# Background

The Internet Corporation for Assigned Names and Numbers (ICANN) is responsible for, among other things, the establishment of policies related to the creation and use of Generic Top Level Domains (gTLDs). gTLDs along with Country Code Top Level Domains (ccTLDs) and a few other specialized Top Level Domains (TLDs) comprise the Internet names space and are used to uniquely identify specific resources on the Internet. TLDs are the right-most string of characters preceded by a dot, of all Internet domain names. ICANN is also responsible for much of the Domain Name System (DNS) the technology which translates Domain Names into numeric Internet address which uniquely identify all resources on the Internet.

Each TLD is managed by a “Registry” and resources within each TLD (Domain Names) may be available for registration by individuals and organizations. For each registration a record is maintained of information about that registration including who the registrant is and contact information. This registration record is traditionally referred to as a “WHOIS” record and more recently is referred to as a Registration Directory Service (RDS) record. Traditionally, all information in the WHOIS database is public. Policy associated with WHOIS is established by the ICANN Board on the recommendation of the Generic Names Supporting Organization (GNSO). Current WHOIS “Policy” is a combination of enacted policy but much is left over from the Internet’s early days.

As part of its prior agreement with the United States Department of Commerce and more recently under its own Bylaws, ICANN is required to periodically review the WHOIS-RDS system. The first such review was carried out in 2010-2012, and the present review is the second such effort.

WHOIS/RDS is a rather hot topic in ICANN. It has been controversial for well over a decade. The recommendations of the first WHOIS Review Team (WHOIS-RT) resulted in an Expert Working Group studying WHOIS and the creation of a GNSO Policy Development Process (PDP) to establish a new WHOIS/RDS Policy. Additionally, in mid-2017, ICANN began efforts to address European privacy regulations (the General Data Protection Regulations – GDPR) which would impact ICANN and its Registrars and Registries ability to continue to publish WHOIS/RDS information.

Under the ICANN Bylaws, there was no choice but to launch the current WHOIS2-RDS Review. But the array of ongoing activities and the rapidly changing environment made it rather challenging. The Bylaws require that the Review address the implementation of the prior reviews recommendations and consider: the needs of law enforcement; to what extent WHOIS/RDS promotes consumer trust; whether registrant data is safeguarded; and to what extent Organisation for Economic Co-operation and Development ("OECD") Guidelines on the Protection of Privacy and Transborder Flows of Personal Data are adhered to.

# Review Scope

There were a number of community proposals to both limit the scope of the Review to just the first RT’s recommendations and also to include a range of other issues over and above those in the Bylaws.

Formally, the scope of a Review is the responsibility of the Review Team. After much discussion the WHOIS2-RDS-RT decided that it would address all of the Bylaw mandated areas except the OECD Guidelines as they were judged to be obsolete, particularly in relation to the GDPR. In addition, the RT included in its scope a review of new policy adopted by ICANN since the first RT published its report, and to perform a substantive review of Contractual Compliance with the intent of (a) assessing the effectiveness and transparency of ICANN enforcement of existing policy relating to WHOIS (RDS) through Contractual Compliance actions, structure and processes, including consistency of enforcement actions and availability of related data, (b) identifying high-priority procedural or data gaps (if any), and (c) recommending specific measureable steps (if any) the team believes are important to fill gaps.

The RT explicitly did not focus on ICANN’s actions in response to GDPR. Those are ongoing and the outcomes are not sufficiently firm as to allow them to be reviewed here. But the RT did not ignore the issue and conduct the review as if GDPR were not an issue of significant concern. To the extent we could factor in GDPR and its effects on the RDS(WHOIS), we did so.

# Methodology

The sixteen recommendations from the first RT were groups into nine subject areas (Strategic Priority, Single WHOIS Policy, Contractual Compliance, Outreach, Data Accuracy, Privacy/Proxy, Common WHOIS Interface, Internationalized Registration Data[[1]](#footnote-1) and Planning/Reports) and a Sub-Group of the RT was formed to address each topic. Subgroups were created to address issues not covered by the first RT (Law Enforcement, Consumer Trust, Safeguards and Post-WHOIS1-RT Policies, referred to as “Anything New”). The new Contractual Compliance study was to be handled by the group reviewing the original Compliance recommendation.

Each Sub-Group performed a thorough analysis of its subject matter, and drafted its report including, if applicable, any new recommendations. Many of the subgroups held teleconferences to carry out its work, in addition to e-mail discussions. The document and its conclusions were then reviewed in depth by the entire RT. To the extent possible, decisions were made by consensus and the vast majority of those were unanimous.

The RT conducted 39 teleconferences (typically 90 minutes) and met face-to-face three times (for a total of 7 days) prior to issues this Draft Report.

# Summary Findings

For each of the Subgroups, a brief description of the issues and findings follow.

**Strategic Priority:** WHOIS1 Rec #1 required ICANN to treat WHOIS in all its aspects as a strategic priority. This recommendation was deemed to have been Partially Implemented as it failed to achieve the original aim of instilling a culture of proactive monitoring and planned improvement in WHOIS.

**Single WHOIS Policy:** WHOIS Rec #2 required ICANN to create a single WHOIS policy document. This was done by creating a web-based document linking to the various documents that in total comprise ICANN WHOIS policy. Although this was not a single policy that was envisioned by some on the first WHOIS RT, it did address the recommendation and was deemed to be Fully Implemented.

**Outreach:** WHOIS1 Rec #3 required ICANN to perform outreach, including to communities outside of ICANN, to with the intent of improving understanding of WHOIS and promoting consumer awareness. Significant web-based documentation was created, but it was not well integrated with other registration and WHOIS-related parts of the ICANN web site. Abundant outreach was done, but little to communities not normally involved with ICANN. The recommendation was deemed to be Partially Implemented.

**Contractual Compliance:** WHOIS1 Rec #4 required that the contractual compliance function be managed with accordance with best practice principles overseen by a dedicated senior executive. There has been significant improvement since the recommendation was made, but it was found to be only Partially Implemented.

In addition to reviewing WHOIS1 Rec #3 implementation, this subgroup also was responsible for the additional study of Contractual Compliance described under Scope. A number of issues were identified resulting in several new recommendations.

**Data Accuracy:** WHOIS1 Rec #5-9 dealt with a number of issues related to WHOIS accuracy. The implementation of these recommendation resulted in a significant effort on behalf of ICANN Org and there is not a better understanding of accuracy issues. However, there are still many gaps in our understanding of accuracy issues. Although we have improved the syntactic accuracy of data, it is less clear what the impact has been on whether the data allows identification of and contact with registrants. GDPR may ultimately obscure this even more by making it more difficult to assess whether the data within the RDS(WHOIS) repository is accurate or nor. Two of the recommendations were deemed to be Fully Implemented and three were Partially Implemented.

**Privacy/Proxy:** The GNSO Policy Development Process (PDP) on Privacy and Proxy providers was triggered by WHOIS1 Rec #10. The PDP has completed and it is in implementation. Since the Board acted fully on the recommendation, it is deemed to have been Fully Implemented. However, since the RT could not assess effectiveness, the Board is requested to recommend that the next RDS Review Team address that. There is also a fallback recommendation in the case that the Privacy/Proxy implementation is unduly delayed.

**Common WHOIS Interface:** WHOIS1 Rec #11 required that a single WHOIS portal be created and operated by ICANN to provide the community with “one-stop shopping” for all WHOIS queries. That was done and the recommendation is deemed to be Fully Implemented. However, there is a follow-on recommendation suggesting metrics and/or a service level agreement for the portal to ensure full effectiveness. GDPR has also broken some aspects of the portal (since the registry is no longer the definitive source for thick WHOIS information) and a follow-on recommendation addresses this.

**Internationalized Registration Data:** WHOIS1 Rec #12-14 Related to the use of internationalized character sets for registration data (name, address, etc.) [[2]](#footnote-2).A number of studies and a PDP were carried out in response to these recommendations. The resultant policy and practices are not yet in place because they depend on a new RDS which is not yet implemented (using the Registration Data Access Protocol – RDAP). Because all of the work requested was carried out, the recommendations are deemed to have been Fully Implemented. As with Privacy/Proxy, the Board is requested to recommend that the next RDS Review Team Address review the effectiveness of the actual implementation.

**Planning/Reports:** WHOIS1 Rec #15-16 addressed the need for planning and reporting to carry out the WHOIS1 recommendations. This was done, but was not found to be as complete or useful as intended. The recommendations were found to be Partially Implemented.

**Law Enforcement:** The ICANN Bylaws call for the RDS Review to assess whether the RDS effectively meets the needs of Law Enforcement. A survey was carried out to address this, and was also used to try to understand, in a preliminary way, whether GDPR was likely to have an impact. The report details the results of this survey [DETAILS TO BE FILLED IN].

**Consumer Trust:** The assessment of whether RDS(WHOIS) enhances consumer trust is also a new mandated requirement for the RDS Review. [DETAILS TO BE FILLED IN].

**Safeguards:** An assessment of whether the RDS(WHOIS) safeguards registrant data looked at privacy, whether data was adequately protected from access or change, and whether appropriate breach notices are required. In the original WHOIS, there was no attempt to address privacy, and GDPR will obviously improve privacy. The ICANN contracts with registries, registrars and escrow agents included varying requirement for how data is to be protected from inappropriate access or change. One of the contracts required that ICANN be notified in the case of breach, and the others were silent.

Anything New: All new policies enacted since the WHOIS1-RT was active were inspected. Most were not deemed to be problematic but two were found to require recommendations which were included in the comparable sections related to the WHOIS1 recommendations

# Review Conclusions

The ICANN Org reports on the implementation of the sixteen recommendations from the first WHOIS-RT deemed that all sixteen had been fully implemented.

The RTs conclusions were that of the sixteen recommendations, eight were fully implemented, seven were partially implemented and one was not implemented[[3]](#footnote-3).

As a result of the analysis of the past RT recommendation as well as the new work, the RT is making X new recommendation which will be summarized in the next section of this Executive Summary.

1. The First WHOIS-RT Report incorrectly titles the section on Internationalized Registration Data as “Internationalized Doman Names”. As the report itself makes clear, the problem is not with the domain names which are handled by the DNS and WHOIS by translating them into ASCII (Punycode), but in the registration data such as the registrant name or mailing address. WHOIS only allows 7-bit ASCII for those, and the need to be able to enter such data in local scripts exists for non-IDN domains as well. [↑](#footnote-ref-1)
2. The WHOIS1 Report incorrectly classed these recommendations under the title Internationalized Domain Names (IDNs). In fact, the need for internationalized registration date applies to both IDNs as well as traditional names. [↑](#footnote-ref-2)
3. Although the intent of the recommendation was partially addressed in a number of ways, the actual recommendation was deemed to be not feasible in the original ICANN Org evaluation and that did not change. [↑](#footnote-ref-3)