Appendix A

Draft Report Recommendations



R1.1 | R1.2

Recommendation R1.1: To ensure that RDS (WHOIS) is treated as a strategic priority, the ICANN Board should put into place a forward-looking mechanism to monitor possible impacts on the RDS (WHOIS) from legislative and policy developments around the world.

Recommendation R1.2: To support this mechanism, the ICANN Board should instruct the ICANN Organization to assign responsibility for monitoring legislative and policy development around the world and to provide regular updates to the Board.

Findings: While a number of steps were taken towards making RDS (WHOIS) a strategic priority for the organization, the record of actions over the last year and in particular the challenging situation regarding compliance with data protection requirements show that ICANN did not take action to address related community concerns in a timely manner. See also discussion of RDS (WHOIS) policy development actions in Section 3.3. Therefore, implementation of this recommendation is not yet sufficient.

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

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

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

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

These recommendations are also within the scope of the review team's efforts.



R1.1 | R1.2

Impact of Recommendation: These recommendations would impact the work of the Board and ICANN leadership. It would contribute to the legitimacy and efficiency of the organization, by ensuring that it is better prepared to meet future challenges and to serve community needs, including registrants, RDS users and contracted parties. It would also impact the ICANN Organization, in that it would require resources to perform the requisite analysis and update the ICANN Board on a regular basis.

Feasibility of Recommendation: Given that the ICANN Board has already resolved in the past to make RDS (WHOIS) a strategic priority, this updated recommendation should also be feasible. A risk remains in that any such attempt at providing a global "policy scan" might fail to properly assess relevant developments, as may have been the case with the GDPR and other data protection rules: the potential for conflicts with the law was highlighted many years ago but no change was made in time through the normal ICANN processes.

Implementation: The implementation has to be provided by the ICANN Board and leadership, with staff support. A successful implementation would consist in a revised Charter for the ICANN Board Working Group on Registration Data Directory Services (BWG-RDS), which should be implemented as soon as possible and at the latest within 6 months. This could dovetail with ongoing efforts to ensure swift and constructive cooperation between the Board and ICANN leadership on the one side and the GNSO on the other side for the Expedited PDP on the Temporary Specification for gTLD Registration Data. The BWG-RDS would need to be supported by appropriate dedicated resources from ICANN, who would provide the requisite analysis of global policy developments and supply the ICANN Board with regular updates, which could also be shared with the full ICANN community.

Priority: High.

These recommendations provide the backbone for ICANN's efforts on RDS (WHOIS), which should be driven by a strategic and coherent overall approach. It is therefore considered essential.



R1.3

Recommendation R1.3: The ICANN Board should update the Charter of its Board Working Group on RDS to ensure the necessary transparency of the group's work, such as by providing for records of meetings and meeting minutes, to enable future review of its activities.

Findings: It is difficult to assess the forward-looking nature of the work done by the BWG-RDS in the absence of any record of its activities.

Rationale: Given the strategic importance of RDS (WHOIS) and related activities, it is to be expected that the work of the relevant BWG-RDS or any successor entity would be of interest to future reviews. In order to allow for accountability and transparency of the work, an account on its activities needs to be created and made available to the ICANN Community.

Impact of Recommendation: This recommendation impacts the ICANN Board members participating in the BWG-RDS and ICANN support staff to the Board. It increases the administrative burden incumbent on the ICANN Board and its support staff.

Feasibility of Recommendation: The recommendation would create a new administrative burden on the ICANN Board and on relevant support staff. However, given the limited burden imposed by the keeping of meeting records and the creation of minutes, its implementation should not be overly burdensome and is therefore considered feasible.

Implementation: The implementation has to be provided by the ICANN Board, with staff support. A successful implementation could consist in a complete record of ICANN BWG-RDS meetings and corresponding meeting minutes, which the Board should resolve to create as soon as possible and at the latest within 6 months.

Priority: Medium.

This Recommendation serves to create overall accountability and transparency of the Board's activities in a key field, and is therefore of strategic importance.



R3.1

Recommendation R3.1: The ICANN Board should direct ICANN Organization to update all of the information related to RDS (WHOIS) and by implication other information related to the registration of second-level gTLDs domains. The content should be revised with the intent of making the information readily accessible and understandable, and it should provide details of when and how to interact with ICANN or contracted parties. Although not the sole focus of this recommendation, interactions with ICANN Contractual Compliance, such as when filing WHOIS inaccuracy reports, should be a particular focus. The revision of this web documentation and instructional material should not be undertaken as a purely internal operation but should include users and potentially focus groups to ensure that the final result fully meets the requirements. The resultant outward facing documentation of registrant and RDS (WHOIS) issues should be kept up to date as changes are made to associated policy or processes.

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

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

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

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



R3.1

Implementation: The implementation should begin once it is moderately clear how GDPR will be addressed with relation to gTLD RDS (WHOIS). Should the implementation of this recommendation be deferred past FY2020, the then existing RDS (WHOIS)-related parts of the ICANN web site must be amended to cross-link the various sections on the RDS (WHOIS) portal, ICANN Contractual Compliance, Registrar and ICANN Learn.

As policies and processes change, so should the related user-oriented documentation.

Priority: Medium.



R3.2

Recommendation R3.2: With community input, the ICANN Board should instruct ICANN Organization to identify which groups outside of those that routinely engage with ICANN should be targeted effectively through RDS (WHOIS) outreach. An RDS (WHOIS) outreach plan should then be developed, executed, and documented. There should be an ongoing commitment to ensure that as RDS (WHOIS) policy and processes change, the wider community is made aware of such changes. WHOIS inaccuracy reporting was identified as an issue requiring additional education and outreach and may require a particular focus. The need for and details of the outreach may vary depending on the ultimate General Data Protection Regulation (GDPR) implementation and cannot be detailed at this point.

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

Rationale: The need for non-traditional outreach on RDS (WHOIS) was clearly understood by the WHOIS1 Review Team. This need was further supported by parts of the ICANN community. However, the apparent lack of insight by others to understand how GDPR might impact Internet communities demonstrates why such outreach is crucial and must include both traditional and non-traditional parties.

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

Feasibility of Recommendation: Although such outreach implementing the original recommendation was apparently not carried out to any great extent, there is no reason to believe that it is not feasible.

Implementation: The implementation should begin once it is moderately clear how GDPR will be addressed with relation to gTLD RDS (WHOIS). Implementation should not be a one-time effort but should have an ongoing component.

Priority: High.



Recommendation R4.1: The ICANN Board should direct ICANN Contractual Compliance to proactively monitor and enforce RDS (WHOIS) data accuracy requirements to look for and address systemic issues. A risk-based approach should be executed to assess and understand inaccuracy issues and then take the appropriate actions to mitigate them.

Findings: As detailed in Section 3.5.3, currently, the ICANN Contractual Compliance team's responsibilities are mainly reactive in responding to WHOIS inaccuracy reports and working with the Global Domains Division (GDD) on the results of the ARS reports. The Compliance team could be more proactive in their approach and when they see suspected systemic issues research, analyze and enforce against inaccuracy in the registration data. With the number of registered domain names growing daily it becomes more important to security and stability to ensure there is accurate information in the registrant data on record.

Rationale: Data produced by ICANN's Domain Activity Abuse Reporting (DAAR) system is an additional resource that the ICANN Contractual Compliance team has available and is not currently including in their research and analysis. The use of DAAR data as one of many input sources would provide a different perspective for the ICANN Contractual Compliance team. Although DAAR data is non-authoritative, it is used globally to add to the security and stability of the internet. Bulk WHOIS Inaccuracy Reports may be helpful in addressing systemic issues. Reports through this tool may be indicative of wide spread problems and use of these reports could assist in enforcement.

Impact of Recommendation: This recommendation could positively impact the accuracy of registrant data. The Compliance team could implement this, unless it requires a new policy, in which case a GNSO Policy Development Process may be required. If this recommendation is not implemented the effectiveness of compliance actions will be lessened. As systemic issues increase and sophistication of attacks are on the rise the ICANN Contractual Compliance teams needs more effective tools and detection information to resolve issues. This recommendation is aligned with ICANN's Mission and within scope of the review team.

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



Implementation: The Community and ICANN org would work together on creating a framework/policy for this recommendation. This recommendation will be successful when the percentage of accurate registrant data records increases. There is currently no specific work underway on this issue except that the DAAR data is available and ready for evaluation. This recommendation could be implemented immediately upon approval by the ICANN Board.

Priority: High.



Recommendation R4.2: The ICANN Board should direct ICANN Contractual Compliance to look for patterns of failure to validate and verify RDS (WHOIS) data as required by the RAA. When such a pattern is detected, an audit should be initiated to check if the Registrar follows RDS (WHOIS) contractual obligations and consensus policies. Sanctions should be applied if significant deficiencies in RDS (WHOIS) data validation or verification are identified.

Findings: As detailed in Section 3.6.3.2, all current RDS (WHOIS) accuracy-related compliance activities are separate and conducted individually. ARS sampled RDS (WHOIS) records to do accuracy tests, the Audit program samples registrars to conduct audits, and no synergies appear to have been gained through these different action tracks.

Rationale: A follow up audit would help in cases where a pattern of failure to validate and verify RDS (WHOIS) data as required by the RAA is detected, to help to mitigate issues regarding the identified registrar.

Impact of Recommendation: Registrars that do not consistently adhere to the requirement to verify and validate the data in the RDS (WHOIS) record will be impacted by this recommendation. If a pattern is detected for lack of adherence to RAA requirements, then the Registrar will be subjected to an audit of their verification and validation of RDS (WHOIS) records by the Compliance team. This could result in education of the Registrar, better understanding of the requirements required by ICANN policy, and an improvement in RDS (WHOIS) data accuracy. If this recommendation is not implemented, systemic issues will not be detected and there will continue to be Registrars that are not complying.

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

Feasibility of Recommendation:

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



Implementation: Registrants, Registrars, Registries and ICANN Contractual Compliance will all be responsible for the implementation of this recommendation. Successful implementation will result in a reduction in percentage of inaccuracy reports for audited registrars and improved accuracy of RDS (WHOIS) records. There is no current work underway on this issue. This recommendation should be implemented immediately after approval by the ICANN Board.

Priority: High.



R5.1

Recommendation R5.1: The ICANN Board should direct the ICANN Organization to look for potentially-anomalous ARS results (e.g., 40% of ARS-generated tickets closed with no action because the RDS (WHOIS) record changed between the time the ARS report was generated and the time the registration was reviewed by ICANN Contractual Compliance) to determine the underlying cause and take appropriate action to reduce anomalies.

Findings: Throughout ARS project Phase 2, a consistently high percentage of ARS-generated tickets have been closed with no action. As detailed in Section 3.5.4.5, changes in the RDS (WHOIS) record between ARS sampling and inaccuracy ticket processing appear to account for 40-60% of closures resulting in no compliance action. In follow-up discussions with ICANN Org, the review team was unable to obtain sufficient information about these record changes and concluded that further investigation is warranted to determine the underlying cause(s) and either rule out or remediate possible processing anomalies.

Rationale: The intent of this recommendation is to improve the effectiveness of ARS in contributing to improvement of RDS (WHOIS) accuracy. If this unexpectedly high ratio of RDS (WHOIS) updates within a relatively short period of time can be extrapolated to all gTLDs, the review team believes that a better understanding of these RDS (WHOIS) changes may help to improve follow-up. For example, how many of such cases involve registrations that expire without renewal prior to ticket processing? How many involve domain names that are transferred to a new registrant and/or registrar prior to processing? How many involve RDS (WHOIS) records that are updated by the registrant or registrar, with or without remediating the ARS-detected inaccuracy? Analyzing the root cause behind closures resulting in no compliance action could uncover patterns that lead to better inaccuracy detection or more targeted compliance actions.

Impact of Recommendation: The ARS project team, the registrars receiving ARS-generated tickets, and (probably) the ICANN Contractual Compliance team will be impacted by this recommendation. If this recommendation is successfully implemented, the ratio of ARS-generated tickets closed without action may be reduced. If this recommendation is not implemented, there could be anomalies in detection or processing that reduce the benefits obtained from ARS. Currently, the ARS project represents a major effort to improve RDS (WHOIS) accuracy. However, given the considerable number of ARS-generated tickets closed with no action refining ARS methodology will contribute the effectiveness of ARS.



R5.1

Feasibility of Recommendation: For every ARS-generated ticket, the ARS project team has worked closely with the identified registrar. To implement this recommendation, further actions are needed to examine ARS-generated tickets that result in closure with no action to determine and analyze the underlying causes. Depending upon common underlying cause(s), investigation and action could involve the ARS Team, ICANN Contractual Compliance, and (to the extent feasible) follow up with the registrar. The review team acknowledges that root cause analysis would add to the workload of affected parties, but believe this effort is feasible and manageable.

Implementation: As described above, ICANN Org would be responsible for implementing this recommendation. In some cases registrars receiving ARS-generated tickets closed with no action could be involved as well. Given that ARS is an on-going project, this recommendation could be injected into the project's process for continuing improvement. The envisioned implementation timeline could be 12 months.

Priority: To be determined.

Consensus: No objections to place holder, pending further investigation.



R10.1

Recommendation R10:1 The Board should monitor the implementation of the PPSAI. In the event that the PPSAI policy does not become operational by 31 December 2019, the ICANN Board should propose an amendment to the RAA that Privacy/Proxy providers affiliated with registrars shall verify and validate underlying customer information provided to them in the same way as registrars are required to verify and validate other registration data.

Findings: The PPSAI PDP recommendations are expected to ensure the verification and validation requirements are expanded to also encompass the underlying registration details of privacy and proxy service providers. It is understood from review by the RDS-WHOIS2 Review Team of existing registrar practices that registrars often already include such processes even though there is no such requirement but this is not known to be a standard practice employed by all accredited registrars.

Rationale: In case the IRT does not result in policy, the policy loophole to the verification and validation of registration data would remain for registrations through such registrars that do not act in this manner and while ICANN would have no ability to enforce any such ability against nonaffiliated, non-accredited providers, the addition of such a requirement to the RAA could eliminate this issue for a large number of services.

Impact of Recommendation: Ensure better data quality and contactability of the underlying contact owner for registrations using privacy services. Would require amending the RAA.

Feasibility of Recommendation: Amendment process of RAA is envisioned in the RAA itself. It would merely expand already existing practices to all registrations using registrar-affiliated privacy services.

Implementation: Use of the RAA amendment process by mutual agreement between ICANN and accredited registrars.

Priority: Low.



R10.2

Recommendation R10.2: Reviewing the effectiveness of the implementation of WHOIS1 Recommendation #10 should be deferred. The ICANN Board should recommend that review be carried out by the next RDS (WHOIS) review team after PPSAI Policy is implemented.

Findings: The PDP process has completed its work and the policy is now in its implementation stage.

Rationale: As no review of the effectiveness of a policy is possible prior to its implementation, this work should be deferred.

Impact of Recommendation: This will allow better assessment of the effective results of the policy.

Feasibility of Recommendation: Easy Implementation: Carrying out this recommendation would fall to the next RDS-WHOIS review team, when constituted.

Priority: Low.



R11.1

Recommendation R11.1: The ICANN Board should direct the ICANN Organization to define metrics or SLAs to be tracked and evaluated to determine consistency of results of queries and use of any common interface (existing or future) used to provide one-stop access to registration data across all gTLDs and registrars/resellers. Specific metrics that should be tracked for any such common interface include:

- How often are RDS (WHOIS) fields returned blank?
- How often is data displayed inconsistently (for the same domain name), overall and per gTLD?
- How often does the tool not return any results, overall and per gTLD?
- What are the causes for the above results?

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

Rationale: Metrics and SLAs could be used to address this and also to proactively spot non-compliance or implementation issues that affect the provision of the service. The significance of the recommendation can only be appropriately assessed after its implementation as the prevalence of lookup failures is currently unknown. Anecdotal evidence suggests the existence of lookup issues. By generating metrics that will assist in recognizing systemic issues or non-compliance, the recommendation aligns well with ICANN's Strategic Plan and Mission as it helps to foster a healthy, resilient and secure identifier ecosystem. The recommendation is in compliance with the review team's scope.

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

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



R11.1

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

Priority: Low.



R11.2

Recommendation R11.2: The ICANN Board should direct the ICANN Organization to continue to maintain the common interface to keep up to date with new policy developments or contractual changes for contracted parties to ensure that the common interface will display all publicly-available RDS (WHOIS) output for each gTLD domain name registration available from contracted parties, i.e., when they differ, both the registry and registrar RDS (WHOIS) output could be shown in parallel.

Findings: As noted above, registry and registrar interpretations of GDPR and the differential requirements for registries and registrars under the Temporary Specification for gTLD Registration Data, lookups at registries and registrars may result in different registration data returned by RDS (WHOIS) for the same domain name, depending on where the lookup is performed.

Rationale: The common interface must be maintained to adapt to such changes, to ensure that it continues to display all publicly-available RDS (WHOIS) output, regardless of which source is more complete or more authoritative.

Impact of Recommendation: A display of divergent results between registry and registrar may cause some level of confusion in users, but ultimately having more complete information available will benefit the users of the common interface.

Feasibility of Recommendation: This recommendation will need to be assessed for compliance with applicable laws.

Implementation: This recommendation can be directly implemented by ICANN after the legal assessment is completed. This recommendation should be implemented by the existing teams responsible for maintenance of the common interface.

Priority: High.



R12.1

Recommendation R12.1: Reviewing the effectiveness of the implementation of Recs #12-14 should be deferred. The ICANN Board should recommend that review be carried out by the next RDS review team after RDAP is implemented, and the translation and transliteration of the registration data launches.

Findings: There is no actual internationalized registration data in the current RDS (WHOIS) system to review the implementation of Recommendations #12-14 in a pragmatic way. Even after RDAP has been implemented, the internationalized registration data can still be waiting for implementation due to lack of a requesting party and financial support.

Rationale: There is still a need to offer internationalized registration data. When all prerequisites are ready, a follow up review could complete the implementation review of Recommendations #12-14.

Impact of Recommendation: The recommendation has no impact until RDAP is in use. When RDAP is in use, registrars and registries will be affected, as they will have to process the internationalized registration data for users, both in internationalized and ASCII format, and partially implement translation/transliteration themselves. Registrants will be affected as they will be able to provide the internationalized data. Though internationalized data is expected to be result in fewer accidental mistakes, the accuracy of ASCII data can also be reduced because of automated translation/transliteration. The Accuracy Reporting System (ARS) will be affected, as new possibilities of providing incorrect information will appear (e.g., mismatch between internationalized and ASCII data) and it will become necessary to involve native speakers to validate internationalized data.

Feasibility of Recommendation: Given that all the necessary work (RDAP protocol standardization, development of principles of internationalization, metrics of data accuracy) have been finalized, this recommendation should also be feasible when RDAP is implemented and internationalized registration data is available.



R12.1

Implementation: To fully implement the recommendation, the efforts of registries and registrars are required to implement the RDAP protocol and start collecting internationalized registration data. The target of successful implementation is all the audiences of RDS (WHOIS) services. Some RDAP implementations are underway already, but they are very limited for now and will not be in a contrary with the recommendation. The period necessary for implementation is estimated as more than 12 months.

Priority: Low.

Given a feasibility loophole in the contracts and no special interest in implementing the RDAP protocol more widely than for experimental purposes, this recommendation would not be in the RDS-WHOIS2 Review Team's top 5 at this time.



R15.1

Recommendation R15.1: The ICANN Board should ensure that implementation of RDS-WHOIS2 Review Team recommendations is based on best practice project management methodology, ensuring that plans and implementation reports clearly address progress, and applicable metrics and tracking tools are used for effectiveness and impact evaluation.

Findings: See Section 3.10.4, Problem/Issue.

Rationale: The intention behind this recommendation is to ensure that the plan and reports regarding implementation of recommendations generated by this review team are pragmatic and efficient.

Impact of Recommendation: Given that implementation plans and annual reports are regular ICANN activities, this recommendation will not impose extra workload on ICANN. Metrics tracking will impact Registrars, Registries, ICANN Contractual Compliance, etc., while the whole community will benefit from the implementation of this recommendation. Under new Bylaws section 4.5, ICANN is in the process of developing an Annual Review Implementation Report, which will discuss the status of the implementation of all review processes required by Section 4.6 and the status of ICANN's implementation of the recommendations set forth in the final reports issued by the review teams to the ICANN Board following the conclusion of such review ("Annual Review Implementation Report").

Feasibility of Recommendation: Measuring recommendation implementation should not be easy, The challenging part will be the design of metrics for each recommendation to be tracked.

Implementation: The ICANN Board should take the lead in developing the structure and metrics for the plan and implementation reports. An overview of the recommendations generated by this Review Team will be the foundation for that design. The envisioned implementation timeline should be within 6 months.

Priority: Medium.



LE.1 | LE.2

Recommendation LE.1: The ICANN Board should resolve that regular data gathering through surveys and studies are to be conducted by ICANN to inform a future assessment of the effectiveness of RDS (WHOIS) in meeting the needs of law enforcement, as well as future policy development (including the current Temporary Specification for gTLD Registration Data Expedited Policy Development Process and related efforts).

Recommendation LE.2: The ICANN Board should consider extending and conducting such surveys and/or studies (as described in LE.1) other RDS (WHOIS) users working with law enforcement on a regular basis.

Findings: The review team found that the lack of available data on RDS (WHOIS) uses, advantages and shortcomings had a negative impact on the possibility to assess the functionality of the RDS (WHOIS) and whether it meets requirements set out in the Bylaws.

Rationale: The intent behind this recommendation is to ensure that future reviews, but also policy development processes, can benefit from a better and more reliable evidence base. The issues identified could best be addressed by repeated data gathering exercises that include the running of surveys at regular intervals to create comparable data sets. The potential impact of not addressing the recommendation would be a continued lack of data, which has already shown to add to current problems plaguing both reviews and policy development processes, where disagreement on basic facts has sometimes led to significant and enduring conflict. This recommendation is aligned with ICANN's Strategic Plan and Mission, which already seek to reflect the strategic priority given to RDS (WHOIS) and which could benefit from a better evidence base to assess whether its own projects and processes meet KPIs. This recommendation is also within the scope of the RDS-WHOIS2 Review Team's efforts.

Impact of Recommendation: This Recommendation would impact ICANN as an organization, creating an administrative burden. It would contribute to the legitimacy, transparency and accountability of the organization and the ICANN community, by ensuring that a better evidence base is made available to assess the uses and other aspects of the RDS (WHOIS) and further develop RDS (WHOIS) policy.



LE.1 | LE.2

Feasibility of Recommendation: Given that the main burden of surveys lies on the respondents, the feasibility of the recommendation will depend on their willingness to participate. However, in light of the importance attributed to the RDS (WHOIS) in recent discussions, this risk seems to be manageable. Conducting surveys and possibly also studies would create an administrative and possibly also financial burden for ICANN as an organization, which however seems manageable in light of the benefits that are to be expected.

Implementation: The implementation has to be provided by the ICANN Board and ICANN Organization. A successful implementation would consist in a Board resolution within the next six months that is then put into practice by the ICANN Organization, e.g. through annual surveys of relevant user groups as defined by policy development processes.

Priority: High. These recommendations create an essential factual basis for further discussion and analysis.



SG.1

Recommendation SG.1: The ICANN Board should require that the ICANN Organization, in consultation with data security and privacy expert(s), ensure that all contracts with contracted parties (to include Privacy/Proxy services when such contracts exist) include uniform and strong requirements for the protection of registrant data and for ICANN to be notified in the event of any data breach. The data security expert(s) should also consider and advise on what level or magnitude of breach warrants such notification. In carrying out this review, the data security and privacy expert(s) should consider to what extent GDPR regulations, which many but not all ICANN contracted parties are subject to, could or should be used as a basis for ICANN requirements. The ICANN Board must either negotiate appropriate contractual changes or initiate a GNSO PDP to consider effecting such changes.

Findings: ICANN's agreements with contracted parties have inconsistent requirements regarding the protection of registrant data, and in several cases, no requirement that it be notified in the case of data breach.

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

Impact of Recommendation: This recommendation will impact data security and potentially registrants whose data is collected in conjunction with gTLD domain registrations. By helping to ensure that such data is not altered inappropriately, their domain names and associated assets are protected. The recommendation could impose additional contractual requirements on registrars and registries. If this recommendation is not addressed, ICANN Contractual Compliance has no ability to either audit that reasonable efforts are being used to protect data, nor to be aware of serious problems with how its contracted parties are protecting such data.

Feasibility of Recommendation: The RDS-WHOIS2 Review Team believes that this recommendation is both feasible and necessary.



SG.1

Implementation: Implementation should ensure uniform and appropriate protection of registrant data by all contracted parties along with due notification of ICANN in the event of breaches and the ability of ICANN Contractual Compliance to audit such actions and take action in the case of noncompliance. The review team knows of no current effort to enact such change, but it should be completed within one year of this recommendation being accepted.

Priority: Medium.



Recommendation CM.1: The ICANN Board should negotiate contractual terms or initiate a GNSO PDP to require that gTLD domain names suspended due to RDS (WHOIS) contact data which the registrar knows to be incorrect, and that remains incorrect until the registration is due for deletion, should be treated as follows. (1) The RDS (WHOIS) record should include a notation that the domain name is suspended due to incorrect data; and (2) Domain names with this notation should not be unsuspended without correcting the data.

Findings: As detailed in Section 8.3.1 (e), currently, when a domain name is suspended for inaccurate information the false information remains in the record. The information in the record may belong to another person or entity so the inaccurate information remaining in the record continues the act of identity theft. At the very least, this information remaining is misleading.

Rationale: Ensure that inaccurate information does not remain in the record and if identity theft has occurred the person or entity doesn't continue to be impacted. Currently, the inaccurate information remains in the record which can cause confusion and harm if this was an act of identity theft. Inaccurate information is often used in the registration data in registration that are perpetuating DNS abuse. Eliminating the use of inaccurate data in any suspended domain name will add to the security and stability of the DNS. Inaccurate data would no longer be found lingering in the registrant data. This would not be difficult to implement a new policy would be created that registrar's would follow when suspending a domain name.

Impact of Recommendation: Successful implementation would result in new statuses in the domain name registration record that indicated the domain name was suspended due to inaccurate information. The inaccurate Information would be redacted and result in removal of data that did not have authorization to be included in the registration data. No related work is currently underway. This recommendation should result in a PDP created immediately upon approval by Board. If this recommendation is not implemented registrant data will continue to be displayed that is not accurate, authorized for inclusion in registrant data and continue to contribute to identity theft. This recommendation is aligned with ICANN's Strategic Plan and Mission and is within the scope of the review team.



Feasibility of Recommendation: Agreed upon language could be added into the RDS (WHOIS) record to clearly indicate status of the domain name.

Implementation: This implementation would involve the community to create the policy, ICANN Org to implement it, and the ICANN Contractual Compliance team to enforce it.

Priority: High.



Recommendation CM.2: The ICANN Board should direct ICANN Organization to assess grandfathered domain names to determine if information is missing from the RDS (WHOIS) Registrant field. If 10-15% of domain names are found to lack data in the Registrant field, then the ICANN Board should initiate action intended to ensure that all gTLD domain names adhere to the same registration data collection requirements within 12 months.

Findings: As detailed in Section 8.3.1 (f), in the Accuracy Reporting System (ARS) report categorize the domain name registrations that are obligated to meet only RDS (WHOIS) requirements of the 2009 RAA RDS (WHOIS) requirements, the report refers to these domain names as grandfathered domains. These are treated separately from those that must adhere to the 2013 RAA. "the only difference between 2013 and 2009 RAA operability requirements is that the 2009 RAA requirements do not require that information be present in the registrant email or telephone number fields, while 2013 RAA require the presence of information in those fields." The report estimates that of the 12000 domain names reviewed for compliance 30% (over 180,000,000 domain name registrations) were 2009 grandfathered domain names and do not have to meet the same requirements as domain names registered after the 2013 RAA was implemented. Considering that the only way these domain names would have to comply with the 2013 RAA is if they were deleted and registered again or transfer of registrant. This does not seem likely since early registrations are often the most valuable. They are often sold but not deleted.

Rationale: After 5 years of two existing policies domain name registrant data must comply based on when the domain name was registered a newly created policy with one standard requirement that all registrant data must adhere standardize the Registrant Data record and ease operability. Currently, the sub group has not found information to determine how many domain name registrations do not contain Registrant email address or telephone number. It may not be an issue if the registrants have proactively provided the information without the requirement to do so. If the policy is updated requiring the same registrant data for all domain name registration this will no longer impact future changes to registrant data policies. This is aligned with the ICANN's strategic plan and mission and It will add to the security and stability of the DNS. 25 The review team is seeking community feedback on this percentage, as well as on impacts this recommendation might have on the rights of registrants in the use of their domain names.



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

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

Implementation: This would require the Community to develop a new policy and ICANN Org to implement and the ICANN Contractual Compliance team to enforce. Successful implementation would result in 100% of domain name registrations complying with the same policy on registrant data. There is no current work underway on a similar policy. This assessment and possible creation of a new policy should begin immediately upon approval by the ICANN Board.

Priority: Medium.



Recommendation CM.3: The ICANN Board should direct ICANN Organization to review the RDS (WHOIS) records of gTLD domain names sampled by ARS for each region to determine whether lack of knowledge of RDS (WHOIS) inaccuracy reporting tools or other critical factors are responsible for low RDS (WHOIS) inaccuracy report submission rates in some regions.

Findings: As detailed in Section 8.3.1 (g), in the ARS reports, the number of reports of inaccurate data from users in South America and Africa where significantly lower than the other continents. This could be due to lack of knowledge of the ability to report these or other cultural influences.

Rationale: Ensure that users in South America and Africa or any developing countries are aware of the RDS (WHOIS) record and that they can independently report inaccurate data. This is critical to ensure that developing countries can address issues with inaccurate data in the RDS (WHOIS). Continuing to reach out to the Global south to increase awareness of ICANN policies and tools to remedy issues is critical for the security and stability of the internet. This recommendation is aligned with ICANN's Strategic Plan and Mission and is within the scope of the review team.

Impact of Recommendation: This recommendation could result in an improvement in submission rates by region and may discover other cultural reasons that the inaccuracy reporting tool is not utilized. This recommendation would impact users in these geographic areas and the registrars who will respond to the Compliance team's request for review. This could increase the number of inaccuracy reports that the Compliance team works on. No implementation will continue to disadvantage the global south.

Feasibility of Recommendation: ICANN currently has many outreach events targeting the Global South along with some of the stakeholder groups. Information about accuracy requirements and how to report inaccurate data could be added to these events and materials distributed.



Implementation: The ICANN Community and ICANN Org would work together on this issue. This recommendation will be successful if the ARS reports show similar reporting rates by users no matter what country they live in after implementation. Education and outreach is ongoing this could be added to and amplified in this work. This recommendation could be implemented immediately upon approval by Board.

Priority: Low.



Recommendation CM.4: The ICANN Board should direct ICANN Organization to publicize and encourage use of the Bulk WHOIS inaccuracy reporting tool (or any successor tool).

Findings: As detailed in Section 8.3.3, according to the information provided by the ICANN Contractual Compliance team only 10 individuals/entities have been approved to use the Bulk WHOIS Inaccuracy Reporting tool. Of those 10, only 3 have reported inaccurate RDS (WHOIS) records in the last year. If more people understood this tool was available, it would be easier for reporters of large number of inaccurate data in the RDS (WHOIS) to report these to the ICANN Contractual Compliance team.

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

Impact of recommendation: If this recommendation is implemented it would result in more efficient inaccuracy report processing and lessen the burden on reporters and ease the review of the report by the ICANN Contractual Compliance team if all the registration data is the same. If it is not implemented multiple domain names with the same inaccurate information will continue to be reported one by one which creates more work for the reporter and require the ICANN Contractual Compliance team to review single reports. This recommendation would impact the users of the Bulk WHOIS Inaccuracy reporting tool by lessening the burden to submit reports. It would also impact the ICANN Contractual Compliance team in how they address inaccuracy reports. This recommendation will add to the security and stability of the DNS, is aligned with ICANN's Strategic Plan and Mission and is within the scope of the review team.



Feasibility of Recommendation: ICANN already does quite a bit of outreach and could add this to their efforts. It is very feasible to implement this recommendation.

Implementation: ICANN Org, with consultation of the community, could provide more outreach about the Bulk WHOIS Inaccuracy Reporting tool. Outreach and education to those that use the inaccuracy single reporting tool would increase the use of the Bulk WHOIS Inaccuracy Reporting tool. Education and outreach to start immediately upon approval by Board.

Priority: Low.



Recommendation CM.5: The ICANN Board should recommend the GNSO adopt a risk-based approach to incorporating requirements for measurement, auditing, tracking, reporting and enforcement in all new RDS policies.

Findings: As detailed in Section 8.3.5, in reviewing all new policies created since the WHOIS1 Review Team at least one was identified as not being enforced by the ICANN Contractual Compliance team. The impact of a policy can be measured with good statistics. If policy cannot be measured it is not a good policy.

Rationale: This new policy would ensure that all policies are measured, audited, tracked, reported and enforced by the ICANN Contractual Compliance team. The community while in the policy development process should ensure that the policy is developed with compliance in mind. One policy, the Consistent Labelling and Display Policy, was identified as not being monitored or enforced. Without statistics on this policy available it is impossible to understand the level of compliance with this policy. Policies not enforced risk being less effective. A risk-based enforcement strategy is critical when voluntary compliance is not sufficient. A strategy would include a rigorous and systematic approach to identifying and responding to risk. It is necessary to identify and assess the risk associated with non-compliance with policies or contractual obligations, based on this risk assessment.

Impact of Recommendation: Registrars and Registries will be impacted by this recommendation, as they will have to review compliance of this policy and provide information to the ICANN Contractual Compliance team and ensure that they are implementing the recommendation. The Compliance team will have to collect, analyze and enforce each policy as required. This will add to security and transparency. The community should develop policies with enforcement in mind. Successful implementation of this policy would result in knowledge of compliance with all policies. The review team requests this recommendation to be implemented immediately upon approval of Board. If this recommendation is not implemented, the current state of not knowing if the policies created by the community are implemented will remain, making the impact on the system as expected by the PDP process that created the policy difficult to assess. This recommendation is aligned with ICANN's Strategic Plan and Mission and is within the scope of the review team.



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

Implementation: If implemented, all policies will be evaluated for impact and effectiveness. If not implemented the community will not know if a policy is effective or has had unexpected consequences. The Community and ICANN Org would be responsible for this implementation. The review team would expect a PDP to be created immediately upon approval by the ICANN Board.

Priority: Low.



BY.1

Recommendation BY.1: The ICANN Board should take action to eliminate the reference to "safeguarding registrant data" in ICANN Bylaws section 4.6(e)(ii) and replace section 4.6(e)(iii) of the ICANN Bylaws with a more generic requirement for RDS (WHOIS) review teams to assess how well RDS (WHOIS) policy and practice addresses applicable data protection and cross border data transfer regulations, laws and best practices.

Findings: Refer to Analysis and Findings section.

Rationale: Refer to Problem/Issue section Impact of Recommendation: This recommendation is aligned with the ICANN Bylaws and scope of this review. The impact of this recommendation will be to simplify the work of future Directory Service Review Teams. If this recommendation is not addressed, future Directory Service Review Teams will have to repeat the analysis conducted by the RDS-WHOIS2 Review Team. Feasibility of Recommendation: The RDS-WHOIS2 Review Team believes that this recommendation is feasible.

Implementation: The RDS-WHOIS2 Review Team believes that this recommendation can be carried out by the ICANN Community, following the process foreseen by the current Bylaws Section 4.6(a)(v).

Priority: Medium.



Appendix B

Public Comments Received



Draft Report

Status of public comments received:

https://mm.icann.org/pipermail/comments-rds-whois2-review-04sep18/2018q4/thread.html

#	Comment Submission
1	Internet Infrastructure Coalition
2	Domain Name Rights Coalition
3	Registrar Stakeholder Group (RrSG)
4	gTLD Registries Stakeholder Group (RySG)
5	Business Constituency (BC)
6	At Large Advisory Committee (ALAC)
7	Non-Commercial Stakeholders Group (NCSG)



Draft Report – Public Comments Received

#	Internet Infrastructure Coalition	Domain Name Rights Coalition	Registrar Stakeholder Group (RrSG)	gTLD Registries Stakeholder Group (RySG)	Business Constituency (BC)	At Large Advisory Committee (ALAC)	Non- Commercial Stakeholders Group (NCSG)
R1.1			Support	Support	Support	Support	Disagreement
R1.2			Support	Support		Support	Disagreement
R1.3			Support	Support			Support
R3.1			Support	Support	Support	Support	Support
R.3.2			Support	Support		Support	Disagreement
R.4.1		Disagreement	Disagreement	Disagreement		Support	Disagreement
R.4.2	Neutral	Disagreement	Neutral	Neutral		Support	Disagreement
R5.1			Neutral	Neutral		Support	Disagreement
R10.1			Disagreement	Disagreement	Support	Support	Neutral
R10.2			Support	Support		Support	
R11.1			Support	Support	Neutral	Support	Disagreement
R11.2			Neutral	Support	Neutral	Support	Support
R12.1			Support		Neutral	Support	Support
R15.1				Support	Support	Support	Neutral



Draft Report – Public Comments Received

#	Internet Infrastructure Coalition	Domain Name Rights Coalition	Registrar Stakeholder Group (RrSG)	gTLD Registries Stakeholder Group (RySG)	Business Constituency (BC)	At Large Advisory Committee (ALAC)	Non- Commercial Stakeholders Group (NCSG)
LE.1	Support	Disagreement	Neutral	Support	Support	Support	Disagreement
LE.2	Neutral	Disagreement	Disagreement		Support	Support	Neutral
SG.1	Neutral		Support		Neutral	Support	
CM.1			Support			Support	
CM.2		Disagreement	Disagreement	Neutral		Support	
CM.3			Support	Neutral		Support	
CM.4		Disagreement	Neutral			Support	
CM.5			Support			Support	
BY.1	Support	Disagreement	Support	Support		Support	Disagreement

- ICANN Bylaws, 4.6 (a)(vii)(B): "The final report should include an explanation of how public comments were considered as well as a summary of changes made in response to public comments."



Appendix C

Draft Report Sections Overview



Sections overview

Section	# Pages	Final?
Executive Summary & Recommendations	10	No
Review Background	3	No
WHOIS1 Rec #1: Strategic Priority	12	No
WHOIS1 Rec #2: Single WHOIS Policy	6	No
WHOIS1 Rec #3: Outreach	5	No
WHOIS1 Rec #4: Compliance	7	No
WHOIS1 Recs #5-9: Data Accuracy	14	No
WHOIS1 Rec #10: Privacy/Proxy Services	7	No
WHOIS1 Rec #11: Common Interface	5	No
WHOIS1 Recs #12-14: Internationalized Registration Data	6	No
WHOIS1 Recs #15-16: Plan & Annual Reports	4	No



Sections overview

Section	# Pages	Final?
Objective 2: Anything New	4	No
Objective 3: Law Enforcement Needs	15	No
Objective 4: Consumer Trust	8	No
Objective 5: Safeguarding Registrant Data	3	No
Objective 6: ICANN Contractual Compliance Actions, Structure and Processes	14	No
ICANN Bylaws	3	No
Appendix A: Glossary of Terms	2	No
Appendix B: Terms of Reference	19	Yes
Appendix C: GNSO and GAC Scope Inputs	3	Yes
Appendix D: Work Plan	1	No
Appendix E: Fact Sheets	2	No
Appendix F: Participation Summary	1	No
Appendix G: Law Enforcement Survey	6	Yes
Appendix H: Bibliography	8	No



Appendix D

Workplan



Workplan (https://community.icann.org/x/dtjRAw)

Final Report				54	0%
Updating draft report					0%
Assemble final recommendations and update draft report based on public comments received	18-Nov-18	21-Dec-18	RDS-WHOIS2	33	0%
Cross-check final recommendations with scope and Bylaws	18-Nov-18	21-Dec-18	RDS-WHOIS2	33	0%
Approval process					0%
Approve final findings and recommendations	18-Nov-18	11-Jan-19	RDS-WHOIS2	54	0%
Approve final report for submission to ICANN Board	13-Dec-18	11-Jan-19	RDS-WHOIS2	29	0%
Send final report					0%
Send final report to ICANN Board	6-Jan-18	25-Jan-19	RDS-WHOIS2	384	0%
Publish final report	6-Jan-18	25-Jan-19	ICANN org	384	0%
Send final report to language services	6-Jan-18	25-Jan-19	ICANN org	384	0%
Provide community with overview of findings and final recommendations	7-Jan-19	11-Jan-19	RDS-WHOIS2	4	0%
mplementation Planning & Feedback				65	0%
Complete ICANN organization survey on review process	25-Jan-19	15-Feb-19	RDS-WHOIS2	21	0%
dentify one or two review team members to remain available for clarification as may be needed during the implementation planning phase	12-Dec-18	25-Jan-19	RDS-WHOIS2	44	0%
Face to Face Meetings					75%
1 Brussels	2-Oct-17	3-Oct-17			100%
2 Brussels	16-Apr-18	18-Apr-18			100%
3 Brussels	26-Jul-18	27-Jul-18			100%
4 Brussels	10-Dec-18	12-Dec-18			0%



Appendix E

"Recommendation Shepherds"



Guidelines

RDS-WHOIS2-RT: Approved Terms of Reference

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

Operating Standards (Draft version)

When leading the implementation, ICANN organization shall cooperate closely with the review team's appointed 'recommendation shepherd' as well as the wider community. This includes providing timely updates on progress, highlighting roadblocks, and working to confirm that the implementation reflects the intention of the review team.

Specific Review Process flowcharts (<u>link</u>)

"Review Team disbands but identifies 1-2 RT members to remain available for clarification through to implementation"



Implementation Planning – Suggested Role & Timeline

• Who?:

- O 1-2 review team members.
- Need for volunteers familiar with all recommendations

⊙ How?:

- On **as-needed basis**, provide clarifications via email, calls (if necessary), on:
 - Recommendations' intent
 - Recommendations' rationale
 - Facts leading to conclusions
 - Envisioned timeline
 - Successful measures of implementation
- How long?: 6-12 months after submission of final report

All questions pertaining to any recommendations will be routed through MSSI project manager/coordinator



Appendix F

S.M.A.R.T. Recommendations



Criteria for S.M.A.R.T. Recommendations







R ELEVANT

T IME-BOUND

Evaluate results:

what is expected, how to get it done and what the target is?



Criteria for S.M.A.R.T. Recommendations

- 11 questions to encourage discussion and consideration to result in clear, useful and implementable recommendations:
 - 1. What observed **fact-based issue** is the recommendation intending to solve? What is the "problem statement"?
 - 2. What are the **findings that support the recommendation**?
 - 3. How significant would the impact be if not addressed:
 - 1. Very significant
 - 2. Moderately significant
 - 3. Impacted areas (for example, security, transparency, legitimacy, efficiency, diversity, etc.)
 - 4. What is the **intent of the recommendation**?
 - 5. What **outcome** is the Review Team seeking? How will the effectiveness of implemented improvements be measured? What is the **target for a successful implementation**?



Criteria for S.M.A.R.T. Recommendations

- 6. Does the Review Team envision[2] the implementation to be:
 - a) Short-term: implemented within 6 months
 - b) Mid-term: implemented within 12 months
 - c) Longer-term: implemented in more than 12 months
- 7. Is the recommendation aligned with ICANN's strategic plan and ICANN mission? If yes, how?
- 8. Does this recommendation require new policies to be adopted? If yes, what stakeholders need to be engaged in the policy development process to support successful implementation of this recommendation?
- 9. Is related work already underway? If so, what is it and who is carrying it out?



S.M.A.R.T. Recommendations

- 10. Who are the (responsible) parties that need to be involved in the implementation work for this recommendation?
 - 1. Community
 - 2. ICANN org
 - 3. Board
 - 4. Combination of the above
- 11. If only 5 recommendations can be implemented due to community bandwidth and other resource constraints, would this recommendation be one of the top 5? Why or why not?



Suggested Recommendations Format

Recommendation:	Included in wa
Findings:	Included in your subgroup report template
Rationale:	
Impact of Recommendation:	
Feasibility of Recommendation:	
Implementation:	
Priority:	
Level of Consensus:	

