issues/whois/whois-pp-survey-final-report-22aug12-en.pdf>

³⁴ <http://gns0.icann.org/en/issues/whois/registrant-identification-summary-23may13-en.pdf>

By comparing WHOIS records to a list of privacy/proxy service providers, NORC found that:

- 15.1 percent (\pm 2.9 percent) of domains apparently used by legal persons were registered using a privacy or proxy service.
- 22.9 percent (\pm 2.7 percent) of domains with potentially commercial activity were registered using a privacy or proxy service.

The study report includes a detailed statistical snapshot of additional information for each type of registrant studied and whether the domain name to be engaged in potentially commercial activity. These findings may prove useful to the PDP when considering the nature and extent of protections for personal information, and whether requiring enhanced verification or validation of information collected from natural person registrants is appropriate.

3.2.6 WHOIS Policy Review Team Final Report (2012)

The WHOIS Policy Review Team's scope, as established in the [Affirmation of Commitments](#)³⁵, was to review the extent to which ICANN's WHOIS policy and its implementation are: effective, meet the legitimate needs of law enforcement and promote consumer trust. The WHOIS Policy Review Team, which was comprised of community representatives, was formed in October 2010 and posted its [Final Report](#) on 11 May 2012.³⁶

In its report, the WHOIS Policy Review Team made 16 recommendations:

1. WHOIS should be a strategic priority for ICANN.
2. In one place, 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.
3. ICANN should ensure that WHOIS policy issues are accompanied by cross-community outreach.
4. ICANN should act to ensure that its compliance function is managed in accordance with best practice principles.

With regard to data accuracy (5-11):

5. ICANN should ensure that the requirements for accurate WHOIS data are widely and

³⁵ <https://www.icann.org/resources/pages/governance/aoc-en>

³⁶ <https://www.icann.org/en/system/files/files/final-report-11may12-en.pdf>

pro- actively communicated.

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.
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.
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.
9. ICANN should develop metrics to track the impact of the annual WHOIS Data Reminder Policy (WDRP) notices to registrants, or alternatively, an effective policy that achieves the objective of improving data quality in a measurable way.
10. ICANN should initiate processes to regulate and oversee Privacy and Proxy service providers.
11. Data access: Overhaul the Internic Service to provide enhanced usability for consumers, including the display of full registrant data for all gTLD domain names.

With regard to Internationalized Domain Names (IDNs) (12-16):

12. ICANN should determine appropriate internationalized domain name registration data requirements and evaluate available solutions
13. The final data model should be incorporated into registrar and registry agreements.
14. Metrics should be developed to maintain and measure the accuracy of the internationalized registration data.
15. ICANN should provide a detailed and comprehensive plan that outlines how to move forward in implementing these recommendations.
16. ICANN should provide at least annual written status reports on its progress.

The recommendations made in the WHOIS Review Team Report were supported broadly, inter alia, by ICANN's At Large Advisory Committee, the GNSO's Business (BC), as well as its Internet

Service Provider and Connectivity Providers Communities (ISPCP),³⁷ but received mixed reviews from other GNSO's stakeholder groups,³⁸ where the recommendations were strongly supported by some and opposed by others.³⁹ The Board subsequently adopted an Action Plan in part to respond to these mixed reviews. Refer to Section 3.5 for the Board resolution which addressed these WHOIS Review Team recommendations through a two-pronged approach consisting both of additional WHOIS implementation activities (see Section 3.3.4) and creation of a next-generation RDS (the focus of this Final Issue Report).

3.2.7 SAC055: WHOIS Blind Men and an Elephant Report (2012)

The impact of WHOIS on DNS security and integrity has long been considered by ICANN's Security and Stability Advisory Committee (SSAC); for example, see [SAC054, Report on Domain Name Registration Data Model](#).^{40,41} In 2012, at the request of the ICANN Board, the SSAC reviewed the 2012 WHOIS Policy Review Team recommendations. In [SAC055, WHOIS: Blind Men and an Elephant](#),⁴² the SSAC found that further work should be undertaken prior to implementation of the WHOIS Policy Review Team's recommendations, concluding:

1. It is critical that ICANN should develop a policy defining the purpose of domain name registration data;
2. ICANN should create a committee to develop a registration data policy that defines the purpose of domain name registration data; and
3. ICANN should defer other activity directed at finding a "solution" to "the WHOIS problem" until the registration data policy identified in (1) and (2) has been developed and accepted.

The questions posed in SAC055 regarding the purpose of registration data and needs of various constituencies were subsequently addressed by the EWG (see Section 3.6).

3.3. Current Policy Development and Implementation Efforts

³⁷ <https://www.icann.org/en/system/files/files/final-report-11may12-en.pdf>

³⁸ <https://gnso.icann.org/en/correspondence/robinson-to-icann-board-07nov12-en.pdf>

³⁹ See also <https://www.icann.org/en/system/files/files/final-report-11may12-en.pdf>

⁴⁰ <https://www.icann.org/en/system/files/files/sac-054-en.pdf>

⁴¹ See <https://www.icann.org/groups/ssac/documents-by-category> for all WHOIS-related SSAC reports

⁴² <https://www.icann.org/en/system/files/files/sac-055-en.pdf>

In addition to the past policy development efforts detailed above, the following GNSO policy development and implementation efforts now underway have impacted the provision of gTLD registration data and will continue to improve the legacy WHOIS system.

3.3.1 Registrar Accreditation Agreement (2013)

The Registrar Accreditation Agreement (RAA)⁴³ is a bilateral agreement between two parties: ICANN and each of the ICANN accredited registrars. ICANN and the registrars engaged in negotiations to reach an updated version of the RAA, published on 17 September 2013. This 2013 RAA⁴⁴ included changes to registrar WHOIS obligations pertaining to gTLD domain names⁴⁵, including:

- Verification of certain data fields (e.g., registrant phone number, email);
- Validation that certain data fields are at least not blank and are of the correct format for that field (e.g., the postal code in an Australian address is 4 digits); and
- Service Level Agreements for web-based and Port 43 WHOIS services.

Note that these changes are incremental in nature. While they are intended to enhance the accuracy and availability of gTLD registration data, all registration data continues to be accessible anonymously to anyone via the Port 43 WHOIS service.⁴⁶ In particular, these 2013 RAA changes do not consider the purpose of collecting, maintaining, or providing access to gTLD registration data, nor do they address how to deliver that data for only those purposes while applying protections to safeguard data. Implementation of the 2013 RAA is on-going. Note that registrars that offer new gTLD domain names must sign on to the 2013 RAA.

3.3.2 RAA WHOIS requirements for gTLD Domain Name Registrants (2013)

The registrant, as the party that supplies WHOIS contact data, plays a key role in ensuring its accuracy. The registrant is required to provide accurate WHOIS data, and to correct data when

⁴³ <https://www.icann.org/resources/pages/approved-with-specs-2013-09-17-en#whois>

⁴⁴ <https://www.icann.org/resources/pages/approved-with-specs-2013-09-17-en#whois>

⁴⁵ Domain names registered under ccTLDs and pseudo-TLDs do not fall under RAA WHOIS requirements. ccTLDs establish their own WHOIS requirements, as further described in the [EWG's ccTLD Survey](#).

⁴⁶ As required by the RAA, certain WHOIS data uses must be prohibited by stated terms and conditions; however, this alone does not prevent WHOIS data from being accessible for any purpose.

there is a change or when an inaccuracy is reported. The RAA includes a requirement that agreements between the registrar and registrant include the following provisions:

3.7.7.1 The Registered Name Holder shall provide to Registrar accurate and reliable contact details and promptly correct and update them during the term of the Registered Name registration, including: the full name, postal address, e-mail address, voice telephone number, and fax number if available of the Registered Name Holder; name of authorized person for contact purposes in the case of an Registered Name Holder that is an organization, association, or corporation; and the data elements listed in Subsections 3.3.1.2, 3.3.1.7 and 3.3.1.8.

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

The sum of these RAA contractual requirements, when put into practice, means that: once a WHOIS data inaccuracy is reported to a registrar, the registrar has a duty to investigate. If the data turns out to be inaccurate (and not corrected) the registrar must take further action to ensure that correction occurs, which could include suspension or deletion of the domain name.

3.3.3 WHOIS Accuracy Reporting System (ARS) (2014-2015)

Information regarding possible inaccuracies often comes from WHOIS Complaint Reports filed on-line.⁴⁷ ICANN regularly publishes data on these reports in Contractual Compliance reports.⁴⁸ For example, the March 2015 report shows that, out of 3143 complaints received by ICANN Compliance, 2279 were about WHOIS accuracy and 58 about WHOIS access.⁴⁹

In November 2012, as part of improvements to address WHOIS Review Team recommendations, ICANN initiated development of the WHOIS Accuracy Reporting System (ARS) – a new system now under development for proactively examining the accuracy of WHOIS records and reporting on the results. In December 2014, ICANN published a [Pilot Study Report](#)⁵⁰ that describes the proposed design and methodology for the ARS. A key function of the ARS will be to forward

⁴⁷ <https://www.icann.org/resources/pages/whois-2013-03-22-en>

⁴⁸ <https://features.icann.org/compliance>

⁴⁹ <https://features.icann.org/compliance/dashboard/0315/report>

⁵⁰ <http://whois.icann.org/sites/default/files/files/ars-pilot-23dec14-en.pdf>

WHOIS records identified as potentially inaccurate to registrars for follow-up. ICANN is currently developing [Phase 1 of the ARS](#), which will focus on syntactic accuracy assessments, incorporating [improvements](#) based on community feedback and lessons learned from the Pilot Study.

3.3.4 Other Recent WHOIS Program Improvements (2012-)

In November 2012, in response to the WHOIS Review Team's recommendations, the Board adopted an [Action Plan](#)⁵¹ that details a comprehensive set of improvements to the legacy WHOIS system. As of June 2015, ICANN had successfully completed 9 out of the 16 recommended improvements; implementation is underway for the remainder.

In addition to the ARS described above, these WHOIS improvements include:

- [whois.icann.org](#): This new microsite provides a comprehensive information portal on how WHOIS works, and how to easily access supporting information, documents, and policies.
- **Consolidated WHOIS Lookup Tool**: This new functionality makes it possible for users to visit a single web-based WHOIS lookup tool ([whois.icann.org](#)), input any gTLD domain name, and retrieve the WHOIS contact information for that domain name's registrant.
- [WHOIS Primer](#):⁵² This primer is a simple, easy to read summary of the complex contract requirements, technical specifications, and consensus policies that define the WHOIS program, available in six languages, intended to help anyone understand how WHOIS works.

Further WHOIS improvements and milestones are detailed in the [Annual Report on WHOIS Improvements](#)⁵³ and the most recent [WHOIS Implementation Report](#).⁵⁴

3.3.5 Thick WHOIS PDP Final Report (2011-2013)

A GNSO PDP on [Thick WHOIS](#)⁵⁵ was initiated in May 2011 to consider a possible requirement of thick WHOIS for all incumbent gTLDs. Historically, gTLD registries and registrars satisfied their

⁵¹ <https://www.icann.org/en/system/files/files/implementation-action-08nov12-en.pdf>

⁵² <https://whois.icann.org/en/primer>

⁵³ <http://whois.icann.org/en/file/improvements-annual-report-12dec14-en>

⁵⁴ <http://whois.icann.org/en/file/implementation-report-whois-improvements-april-2015>

⁵⁵ <http://gnso.icann.org/en/group-activities/active/thick-whois>

WHOIS service obligations using different service models, known as "thin" and "thick" WHOIS. With thin registries (e.g., .com, .net), each registrar manages data associated with the registrant of domain names and provides that data via their own WHOIS service. However, thick registries (e.g., .info, .biz) maintain and provide registrant data via the registry's WHOIS service.

The Thick WHOIS Working Group published its [Final Report](#)⁵⁶ in October 2013, recommending provision of thick WHOIS services, with a consistent labeling and display as per the model outlined in Specification 3 of the 2013 RAA, for all gTLD registries, both existing and future. Implementation efforts associated with the PDP are now underway. These recommendations were [adopted by the Board](#) in February 2014, and are currently in the implementation phase. A GNSO implementation review team is providing guidance to Staff in developing the implementation details for this new consensus policy.⁵⁷ A legal memorandum has been provided to the IRT describing the legal framework associated with the transition from Thin WHOIS to Thick WHOIS.⁵⁸

3.3.6 Privacy & Proxy Services Accreditation PDP (2013-)

A GNSO PDP on [Privacy & Proxy Services Accreditation Issues \(PPSAI\)](#)⁵⁹ was initiated in October 2013 to provide the GNSO Council with policy recommendations regarding the issues relating to the accreditation of Privacy and Proxy Service providers identified but not addressed during the 2013 RAA negotiations and otherwise suited for a GNSO PDP. The PPSAI Working Group published its [Initial Report](#)⁶⁰ for public comment in May 2015 and currently expects to publish its Final Report in late-2015.

3.3.7 Translation and Transliteration of Contact Information PDP (2013-)

A GNSO PDP on [Translation/Transliteration of Contact Information](#)⁶¹ was initiated in November

⁵⁶ <http://gnso.icann.org/en/issues/whois/thick-final-21oct13-en.pdf>

⁵⁷ <https://community.icann.org/display/TWCPI/IRT>

⁵⁸

https://community.icann.org/download/attachments/52889541/ICANN%20Memorandum%20to%20the%20IRT%20-%20Thin%20to%20Thick%20WHOIS%20Transition_Final_2015-06-08.pdf?version=1&modificationDate=1434138098000&api=v2

⁵⁹ <https://community.icann.org/pages/viewpage.action?pageId=43983094>

⁶⁰ <http://gnso.icann.org/en/issues/raa/ppsai-initial-05may15-en.pdf>

⁶¹ <https://community.icann.org/display/tatcipdp/>

[Translation+and+Transliteration+of+Contact+Information+PDP+Home](#)

2013 to provide policy recommendations regarding the translation and transliteration of contact information, including whether it is desirable to translate contact information to a single common language or transliterate contact information to a single common script, and who should decide who should bear the burden of translating contact information. This Working Group published its [Initial Report](#)⁶² for public comment. The Final Report was submitted to the GNSO Council on 13 June 2015 and subsequently adopted by the GNSO Council at its meeting on 24 June 2015. The recommendations were then published for public comment prior to consideration by the ICANN Board (see <https://www.icann.org/public-comments/transliteration-contact-recommendations-2015-06-29-en>).

3.4. Additional Input Material relevant to the PDP

In addition to the GNSO policy development and implementation efforts summarized above, the following contributions have played significant roles in the evolution of policy related to WHOIS and gTLD registration data and should be considered as input to the PDP.

3.4.1 GAC Communiqués regarding WHOIS (2007-2015)

The Governmental Advisory Committee (GAC) considers and provides advice on the activities of ICANN as they relate to concerns of governments, multinational governmental organizations and treaty organizations, and distinct economies as recognized in international fora, including matters where there may be an interaction between ICANN's policies and various laws and international agreements and public policy objectives. The GAC provides advice and communicates issues and views to the ICANN Board through GAC Communiqués.⁶³

Over time, the GAC has issued several Communiqués related to WHOIS and the purpose and provision of gTLD registration data,⁶⁴ including:

- Singapore GAC Communiqué (11 February 2015)
- Los Angeles GAC Communiqué (16 October 2014)
- London GAC Communiqué (25 June 2014)
- Singapore GAC Communiqué (27 March 2014)
- Beijing GAC Communiqué (11 April 2013)

⁶² <http://gns0.icann.org/en/issues/gtlds/transliteration-contact-initial-15dec14-en.pdf>

⁶³ <https://gacweb.icann.org/display/gacweb/GAC+Operating+Principles>

⁶⁴ All GAC Communiqués regarding WHOIS are posted at <https://gacweb.icann.org/display/GACADV/WHOIS>

- GAC 44 Prague Communiqué (28 June 2012)
- GAC Principles regarding gTLD WHOIS Services (28 March 2007)

In particular, in its 2007 Communiqué [GAC Principles Regarding gTLD WHOIS Services](#),⁶⁵ the GAC asserted that *“WHOIS services should provide sufficient and accurate data about domain name registrations and registrants in a manner that: ... facilitates continuous, timely and world-wide access.”* The communiqué also stated that the purpose of WHOIS includes *“assisting law enforcement authorities in investigations, in enforcing national and international laws, including, for example, countering terrorism-related criminal offences and in supporting international cooperation procedures ... to help counter intellectual property infringement, misuse and theft in accordance with applicable national laws and international treaties, ...[and] in combating fraud, complying with relevant laws, and safeguarding the interests of the public.”*

This 2007 Communiqué also played a key role in launching WHOIS Studies and served as input to the EWG. This standing GAC advice remains directly relevant to the issue to be addressed by the PDP as also confirmed by the GAC as part of its response through the Quick Look Mechanism⁶⁶.

In a further follow up to this response⁶⁷, the GAC confirmed that ‘there are public policy implications for this issue’ and also highlighted November 2013 Buenos Aires Communiqué which recorded that ‘The GAC met with the EWG and exchanged views on the model proposed by the EWG for next generation directory services. GAC members highlighted a range of issues including the importance of applicable data privacy laws, the balance between public and restricted data elements and the accreditation process to allow access to restricted data for legitimate purposes. The GAC welcomed the opportunity for continuing engagement with the EWG.”

3.4.2 Article 29 Data Protection Working Party Letters (2003-2014)

The Article 29 Data Protection Working Party, an Independent EU Advisory Body on Data Protection and Privacy, has submitted many letters to ICANN which may be relevant to the issue to be addressed by the PDP, including:

⁶⁵ <http://whois.icann.org/en/link/gac-principles-regarding-gtld-whois-services>

⁶⁶ <http://gnso.icann.org/en/correspondence/dale-to-cole-20may15-en.pdf>

⁶⁷ <http://gnso.icann.org/en/correspondence/dale-to-cole-09jul15-en.pdf>

- Statement on the data protection impact of the revision of the ICANN RAA (2013-2014)⁶⁸
- Comments on the data protection impact of the revision of the ICANN RAA concerning accuracy and data retention of WHOIS (2012)⁶⁹
- ICANN Procedure for Handling WHOIS Conflicts with Privacy Law (2007)⁷⁰
- ICANN's WHOIS Database Policy (2006)⁷¹

These and other communications date back to 2000, with the IWGDTP's Common Position on Privacy and Data Protection, referenced and accepted by the Article 29 Working Party. For example, in its [2/2003 Opinion on the application of the data protection principles to the WHOIS directories](#),⁷² the Article 29 Working Party stated that "*the WHOIS directories raise several issues from the data protection perspective*" and that "*from the data protection viewpoint it is essential to determine in very clear terms what is the purpose of the WHOIS and which purpose(s) can be considered as legitimate and compatible to the original purpose.*" Concerns about the purpose of the collection, use, disclosure, and retention of registrant data expressed in this on-going correspondence between the Article 29 Working Party and ICANN are thus relevant to the PDP.

⁶⁸ <https://www.icann.org/en/system/files/correspondence/namazi-to-kohnstamm-25mar14-en.pdf>
<https://www.icann.org/en/system/files/correspondence/kohnstamm-to-jeffrey-08jan14-en.pdf>
<https://www.icann.org/en/system/files/correspondence/jeffrey-to-kohnstamm-20sep13-en.pdf>
<https://www.icann.org/en/system/files/correspondence/kohnstamm-to-crocker-chehade-06jun13-en.pdf>

⁶⁹ <https://www.icann.org/en/system/files/correspondence/kohnstamm-to-crocker-atallah-26sep12-en.pdf>
<https://www.icann.org/en/news/correspondence/chehade-to-kohnstamm-09oct12-en>

⁷⁰ <http://gnso.icann.org/en/correspondence/cerf-to-schaar-24oct07.pdf>
<https://www.icann.org/en/system/files/files/cerf-to-schaar-15mar07-en.pdf>
<https://www.icann.org/en/correspondence/schaar-to-cerf-12mar07.pdf>

⁷¹ <https://www.icann.org/en/system/files/files/schaar-to-cerf-22jun06-en.pdf>
<https://www.icann.org/en/correspondence/lawson-to-cerf-22jun06.pdf>
<https://www.icann.org/en/correspondence/parisse-to-icann-22jun06.pdf>
<https://www.icann.org/en/system/files/files/fingleton-to-cerf-20jun06-en.pdf>

⁷² http://ec.europa.eu/justice/policies/privacy/docs/wpdocs/2003/wp76_en.pdf

3.4.3 U.S. General Accounting Office (GAO) Study (2005)

In its 2005 report [Prevalence of False Contact Information for Registered Domain Names](#),⁷³ the U.S. Government Accountability Office (GAO) attempted to determine the prevalence of patently false or incomplete contact data in the WHOIS service for the .com, .org, and .net domains. The GAO estimated, at that time, that 5.14 percent of domain names were registered with patently false data – data that appeared obviously and intentionally false without verification against any reference data – in one or more of the required WHOIS contact information fields. GAO also found that 3.65 percent of sampled domain names were registered with incomplete data in one or more required WHOIS field, and 8.65 percent had at least one instance of patently false or incomplete data in those fields (margin of error of ±5 percent). This GAO study played a role in the GAC’s 2007 request for additional data upon which to base future WHOIS policy.

3.4.4 NORC Study of the Accuracy of WHOIS Registrant Contact Information (2010)

In 2010, a [WHOIS Accuracy Study](#)⁷⁴ commissioned by the ICANN Compliance Department and conducted by NORC found that only 23 percent of gTLD WHOIS records were ‘fully accurate.’ In contrast, 28.7 percent of records produced either are full or substantial failures. This study thus concluded that “there is no question that there are people who register domains without disclosing their full or real identity.” In this context, NORC found that key barriers to accuracy in gTLD domain name registration included:

- concerns about privacy;
- confusion about information needed;
- lack of clarity in the standard to which information would be entered;
- no requirement for proof of identity of address; and
- the structure of WHOIS itself.

3.4.5 NORC Study of WHOIS Privacy/Proxy Prevalence (2010)

In 2010, a [Study on the Prevalence of Domain Names Registered Using A Privacy or Proxy](#)

⁷³ <http://www.gao.gov/products/GAO-06-165>

⁷⁴ <http://www.icann.org/en/resources/compliance/reports/whois-accuracy-study-17jan10-en.pdf>

[Service Among the Top 5 gTLDs](#)⁷⁵ was also conducted by NORC at the request of ICANN's Compliance Department. Out of 2400 sampled domain names in the top 5 gTLDs, NORC found that 18 percent were registered using Privacy or Proxy services. Of these, 9 percent were attributed to registrations using a Privacy service and 91 percent to a Proxy service. These findings were used as a foundation by other WHOIS Studies, including the aforementioned WHOIS Registrant Identification Study and the WHOIS Privacy/Proxy Abuse study.

3.4.6 IETF Registration Data Access Protocol RFCs

The legacy WHOIS protocol ([RFC 3912](#))⁷⁶ is a very basic exchange of queries and messages between a client and a server over TCP using a specific port. Much work has been done over the years in an effort to address WHOIS protocol deficiencies.

In 2010 and 2011, the Internet address registries (ARIN, RIPE, etc.) started to experiment with serving registration data over a RESTful web interface, leading to formation of the [Web Extensible Internet Registration Data Service \(WEIRDS\)](#)⁷⁷ IETF working group. This resulted in development of a standard web interface and protocol for access to registration data – known collectively as the [Registration Data Access Protocol \(RDAP\)](#),⁷⁸ approved in January 2015. RDAP addresses many WHOIS protocol deficiencies by providing standardized command, output, and error structures, and support for internationalization, localization, user identification, authentication, and access control. In anticipation of this, ICANN's 2013 registrar and registry agreements require implementation of IETF standards relating to the web-based directory service specified by the WEIRDS working group no later than 135 days after such implementation is requested by ICANN⁷⁹.

⁷⁵ <https://www.icann.org/en/system/files/newsletters/privacy-proxy-registration-services-study-14sep10-en.pdf>

⁷⁶ <https://tools.ietf.org/html/rfc3912>

⁷⁷ <http://datatracker.ietf.org/wg/weirds/charter/>

⁷⁸ <http://tools.ietf.org/html/rfc7480>

⁷⁹ For further information on the discussion on future implementation per 2013 RAA see <http://mm.icann.org/pipermail/gtld-tech/2015-September/000507.html> and <https://meetings.icann.org/en/dublin54/schedule/wed-rdap-implementation>

3.4.7 IETF Extensible Provisioning Protocol RFC

[RFC 5730](#)⁸⁰ defines the Extensible Provisioning Protocol (EPP), an XML-based protocol that permits multiple service providers to perform object-provisioning operations using a shared central object repository. EPP, approved as an IETF standard in 2009, meets and exceeds the requirements for a generic registry registrar protocol as described in RFC 3375. It is today implemented by many gTLD registry operators as a standard method of collecting WHOIS data from registrars.

3.5. ICANN Board Resolutions Relevant to the launch of the PDP

3.5.1 Original Board Resolution on gTLD Registration Data (2012)

On 11 May 2012, the WHOIS Policy Review Team submitted its Report to the ICANN Board, followed by extensive public comment and community discussion.⁸¹ On 8 November 2012, the Board took action by passing a [Resolution](#)⁸² that led to the creation of the Expert Working Group on gTLD Registration Directory Services (EWG) and, in parallel, requested an Issue Report as the starting point of a Board-initiated GNSO PDP. The Board referred to this as a ‘two-pronged approach’ that is based on ‘broad and responsive action’ in relation to the reform of WHOIS.⁸³

In its Resolution, the Board pointed out that *‘the Affirmation of Commitments (AoC) between ICANN and the U.S. Department of Commerce commits ICANN to enforcing its existing policy relating to WHOIS (subject to applicable laws), which "requires that ICANN implement measures to maintain timely, unrestricted and public access to accurate and complete WHOIS information, including registrant, technical, billing, and administrative contact information.”* Both, the WHOIS Policy Review Team Report as well as the related submission by the SSAC⁸⁴ highlighted the limits of the current framework for gTLD directory services and the need to move beyond the present contractual provisions.

An Extract of this Board Resolution can be found just below. The entire resolution and its

⁸⁰ <http://tools.ietf.org/html/rfc5730>

⁸¹ For all see <https://www.icann.org/en/system/files/files/final-report-11may12-en.pdf>

⁸² <https://www.icann.org/en/groups/board/documents/resolutions-08nov12-en.htm>

⁸³ As noted by public comments, this Issue Report responds to the Board’s request by focusing on just one prong of this ‘two-prong approach’ – that is, a PDP leading to creation of a new policy framework for gTLD registration data. The other prong – on-going efforts to support legacy WHOIS consensus policy and contractual conditions -- are referenced by but not the focus of this Issue Report.

⁸⁴ <https://www.icann.org/en/system/files/files/sac-055-en.pdf>

rationale, including the announcement to launch the Expert Working Group and the Board initiated PDP, can be found in Annexes A and B.

Resolved (2012.11.08.01), the Board directs the CEO to launch a new effort to redefine the purpose of collecting, maintaining and providing access to gTLD registration data, and consider safeguards for protecting data, as a foundation for new gTLD policy and contractual negotiations, as appropriate (as detailed in the 1 November 2012 Board paper entitled, "Action Plan to Address WHOIS Policy Review Team Report Recommendations"—ICANN Board Submission Number 2012-11-08-01 [PDF, 266 KB]), and hereby directs preparation of an Issue Report on the purpose of collecting and maintaining gTLD registration data, and on solutions to improve accuracy and access to gTLD registration data, as part of a Board-initiated GNSO policy development process;

Resolved (2012.11.08.02), the Board directs the CEO to continue to fully enforce existing consensus policy and contractual conditions relating to the collection, access and accuracy of gTLD registration data (referred to as gTLD WHOIS data), and increase efforts to communicate, conduct outreach on, and ensure compliance with existing policy and conditions relating to WHOIS (as detailed in the 1 November 2012 Summary of the Board Action entitled, "WHOIS Policy Review Team Report Recommendations").⁸⁵

3.5.2 Original Preliminary Issue Report on gTLD Registration Data Services (2013)

As directed by the Board in the above Resolution, ICANN staff prepared the original [Preliminary Issue Report on gTLD Registration Data Services](#),⁸⁶ published on 15 March, 2015. That Report was used by the EWG as discussed in Section 3.6 to help identify input documents and concerned stakeholder groups/constituencies.

[A single set of public comments](#)⁸⁷ was submitted on the original Issue Report by ALAC, expressing support for a GNSO PDP "to craft an acceptable community solution to gTLD Directory Services" but suggesting the Issue Report "be re-called and re-issued at a later date [following] the output of the EWG." Ultimately, the original Issue Report was superseded by a [new Preliminary Issue Report](#)⁸⁸, leading to publication of a Final Issue Report (this document).

⁸⁵ As the PDP progresses, if the GNSO decides to develop a new consensus policy framework, BWG-RDS guidance will be needed regarding impact on and leveraging of other on-going ICANN efforts, including legacy WHOIS activities corresponding to the Board's two-prong approach

⁸⁶ <https://www.icann.org/public-comments/gtld-registration-data-2013-03-15-en>

⁸⁷ <https://www.icann.org/en/system/files/files/report-comments-gtld-registration-data-29may13-en.pdf>

⁸⁸ <http://whois.icann.org/sites/default/files/files/rds-prelim-issue-13jul15-en.pdf>

3.5.3 Confirming Board Resolution on gTLD Registration Data (2015)

Upon publication of the EWG's Final Report in June, 2014, an informal group of Generic Names Supporting Organization (GNSO) Councilors and ICANN Board members collaborated to propose a Process Framework for structuring a GNSO Policy Development Process (PDP) to successfully address these challenging issues. The EWG's Final Report and this Process Framework are further discussed in Sections 3.6 and 3.7 of this Final Issue Report.

On 26 May 2015, the ICANN Board reviewed both of these outputs and reaffirmed its original 2012 request for a Board-initiated PDP on this issue. An Extract of the Board Resolution⁸⁹ can be found just below. The entire resolution can be found in Annex A:

Resolved (2015.04.26.10), the Board reaffirms its request for a Board-initiated GNSO policy development process to define the purpose of collecting, maintaining and providing access to gTLD registration data, and consider safeguards for protecting data, using the recommendations in the [Final Report](#) [PDF, 5.12 MB] as an input to, and, if appropriate, as the foundation for a new gTLD policy.

3.6. Expert Working Group on gTLD Registration Directory Services (2013-2014)

3.6.1 Origin and Outputs

As directed by the original 2012 Board Resolution, ICANN's CEO formed a group of expert volunteers to move beyond the deadlock on WHOIS by re-examining and defining the purpose of collecting and maintaining gTLD registration data, considering how to safeguard that data, and proposing a next-generation Registration Directory Service (RDS) to better serve the needs of the global Internet community.

In addition to review of past WHOIS work, the EWG participated in 19 public community consultations and countless input-gathering sessions with outside experts and community members. To provide insight into its thinking and gather community feedback, the EWG published an [Initial Report](#)⁹⁰ in July 2013 and an [Update Report](#)⁹¹ in November 2014.

Stakeholder groups and constituencies submitted over 2600 comments on the EWG's Initial and

⁸⁹ <https://www.icann.org/resources/board-material/resolutions-2015-04-26-en#1.f>

⁹⁰ <https://community.icann.org/pages/viewpage.action?pageId=41899880>

⁹¹ <https://community.icann.org/pages/viewpage.action?pageId=43983053>

Update Reports. These were analyzed and responded to in the following documents:

- [Public comments on Initial Report](#) and [EWG's Responses](#)⁹²
- [Public comments on Update Report](#) and [Summary Report](#)⁹³

To reconcile diverse community views and inform its final recommendations, the EWG then conducted further research into contentious areas, reflected in the following outputs:⁹⁴

- [Data Protection Considerations Applicable to the Collection of gTLD Registration Data](#):⁹⁵ This memorandum from ICANN Legal explores principles of data protection laws relevant to the use, processing and transfer of personal data within RDS models considered by the EWG.
- [ccTLD WHOIS Data Verification/Validation](#):⁹⁶ This survey invited ccTLD registry operators to describe their existing practices for improving WHOIS data accuracy.
- [WHOIS Privacy and Proxy Service Provider Practices](#):⁹⁷ This survey invited Privacy and Proxy service providers to describe their existing practices, including conditions of service, contact data validation, correspondence relay, and inquiry/complaint handling.
- [Contact Data Validation and Verification Systems RFI](#):⁹⁸ This RFI invited commercial software and service providers to describe available tools to improve contact data accuracy.
- [Registration Directory Service User Accreditation RFI](#):⁹⁹ This RFI invited organizations potentially capable of vetting and credentialing RDS users to describe how they might do so.
- [RDS Implementation Model Cost Analysis](#):¹⁰⁰ Estimation of core RDS implementation and operating costs associated with the top two system models considered by the EWG.

⁹² <http://mm.icann.org/pipermail/input-to-ewg/2013/thread.html> and <http://www.icann.org/en/groups/other/gtld-directory-services/summary-response-initial-12nov13-en.pdf>

⁹³ <http://mm.icann.org/pipermail/input-to-ewg/2014/thread.html> and <http://www.icann.org/en/news/public-comment/report-comments-gtld-directory-services-status-02apr14-en.pdf>

⁹⁴ For EWG Research Results, visit <https://community.icann.org/display/eWG/EWG+Public+Research+Page+95> <https://community.icann.org/download/attachments/43982771/Memo%20to%20EWG%20re%20gTLD%20Registration%20Data%20and%20International%20Data%20Privacy%20Considerations.docx>

⁹⁶ <https://community.icann.org/download/attachments/45744698/EWG%20CCTLD%20VALIDATION%20SUMMARY%202010%2020March%20202014.pdf>

⁹⁷ <https://community.icann.org/download/attachments/45744698/EWG%20PPP%20PROVIDER%20QUESTIONNAIRE%20SUMMARY%2014%20March%20202014.pdf>

⁹⁸ <https://community.icann.org/download/attachments/45744698/RFI%20Commercial%20Validation%20Systems%20SUMMARY%2014%20March%20202014.pdf>

⁹⁹ <https://community.icann.org/download/attachments/45744698/EWG%20USER%20ACCREDITATION%20RFI%20SUMMARY%2013%20March%20202014.pdf>

¹⁰⁰ <https://community.icann.org/download/attachments/45744698/RDS%20Cost%20Analysis%20Summary%20IBM%206June2014.pdf>

- [RDS Risk/Benefit Survey](#):¹⁰¹ This survey invited all parties potentially impacted by a next-generation RDS to help identify and prioritize possible negative and positive impacts.

In June 2014, the EWG delivered its [Final Report](#)¹⁰² to ICANN's CEO and presented its recommendations to the ICANN community.

Due to the complexity of the issue, the EWG also produced [Frequently Asked Questions](#),¹⁰³ [Tutorials](#),¹⁰⁴ and [Webinars](#)¹⁰⁵ to answer questions posed by the ICANN community, all published at the [EWG's page on the ICANN website](#).¹⁰⁶

Several EWG members have also since published individual statements or blogs about the EWG's recommendations, including:

- [Dissent Statement, by Stephanie Perrin](#)¹⁰⁷
- [How to Improve WHOIS Data Accuracy, by Lanre Ajayi](#)¹⁰⁸
- [Where Do Old Protocols Go To Die?, by Scott Hollenbeck](#)¹⁰⁹
- [Some Thoughts on the ICANN EWG Recommended RDS, by Rod Rasmussen](#)¹¹⁰
- [Building a Better WHOIS for the Individual Registrant, by Carlton Samuels](#)¹¹¹

All of the outputs enumerated in this section should help inform the PDP as they examine in detail the many areas that must be addressed by a new policy framework to support a next-generation RDS, documenting the many viewpoints and research studies that informed the EWG, and the principles and system model ultimately recommended by the EWG as a foundation for the PDP.

3.6.2 EWG Recommendations for a Next-Generation RDS

¹⁰¹ <http://tiny.cc/risk-ewg-survey>

¹⁰² <https://www.icann.org/en/system/files/files/final-report-06jun14-en.pdf>, with translations found at <https://community.icann.org/pages/viewpage.action?pageId=48343061>

¹⁰³ <https://community.icann.org/x/PVZ-Ag>

¹⁰⁴ <http://london50.icann.org/en/schedule/mon-ewg-final-overview/presentation-ewg-final-overview-23jun14-en.pdf>

¹⁰⁵ <https://www.icann.org/news/announcement-2014-08-25-en>

¹⁰⁶ <https://www.icann.org/resources/pages/gtld-directory-services-2013-02-14-en> and <https://community.icann.org/display/eWG/EWG+Multimedia+FAQs>

¹⁰⁷ <https://www.icann.org/en/system/files/files/perrin-statement-24jun14-en.pdf>

¹⁰⁸ http://www.circleid.com/posts/20141105_how_to_improve_whois_data_accuracy/

¹⁰⁹ http://www.circleid.com/posts/20150121_where_do_old_protocols_go_to_die/

¹¹⁰ <http://www.circleid.com/posts/>

¹¹¹ [20141013_thoughts_on_icann_ewg_recommended_registration_directory_service/](http://www.circleid.com/posts/20141013_thoughts_on_icann_ewg_recommended_registration_directory_service/)

¹¹¹ http://www.circleid.com/posts/20141011_building_a_better_whois_for_the_individual_registrant/

In its Final Report, the EWG unanimously recommended that today's WHOIS model of giving every user the same entirely anonymous public access to (often inaccurate) gTLD registration data be abandoned. Instead, the EWG recommended a paradigm shift to a next-generation RDS that collects, validates and discloses gTLD registration data for permissible purposes only. In this new paradigm, while basic data would remain publicly available, the rest would be accessible only to accredited requestors who identify themselves, state their purpose, and agree to be held accountable for appropriate use.

Many compromises were necessary to overcome the deadlock encountered by past Task Forces and produce consensus recommendations, including one non-unanimous principle regarding consent¹¹² that led an EWG member to publish a [dissent statement](#).¹¹³ However, EWG members were unanimous in concluding that creating a next-generation RDS would provide a more solid foundation from which the GNSO could develop a new global policy for gTLD registration data to protect personal privacy and ensure greater accuracy, accountability, and transparency for the entire ICANN ecosystem.

Starting with the Board's request for a two-prong approach, EWG members questioned fundamental assumptions about the purposes, uses, collection, maintenance and provision of registration data. The EWG considered each stakeholder involved in gTLD directory services, examining needs for accuracy, access, and privacy and considering possible approaches to meet those needs more effectively. Ultimately, the EWG's Final Report included 180 principles encompassing the following areas.

- **Users and Purposes (Section 3, Annex C):** The EWG examined existing and potential purposes for collecting, storing, and providing registration data. After examining WHOIS use cases, reference materials, and community input, the EWG recommended a set of users and permissible purposes that must be accommodated by any next-generation RDS, potential misuses that must be deterred, and principles leading to those recommendations. To deliver purpose-driven access to data while improving communication and personal privacy, the EWG also proposed a set of purpose-based contacts, mapped to proposed users and purposes, to replace the more ambiguous, less accurate contacts now included in WHOIS.

¹¹² Principle #28 on Page 42 of <https://www.icann.org/en/system/files/files/final-report-06jun14-en.pdf>

¹¹³ <https://www.icann.org/en/system/files/files/perrin-statement-24jun14-en.pdf>

- **Gated Access (Section 4b and 4c, Annex E):** The proposed RDS abandons one-size-fits-all WHOIS access for an entirely new purpose-driven gated access paradigm¹¹⁴ to increase accountability for all parties involved in the disclosure and use of gTLD registration data. Recommended principles include logging all access (including unauthenticated access to public data), gating access to more sensitive data (based on authenticated user and stated purpose), and auditing access to minimize and remedy abuse. Principles also address accrediting and issuing RDS access credentials to safeguard data within this new paradigm.
- **Privacy and Data Protection (Section 6 and 7, Annex H):** To create a new paradigm that increases data accuracy while also offering protections for registrants seeking to guard their privacy, the EWG considered data protection and privacy laws and reasons that registrants seek heightened protections. Recommended principles includes mechanisms, policies, and implementation approaches to facilitate routine legally compliant data collection and transfer between RDS ecosystem actors, as well as an accredited Privacy/Proxy service for general use and an accredited Secure Protected Credentials service for persons at risk.
- **Data Quality (Section 5):** In addition to data accuracy and reachability improvements likely to be gained by the aforementioned gated access and purpose-based contacts, the EWG recommended principles and processes to improve the quality of data accessed through the RDS, including standard validation levels for registration data at time of collection and periodically thereafter, the ability for users to see when data was last validated, and a pre-validated contact directory to promote data quality and reusability and deter fraudulent use of each contact's personal data.
- **Data Elements (Section 4a, Annex D):** The EWG examined all recommended RDS users and permissible purposes to identify associated workflows and registration data needs. The EWG's Final Report maps each permissible purpose to registration information, contact, and query needs, using this to derive recommended principles for classifying data elements as mandatory/optional to collect and public/gated to access. The EWG also recommended new data elements to give registrants more flexibility and better protect each contact's data.
- **Compliance and Accountability (Section 6c and 6d):** The EWG also recommended principles

¹¹⁴ The EWG recommended "purpose-driven gated access" rather than "differentiated access" to indicate that sensitive registration data should be protected and accessible for permissible purposes only.

for compliance, contractual relationships, accountability, and audit to ensure that all RDS ecosystem actors can be held accountable for actions taken with registration information.

- **Implementation Model (Section 8, Annex F):** In considering how ICANN might put these recommended principles into practice, the EWG evaluated several alternative system models against defined criteria, chose two models for deeper examination, and ultimately recommended a Synchronized RDS (SRDS) model. In this model, data collected by registrars and validators and stored by registries is copied to the SRDS, a distributed system that would deliver purpose-driven access consistently across all gTLDs in accordance with policy.
- **Cost (Section 9a, Annex I):** The EWG also considered costs and impacts associated with a next-generation RDS, acknowledging that some aspects of the recommended model would incur new costs, but believing many other hidden costs incurred with today's inefficient inaccurate WHOIS will be reduced. The Final Report includes both recommended cost principles and discussion of the detailed cost analysis which led to recommending the SRDS.
- **Risks and Benefits (Section 9b and 9c):** Finally, the EWG recommended performing a widely scoped risk assessment to confirm that any next-generation RDS does in fact result in appropriate collection and disclosure of data for defined purposes, striking the right balance between risks and benefits. As input to that future risk assessment, the EWG conducted an initial survey to gather community input on potential costs, risks, and benefits for all stakeholders impacted by replacing today's WHOIS system with a next-generation RDS.

In addition to recommending principles and a system model, the EWG flagged areas to be more fully addressed during the PDP or subsequent implementation, including areas addressed by other GNSO PDPs described previously in this Final Issue Report. In the Final Report's conclusion, the EWG suggested framing consideration of its recommendations by asking:

- Is the RDS preferable to today's WHOIS?
- If not, does the ICANN community agree that the current WHOIS system should continue, and [how] can it meet the needs of the evolving global Internet?

3.7. EWG Process Working Group (2014-2015)

3.7.1 Origin and Outputs

Upon publication of the EWG's Final Report, an informal group of GNSO Councilors and ICANN

Board members collaborated to propose a process framework for structuring a GNSO Policy Development Process (PDP) to successfully address this complex issue.

Between September 2014 and April 2015, this EWG Process Working Group (EP-WG) considered the EWG's Final Report and existing/further inputs needed to organize one or more PDPs that would successfully lead to new policies defining the appropriate purpose of gTLD registration data and improving accuracy, privacy and permissible access to that data.

The EP-WG drafted an initial process framework, discussed it with the ICANN community at ICANN-52, incorporated clarifications to address questions raised there, and published its proposed [Framework for a PDP WG on Next-Generation RDS](#)¹¹⁵ on 2 April 2015. This proposed framework was transmitted to the GNSO Council and ICANN Board for consideration, and subsequently adopted by the ICANN Board in its 26 April 2015 resolution.

3.7.2 EP-WG Framework for a PDP on Next-Generation RDS

To develop its proposed framework, the EP-WG grouped and sequenced EWG recommended principles into an overall process flow consisting of:

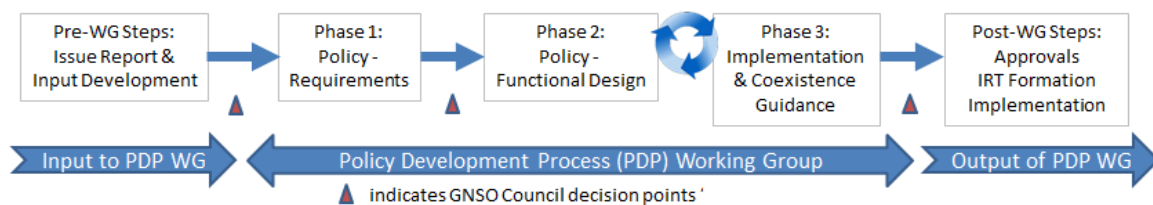
- Steps to be completed before a PDP Working Group is formed
- A 3-phase PDP to create policies for a next-generation RDS to replace WHOIS
- Steps to be completed after the PDP Working Group's Final Report

The 3-phase process to organize the PDP Working Group's efforts includes:

Phase 1) Policy Requirements: Define IF and WHY a next-generation RDS is needed.

Phase 2) Policy Functional Design: Detail WHAT a next-generation RDS should do.

Phase 3) Implementation & Coexistence Guidance: Consider HOW a next-generation RDS should implement policy.



¹¹⁵ <http://whois.icann.org/sites/default/files/files/next-generation-rds-framework-26apr15-en.pdf>

This process is illustrated above and further detailed in the proposed Framework, including a list of available and additional recommended inputs to inform the PDP,¹¹⁶ a mapping of inputs to policy areas derived from principles in the EWG's Final Report, suggested grouping and sequencing of these policy areas to reflect interdependencies, definitions and examples for each phase, and GNSO Council decision points. The Framework also includes recommendations to the GNSO Council regarding PDP oversight, timeline, methodology, and opportunities for parallelism.

Due to the complex and highly inter-dependent nature of the issue at hand, the EP-WG recommended that a single PDP Working Group address all identified policy areas together during Phase 1 of the PDP. After completing Phase 1, if the GNSO chooses, parallel sub-teams could then be used during Phases 2-3 to address some policy areas concurrently, in a sequenced manner, given sufficient resources and coordination.

In addition, the EP-WG offered guidance regarding GNSO Council decision points by providing a set of questions to determine whether sufficient progress has been made to move from one phase to the next within this phased PDP. However, the EP-WG noted in its Framework that this set of questions may be further refined after consideration of public comments on the Preliminary Issue Report, including the Framework itself and the draft PDP Charter in Annex C.

On 28 July 2015, the ICANN Board approved the formation of a new Board Working Group on Registration Data Directory Services (BWG-RDS)¹¹⁷ to liaise with the GNSO throughout this PDP. As such, it is anticipated that the GNSO Council will consider public comments on both the Framework and the draft PDP Charter, supported by on-going guidance from the BWG-RDS.

¹¹⁶ The EP-WG considered creating additional recommended inputs prior to PDP start – for example, assessing cost impacts – but found it was too early to do so in a meaningful way. Creation of additional recommended inputs was therefore incorporated at appropriate points during the PDP.

¹¹⁷ <https://features.icann.org/composition-and-scope-board-working-group-registration-data-directory-services-bwg-rds-0>

4. Discussion of Proposed Issue

The PDP has been requested to analyze the purpose of collecting, maintaining and providing access to gTLD registration data and consider safeguards for protecting that data, determining if and why a next-generation Registration Directory Service (RDS) is needed to replace WHOIS, and then creating policies and coexistence and implementation guidance to meet those requirements. To do so, the PDP should use a 3-phase approach to answer, *at minimum*, the following complex and inter-related questions:¹¹⁸

- **Users/Purposes:** Who should have access to gTLD registration data and why?
- **Gated Access:** What steps should be taken to control data access for each user/purpose?
- **Data Accuracy:** What steps should be taken to improve data accuracy?
- **Data Elements:** What data should be collected, stored, and disclosed?
- **Privacy:** What steps are needed to protect data and privacy?
- **Coexistence:** What steps should be taken to enable next-generation RDS coexistence with and replacement of the legacy WHOIS system?
- **Compliance:** What steps are needed to enforce these policies?
- **System Model:** What system requirements must be satisfied by any next-generation RDS implementation?
- **Cost:** What costs will be incurred and how must they be covered?
- **Benefits:** What benefits will be achieved and how will they be measured?
- **Risks:** What risks do stakeholders face and how will they be reconciled?

The following subsections discuss each of these areas, available inputs, and the recommended approach for considering them. The section then concludes with a discussion of impacted stakeholders and constituencies and next steps.

4.1. Registration Data Users and their Purposes

It is important to bear in mind that the question of ‘purpose’ in relation to gTLD registration data is not a new issue. Purpose was central to the 2007 GNSO WHOIS Task Force, which noted in its Final Report that *“registrants do not understand the meaning or purpose of the different*

¹¹⁸ Feedback gathered during public comment indicates that this question list and the corresponding Process Framework are relatively comprehensive. However, this list is not intended to constrain the scope of the PDP or questions that the PDP Working Group may decide to address as part of its approved Charter.

WHOIS contacts.” Although that report contained substantial discussion about purpose, the GNSO Council could not find a majority to adopt those Task Force recommendations. Since that time, the GAC, the SSAC, and others within the ICANN community have repeatedly highlighted a need to define purpose. To break new ground, the EWG was tasked with defining purpose in the context of creating a next-generation RDS. By examining users and their gTLD registration data uses, the EWG derived a set of permissible purposes and recommended RDS principles.

To answer the question “**Who should have access to gTLD registration data and why?**” the PDP should be informed by available inputs dealing with purpose, including:

Available Inputs – Hyperlinked to Sections of this Issue Report	
3.2.2	WHOIS Task Force Final Report (2007)
3.2.6	WHOIS Policy Review Team Final Report (2012)
3.2.7	SAC055: WHOIS Blind Men and an Elephant Report (2012)
3.4.1	GAC Communiqués regarding WHOIS (2007-2015), especially <ul style="list-style-type: none"> • 2007 GAC Principles Regarding gTLD WHOIS Services
3.4.2	Article 29 Data Protection Working Party Letters (2003-2014)
3.6.2	EWG Recommendations for a Next-Generation RDS, especially <ul style="list-style-type: none"> • Section 3, Users and Purposes • Annex C, Example Use Cases • Annex A, Board Questions • EWG Tutorial Pages 17-20, 37-41 • EWG FAQs 9-12, 67 • Video FAQ “Is my purpose supported by the RDS?” • Statements/Blogs by Perrin and Samuels
3.7.2	EP-WG Framework for a PDP on Next-Generation RDS, especially <ul style="list-style-type: none"> • 3-Phase Approach detailed on Page 9, Row 1

During Phase 1, the PDP should consider **whether gTLD registration data should continue to be accessible for any purpose, or whether data should be accessible only for specific purposes.**¹¹⁹

If the latter decision is reached, the PDP should **recommend permissible users and purposes**, starting from the foundation provided by the EWG. Phase 1 output should therefore include a set of fundamental requirements for registration data (i.e., **who needs it and why**), letting the GNSO Council determine **if these requirements are met by WHOIS or should be met by a next-generation RDS designed to deliver purpose-driven access.**

During Phase 2, the PDP should **design policies to satisfy requirements for each user and**

¹¹⁹ While certain WHOIS data uses are prohibited by the RAA, there is no requirement that WHOIS data requestors disclose their specific purposes. Thus, WHOIS data is effectively accessible for any purpose.

purpose established in Phase 1. For example, the PDP should identify data elements accessible for each permissible purpose. During Phase 3, the PDP should generate **coexistence and implementation guidance to support policies designed in Phase 2.** For example, the PDP might explore possible Terms of Service for permissible purposes, refining proposed policies where necessary to reach viable solutions. Refer to the Process Framework, Page 9, Row 1, for further detail about possible PDP outputs in this area.

4.2. Gated Access

Anonymous WHOIS access to entirely-public registration data has raised concerns regarding potential misuse – especially of personal information pertaining to domain name registrants and administrative and technical contacts. Concerns raised by the Article 29 Working Party, privacy and human rights advocates, and others led the 2007 WHOIS Task Force to recommend an OPoC as an alternative to including personal information in WHOIS. When the GNSO could not reach consensus on a way to balance diverse stakeholder concerns, it launched a study to measure the frequency of WHOIS data misuse and the effectiveness of anti-harvesting measures. At the same time, many Privacy and Proxy Service providers emerged to offer registrants a wide variety of alternatives for populating WHOIS data. In its Final Report, the EWG recommended a fundamentally different approach to improve registrant privacy and deter misuse of gTLD registration data while still enabling registration transparency: a purpose-driven gated access paradigm whereby some data would remain publicly available, but the rest would be accessible only to accredited requestors who identify themselves, state their purpose, and agree to be held accountable for appropriate use.

To answer the question “**What steps should be taken to control data access for each user/purpose?**” the PDP should be informed by available inputs on this topic, including:

Available Inputs – Hyperlinked to Sections of this Issue Report	
3.2.1	WHOIS Task Force Final Report (2003)
3.2.2	WHOIS Task Force Final Report (2007)
3.2.4	WHOIS Studies (2012-2014) , especially <ul style="list-style-type: none"> • WHOIS Misuse Study
3.3.4	Other Recent WHOIS Program Improvements (2012-), especially <ul style="list-style-type: none"> • Consolidated WHOIS Lookup Tool
3.4.2	Article 29 Data Protection Working Party Letters (2003-2014)
3.6.2	EWG Recommendations for a Next-Generation RDS, especially <ul style="list-style-type: none"> • Section 4b, Principles for Unauthenticated and Gated Data Access • Section 4c, RDS User Accreditation Principles • Annex E, Unauthenticated and Gated Access Examples

	<ul style="list-style-type: none"> • EWG Research: RDS User Accreditation RFI • EWG Tutorial Pages 15-21, 42-60 • EWG FAQs 25-30, 68 • Video FAQs “Does the RDS eliminate free public access to data?” and “What would I need to do to access gated RDS data?” and “What are RDS contacts?” • Statements/Blogs by Hollenbeck and Perrin
3.7.2	<p>EP-WG Framework for a PDP on Next-Generation RDS, especially</p> <ul style="list-style-type: none"> • 3-Phase Approach detailed on Page 9, Row 2

During Phase 1, the PDP should consider whether **gTLD registration data should continue to entirely public, or whether access to some data should be limited to a subset of all users.**¹²⁰

If the latter decision is reached, the PDP should **recommend a new gated access paradigm**, starting from the foundation provided by the EWG. Phase 1 output should therefore include a set of fundamental requirements regarding gated access (i.e., **what steps should be taken to control data access for each user/purpose**), letting the GNSO Council determine **if these requirements are met by WHOIS or should be met by a next-generation RDS designed to deliver and enforce gated access.**

During Phase 2, the PDP should **design policies to satisfy requirements for gated access established in Phase 1.** For example, the PDP should define an authorized level of access for each user/purpose and credentialing and anti-abuse policies to support this new paradigm. During Phase 3, the PDP should generate **coexistence and implementation guidance to support policies designed in Phase 2.** For example, the PDP might explore access protocol and authentication requirements. Refer to the Process Framework, Page 9, Row 2, for further detail.

4.3. Data Accuracy

As with many WHOIS topics of discussion, reaching a commonly-agreed definition of WHOIS “data accuracy” has been problematic and controversial. While the 2013 RAA enumerates registration data elements and related verification and validation obligations, research studies, contractual compliance reports, and new initiatives such as the ARS have repeatedly shown that there are still many registered domain names where one or more of these values is absent, incorrect, or even fraudulent. As noted by NORC’s WHOIS Accuracy Study, the barriers to accuracy are complex, ranging from confusion about what data is needed and used for to concerns about personal privacy. Although address verification is technically feasible, questions

¹²⁰ Refer to Section 4.4 for application of this over-arching access policy to individual data elements.

remain about whether to require proof of reachability or identity for WHOIS contacts and the impact such requirements might have on registrants. To better understand potential improvements, the EWG surveyed ccTLD operators and commercial validation providers. In addition to heightened privacy and standard levels of validation, the EWG recommended a new approach to ease data maintenance and deter identity theft: a new paradigm of pre-validated reusable contacts, created, stored, and maintained through RDS “Validators.”

To answer the question “**What steps should be taken to improve data accuracy?**” the PDP should be informed by available inputs, including:

Available Inputs – Hyperlinked to Sections of this Issue Report	
3.2.1	WHOIS Task Force Final Report (2003)
3.2.2	WHOIS Task Force Final Report (2007)
3.2.6	WHOIS Policy Review Team Final Report (2012)
3.3.3	WHOIS Accuracy Reporting System (ARS) (2014-2015)
3.4.4	NORC Study of the Accuracy of WHOIS Registrant Contact Information (2010)
3.6.2	EWG Recommendations for a Next-Generation RDS, especially <ul style="list-style-type: none"> • Section 5, Improving Data Quality • EWG Research: Contact Data Validation and Verification Systems RFI • EWG Research: ccTLD WHOIS Data Verification/Validation Survey • EWG Tutorial Pages 22-24 • EWG FAQs 39-45 • Video FAQ “How would the RDS improve data quality?” • Statements/Blogs by Ajayi
3.7.2	EP-WG Framework for a PDP on Next-Generation RDS, especially <ul style="list-style-type: none"> • 3-Phase Approach detailed on Page 9, Row 3

During Phase 1, the PDP should consider whether **gTLD registration data is sufficiently complete and accurate, or further steps should be taken to overcome barriers to accuracy.**

If the latter decision is reached, the PDP should **recommend enhanced validation requirements to overcome accuracy barriers**, starting from the foundation provided by the EWG. Including **required steps to improve data accuracy** in Phase 1 outputs will allow the GNSO Council to determine **if these requirements are met by WHOIS or should be met by a next-generation RDS designed to validate and maintain more accurate contact data.**

During Phase 2, the PDP should **design policies to satisfy requirements for data accuracy established in Phase 1.** For example, the PDP should define principles to promote data accuracy and the extent to which contact data elements must be validated and verified. During Phase 3, the PDP should generate **coexistence and implementation guidance to support policies designed in Phase 2.** For example, the PDP might explore possible interfaces between

ecosystem players involved in contact validation and authorization or metrics for measuring accuracy. Refer to the Process Framework, Page 9, Row 3, for further detail.

4.4. Data Elements

The 2013 RAA took steps to clarify mandatory and optional WHOIS data elements. However, several WHOIS studies show that registrants interpret and use these same data elements different ways. Furthermore, so long as gTLD registration data is not placed in the context of purpose, questions will remain about whether those data elements should be collected or disclosed, and under what conditions. To better understand these needs, the EWG examined use cases, mapping purposes to individual data elements and using this to derive principles for mandatory/optional data collection and public/gated data access – including a new paradigm of purpose-based contacts, disclosed only to users authorized to access data for that purpose.

To answer the question **“What data should be collected, stored, and disclosed?”** for each purpose, the PDP should be informed by available inputs, including:

Available Inputs – Hyperlinked to Sections of this Issue Report	
3.2.2	WHOIS Task Force Final Report (2007)
3.3.1	Registrar Accreditation Agreement (2013)
3.3.2	RAA WHOIS requirements for gTLD Domain Name Registrants (2013)
3.2.5	WHOIS Registrant Identification Study (2013)
3.4.2	Article 29 Data Protection Working Party Letters (2003-2014)
3.6.2	EWG Recommendations for a Next-Generation RDS, especially <ul style="list-style-type: none"> • Section 4a, Data Element Principles • Annex D, Purposes and Data Needs • EWG Tutorial Pages 10-14, 45-60 • EWG FAQs 13-24 • Video FAQ “What is the RDS minimum public data set?” • Statements/Blogs by Perrin
3.7.2	EP-WG Framework for a PDP on Next-Generation RDS, especially <ul style="list-style-type: none"> • 3-Phase Approach detailed on Page 9, Row 4

During Phase 1, the PDP should consider whether **existing registration data elements are sufficient for each purpose, or a new purpose-drive policy framework is needed to guide the collection, storage, and disclosure of data elements.**¹²¹

If the latter decision is reached, the PDP should **recommend purpose-driven gTLD registration**

¹²¹ Refer to Section 4.2 for the over-arching data access policy. That overall access paradigm must be determined before it can be applied here to create specific disclosure policies for each data element.

data element requirements, starting from the foundation provided by the EWG. By including **data element requirements** in Phase 1 outputs will allow the GNSO Council to determine **if these requirements are met by WHOIS or should be met by a next-generation RDS.**

During Phase 2, the PDP should **design policies to satisfy data element requirements established in Phase 1.** For example, the PDP should define the syntax and meaning of all mandatory and optional data elements to be collected from registrants or supplied by registrars or registries. During Phase 3, the PDP should generate **coexistence and implementation guidance to support policies designed in Phase 2.** For example, the PDP might explore if and how data elements map to EPP and RDAP. Refer to the Process Framework, Page 9, Row 4, for further detail.

4.5. Privacy

Purpose is also paramount to address data protection, privacy, and consumer protection concerns voiced by various stakeholders. As demonstrated by evolving procedures for handling jurisdictional issues and associated conflicts between WHOIS requirements and national laws, all parties involved in collecting, storing, and transferring registration data have an interest in data protection laws. Avoiding conflict with national laws is made more challenging by the volume and diversity of the laws themselves across all jurisdictions, as well as the differing – sometimes opposing -- concerns of impacted stakeholders. While it may be impossible to fully reconcile opposing views, the PDP must address compliance with applicable data protection and privacy laws, privacy policy for gTLD registration data, and related services applied to registration data. Although the EWG made recommendations in all of these areas, the group was unable to agree upon a principle requiring registrant consent. Privacy/Proxy accreditation work also continues in a separate PDP. Clearly, privacy will be a very challenging but essential area for the PDP to address.

To answer the question “**What steps are needed to protect data and privacy?**” for each purpose, the PDP should be informed by available inputs, including:

Available Inputs – Hyperlinked to Sections of this Issue Report	
3.2.3	Procedure for Handling Conflicts with National Laws (2003-2014)
3.2.4	WHOIS Studies (2012-2014) , especially <ul style="list-style-type: none"> • WHOIS Privacy/Proxy Abuse Study • WHOIS Privacy/Proxy Relay and Reveal Survey
3.3.6	Privacy & Proxy Services Accreditation PDP (2013-)
3.4.2	Article 29 Data Protection Working Party Letters (2003-2014)

3.4.5	NORC Study of WHOIS Privacy/Proxy Prevalence (2010)
3.6.2	EWG Recommendations for a Next-Generation RDS, especially <ul style="list-style-type: none"> • Section 6a, Data Protection Principles • Section 6b, Principles for Data Access by Law Enforcement • Section 7, Improving Registrant Privacy • Annex H, Model for Relay and Reveal • EWG Research: Data Protection Considerations Applicable to Collection of gTLD Reg Data Memo • EWG Research: WHOIS Privacy and Proxy Service Provider Practices Survey • EWG Tutorial Pages 28-30 • EWG FAQs 31-38 • Statements/Blogs by Ajayi and Perrin
3.7.2	EP-WG Framework for a PDP on Next-Generation RDS, especially <ul style="list-style-type: none"> • 3-Phase Approach detailed on Page 9, Row 5

During Phase 1, the PDP should consider whether a new policy framework is needed to **meet gTLD registration data requirements for each purpose in a manner that enables compliance with applicable data protection, privacy, and free speech laws within each jurisdiction and addresses the overall privacy needs of registrants and other stakeholders.**

If a new policy framework is necessary, the PDP should **recommend privacy-related requirements**, starting from the foundation provided by the EWG and consistent with the output of the PPSAI PDP. Including these in Phase 1 outputs will allow the GNSO Council to determine **if privacy-related requirements are met by WHOIS or should be met by a next-generation RDS designed to comply with applicable laws and enforce a privacy policy for gTLD registration data.**

During Phase 2, the PDP should **design policies to satisfy the privacy-related requirements established in Phase 1.** For example, the PDP should define an over-arching data protection policy that addresses overall privacy needs of registrants in each jurisdiction while at the same time enabling routine compliance with applicable national laws by all RDS ecosystem players, and also options to be available for enhanced privacy that are consistent with and build upon the output of the PPSAI PDP. During Phase 3, the PDP should generate **coexistence and implementation guidance to support policies designed in Phase 2.** For example, the PDP might commission a rigorous analysis of data protection laws in each jurisdiction and their application to each purpose and associated registration data element. Refer to the Process Framework, Page 9, Row 5, for further detail about possible outputs.

4.6. Coexistence

To reach closure at each key decision point, the PDP must also consider how any next-

generation system should co-exist with and eventually replace the legacy WHOIS system. To date, comparatively little discussion has been focused on coexistence. However, while this question cannot be fully answered in the early phases of the PDP, setting expectations for coexistence at the outset of the PDP is critical. For example, foundational requirements for phased transition, acceptance testing, time period, etc., must be established before any new system model can be designed or cost impacts can be meaningfully assessed. Coexistence requirements must therefore be considered and refined throughout the PDP, especially during Phase 3 when specific coexistence guidance may be given for each policy area.

To answer the question “**What steps should be taken to enable next-generation RDS coexistence with and replacement of the legacy WHOIS system?**” the PDP should be informed by available inputs, including:

Available Inputs – Hyperlinked to Sections of this Issue Report	
3.2.6	WHOIS Policy Review Team Final Report (2012)
3.3.1	Registrar Accreditation Agreement (2013)
3.3.4	Other Recent WHOIS Program Improvements (2012-)
3.6.2	EWG Recommendations for a Next-Generation RDS, especially <ul style="list-style-type: none"> • Section 5a, Alignment with 2013 RAA and New Data Elements • Annex F, System Models – Ease of Transition • EWG FAQ 65
3.7.2	EP-WG Framework for a PDP on Next-Generation RDS, especially <ul style="list-style-type: none"> • 3-Phase Approach detailed on Page 10, Row 1

During Phase 1, the PDP should consider **RDS/WHOIS coexistence requirements such as phased transition and time period that would apply when transitioning to any WHOIS replacement**. Including these in Phase 1 outputs will help the GNSO Council agree upon **steps that would be required to enable coexistence if a decision is made to create a next-generation RDS**.

During Phase 2, the PDP should **design policies to satisfy coexistence requirements established in Phase 1**. For example, the PDP should define new policies to identify and address the coexistence requirements of each stakeholder, including engineering input on how effective coexistence of legacy and next-generation systems might be achieved during transition. During Phase 3, the PDP should generate **coexistence and implementation guidance to support policies designed in Phase 2**. For example, the PDP might provide guidance for an implementation and test plan with acceptance criteria to be met before transition. Refer to the Process Framework, Page 10, Row 1, for further detail about possible outputs, including coexistence guidance within each area to be addressed by the PDP.

4.7. Compliance

Any new policy framework for gTLD registration data must address compliance expectations, including key obligations such as SLAs that contracted parties must agree to and contract holders must enforce. For today’s WHOIS, these obligations primarily are codified in ICANN’s Registry and Registrar Accreditation Agreements and enforced by ICANN Compliance. With a next-generation RDS, new contracted parties might be created – including one or more RDS operators and many RDS users who must be accredited and agree to be held accountable for actions taken with registration information. Defining new audit and accountability policies and associated metrics would set expectations for compliance throughout a new RDS ecosystem. Any such compliance expectations would be informed by community views on this question; once established, those expectations must be communicated clearly and unambiguously to all.

To answer the question “**What steps are needed to enforce new policies?**” associated with gTLD registration data, the PDP should be informed by available inputs, including:

Available Inputs – Hyperlinked to Sections of this Issue Report	
3.2.2	WHOIS Task Force Final Report (2007)
3.2.3	Procedure for Handling Conflicts with National Laws (2003-2014)
3.2.6	WHOIS Policy Review Team Final Report (2012)
3.3.1	Registrar Accreditation Agreement (2013)
3.3.3	WHOIS Accuracy Reporting System (ARS) (2014-2015)
3.6.2	EWG Recommendations for a Next-Generation RDS, especially <ul style="list-style-type: none"> • Section 6c, Compliance and Contractual Relationship Principles • Section 6d, Accountability and Audit Principles • EWG FAQ 33
3.7.2	EP-WG Framework for a PDP on Next-Generation RDS, especially <ul style="list-style-type: none"> • 3-Phase Approach detailed on Page 10, Row 2

During Phase 1, the PDP should consider **expectations for auditing purpose-driven access to registration data, enforcing terms of service, deterring abuse, etc.**, during RDS implementation. Including these foundational requirements in Phase 1 outputs will help the GNSO Council agree upon **steps that would be required to enforce compliance if a decision is made to create a next-generation RDS.**

During Phase 2, the PDP should **design policies to satisfy compliance requirements established in Phase 1.** For example, the PDP should define compliance policies for each contracted party in the next-generation RDS ecosystem. During Phase 3, the PDP should generate **guidance to support compliance policies designed in Phase 2.** For example, the PDP might recommend service level agreements (SLAs) to be monitored and reported on to benchmark compliance and

enforcement activities. Refer to the Process Framework, Page 10, Row 2, for further detail.

4.8. System Model

Given foundational requirements to shape the next-generation RDS, the PDP must also consider system model requirements, policies, and guidance. As demonstrated by the many diverse implementations of WHOIS today and discussions around Thick WHOIS, there are many possible system models for collecting, storing, and providing access to gTLD registration data. In its Final Report, the EWG contrasted half a dozen possible models that might support its recommended principles, ultimately recommending a Synchronized RDS model. However, stakeholders remain concerned that steps be taken to avoid single point of failure, centralized data storage, risk of data breach, undesirable jurisdictional impacts, etc. Furthermore, any model for a next-generation RDS should ideally leverage standardized protocols and transliteration/translation policies. Within the PDP, these kinds of concerns should be represented as system model requirements, policies, and guidance.

To answer the question **“What system requirements must be satisfied by any implementation of a next-generation RDS?”** the PDP should be informed by available inputs, including:

Available Inputs – Hyperlinked to Sections of this Issue Report	
3.2.6	WHOIS Policy Review Team Final Report (2012)
3.2.7	SAC055: WHOIS Blind Men and an Elephant Report (2012) and SAC054
3.3.1	Registrar Accreditation Agreement (2013)
3.3.5	Thick WHOIS PDP Final Report (2011-2013)
3.3.7	Translation and Transliteration of Contact Information PDP (2013-)
3.4.6	IETF Registration Data Access Protocol RFCs
3.4.7	IETF Extensible Provisioning Protocol RFC
3.6.2	EWG Recommendations for a Next-Generation RDS, especially <ul style="list-style-type: none"> • Section 8, Possible RDS Models • Annex F, System Models Considered • Annex G, Ability of EPP and RDAP Protocols to support RDS • Annex I, RDS Process Flow Charts • EWG Tutorial Pages 25-27. 61-66 • EWG FAQs 50-55 • Video FAQ “Did the EWG choose a centralized model for the RDS?” • Statements/Blogs by Hollenbeck and Rasmussen
3.7.2	EP-WG Framework for a PDP on Next-Generation RDS, especially <ul style="list-style-type: none"> • 3-Phase Approach detailed on Page 10, Row 3

During Phase 1, the PDP should consider **system model requirements for any next-generation RDS** (e.g., **performance, stability, security, internationalization requirements**). Including these foundational requirements in Phase 1 outputs will help the GNSO Council agree upon **system characteristics that would be expected of any next-generation RDS implementation**.

During Phase 2, the PDP should **design policies to satisfy system model requirements established in Phase 1**. For example, the PDP should design required functions and external interfaces and SLA and security policies. During Phase 3, the PDP should generate **coexistence and implementation guidance to support policies designed in Phase 2**. For example, the PDP might explore standard protocols extensions, alternatives for geographic distribution of data, or tests to demonstrate that SLAs and security goals can in fact be met by the system model. Refer to the Process Framework, Page 10, Row 3, for further detail.

4.9. Cost Model

In addition to determining next-generation RDS functionality and approach, the PDP must also consider cost model requirements, policies, and guidance. Implementing, testing, and operating any next-generation RDS will incur costs. However, this fact does not imply that any particular stakeholder will incur fees; recommending how costs should be covered is part of this PDP. The PDP must provide a framework for managing, allocating, and tracking costs, and cost estimates developed at the appropriate time. This approach was used on a smaller scale by the EWG to reach closure on which system model to recommend. After drafting RDS requirements, the EWG commissioned a systems integrator to identify, analyze, and project costs associated with the core RDS. The PDP must address this question more broadly by examining entire ecosystem costs for the PDP-recommended model.

To answer the question **“What costs will be incurred in creating a next-generation RDS and how must they be covered?”** the PDP should be informed by available inputs, including:

Available Inputs – Hyperlinked to Sections of this Issue Report	
3.2.6	WHOIS Policy Review Team Final Report (2012)
3.6.2	EWG Recommendations for a Next-Generation RDS, especially <ul style="list-style-type: none"> • Section 9, Costs and Impacts • Annex F, System Models Considered and Methodology – Model Cost Analysis • EWG Research: RDS Implementation Model Cost Analysis • EWG Tutorial Pages 61-66 • EWG FAQs 56-61 • Video FAQ “How would the RDS impact Registrars and Registries?” • Statements/Blogs by Ajayi

<p>3.7.2 EP-WG Framework for a PDP on Next-Generation RDS, especially</p> <ul style="list-style-type: none"> • 3-Phase Approach detailed on Page 10, Row 4 • Additional Input: Cost Impact Assessment on all Ecosystem Players, Page 5
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During Phase 1, the PDP should consider **cost model requirements for any next-generation RDS (e.g., listing possible expenses, income sources, cost drivers to be considered)**. Including these foundational requirements in Phase 1 outputs will help the GNSO Council agree upon **cost factors that should be analyzed for any next-generation RDS implementation**.

During Phase 2, the PDP should **design policies to satisfy cost model requirements established in Phase 1**. For example, the PDP should define policies for allocating and managing costs – for example, policies for cost tracking and recovery. During Phase 3, the PDP should generate **coexistence and implementation guidance to support policies designed in Phase 2**. For example, the PDP might commission a cost analysis for the entire ecosystem, based on the PDP-defined system model, including development and deployment expenses and how they might be paid for. Refer to the Process Framework, Page 10, Row 4, for further detail.

4.10. Benefit Analysis

Before the GNSO can reach closure on the PDP, it must identify and quantify potential benefits for all impacted parties. While the EWG attempted to identify benefits associated with its proposed RDS, it did not attempt to quantify them or define metrics to determine if the system implemented achieves those benefits. Although quantifying benefits is extremely difficult, the PDP must take the next step, creating a policy framework with which to analyze benefits.

To answer the question **“What benefits will be achieved and how will they be measured?”** the PDP should be informed by available inputs, including:

Available Inputs – Hyperlinked to Sections of this Issue Report	
3.2.6	WHOIS Policy Review Team Final Report (2012)3.2.2 WHOIS Task Force Final Report (2007)
3.6.2	EWG Recommendations for a Next-Generation RDS, especially <ul style="list-style-type: none"> • Section 9b, Benefits compared to Current WHOIS under the 2013 RAA • Sections 4d. 5h. 7c, Summaries of Key Benefits • EWG Research: RDS Risk/Benefit Survey • EWG Tutorial Page 67 • EWG FAQs 18 & 52 • Video FAQ “How might the RDS benefit individual registrants?” • Statements/Blogs by Ajayi and Samuels
3.7.2	EP-WG Framework for a PDP on Next-Generation RDS, especially <ul style="list-style-type: none"> • 3-Phase Approach detailed on Page 10, Row 5 • Additional Input: WHOIS & RDS Benefit Survey, Page 5

During Phase 1, the PDP should consider **benefits analysis requirements for any next-generation RDS (e.g., benefit goals and abstract metrics)**. Including these foundational requirements in Phase 1 outputs will help the GNSO Council agree upon **benefits that should be analyzed for any next-generation RDS implementation**

During Phase 2, the PDP should **design policies to satisfy requirements established in Phase 1**. For example, the PDP should define policies for benefit tracking. During Phase 3, the PDP should generate **coexistence and implementation guidance to support policies designed in Phase 2**. For example, the PDP might explore benefit benchmarks and how progress could be measured. Refer to the Process Framework, Page 10, Row 5, for further detail.

4.11. Risks Assessment

In addition to analyzing benefits, the PDP must identify, prioritize, and accept/mitigate/transfer potential risks for all impacted parties. While the EWG attempted to identify risks associated with its proposed RDS, it did not attempt a full risk assessment. Rather, it recommended that a risk assessment be conducted at the appropriate point in the PDP process. Following through on this recommendation and consistent with public comments, the PDP must take the next step, creating a policy framework with which to complete a risk assessment.

To answer the question **“What risks do stakeholders face and how will they be reconciled?”** the PDP should be informed by available inputs, including:

Available Inputs – Hyperlinked to Sections of this Issue Report	
3.2.6	WHOIS Policy Review Team Final Report (2012)
3.6.2	EWG Recommendations for a Next-Generation RDS, especially <ul style="list-style-type: none"> • Section 9c, Risks and Impact Assessment • EWG Research: RDS Risk/Benefit Survey • EWG FAQs 18, 33, 48, 53 • Statements/Blogs by Rasumussen
3.7.2	EP-WG Framework for a PDP on Next-Generation RDS, especially <ul style="list-style-type: none"> • 3-Phase Approach detailed on Page 10, Row 6 • Additional Input: WHOIS & RDS Risk Survey, Page 5

During Phase 1, the PDP should consider **risk assessment requirements for any next-generation RDS (e.g., needs for risk identification and reconciliation)**. Including these foundational requirements in Phase 1 outputs will help the GNSO Council agree upon **how risks should be assessed for any next-generation RDS implementation**.

During Phase 2, the PDP should **design policies to satisfy requirements established in Phase 1**. For example, the PDP should define policies for impact assessment. During Phase 3, the PDP should generate **coexistence and implementation guidance to support policies designed in Phase 2**. For example, the PDP might explore possible measures to accept, transfer, or mitigate top-priority risks. Refer to the Process Framework, Page 10, Row 5, for further detail.

4.12. Potential impacts and concerns for GNSO Stakeholder Groups, Constituencies, and other relevant parties

Lack of progress on new gTLD policies for registration data is due in part to the fact that ICANN stakeholder groups and constituencies have divergent interests and viewpoints. Thus far, the GNSO has been unable to achieve consensus across all stakeholders on all of the inter-related policy areas and questions that must be addressed for comprehensive reform.

The continued lack of agreement by the ICANN community on the purpose of gTLD registration data and associated gTLD policy reform might be regarded by some as a failure of the multi-stakeholder model itself. Some may believe this history indicates the ICANN community is either unable or unwilling to make changes to WHOIS. Others may believe that status quo is the proper outcome, given the lack of consensus on this issue. For example, the argument that additional protections are required for law enforcement and intellectual property protection purposes is often countered by concerns about privacy and the chilling effect on speech and Internet participation that may result from public access to personal information.

The original Preliminary Issue Report¹²² summarized the diverse perspectives of stakeholders affected by WHOIS in order to highlight the complexities of this issue and explain why there have been past difficulties in reaching consensus. For example, that original Report summary highlighted the 2007 GAC Principles Regarding gTLD WHOIS Services, recently reconfirmed on 20 May 2015 by the GAC Quick Look Committee as GAC standing advice relevant to this issue.

ICANN community views were further articulated in divergent comments made by stakeholder groups and constituencies on the EWG's Initial and Update reports. For example, public comments on the EWG's Initial Report were submitted by the following parties:¹²³

¹²² <https://www.icann.org/public-comments/gtld-registration-data-2013-03-15-en>

¹²³ <http://www.icann.org/en/groups/other/gtld-directory-services/summary-response-initial-12nov13-en.pdf>

Submitted By	On Behalf Of
Pierre Bonis	Afnic
Jessica Crewse	Personal capacity (Symantec Corporation)
Steven Metalitz	Coalition for Online Accountability
Joseph Lorenzo Hall	Center for Democracy & Technology
Jerry Upton	M3AAWG
Kiran Malancharuvil	MarkMonitor
Kathy Kleiman	NCSG
Edward Morris	NCSG
Travis Johnson	International AntiCounterfeiting Coalition
John Horton	LegitScript
Libby Baney	FWD Strategies International
Meredith Baker	NBCUniversal
Suzanne Radell	NTIA/OIA
Avri Doria	NCSG
George Kirikios	Leap of Faith Financial Services Inc.
Di Giorgio Domenico	Counterfeit Prevention Unit, AIFA
Danny Pryor	Personal capacity (Rodan Media Group)
Frederick Felman	MarkMonitor
Tom Barrett	Personal capacity (EntCirca)
Kristina Rosette	IPC
Steve DelBianco	BC
Maemura Akinori	Japan Network Information Center
Claudio Di Gangi	International Trademark Association
Fatima Cambroner	LACRALO
Erin Kenneally	Personal capacity (elChemistry)
Russell Pangborn	Microsoft
ICANN At-Large Staff	ALAC
Julie Hedlund	SSAC
Wolf-Ulrich Knoben	Internet Services Provider and Connectivity Provider Constituency (ISPCP)

The EWG considered each of these comments in detail, along with the perspectives of all stakeholders involved in collecting, storing, disclosing and using gTLD registration data (enumerated in Section 3d of the EWG Final Report, Table 4) to reach consensus on its recommendations.

In particular, before finalizing its report, the EWG invited all parties that provide or use gTLD domain name registration data to participate in an on-line RDS Risk Survey¹²⁴, including:

- Natural Person (Individual) Registrants (i.e., individual person registering a domain name)
- Legal Person (Business) Registrants (i.e., company or organization registering a domain)
- Proxy Service Providers (i.e., agent registering domain name(s) for use by third parties)
- Protected Registrants (i.e., customer of a Proxy Service Provider)
- Domain Name Registrars (i.e., provides domain name registration services to Registrants)

¹²⁴ <http://tiny.cc/risk-ewg-survey>

- Domain Name Registries (i.e., authoritative database of all domain names under each TLD)
- Third-Party WHOIS Data Access Providers (i.e., offers WHOIS but is not a Registrar/Registry)
- Internet Technical Staff (e.g., DNS, email, or website administrators)
- On-Line Service Providers (e.g., ISP, hosting provider, certificate authority)
- Individual Internet Users (e.g., on-line consumer)
- Business Internet Users (e.g., brand holder, broker)
- Internet Researchers (e.g., academic or private studies about the Internet)
- Intellectual Property Owners (e.g., trademark owner, digital media copyright holder)
- Law Enforcement Agencies (e.g., national/local agencies investigating cybercrime)
- Operations/Security Investigators (e.g., cyber defense provider, industry consortia)
- Other Investigators (e.g., tax authority, UDRP provider)

A summary of survey responses¹²⁵ was published on 29 May 2014, highlighting next-generation RDS risks and benefits that respondents indicated were most likely and impactful to them.

However, it must be understood that this survey only attempted to *identify* potential risks and benefits, as perceived by survey respondents. The EWG recommended – and the EP-WG amplified in its Process Framework – that careful assessment of cost impacts, risks, and benefits (including metrics to measure progress) should occur at the appropriate points throughout the PDP and subsequent implementation.

Finally, the Process Framework suggests a set of key questions to guide the GNSO Council at each decision point during the PDP, including “*Has the Working Group made suitable progress in this phase towards seeking buy-in from all impacted parties, including ecosystem players, consumers and standards bodies?*” Periodically examining concerns expressed by stakeholder groups, constituencies, and other relevant parties is thus an integral part of the 3-phase process recommended for the PDP.

¹²⁵ <https://community.icann.org/download/attachments/45744698/RDS-Risk-Survey-Results-28July2014.pdf>

5. Staff recommendation

Scope considerations

In determining whether the issue is within the scope of the ICANN policy process and the scope of the GNSO, Staff and the General Counsel's office have considered the following factors:

Whether the issue is within the scope of ICANN's mission statement

ICANN's mission statement includes the coordination of the allocation of certain types of unique identifiers, including domain names, and the coordination of policy development reasonably and appropriately related to these technical functions, which includes gTLD registration data related activities.

Whether the issue is broadly applicable to multiple situations or organizations.

As gTLD registration data affects all registrants of gTLDs, registrars and registries, the issue is broadly applicable to multiple situations or organizations. Any changes to the policy, its rules or technical protocol that may result from a PDP would also be broadly applicable to multiple situations or organizations.

Whether the issue is likely to have lasting value or applicability, albeit with the need for occasional updates.

A reform of the gTLD registration data policy is expected to have lasting applicability as the PDP may produce a new policy framework to support the next generation of registration data directory services to replace WHOIS, or may lead to improvements to the WHOIS policy, to better serve the needs of the global Internet community.

Whether the issue will establish a guide or framework for future decision-making.

A reform of the gTLD registration data policy is expected to function as a sustainable policy framework for future decision-making in relation to this issue.

Whether the issue implicates or affects an existing ICANN policy.

The goal of the PDP would be to review (and potentially overhaul) the entire existing gTLD registration data policy, including possible replacement of its underlying WHOIS protocol. Such

an overhaul would therefore replace the policy currently in place and might affect other policies, as well as future registry and registrar agreements for gTLDs in so far as they deal with the collection, maintenance and access to gTLD registration data.

5.1. Staff recommendation

ICANN staff has confirmed that the proposed issue is within the scope of the GNSO's Policy Development Process and the GNSO. The EWG's Final Report provides recommendations to address the questions that are the focus of the PDP, along with a proposed new model for gTLD Data Directory Services. The PDP should begin by analyzing these recommendations from the EWG, as directed by the ICANN Board.

In ICANN's view a successful outcome of the PDP is of utmost importance as it may provide a solution to the multitudes of issues surrounding gTLD registration data. The PDP therefore constitutes a crucial if not defining moment in ICANN's multi-stakeholder policy development process. ICANN staff recommends that the PDP proceed by considering carefully the recommendations of the EWG, along with available inputs enumerated in this Issue Report, and work constructively towards a universal solution, as this would allow for an informed decision by the GNSO Council on the matter of purpose and provision of gTLD registration data. Ultimately, this must include an assessment of the impact of any proposed new policy framework on existing ICANN policies related to gTLD registration data.

The majority of public comments received on the Preliminary Issue Report reflect competing interests of various stakeholders on the many questions to be addressed by this PDP. To achieve a successful outcome, the PDP Working Group (with support from the GNSO Council and BWG-EWG) will need to weigh competing interests on these questions, striving where possible for consensus policies which strike a balance between all interests, and recommending choices where all interests cannot be accommodated.

To meet this objective, ICANN staff further recommends that the PDP begin with and build upon the proposed Process Framework to structure a PDP Working Group in a manner that is not only consistent with PDP Rules but facilitates substantive and timely progress on the complex set of inter-related questions that must be addressed by the PDP. Annex C of this report also contains a draft PDP WG charter which incorporates that Process Framework for consideration by the GNSO Council. When establishing the PDP work plan, the PDP WG should take into

consideration community work and available resources of all stakeholders.

6. Next Steps

Following review of the public comments received regarding information missing from the Preliminary Issue Report, or necessary corrections and updates to information in the Preliminary Issue Report (see Annex D), the Staff Manager has updated this Issue Report, which is now submitted as the Final Issue Report to the GNSO Council for its consideration. The GNSO Council may, using its own methods, refine the Issue Report's proposed Working Group Charter before adopting a Charter and forming a PDP Working Group to address this issue.

In addition, public comments received regarding the PDP WG work plan and/or substantive input that may ultimately be considered by the PDP Working Group will be relayed to the GNSO Council and the newly-formed Board Working Group on Registration Data Directory Services ([BWG-RDS](#))¹²⁶ for consideration at appropriate points throughout this PDP.

¹²⁶ <https://features.icann.org/composition-and-scope-board-working-group-registration-data-directory-services-bwg-rds-0>

Annex A – ICANN Board Resolutions

Special Meeting of the ICANN Board – 8 November 2012

<http://www.icann.org/en/groups/board/documents/prelim-report-08nov12-en.htm>

The Board then took the following action, and agreed that further work was necessary to refine the rationale before releasing the resolution:

WHOIS Policy Review Team Report: Whereas, the WHOIS Policy Review Team Report was submitted to the Board on 11 May 2012 and was the subject of extensive public comment and community discussion; Whereas, the Review Team's work has encouraged the Board and community to re-examine the fundamental purpose and objectives of collecting, maintaining and providing access to gTLD registration data, has inspired renewed and new efforts to enforce current WHOIS policy and contractual conditions, and has served as a catalyst for launching a new approach to long-standing directory services challenges;

Resolved (2012.11.08.01), the Board directs the CEO to launch a new effort to redefine the purpose of collecting, maintaining and providing access to gTLD registration data, and consider safeguards for protecting data, as a foundation for new gTLD policy and contractual negotiations, as appropriate (as detailed in the 1 November 2012 Board paper entitled, [Action Plan to Address WHOIS Policy Review Team Report Recommendations – ICANN Board Submission Number 2012-11-08-01](#), and hereby directs preparation of an Issue Report on the purpose of collecting and maintaining gTLD registration data, and on solutions to improve accuracy and access to gTLD registration data, as part of a Board-initiated GNSO policy development process;

Resolved (2012.11.08.02), the Board directs the CEO to continue to fully enforce existing consensus policy and contractual conditions relating to the collection, access and accuracy of gTLD registration data (referred to as gTLD WHOIS data), and increase efforts to communicate, conduct outreach on, and ensure compliance with existing policy and conditions relating to WHOIS (as detailed in the 1 November 2012 Summary of the Board Action entitled, "WHOIS Policy Review Team Report Recommendations").

Resolved (2012.11.08.03), pursuant to Article III, Section 5.4 of the Bylaws, the Board directs that the contents of this resolution and rationale shall not be made publicly available until 19 November 2012. **All Board members in attendance approved of Resolutions 2012.11.08.01, 2012.11.08.02 and 2012.11.08.03. Two Board members were unavailable to vote on the Resolutions. The resolutions carried.**

Rationale for Resolutions 2012.11.08.01 - 2012.11.08.02 The Affirmation of Commitments (AoC) between ICANN and the U.S. Department of Commerce commits ICANN to enforcing its existing policy relating to WHOIS (subject to applicable laws), which "requires that ICANN implement measures to maintain timely, unrestricted and public access to accurate and complete WHOIS information, including registrant, technical, billing, and administrative contact information." The AoC obligates ICANN to organize no less frequently than every three years a community review of WHOIS policy and its implementation to assess the extent to which WHOIS policy is effective and its implementation meets the legitimate needs of law enforcement and promotes consumer trust. The AoC further commits ICANN's Board to

publish for public comment the report submitted by the Review Team, and to take action on the report within six months of its submission. The Team's volunteer members were appointed by ICANN's CEO and the GAC Chair, per the AoC requirements, and reflected the broad Internet community's interests in WHOIS policy. For 18 months, the Team conducted fact-finding, including meetings with ICANN's relevant Supporting Organizations and Advisory Committees, members of the broader Internet community, and other interested parties, and issued a draft report for public comment before submitting its Final Report to the Board on 11 May 2012. The Report was posted for two months of public comment and the Board requested input from ICANN's Supporting Organizations and Advisory Committees. Community discussion and input on the Report continued through the ICANN Toronto meeting in October 2012. The GAC and ALAC endorsed the WHOIS review report, SSAC provided a response in [SAC 055](#), and the GNSO provided a [response by constituency](#). There is general agreement on the objective of strengthening the enforcement of existing consensus policies and contracts and the WHOIS Review Team Report provides many relevant recommendations to that effect. However, both the WHOIS Review Team Report and the SSAC comments highlighted the limits of the current framework for gTLD directory services and the need to move beyond the present contractual provisions. The WHOIS Review Team for instance clearly stated that "the current system is broken and needs to be repaired." Likewise, the SSAC report stated that "the foundational problem facing all 'WHOIS' discussions is understanding the purpose of domain name registration data", that "there is a critical need for a policy defining the purpose of collecting and maintaining registration data" and suggested that "the formation of a properly authorized committee to drive solutions to these questions first, and to then derive a universal policy from the answers, is the appropriate sequence of steps to address the WHOIS Review Team's report." Indeed, the WHOIS protocol is over 25 years old (the current version is documented in RFC3912 dated September 2004, and the original version is documented in RFC812 dated March 1982). Furthermore, ICANN's requirements for domain name registration data collection, access and accuracy for gTLD registries and registrars are largely unchanged after more than 12 years of GNSO task forces, working groups, workshops, surveys and studies. Concerns of access, accuracy, privacy, obsolescence of protocols in an evolving name space, and costs to change remain unresolved. In this context, taking into account these inputs and community concerns, the Board has determined that a broad and responsive action is required and has decided to implement a two-pronged approach. Accordingly, the Board is simultaneously:

Directing the President and CEO to continue to fully enforce existing consensus policy and contractual conditions as well as to increase efforts to communicate, conduct outreach on, and ensure compliance with such existing policy and conditions.

Directing the President and CEO to launch a new effort focused on the purpose and provision of gTLD directory services, to serve as the foundation of an upcoming Board-initiated gNSO PDP. The outcomes of this work should act as guidance to the Issue Report that will be presented as part of the GNSO's policy development work; as a result, the Issues Report is not expected to be produced until such time as the President and CEO determines that his work has progressed to a point that it can serve as a basis of work within the PDP.

On both aspects, additional information is contained in the document, "Action Plan to Address WHOIS Policy Review Team Report Recommendations"—[ICANN Board Submission Number 2012- 11-08-01](#)." As part of the work of the President and CEO to ensure continued compliance with existing policy and conditions, the President and CEO has moved the

Compliance Department to report directly to the President and CEO (<https://www.icann.org/news/announcement-2012-09-14-en>), and the Board granted financial authorization to establish a Contractual Compliance Audit Program through an independent Service Provider (<https://www.icann.org/resources/board-material/resolutions-2012-10-03-en#1.d>). Furthermore, appropriate liaison will be established with the ongoing work undertaken in the IETF WG on the Web Extensible Internet Registration Data Service (WEIRDS) Protocol to ensure coherence. The Board strongly feels that taking this two-pronged approach is essential to fulfill ICANN's responsibility to act in the global public interest. The initiation of a focused work on WHOIS is expected to have an impact on financial resources as the research and work progresses. If the resource needs are greater than the amounts currently budgeted to perform work on WHOIS-related issues, the President and CEO will bring any additional resource needs to the Board Finance Committee for consideration, in line with existing contingency fund request practices. This action is not expected to have an immediate impact on the security, stability or resiliency of the DNS, though the outcomes of this work may result in positive impacts. This is an Organizational Administrative Function of the Board for which the Board received public comment, at <https://www.icann.org/resources/pages/whois-rt-final-report-2012-05-11-en>.

Next Steps for the EWG Final Report on Next Generation Registration Directory Services

<https://www.icann.org/resources/board-material/resolutions-2015-04-26-en#1.f>

Whereas, in 2012, the Board [adopted](#) a two-pronged approach to address the recommendations of the WHOIS Review Team, calling for ICANN to (i) continue to fully enforce existing consensus policy and contractual conditions relating to WHOIS, and (ii) create an expert working group to determine the fundamental purpose and objectives of collecting, maintaining and providing access to gTLD registration data, to serve as a foundation for a Board-initiated GNSO policy development process (PDP).

Whereas, in 2014, **the Expert Working Group on Next Generation Registration Directory Services (EWG)** delivered its [Final Report](#) [PDF, 5.12 MB] to the Board with its recommended model and principles to serve as the foundation for the GNSO PDP.

Whereas, **an informal group of Board members and GNSO Councilors** collaborated and developed a proposed [Framework](#) [PDF, 612 KB] to provide guidance to the GNSO PDP for the examination of the EWG's recommended models and principles for the next generation registration directory services to replace WHOIS.

Resolved (2015.04.26.09), the Board thanks the EWG for the significant effort and work exerted that produced the proposed model for a next generation registration directory services as reflected in its [Final Report](#) [PDF, 5.12 MB].

Resolved (2015.04.26.10), the Board reaffirms its request for a Board-initiated GNSO policy development process to define the purpose of collecting, maintaining and providing access to gTLD registration data, and consider safeguards for protecting data, using the recommendations in the [Final Report](#) [PDF, 5.12 MB] as an input to, and, if appropriate, as the foundation for a new gTLD policy;

Resolved (2015.04.26.11), the Board directs that a new Preliminary Issue Report that follows this [framework](#) [PDF, 612 KB] be prepared and delivered to the GNSO;

Resolved (2015.04.26.12), the Board commits to forming a group of Board members that will (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](#) [PDF, 119 KB] adopted by the Board in response to the WHOIS Review Team's recommendations. The Board directs the Board Governance Committee to begin the process for identifying a recommendation of a slate of Board members to do this work.

Rationale for Resolutions 2015.04.26.09-2015.04.26.12

This resolution continues the Board's attention to the implementation of the [Action Plan](#) [PDF, 119 KB] adopted by the Board in response to the WHOIS Review Team's [recommendations](#) [PDF, 5.12 MB]. The resolution adopted today adopts a [framework](#) [PDF, 612 KB] to conduct a board-initiated GNSO policy development process to refine the purpose of collecting, maintaining and providing access to gTLD registration data, and consider safeguards for protecting data, using the recommendations of the Expert Working Group's [Final Report](#) [PDF, 5.12 MB] as an input to, if appropriate, to serve as the foundation for a new gTLD policy.

Under the Affirmation of Commitments (AoC), ICANN is committed to enforcing its existing policy relating to WHOIS (subject to applicable laws), which "requires that ICANN implement measures to maintain timely, unrestricted and public access to accurate and complete WHOIS information...." The AoC obligates ICANN to organize no less frequently than every three years a community review of WHOIS policy and its implementation to assess the extent to which WHOIS policy is effective and its implementation meets the legitimate needs of law enforcement and promotes consumer trust. Under this timeline, the second WHOIS Review Team is to be convened in late 2015.

In 2012, in response to the recommendations of the first WHOIS Review Team, the Board adopted a two-prong approach that simultaneously directed ICANN to (1) implement improvements to the current WHOIS system based on the [Action Plan](#) [PDF, 119 KB] that was based on the recommendations of the WHOIS Review Team, and (2) launch a new effort, achieved through the creation of the Expert Working Group, to focus on the purpose and provision of gTLD directory services, to serve as the foundation of a Board-initiated GNSO policy development process (PDP).

The Expert Working Group's [Final Report](#) [PDF, 5.12 MB] contains a proposed model and detailed principles to serve as the foundation for a PDP to support the creation of the next generation registration directory services to replace WHOIS. This [Final Report](#) [PDF, 5.12 MB] contains over 160 pages of complex principles and recommendations to be considered in the GNSO PDP. In order to effectively manage the PDP on such a large scale, an informal group of Board members and GNSO councilors collaborated to develop the [framework](#) [PDF, 612 KB] approved today.

The complex nature of the EWG's recommendations, along with the contentiousness nature of the WHOIS issue in the ICANN community over the last ten+ years, calls for a very structured approach to conducting a policy development process of this magnitude. The [framework](#) [PDF, 612 KB] provides guidance to the GNSO on how to best structure the resulting PDP(s) for success

– that is, it proposes a process which leads to new policies defining the purpose of gTLD registration data and improving accuracy, privacy, and access to that data.

This [framework](#) [PDF, 612 KB] creates a 3-phased approach to conducting the PDP, with Phase 1 focusing on definition of the policy requirements, Phase 2 focusing on the functional design elements of the policy, and Phase 3 focusing on implementation of the policies and providing guidance during an expected transition period during which the legacy WHOIS system and the next generation registration directory services may coexist and both operational at the same time. The Board believes that following the [framework](#) [PDF, 612 KB] will ensure that the PDP will properly address the many significant issues and interdependencies that require consideration in order to support the creation of the next generation registration directory services.

The Board recognizes that additional resources may be needed for the conduct of this unique policy development process. The Board commits to reviewing the GNSO's proposed plan and schedule, as well as Staff's assessment of the resources required to implement this proposed plan, and to supporting appropriate resourcing for the conduct of this PDP.

In addition, the Board believes that the importance of the WHOIS issue, along with the breadth and scope of the many WHOIS activities currently under way, support the need for a designated group of Board members dedicated to overseeing the entire WHOIS Program, including working with the community on the GNSO PDP, and any future transition to a next generation registration directory services that may emerge following the GNSO PDP. Community members participating in the informal Board-GNSO Council effort to develop the framework for the PDP also requested the Board's continued involvement in this effort.

The Board reviewed the EWG [Final Report](#) [PDF, 5.12 MB], the [Framework](#) [PDF, 612 KB] developed through the informal collaboration between the Board and the GNSO Council, and the Briefing Papers submitted by Staff.

The initiation of focused work on WHOIS and the creation of policies to support the next generation of registration directory services are expected to have an impact on financial resources as the research and work progresses. Due to the expected complexity of this PDP, there is a potential that this PDP may have higher resource needs than other PDPs, though the full extent of those resource needs are not fully understood, particularly as to the scope of those resources in comparison to the resources proposed for allocation within the upcoming fiscal year for this effort. The Board commits to reviewing staff's assessment of resources for the conduct of this PDP (after there is a plan and schedule developed) with a view towards providing appropriate resourcing for the conduct of this PDP.

This action is not expected to have an immediate impact on the security, stability or resiliency of the DNS, though the outcomes of this work may result in positive impacts.

As this is a continuation of prior Board actions, public comment is not necessary prior to adoption. A public comment period will be commenced, as required by the ICANN Bylaws, once the Preliminary Issue Report is published by Staff, thereby allowing the [Framework](#) [PDF, 612 KB] approved today to be adjusted as appropriate prior to delivery of the Final Issue Report to the GNSO.

Annex B – Launch of Expert Working Group on gTLD Directory Services

<https://www.icann.org/news/announcement-2-2012-12-14-en>

13 December 2012... Fadi Chehadé, ICANN's President and CEO, is announcing the creation of an Expert Working Group on gTLD Directory Services. This first step in fulfilling the ICANN Board's [directive](#) to help redefine the purpose and provision of gTLD registration data will provide a foundation to help the ICANN community (through the Generic Names Supporting Organization, GNSO) create a new global policy for gTLD directory services. The working group will be chaired by Jean-Francois Baril, as the group's Lead Facilitator, and interested individuals with the requisite experience are invited to indicate their interest in serving as volunteer working group members (more information below). Board Chair, Steve Crocker, and Director, Chris Disspain, will serve as Board liaisons to the working group.

The objectives of the working group are to 1) define the purpose of collecting and maintaining gTLD registration data, and consider how to safeguard the data, and 2) provide a proposed model for managing gTLD directory services that addresses related data accuracy and access issues, while taking into account safeguards for protecting data. This output will feed into a Board-initiated GNSO policy development process to serve as a foundation for the GNSO's creation of new consensus policy, and requisite contract changes, as appropriate. The working group will be informed by the WHOIS Policy Working Group's [Report](#) [PDF, 1.44 MB] and previous community input and GNSO work over the last decade, will address key questions set forth by the Security and Stability Advisory Committee (SSAC) in their report, [SAC055](#), and will take into consideration current and future Internet operations and services. The working group also will address concerns of the parties who provide, collect, maintain, publish or use this data as it relates to ICANN's remit.

ICANN staff will publish an issues report that incorporates the working group's output, which will form the basis of a Board-initiated GNSO PDP. ICANN and its leadership will be focused on facilitation of the expedited policy work to enable the GNSO to recommend a consensus policy that, at a minimum, addresses the purpose of collecting, maintaining and making available gTLD registration data, and related data accuracy and access issues. Such a policy would be contractually binding on ICANN accredited gTLD registrars and gTLD registries upon adoption by the ICANN Board.

Working Group Schedule and Operations

The working group will conduct its activities from January through April 2013 and may be extended, if needed. Work will be conducted primarily online and through conference calls, and two face-to-face meetings are expected. The working group will periodically provide public updates on its progress, and output from the working group is expected to be presented for community discussion online and at the ICANN Beijing meeting in April 2013. ICANN Staff will support the working group.

Working Group Volunteers

Qualified individuals are being identified to participate in the working group. Individuals with the following characteristics are invited to indicate their interest in serving as volunteer working group members by sending an expression of interest and their resume/CV by email to expertworkinggroup@icann.org by 31 December 2012.

Volunteer working group members should: have significant operational knowledge and experience with WHOIS, registrant data, or directory services; be open to new ideas and willing to forge consensus; be able to think strategically and navigate conflicting views; have a record of fostering improvements and delivering results; have a desire to create a new model for gTLD directory services; and be able to volunteer approximately 12-20 hours a month during January

– April 2013 to the working group. Individuals who have worked extensively in the areas of registration data collection, access, accuracy, use, privacy, security, law enforcement, and standards and protocols are also encouraged to consider working group membership. As the working group will be a collection of experts, it is not expected to be comprised solely of representatives of current ICANN community interests. Although members may not come directly from ICANN structures, the working group will have a deep understanding of, and concern for, the ICANN communities' interests. The working group's results will feed into the GNSO's bottom-up, policy development process where all community interests will be encouraged to participate in the decision-making efforts.

ICANN will reimburse working group members for travel and other expenses associated with working group activities, per ICANN reimbursement rules.

Annex C - Draft Charter for a PDP WG on a Next-Generation gTLD Registration Directory Service (RDS) to Replace WHOIS



Next Generation gTLD RDS to Replace WHOIS PDP Working Group (WG) Charter (Draft)

WG Name:	Next Generation gTLD RDS to Replace WHOIS PDP Working Group	
Section I: Working Group Identification		
Chartering Organization(s)	GNSO Council	
Charter Approval Date:	TBD	
Name of WG Chair:	TBD	
Name(s) of Appointed Liaison(s):	TBD	
WG Workspace URL:	TBD	
WG Mailing List:	TBD	
GNSO Council Resolution:	Title:	Motion to Approve the Charter for the Next Generation gTLD RDS to Replace WHOIS PDP Working Group
	Ref # & Link:	TBD
Important Document Links:	<input type="checkbox"/> Next Generation gTLD RDS to Replace WHOIS Final Issue Report <input type="checkbox"/> GNSO Working Group Guidelines <input type="checkbox"/> GNSO PDP Manual <input type="checkbox"/> EP-WG Framework for a PDP on Next-Generation RDS <input type="checkbox"/> EWG Final Report and FAQs, Tutorials, & EWG Member Statements	

Section II: Mission, Purpose, and Deliverables

Mission & Scope:

Background

On 8 November, 2012, the ICANN Board passed a [resolution](#) launching the Expert Working Group on gTLD Registration Directory Services (EWG) to help redefine the purpose of gTLD registration data and consider how to safeguard the data, and to propose a model for gTLD registration directory services (RDS) to address accuracy, privacy, and access issues.

Upon publication of the [EWG's Final Report](#) in June, 2014, an informal group of GNSO Councilors and ICANN Board Members collaborated to propose a [Process Framework](#) for structuring a GNSO PDP to successfully address these challenging issues. On 26 May, 2015, the ICANN Board passed a [resolution](#) adopting that Process Framework and reaffirming its 2012 request for a Board-initiated PDP to define the purpose of collecting, maintaining and providing access to gTLD registration data, and to consider safeguards for protecting data, using the recommendations in the EWG's Final Report as an input to, and, if appropriate, as the foundation for a new gTLD policy.

Accordingly, the GNSO Council is proceeding with the Board-requested PDP, using the Framework's 3-phase process to (1) establish gTLD registration data requirements to determine if and why a next-generation RDS is needed, (2) design policies that detail functions that must be provided by a next-generation RDS to support those requirements, and (3) provide guidance for how a next-generation RDS should implement those policies, coexisting with and eventually replacing WHOIS.

Mission and Scope

The PDP Working Group is tasked with providing the GNSO Council with policy recommendations regarding the issue identified by the above ICANN Board resolutions and described in the Process Framework. Specifically, the PDP WG is tasked with analyzing the purpose of collecting, maintaining and providing access to gTLD registration data and considering safeguards for protecting that data, determining if and why a next-generation Registration Directory Service (RDS) is needed to replace WHOIS, and creating policies and coexistence and implementation guidance to meet those needs.

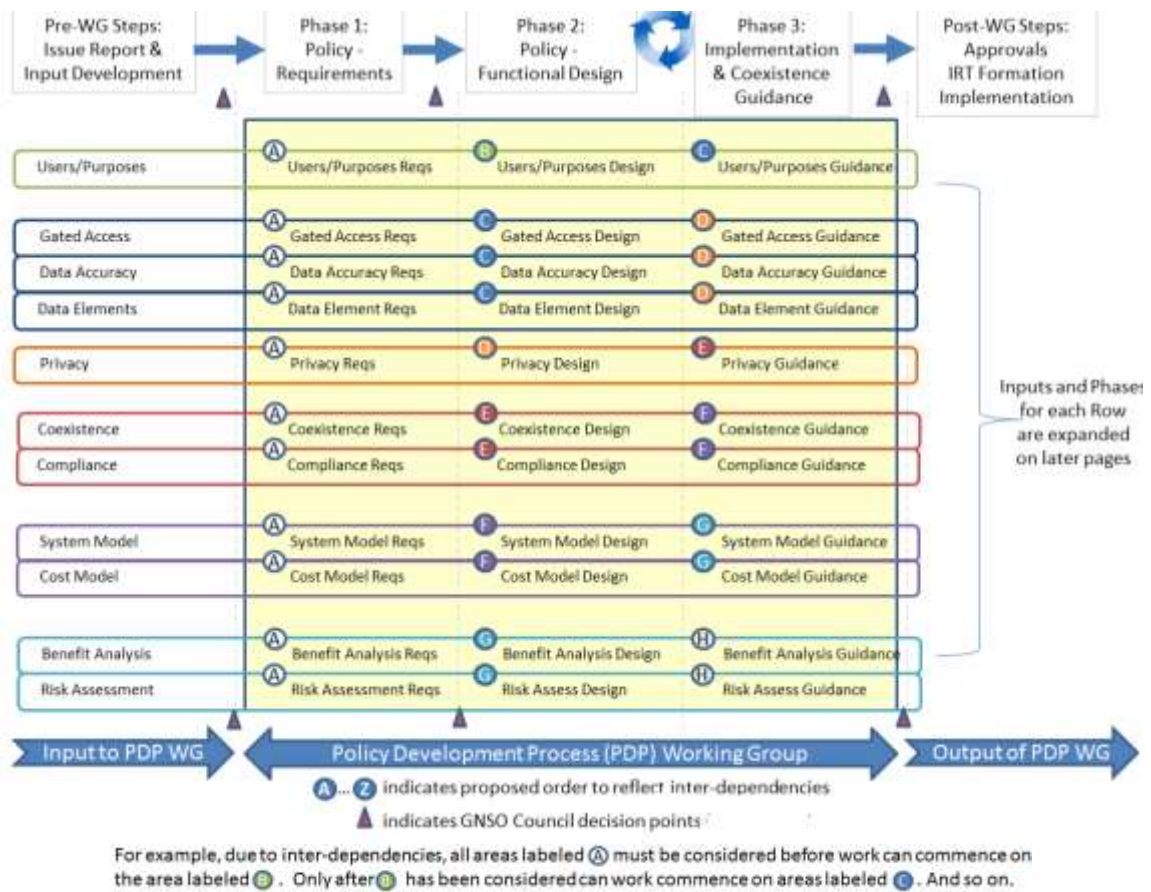
During Phase 1, the PDP WG should, at a minimum, attempt to reach consensus recommendations regarding the following questions:

- **What are the fundamental requirements for gTLD registration data?**
When addressing this question, the PDP WG should consider, at a minimum, users and purposes and associated access, accuracy, data element, and privacy requirements.
- **Is a new policy framework and next-generation RDS needed to address these requirements?**
 - If yes, what cross-cutting requirements must a next-generation RDS address, including coexistence, compliance, system model, and cost, benefit, and risk analysis requirements?
 - If no, does the current WHOIS policy framework sufficiently address these requirements? If not, what revisions are recommended to the current WHOIS policy framework to do so?

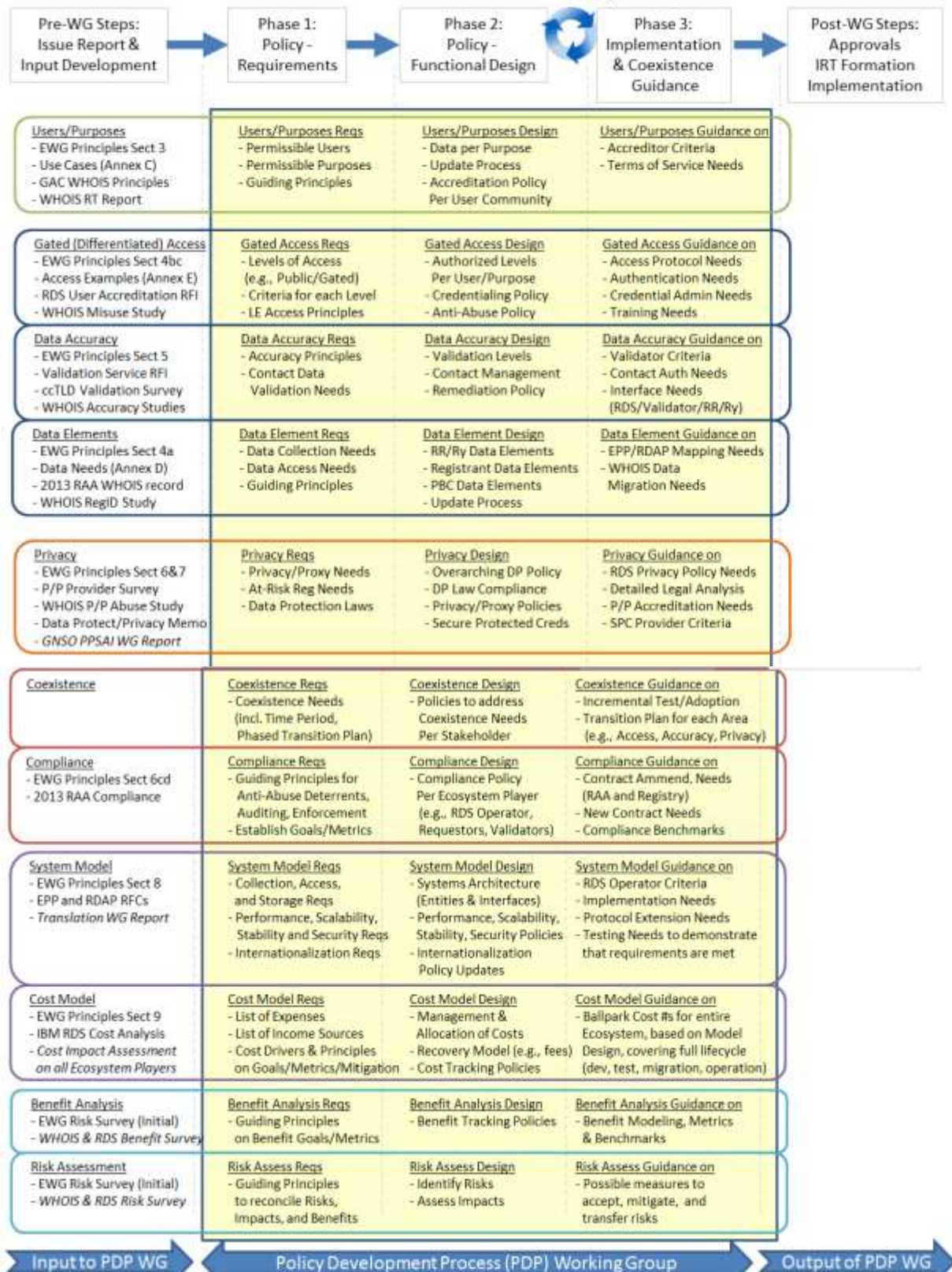
As part of its Phase 1 deliberations, the PDP WG should work to reach consensus recommendations by considering, *at a minimum*, the following complex and inter-related questions:

- **Users/Purposes:** Who should have access to gTLD registration data and why?
- **Gated Access:** What steps should be taken to control data access for each user/purpose?
- **Data Accuracy:** What steps should be taken to improve data accuracy?
- **Data Elements:** What data should be collected, stored, and disclosed?
- **Privacy:** What steps are needed to protect data and privacy?
- **Coexistence:** What steps should be taken to enable next-generation RDS coexistence with and replacement of the legacy WHOIS system?
- **Compliance:** What steps are needed to enforce these policies?
- **System Model:** What system requirements must be satisfied by any next-generation RDS implementation?
- **Cost:** What costs will be incurred and how must they be covered?
- **Benefits:** What benefits will be achieved and how will they be measured?
- **Risks:** What risks do stakeholders face and how will they be reconciled?

Each of these areas is defined in the Issue Report and suggested PDP WG inputs – including but certainly not limited to recommendations made in the EWG’s Final Report. The Process Framework shown below time-sequences these areas to accommodate inter-dependencies and create opportunities for parallel policy development, subject to resource availability.



3-Phase PDP WG Process: Detailed Description



During Phase 1, the PDP WG should examine all requirements for gTLD registration data and directory services at a high level. Due to inter-dependencies, all areas should be considered together, by a single team. For example, the PDP WG should consider whether gTLD registration data should continue to be accessible for any purpose, or whether data should be accessible only for specific purposes. If the PDP WG decides the latter, it should recommend permissible users and purposes.

At the conclusion of Phase 1, the PDP WG's output should be sent to the GNSO Council for approval of its recommendations regarding IF and WHY a next-generation RDS is needed to replace WHOIS. If the WG has concluded a new policy framework is needed, this output should include requirements to be addressed by that new framework and any next-generation RDS. However, if the WG has concluded the existing WHOIS system can adequately address requirements, the WG's output should confirm this and identify any necessary changes to the WHOIS policy framework.

Before proceeding to Phase 2, the GNSO Council should decide whether or not sufficient progress has been made to move to the next phase, whether questions still need to be more fully addressed before moving to the new phase, or whether the PDP WG has accomplished its charter. The GNSO Council should be guided at each such decision point by a set of questions that assess how well key goals and concerns have been addressed. At minimum, the Council should consider whether all questions posed in the November 2012 [Board Resolution](#) initiating this PDP have been addressed:

- Why are gTLD registration data collected?
- What purpose will the data serve?
- Who collects the data?
- What value does the public realize with access to registration data?
- Of all the registration data available, which does the public need access to?
- Is the WHOIS protocol the best choice for providing that access?
- What safeguards are provided to protect the data?

Additionally, the Council should consider whether the WG made suitable progress towards key goals and concerns in this phase of the PDP. For example, has suitable progress been made on:

- Establishing a compelling business case for a next-generation RDS to meet defined needs for registration data? (i.e., do benefits outweigh costs?)
- Establishing a coexistence plan enabling phased transition over a defined period of time?
- Creating a viable approach to moving from WHOIS anonymous access to RDS gated access?
- Ensuring scalability, stability and security of the Next-Gen RDS?
- Measuring the effectiveness of the Next-Gen RDS in reaching stated goals?
- Seeking buy-in from all impacted parties, including ecosystem players, consumers & standards bodies?

The above list is suggested by the Process Framework as a starting point for the GNSO Council to refine, in advance of reaching the Phase 1 decision point.

This next part of this charter applies only if the GNSO Council confirms after Phase 1 that a new policy framework and next-generation RDS are required and the WG should to proceed to Phases 2 and 3.¹²⁷

¹²⁷ As the PDP progresses, if the GNSO decides to develop a new consensus policy framework, BWG-RDS guidance will be needed regarding impact on and leveraging of other on-going ICANN efforts, including legacy WHOIS activities corresponding to the Board's two-prong approach.

During Phases 2 and 3, the PDP WG should recommend a new consensus policy framework to satisfy requirements for a next-generation RDS established in Phase 1, along with any necessary coexistence and implementation guidance. Specifically:

- **In Phase 2**, the PDP WG should design detailed policies to satisfy all requirements established in Phase 1. For example, the PDP WG should define the data elements to be accessible for each permissible user and purpose. Opportunities for parallel policy design have been identified in the Process Framework, sequenced to reflect inter-dependencies. For example, to satisfy dependencies, policies in group B must be drafted before policies in group C can start, but policies in group C could potentially be drafted in parallel by PDP WG subteams, given sufficient resources and coordination. This sequencing is intended as a guideline for GNSO use when developing the PDP work plan.
- **In Phase 3**, the PDP WG should dive more deeply into each policy group to create any necessary implementation and coexistence guidance. For example, in Phase 3a), the PDP WG might explore possible Terms of Service for permissible users and purposes and identify challenges that must be overcome. In Phase 3b), the PDP WG might detail WHOIS and next-generation RDS data access coexistence.
- **Phases 2 and 3 may be overlapping and iterative.** Details explored in Phase 3 may require refinement of certain Phase 2 policies. Any policy refinements should be carefully coordinated to manage inter-dependencies. To accomplish this, the Process Framework recommends that the GNSO Council periodically review Phase 2 work-in-progress to identify gaps or inconsistencies and ensure alignment with Phase 1 requirements.

At the conclusion of Phase 3, the PDP WG's output should be sent to the GNSO Council for approval of its recommended new policy framework for a next-generation RDS and guidance for how a next-generation RDS should implement those policies, coexisting with and eventually replacing WHOIS.

Upon reaching this final decision point, the GNSO Council should decide whether sufficient progress has been made, whether questions still need to be more fully addressed, or whether the PDP WG has accomplished its charter. As at the end of Phase 1, the GNSO Council should be guided by a set of questions that assess how well key goals and concerns have been addressed.

PDP WG inputs: As directed by the ICANN Board, the EWG Final Report and FAQs, Tutorials, and EWG Member Statements should serve as the foundation for the PDP. In addition to past work on this topic and all available inputs suggested in the Issue Report and the Process Framework, the PDP WG should take into account on-going ICANN initiatives that may help inform deliberations limited to this specific topic, such as:

- Implementation of the 2013 RAA
- Implementation of Thick WhoIs
- Privacy and Proxy Services Accreditation Issues recommendations, if/when adopted by the GNSO Council and ICANN Board
- Translation and Transliteration recommendations, if/when adopted by the GNSO Council and ICANN Board

For example, the PDP WG is expected to build upon the GNSO/Board-adopted output of the PPSAI and Translation/Transliteration PDPs.

The PDP WG is also expected to consider information and advice on this topic provided by all relevant

stakeholders, including but not limited to other ICANN Supporting Organizations and Advisory Committees. The WG is strongly encouraged to initiate consultation processes and reach out to these groups for collaboration at an early stage of its deliberations, to ensure that their concerns and positions are heard and considered in a timely manner. During Phases 2 and 3, the WG may engage outside experts as needed to inform its work, particularly when formulating coexistence and implementation guidance.

Objectives & Goals:

To develop, at a minimum, an Initial Report and a Final Report which addresses the questions enumerated in the Final Issue Report. Both of these Reports are to be published for public comment at the end of Phase 1 and again at the end of iterative Phases 2 +3.

These Reports should be delivered to the GNSO Council, following the processes described in Annex A of the ICANN Bylaws and the GNSO PDP Manual, and further guided by the Process Framework as described above.

Additional Interim Reports may be requested from the PDP WG by the GNSO Council to facilitate oversight, avoid gaps, and ensure continuing alignment across areas.

Deliverables & Timeframes:

To foster sustained progress and timely completion, the PDP WG should work towards a defined timeline for incremental targets (e.g., complete Phase 1 in x weeks). Additionally, the WG shall respect the timelines and deliverables as outlined in Annex A of the ICANN Bylaws and the PDP Manual. As per the GNSO Working Group Guidelines, the WG shall develop a work plan that outlines the necessary steps and expected timing in order to achieve the milestones of the PDP as set out in Annex A of the ICANN Bylaws, the PDP Manual, and the Process Framework, and submit this to the GNSO Council. When establishing the PDP work plan, the PDP WG should take into consideration community work and available resources of all stakeholders.

Section III: Formation, Staffing, and Organization

Membership Criteria:

The Working Group will be open to all interested in participating. All members are expected to review previous documents enumerated in the Final Issue Report and produced by the PDP WG, including PDP WG meeting transcripts.

Group Formation, Dependencies, & Dissolution:

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

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

As previously noted, the entire PDP WG should address all policy areas simultaneously during Phase 1 of this PDP. If the GNSO chooses, parallel subteams may be used during Phases 2 and 3 to address policy areas concurrently, in a sequenced manner, given sufficient resources and coordination.

The PDP WG should consider, as part of its work plan, if there are opportunities to facilitate productive dialog, such as periodic face-to-face conferences. The methodology used by the PDP WG must be transparent, consistent with the GNSO Policy Development Process, and take into consideration capacity to ensure adequate resourcing from all stakeholders.

Working Group Roles, Functions, & Duties:

The standard WG roles, functions & duties shall be applicable as specified in Section 2.2 of the Working Group Guidelines. The ICANN Staff assigned to the WG will fully support the work of the Working Group as requested by the Chair, including meeting support, document drafting, editing and distribution and other substantive contributions when deemed appropriate. Staff assignments to the Working Group: <td> Especially during Phase 3, external experts may be called upon to help the PDP WG complete research in selected areas (e.g., data protection laws, risk assessment, cost impact analysis).

Statements of Interest (SOI) Guidelines:

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

Section IV: Rules of Engagement

Decision---Making Methodologies:

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

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

- Full consensus** --- when no one in the group speaks against the recommendation in its last readings. This is also sometimes referred to as **Unanimous Consensus**.
- Consensus** --- a position where only a small minority disagrees, but most agree. [Note: For those that are unfamiliar with ICANN usage, you may associate the definition of 'Consensus' with other definitions and terms of art such as rough consensus or near consensus. It should be noted, however, that in the case of a GNSO PDP originated Working Group, all reports, especially Final Reports, must restrict themselves to the term 'Consensus' as this may have legal implications.]
- Strong support but significant opposition** - a position where, while most of the group supports a recommendation, there are a significant number of those who do not support it.
- Divergence (also referred to as No Consensus)** - a position where there isn't strong support for any particular position, but many different points of view. Sometimes this is due to irreconcilable differences of opinion and sometimes it is due to the fact that no one has a particularly strong or convincing viewpoint, but the members of the group agree that it is worth listing the issue in the report nonetheless.
- Minority View** --- refers to a proposal where a small number of people support the recommendation. This can happen in response to a **Consensus, Strong support but significant opposition**, and **No Consensus**; or, it can happen in cases where there is neither

support nor opposition to a suggestion made by a small number of individuals. In cases of **Consensus**, **Strong support but significant opposition**, and **No Consensus**, an effort should be made to document that variance in viewpoint and to present any **Minority View** recommendations 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 WG Chair should encourage the submission of minority viewpoint(s).

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

- i. After the group has discussed an issue long enough for all issues to have been raised, understood and discussed, the Chair, or Co---Chairs, make an evaluation of the designation and publish it for the group to review.
- ii. After the group has discussed the Chair's estimation of designation, the Chair, or Co---Chairs, should reevaluate and publish an updated evaluation.
- iii. Steps (i) and (ii) should continue until the Chair/Co---Chairs make an evaluation that is accepted by the group.
- iv. In rare case, a Chair may decide that the use of polls is reasonable. Some of the reasons for this might be:
 - 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 they do not become votes. A liability with the use of polls is that, in situations where there is Divergence or Strong Opposition, there are often disagreements about the meanings of the poll questions or of the poll results.

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

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

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

1. Send email to the Chair, copying the WG explaining why the decision is believed to be in error.
2. If the Chair still disagrees with the complainants, the Chair will forward the appeal to

<p>the CO liaison(s). The Chair must explain his or her reasoning in the response to the complainants and in the submission to the liaison. If the liaison(s) supports the Chair's position, the liaison(s) will provide their response to the complainants. The liaison(s) must explain their reasoning in the response. If the CO liaison disagrees with the Chair, the liaison will forward the appeal to the CO. Should the complainants disagree with the liaison support of the Chair's determination, the complainants may appeal to the Chair of the CO or their designated representative. If the CO agrees with the complainants' position, the CO should recommend remedial action to the Chair.</p> <p>3. In the event of any appeal, the CO will attach a statement of the appeal to the WG and/or Board report. This statement should include all of the documentation from all steps in the appeals process and should include a statement from the CO (see Note 2 below).</p> <p><u>Note 1</u>: Any Working Group member may raise an issue for reconsideration; however, a formal appeal will require that that a single member demonstrates a sufficient amount of support before a formal appeal process can be invoked. In those cases where a single Working Group member is seeking reconsideration, the member will advise the Chair and/or Liaison of their issue and the Chair and/or Liaison will work with the dissenting member to investigate the issue and to determine if there is sufficient support for the reconsideration to initial a formal appeal process.</p> <p><u>Note 2</u>: It should be noted that ICANN also has other conflict resolution mechanisms available that could be considered in case any of the parties are dissatisfied with the outcome of this process.</p>
<p>Status Reporting:</p>
<p>As requested by the GNSO Council, taking into account the recommendation of the Council liaison(s) to the WG.</p>
<p>Problem/Issue Escalation & Resolution Processes:</p>
<p><i>{Note: the following material was extracted from Sections 3.4, 3.5, and 3.7 of the Working Group Guidelines and may be modified by the Chartering Organization at its discretion}</i></p> <p><i>The WG will adhere to ICANN's Expected Standards of Behavior as documented in Section F of the ICANN Accountability and Transparency Frameworks and Principles, January 2008.</i></p> <p>If a WG member feels that these standards are being abused, the affected party should appeal first to the Chair and Liaison and, if unsatisfactorily resolved, to the Chair of the Chartering Organization or their designated representative. It is important to emphasize that expressed disagreement is not, by itself, grounds for abusive behavior. It should also be taken into account that as a result of cultural differences and language barriers, statements may appear disrespectful or inappropriate to some but are not necessarily intended as such. However, it is expected that WG members make every effort to respect the principles outlined in ICANN's Expected Standards of Behavior as referenced above.</p> <p>The Chair, in consultation with the Chartering Organization liaison(s), is empowered to restrict the participation of someone who seriously disrupts the Working Group. Any such restriction will be</p>

reviewed by the Chartering Organization. Generally, the participant should first be warned privately, and then warned publicly before such a restriction is put into place. In extreme circumstances, this requirement may be bypassed.

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

In addition, if any member of the WG is of the opinion that someone is not performing their role according to the criteria outlined in this Charter, the same appeals process may be invoked.

Closure & Working Group Self--Assessment:

The WG will close upon the delivery of the Final Report, unless assigned additional tasks or follow-up. A self-assessment as outlined in the GNSO Operating Procedures will be conducted following closure of the Working group.

Section V: Charter Document History

	Version	Date	Description	
	1.0			
Staff Contact:			Email:	

Annex D – Report of Public Comments

Title:	Next-Generation gTLD Registration Directory Services to Replace WHOIS Preliminary Issue Report		
Publication Date:	7 October 2015		
Prepared By:	Marika Konings		
Comment Period:			Important Information Links
Comment Open Date:	13 July 2015		Announcement
Comment Close Date:	6 September 2015		Public Comment Box
			View Comments Submitted
Staff Contact:	Marika Konings	Email:	Policy-staff@icann.org
Section I: General Overview and Next Steps			
<p>In accordance with Policy Development Process (PDP) rules, a new Preliminary Issue Report concerning Next-Generation gTLD Registration Directory Services (RDS) to Replace WHOIS [PDF, 1.37 MB] was posted for public comment and submitted to the GNSO Council on 13 July, 2015.</p> <p>This Board-initiated Policy Development Process (PDP) will define the purpose of collecting, maintaining and providing access to gTLD registration data and consider safeguards for protecting that data, determining if and why a next-generation Registration Directory Service (RDS) is needed to replace WHOIS, and creating policies and coexistence and implementation guidance to meet those requirements.</p> <p>This PDP was originally initiated by the ICANN Board in November 2012 as part of a two-prong approach to address recommendations made by the WHOIS Policy Review Team Final Report. As directed by the Board, this issue was researched by the Expert Working Group on gTLD Registration Directory Services (EWG). Upon publication of the EWG's Final Report in June 2014, an informal group of GNSO Councilors and ICANN Board members collaborated to propose a Process Framework for structuring a successful PDP on this Issue. Pursuant to a Resolution during a meeting of the ICANN Board on 26 April, 2015, Staff responded to the Board's request by publishing a new Preliminary Issue Report for public comment on 13 July, 2015.</p> <p>Following the close of the public comment period and the publication of this Report of Public Comments, a Final Issue Report will be prepared for the GNSO Council, which will then consider a Charter for a PDP Working Group on this issue. The Final Issue Report will reflect consideration of all feedback received through the public comment forum which identified specific clarifications, corrections, or enhancements to the Preliminary Issue Report.</p> <p>In addition, feedback received through the public comment forum regarding the PDP work</p>			

plan and/or substantive input to be considered by the PDP Working Group will be relayed to the GNSO Council and the Board Working Group on Registration Data Directory Services ([BWG-RDS](#)) for evaluation at the appropriate points throughout this PDP.

Section II: Contributors

At the time this report was prepared, a total of twelve (12) community submissions had been posted to the Forum. The contributors, both individuals and organizations/groups, are listed below in chronological order by posting date with initials noted. To the extent that quotations are used in the foregoing narrative (Section III), such citations will reference the contributor's initials.

Organizations and Groups:

Name	Submitted by	Initials
Coalition for Online Accountability	S. Metalitz	COA
Google, Inc.	S. Duchensneau	GG
Electronic Frontier Foundation	M. Stoltz	EFF
At-Large Advisory Committee	At-Large Staff	ALAC
Registrar Stakeholder Group	M. Neylon	RrSG
Business Constituency	S. DelBianco	BC
Non-Commercial Stakeholder Group	R. Dammak	NCSG
Intellectual Property Constituency	G. Shatan	IPC
Registries Stakeholder Group	P. Diaz	RySG
International Trademark Association	L. Schulman	INTA
Governmental Advisory Committee	T. Dale	GAC

Individuals:

Name	Affiliation (if provided)	Initials
Garth Bruen	Knujon	KJ

Section III: Summary of Comments

General Disclaimer: This section is intended to broadly and comprehensively summarize the comments submitted to this Forum, but not to address every specific position stated by each contributor. Staff recommends that readers interested in specific aspects of any of the summarized comments, or the full context of others, refer directly to the specific contributions at the link referenced above (View Comments Submitted).

As noted in Section I, preparatory work to inform and help structure a PDP Working Group to address this Issue has been underway since 2012 when the ICANN Board initiated this PDP. The Preliminary Issue Report summarized those and other relevant efforts and available inputs to this PDP, stated the Issue raised for consideration, and described the Board-GNSO-recommended 3-phase Process Framework that might be used to address a minimum set of complex and inter-related questions. The Preliminary Issue Report also included a draft PDP WG Charter for broad community consideration.

Comments received on this Preliminary Issue Report fell broadly into three categories:

- Comments suggesting clarifications, corrections, or enhancements to the Preliminary Issue Report. These are further summarized below and will be reflected in the Final Issue Report.
- Comments on the recommended Process Framework, reflected in the PDP Charter. These are briefly summarized below but best addressed by the GNSO Council and the Board Working Group on Registration Data Directory Services ([BWG-RDS](#)) during adoption of the PDP Charter and Workplan.
- Inputs on potential recommendations and implementation guidance to be generated by the PDP Working Group. These community inputs are briefly outlined below but will be relayed in full to the GNSO Council and BWG-RDS for future consideration at the appropriate points throughout the PDP.

Comments suggesting Issue Report clarifications, corrections, or enhancements

Within the 12 sets of comments received, approximately 24 specific comments responded directly to the public comment forum's call for community input on information that might be missing from the Preliminary Issue Report, necessary corrections or updates to information in the Preliminary Issue Report, or whether there are any questions that should be explored in this PDP in addition to those already described in the Preliminary Issue Report.

- There were no comments suggesting additional questions that should be explored in this PDP.
- Several commenters (COA, IPC, NCSG, Google, RySG) suggested PDP scope or framing clarifications. For example:
 - COA stated "The report subtly places a thumb on the scale in favor of dramatic change and against status quo."
 - IPC stated "The framing of these issues and scope of the WG Chart must ensure scope of questions and inquiry are adequate to task ... and allow for inclusion of any issues that have not yet been contemplated."
 - NCSG, Google, and RySG all suggested the PDP WG not be limited to focusing on the EWG's Final Report.
- Several commenters suggested clarifications or enhancements to questions already included in the Preliminary Issue Report:
 - Four commenters (RrSG, BC, COA, IPC) noted the need to assess and balance costs and benefits. For example, RrSG noted that "Cost must be analyzed at each step" while BC stated "It will be important for the PDP to consider the benefits of transparency ... as well as registrant's interest in privacy and the risk of misuse."
 - Three commenters (RrSG, BC, RySG) suggested privacy-related enhancements. For example, RrSG and RySG both noted that jurisdictional

- issues must be addressed, while BC expressed concern that consumer protection requirements be considered.
- Three commenters (RrSG, BC, IPC) addressed the needs for coexistence. For example, IPC stated “To the extent that existing gTLDs may continue to utilize WHOIS, consideration needs to be given to how the different systems can operate effectively.”
 - Two commenters (RrSG, BC) addressed aspects of system modeling. BC questioned whether “how data is secured” had been adequately addressed, while RrSG cited jurisdictional issues “including location, who will manage, centralization, and data breach results.”
 - One commenter (IPC) addressed compliance, suggesting “The PDP should ensure that the views of the community inform compliance expectations and that these expectations are clearly and unambiguously communicated.
 - Finally, several commenters (COA, EFF, BC, NCSG) flagged potential inaccuracies or statements that might require update to the Preliminary Issue Report. For example:
 - COA commented “To state that data is accessible for any purpose is not accurate.”
 - EFF stated “ICANN has the power to exempt registries and registrars from the requirements to provide WHOIS.”
 - BC observed that access and disclosure policies are addressed under two questions.
 - NCSG noted that the IWGDPT common position on privacy and data protection had not been included, questioned whether the EWG started with a clean slate, and suggested that the report be updated to reflect the CCWG-Accountability group’s work.

Concerns regarding the process to be used by the PDP

Within the 12 sets of comments received, approximately 36 specific comments pertained to the process that may be used by the PDP Working Group to address this Issue, including both the Board/GNSO-recommended Process Framework and the draft PDP WG Charter included as Annex C.

- Two commenters (COA, RrSG) made recommendations regarding the finality of Phase 1 decisions. COA recommended “At each step in the process, the WG will need to make a choice between incremental change and starting over,” while RrSG recommended that several questions and issues “be firmly decided prior to completion of Phase 1.”
- Two commenters (COA, IPC) suggested that the sequence of topics in the Process Framework and Charter be considered “a guideline not fixed” (COA).
- Similarly, RySG recommended that the GNSO “treat this as an opportunity to develop a more comprehensive approach” to develop “policies from the ground up that best fit RDS purpose.”
- Several comments suggested potential (sometimes conflicting) topic reordering.

For example:

- COA commented that “compliance is cross-cutting and should not be deferred” and “Postponing until the very end any consideration of risks and benefits may be imprudent and inefficient.”
- Google commented that “proposed cost/benefit analyses should be carried out in each of the identified phases.
- BC stated that “Privacy issues should be the first focus of policy development” and “Phrase 2 should not be considered complete until a satisfactory overarching data protection policy is developed.” However, IPC stated “PPSAI may render [privacy] discussion in the context of the PDP WG redundant and unnecessary ... Consideration should be given to analyzing privacy policies separately.”
- IPC also stated that consideration of system model is premature: “It should wait for the PDP process to decide if there should be a next-generation RDS.”
- NCSG recommended “At the conclusion of each phase, a separate rights impact assessment should be performed,” while INTA advocated waiting for Phase 2 to put “specific parameters around impact assessment.”
- Several comments addressed when the “if and why” decision would be made to pursue a next-generation RDS to replace WHOIS, and the implications of that decision. For example:
 - IPC stated “Many of the observations and proposed procedures for the PDP WG may embody conclusions reached by the EWG on issues that should be reserved for the WG itself, including the notion that the current model must be abandoned.”
 - Google, RySG, RrSG, BC, and IPC all raised questions regarding impact on existing WHOIS policy and implementation and continued pursuit of parallel paths. Google stated “If the community decides to undertake a next-generation RDS, parallel efforts to update WHOIS requirements should be limited to the extent possible.” RrSG asked “Given parallel initiatives, how will redundancy be eliminated and other WG outputs incorporated?” BC stated that, while the PDP is underway, “parallel ad hoc efforts to modify WHOIS requirements should be limited.”
- Three commenters (Google, ALAC, NCSG) expressed concern over resourcing.
 - Google asked whether “allocation of community resources to WHOIS reform would detract from other efforts where consensus is more likely.”
 - ALAC and NCSG both suggested that steps be taken to ensure equitable and representative participation from all stakeholders.
- Finally, GAC recommended that “ICANN should initiate specific consultation processes with public stakeholders such as law enforcement, consumer protection, and data protection authorities” and others.

Inputs to recommendations that will be generated by the PDP Working Group

Approximately 29 inputs were received within public comments that did not address the

Preliminary Issue Report or PDP Charter/Work plan, but rather voiced stakeholder views on potential recommendations to be generated by the PDP WG. These include:

- EFF and INTA inputs on each question enumerated for GNSO consideration during this PDP.
- RrSG suggestion to learn from ccTLD implementations of WHOIS.
- BC inputs on use cases, accuracy, data elements, system model, and cost/benefit/risk.
- NCSG position that WHOIS “is no longer fit for purpose in a modern privacy conscious world.”
- Knujon position that the intent of WHOIS and kind of information to be published in WHOIS is “quite clear” and stated in RFC 882 and RFC 3912.
- IPC suggestion that data elements might be “clarified or improved.”
- GAC positions on privacy, purpose, access, and accuracy questions.

Section IV: Analysis of Comments

General Disclaimer: This section is intended to provide an analysis and evaluation of the comments received along with explanations regarding the basis for any recommendations provided within the analysis.

With relatively few exceptions, commenters either confirmed or did not challenge the substantive research and background information provided in the Preliminary Issue Report. Comments suggesting clarifications, corrections, or enhancements to the Issue Report have all been reviewed by the Staff Manager to ensure that requested additions were either already present or added to the Final Issue Report, and that requested corrections have either been incorporated or addressed through clarifications in the Final Issue Report.

In particular, Staff analysis of comments regarding PDP scope or framing is that they can all be addressed through greater emphasis on relevant sections of the Final Issue Report, including this PDP’s focus on one prong of the Board-directed two-phase approach, the intent to consider all available inputs, and the opportunity for the GNSO to add questions and adjust the suggested Process Framework when adopting a PDP Charter and developing a PDP Workplan.

With regard to the process to be used by this PDP, commenters largely suggested alternatives already considered by the EP-WG when formulating its Process Framework. After analysis, Staff does not believe that these comments shed new light on the most effective PDP process, but nonetheless recommends that these comments be considered by the GNSO Council and the Board Working Group on Registration Data Directory Services ([BWG-RDS](#)) during adoption of the PDP Charter and Workplan. In some cases, these comments may help the GNSO focus on the community’s greatest concerns, including the continuation of parallel paths and resourcing.

Finally, it is Staff's recommendation that all comments which did not directly address the Issue Report but rather were intended as substantive input for the deliberations be considered by the PDP WG at the appropriate points during the PDP process. The comments underscore the diverse concerns of various stakeholders and will serve to inform the PDP, along with other available inputs summarized in the Final Issue Report.

The Final Issue Report will include this Report and analysis of public comments received, to enable the GNSO Council to fully consider all the issues and concerns expressed by the community in order to move forward on this Board-initiated PDP by adopting a PDP WG Charter and PDP Work plan.