RDS-WHOIS2-RT Brussels Face-to-Face Meeting

16-17-18 April 2018

ICANN

RDS-WHOIS2-RT Brussels Face-to-Face Meeting

DAY 1 – 16 April 2018

ICANN

Welcome, Roll-Call, SoI Updates, Administrative Items

Agenda Item #1

Time: 09:00-09:10

Presenters: Review Team Leadership & ICANN org

SoI Updates, Roll-Call, Administrative Items

Raise your hand if you wish to be added to the queue

Session is recorded:
- Always use your microphone
- State your name before speaking
- Limit use of your laptop

Breaks:
- Reception desk/area for coffee breaks
- Kitchen area for lunch

Badges

Opening Remarks

Agenda Item #2

Time: 09:10-09:20

Presenters: Review Team Leadership

Meeting Objectives

Overall goals for this meeting

- Present every subgroup's questions to be answered, research methodology and materials, and draft findings
  - To help the full RT understand the subgroup's analysis
  - To flag any open questions, potential overlaps, or gaps
- As applicable, introduce subgroup-identified issues/problems and proposed recommendations (if any) to address them
- Critical assessment of current status of each subgroup/issue,prognosis, and the need for any strategic changes
- Review the RT's work plan to confirm next steps and dates

Outputs to be produced from this meeting

- Questions and action items for each subgroup to address in report
- Due dates for final subgroup reports
  - Subgroup 1 – WHOIS1 Recommendation Implementation Review
  - Subgroups 2-5 – Additional Review Objectives
- Plan to consolidate subgroup reports into draft RDS-WHOIS2 report and begin full RT work on proposed recommendations (if any)

Overview of Rapporteurs' Updates

#	Subgroup	Rapporteur	Day of FtoF Meeting	Time Allocated
1	WHOIS1 Rec #1 - Strategic Priority	Cathrin	1	30 min
	WHOIS1 Rec #2: Single WHOIS Policy	Carlton	1	30 min
	WHOIS1 Rec #3: Outreach	Alan	1	30 min
	WHOIS1 Rec #4: Compliance	Susan	1	120 min
	WHOIS Rec #5-9: Data Accuracy	Lili	1	60 min
	WHOIS Rec #10: Privacy/Proxy Services	Volker (Susan)	2	120 min
	WHOIS Rec #11: Common Interface	Volker (Susan)	2	30 min
	WHOIS Rec #12-14: Internationalized Domain Names	Dmitry	2	30 min
	WHOIS Rec #15-16: Plan & Annual Reports	Lili	1	30 min
2	Anything New	Stephanie	3	60 min
3	Law Enforcement Needs	Thomas (Cathrin)	3	60 min
4	Consumer Trust	Erika	2	60 min
5	Safeguarding Registrant Data	Alan	3	30 min

Day 1 Objectives

Agenda Item #3

Time: 09:20-09:30

Presenters: Review Team Leadership

Day 1 – Morning Program

08:30-09:00 - Breakfast

09:00-09:10 – Welcome, SoI updates, roll-call & administrative items

09:10-09:20 – Opening remarks

09:20-09:30 – Day 1 objectives

09:30-09:35 – Work plan

09:35-09:45 – Criteria for SMART recommendations

09:45-10:15 – WHOIS1 Recs #15-16: Plan & Annual Reports

10:15-10:30 – Break

10:30-11:00 – WHOIS1 Rec #1: Strategic Priority

11:00-11:30 – WHOIS1 Rec #2: Single WHOIS Policy

11:30-12:30 – WHOIS1 Recs #5-9: Data Accuracy

12:30-13:30 – Lunch

Day 1 – Afternoon Program

13:30-15:30 – WHOIS1 Rec #4: Compliance

15:30-15:45 – Break

15:45-16:15 – WHOIS1 Rec #3: Outreach

16:15-17:15 – Parking lot for items to be further discussed TBD

17:15:17:30 – Review day 2 agenda and closing remarks

19:30-21:30 – Dinner (offsite)

Day 1 Objectives

⊙ Present and discuss subgroup outputs for Objective #1:

    ○ Consistent with ICANN's mission and Bylaws, Section 4.6(e)(iv), the Review Team will

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

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

        c) determine if any specific measurable steps should be recommended to enhance results achieved through the prior RT's recommendations.

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

⊙ Critical assessment of current status of each subgroup/issue,prognosis, and the need for any strategic changes

⊙ Points to consider throughout Day 1

    ○ Do you have any questions or feedback on each subgroup's output?

    ○ Are there any overlaps between subgroups that need to be resolved?

    ○ Did the subgroup fully-address at least a) and b) above?

Work Plan & Deliverables

Agenda Item #4

Time: 09:30-09:35

Presenters: ICANN org

Work Plan & Deliverables

DATE	DELIVERABLE
By 24 May	Subgroups to incorporate edits identified in Brussels
By 28 June ICANN62	• Seek community input on draft findings/recommendations • Approve draft findings and recommendations
By 31July	Approve draft report for public comment
7 August – 5 October	Public comment on Draft Report
By 30 November	• Update draft report based on public comment • Assemble final recommendations
By 21 December	Approve final report for submission to ICANN Board

Per work plan submitted to ICANN Board on 9 February 2018

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

Agenda Item #5

Time: 09:35-09:45

Presenters: ICANN org

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

S PECIFIC

M EASURABLE

A CHIEVABLE

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:

Findings:

Rationale:

Impact of Recommendation:

Feasibility of Recommendation:

Implementation:

Priority:

Level of Consensus:

Included in your subgroup report template

WHOIS1 Recs #15-16: Plan & Annual Reports

Agenda Item #6

Time: 09:45-10:15

Presenter: Lili Sun

Subgroup Members: Lili, Alan, Chris

Subgroup Wiki: https://community.icann.org/x/9pIEB

WHOIS1 Recs #15-16: Plan & Annual Reports

WHOIS1 Recommendations

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

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

Questions the subgroup attempted to answer when assessing this objective:
1. Check whether Action Plan properly addressed the other 16 recommendations
2. Assess the effectiveness of the already-published WHOIS Annual Reports

Research and background materials used to answer questions:
- WHOIS1 Final Report, Action Plan, & Implementation Reports
- Implementation Briefing Presentation, Answers to Questions, & Written Briefing
- ICANN 5-Year Strategic Plan and ICANN FY2017 Operating Plan and Budget
- 2013-2016 WHOIS Annual Reports

WHOIS1 Recs #15-16: Plan & Annual Reports

Describe your methodology to answer questions and analyze the materials

- Review all the background materials to assess whether the WHOIS1 Recs #15-16 have been implemented, have the objectives been met.
- Plan to base analysis in part upon key findings for all other WHOIS1 Recs

Based on the analysis, what are the main findings?

- This subgroup couldn't find any separate work plan with milestones, deliverables and/or specific deadlines beyond the [Action Plan](#).
- Except ICANN FY 2013 Operating Plan and Budget, this subgroup has difficulties in tracking the budget and resources allocated to the implementation of WHOIS1 recommendations in the following years.
- The WHOIS Improvements Annual Report contains elemental information about WHOIS policy development, fact-based progress about the Action Plan, but there are hardly figures and analysis on specific improvement, e.g. data accuracy, outreach.
- There has been a delay for ICANN to publish WHOIS Improvements Annual Report since 2016. And the annual report for 2016 was published till 1 September 2017, the annual report has not been ready for 2017 yet.

WHOIS1 Recs #15-16: Plan & Annual Reports

ICANN Action Plan For the WHOIS Policy Review Team Final Report:
Recommendations Summary, and Approved Board Action and Rationale
8 November 2012

WHOIS Policy Review Team Report Recommendations	Board action	Board rationale
1. Strategic Priority -- WHOIS, in all its aspects, should be a strategic priority, form the basis of staff incentivization (including CEO's) and organizational objectives; Board should create a committee that includes the CEO to be responsible for priority and key actions; issue public updates on progress against targets for all aspects of WHOIS.	• Board agrees that gTLD WHOIS is a strategic priority for ICANN. • Consistent with advice from SSAC (SAC055), Board directs the CEO to create an expert working group to create material to launch GNSO policy work and inform contractual negotiations, as appropriate. Working group output is expected within 90 days and will ideally include a straw-man model for managing gTLD registration data. • The working group's output form the basis for an Issues Report to accompany Board-initiated, expedited GNSO policy work that is expected to result in consensus policy that, at a minimum, addresses the purpose of collecting, maintaining and making available gTLD registration data, and related accuracy, data protection, and access issues. • The Board also will call upon the registrars, registries, and the staff to address the working group's output in contractual negotiations and registry contracts, as appropriate. • The CEO will oversee improvements to the enforcement of the contractual conditions relating to gTLD WHOIS in the gTLD registry and gTLD registrar agreements. Appropriate reporting of these improvements will be developed, and the CEO will be responsible for appropriate staff incentives. • The Board will incorporate performance of the WHOIS strategy into the incentive program for the CEO.	• The Board notes that ccTLD WHOIS is the policy responsibility of each ccTLD manager. • The Board notes that IP address registry WHOIS services are under the policy responsibility of each RIR, and the WHOIS review has not raised any concerns with these services • It is difficult to further evolve improvements to the gTLD WHOIS service, without developing policy to answer fundamental questions such as: • Why are data collected? • What purpose will the data serve? • Who collects the data? • Where is the data stored and how long is it stored? • Where is the data escrowed and how long is it escrowed? • Who needs the data and why? • Who needs access to logs of access to the data and why? • How to protect personal data?
2. Single WHOIS Policy -- Board should oversee creation of a single WHOIS policy document, and reference it in agreements with Contracted Parties; clearly document the current gTLD WHOIS policy as set out in the gTLD Registry & Registrar contracts & Consensus Policies and Procedure.	• The Board directs the CEO to create and maintain a single public source that compiles current gTLD WHOIS requirements for gTLD registries, registrars and registrants (including consensus policies and contractual conditions).	• The Board notes that there is not a comprehensive gTLD WHOIS policy that addresses all of the issues raised in the Review Team report and in SAC055. There is a set of existing contractual conditions that have been developed over time by negotiation between ICANN and registries and registrars, and a small set of consensus policies that address some aspects of the management of domain name

WHOIS1 Recs #15-16: Plan & Annual Reports

Describe your methodology to answer questions and analyze the materials
- Review all the background materials to assess whether the WHOIS1 Recs #15-16 have been implemented, have the objectives been met.
- Plan to base analysis in part upon key findings for all other WHOIS1 Recs

Based on the analysis, what are the main findings?
- This subgroup couldn't find any separate work plan with milestones, deliverables and/or specific deadlines beyond the Action Plan.
- Except ICANN FY 2013 Operating Plan and Budget, this subgroup has difficulties in tracking the budget and resources allocated to the implementation of WHOIS1 recommendations in the following years.
- The WHOIS Improvements Annual Report contains elemental information about WHOIS policy development, fact-based progress about the Action Plan, but there are hardly figures and analysis on specific improvement, e.g. data accuracy, outreach.
- There has been a delay for ICANN to publish WHOIS Improvements Annual Report since 2016. And the annual report for 2016 was published till 1 September 2017, the annual report has not been ready for 2017 yet.

WHOIS1 Recs #15-16: Plan & Annual Reports

Based on findings, the subgroup identified the following problems/issues

- The Plan and Annual Reports partly met the objectives of WHOIS1 Recs #15-16.

To address the above problems/issues, the subgroup proposes the following recommendations (if any)

- Plan & Annual Reports are essential to guarantee the effective implementation of any recommendations, more specific methodologies on Plan & Annual Reports should be taken in future.

Break

Time: 10:15-10:30

What's Next?

10:30-11:00 – WHOIS1 Rec #1: Strategic Priority
11:00-11:30 – WHOIS1 Rec #2: Single WHOIS Policy
11:30-12:30 – WHOIS1 Recs #5-9: Data Accuracy

WHOIS1 Rec#1 – Strategic Priority

Agenda item #7

Time: 10:30-11:00

Presenter: Cathrin Bauer-Bulst

Subgroup Members: Cathrin, Carlton, Volker

Subgroup Wiki: https://community.icann.org/x/3pIEB

WHOIS1 Rec #1 – Strategic Priority

WHOIS1 Recommendation

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

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

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

  - *Implementation of this report's recommendations;*

  - *Fulfillment of data accuracy objectives over time;*

  - *Follow up on relevant reports (e.g. NORC data accuracy study);*

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

  - *Monitoring effectiveness of senior staff performance and the extent to which ICANN Compliance function is effective in delivering WHOIS outcomes, and taking appropriate action to remedy any gaps.*

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

WHOIS1 Rec #1 – Strategic Priority

Questions the subgroup attempted to answer when assessing this objective:

1. Has ICANN.Org made WHOIS a strategic priority from a formal perspective, by putting into place the appropriate resources and procedures?
2. Has ICANN.Org made WHOIS a strategic priority from a substantive perspective?
3. Has ICANN Org issued public updates on progress against targets for all aspects of WHOIS?
4. Based on findings of other subgroups, how have the updated complaints and other compliance procedures impacted the accuracy and functionality of the WHOIS?

WHOIS1 Rec #1 – Strategic Priority

Research and background materials used to answer questions:
- WHOIS1 Final Report, Action Plan, & Implementation Reports
- Implementation Briefing Presentation, Answers to Questions & Written Briefing*
- ICANN 5-Year Strategic Plan and ICANN FY2017 Operating Plan and Budget
- 2013 RAA, including WHOIS Requirements for Registrants
- EWG Final Report
- WHOIS Information Portal and Consolidated WHOIS Lookup Tool
- Roadmap of WHOIS/RDS Activities (as of June 2017)

Describe your methodology to answer questions and analyze the materials
- Requested additional materials, including incentivisation measures, records of Board/CEO Committee on WHOIS and other indicators to show that the recommendation has been implemented
- Posed series of questions for ICANN SMEs to address in written briefing
- Plan to review the output from the other subgroups in assessing the degree to which WHOIS has been made a strategic priority within the organization

* Assumes written briefing will be provided & reviewed by subgroup this week

WHOIS1 Rec #1 – Strategic Priority

Based on the analysis, what are the main findings?
- *First findings:*

1. ICANN has taken steps to add Whois to its priorities ☑
- *Board has instructed ICANN organization to take actions*
- *Whois reflected in five-year strategic plan*
- *Whois reflected in each Annual Operating Plan & Budget*
- *Key Success Factor identified: Globally accepted, reliable, secure, and trusted services to facilitate access to, and update of, identifier registration data.*
- *WHOIS projects are identified in both WorkFront and the Halogen management system and included in CEO compensation*
- *Public updates on progress have been provided (incl. roadmaps)*

2. ICANN and the community have launched a number of processes since the first Whois RT report that evidence its being a strategic priority ☑
- *Whois Accuracy Reporting System Project*
- *Whois EWG*
- *RDS Policy Development Process*
- *Privacy and Proxy Services Accreditation Programme*
- *Further projects listed in the post-2012 Whois activities inventory provided to the RT*

WHOIS1 Rec #1 – Strategic Priority

3. Current activities show that ICANN as an organization now assigns high importance to the Whois ☑

- *Board of Directors and leadership regularly engage in Whois-related activites*
- *CEO provides regular blog posts on Whois developments*
- *Efforts under way to adapt Whois to legal requirements*

Based on findings, the subgroup identified the following problems/issues

- *No concrete actions/activities associated with Whois quality control*
- *Control committee does not appear to have been created; instead, the launch of the EWG was seen as the deliverable*
- *No meaningful indicators (KPIs) provided to assess actual progress on Whois*
- *Lack of activities planned for ICANN as an organization in Operating Plans and Budgets after 2013 RAA update and implementation – Whois portfolio listed under wrong strategic objective with no concrete activities associated*
- *Current process shows that Whois emerged as a priority for ICANN as an organization rather belatedly when it comes to the necessary updates*

To address the above problems/issues, the subgroup proposes the following recommendations (if any)

TBD

WHOIS1 Rec #2: Single WHOIS Policy

Agenda item #8

Time: 11:00-11:30

Presenter: Carlton Samuels

Subgroup Members: Carlton, Cathrin, Thomas

Subgroup Wiki: https://community.icann.org/x/4ZIEB

WHOIS1 Rec #2 – Single WHOIS Policy

WHOIS1 Recommendation

- *Rec 2 – The ICANN Board should oversee the creation of a single WHOIS policy document, and reference it in subsequent versions of agreements with Contracted Parties. In doing so, ICANN should clearly document the current gTLD WHOIS policy as set out in the gTLD Registry and Registrar contracts and GNSO Consensus Policies and Procedure.*

Questions the subgroup attempted to answer when assessing this objective:
1. LIST HERE

Research and background materials used to answer questions:
- WHOIS1 Final Report & Implementation Reports
- Responses to WHOIS1 Final Report by ICANN Constituencies, including ALAC, GNSO SG/Cs, and SSAC (SAC055)
- Board Action Plan that emerged from consideration of Single WHOIS policy rec
- Implementation Briefing Presentation, Answers to Questions, & Written Briefing
- ICANN web page on WHOIS Policies
- Next Generation RDS to replace WHOIS PDP

WHOIS1 Rec #2 – Single WHOIS Policy

Describe your methodology to answer questions and analyze the materials

- Followed timeline from WHOIS1 report releast to current time
    - Responses to the Final Report by ICANN Constituencies
    - Record of the Board's response
    - Action Plan developed by ICANN org Staff on the Board's direction
    - Subsequent published status reports and evidence of implementation
- Examined the list of WHOIS-related consensus policies and procedures

Based on the analysis, what are the main findings?

- *[Text below copied from Page 5, Recommendations – expand if desired]*
- The <u>web page</u> is a good and sufficient substitute for the single authoritative WHOIS policy document but with navigational improvements and further organisation of content could be better.
- The Board-initiated GNSO PDP chartered to address the next generation Registration Data Directory Services is in progress. This Review Team cannot now pronounce on the success of a single fit-for-purpose next generation WHOIS policy framework.

WHOIS1 Rec #2 – Single WHOIS Policy

Based on findings, the subgroup identified the following problems/issues
- *[Include summary of Problem/Issue here from Section 4, page 5 of draft report]*

To address the above problems/issues, the subgroup proposes the following recommendations
1. *[Text below copied from Page 5, Recommendations – expand if desired]*
2. Accept that WHOIS1 RT Recommendation 2 is fully implemented.
3. Accept that the adoption of the EWG's Final Report and development of the framework for the Board-initiated GNSO RDS PDP[s] is intended to deliver a holistic next generation WHOIS policy framework that would address current set of fragmented and decentralized WHOIS policies.

WHOIS1 Recs #5-9: Data Accuracy

Agenda item #9

Time: 11:30-12:30

Presenter: Lili Sun

Subgroup Members: Lili, Cathrin, Dmitry, Erika

Subgroup Wiki: https://community.icann.org/x/6plEB

WHOIS1 Recs # 5-9: Data Accuracy

WHOIS1 Recommendations

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

- *Rec 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.*

- *Rec 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.*

- *Rec 8 – ICANN should ensure that there is a clear, unambiguous and enforceable chain of contractual agreements with registries, registrars, and registrants to require the provision and maintenance of accurate WHOIS data. As part of these agreements, ICANN should ensure that clear, enforceable and graduated sanctions apply to registries, registrars and registrants that do not comply with its WHOIS policies. These sanctions should include de-registration and/or de-accreditation as appropriate in cases of serious or serial non-compliance.*

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

WHOIS1 Recs #5-9 – Data Accuracy

Questions the subgroup attempted to answer when assessing this objective:

1. Implementation progress of 2013 "WHOIS ACCURACY PROGRAM SPEC"?
2. Progress of WHOIS Accuracy Reporting System (ARS) project – to what extent inaccuracy has been reduced?
3. Accuracy rate of WHOIS data which uses Privacy/Proxy service?
4. Are the measures which have been taken effective in achieving the objectives?
5. Can we measure data accuracy when data becomes mostly hidden?

Research and background materials used to answer questions:

- WHOIS1 Final Report, Action Plan, & Implementation Reports
- Implementation Briefing Presentation, Answers to Questions, & Written Briefing
- Other background materials listed on subgroup's wiki page
- SME responses from Global Domains Division and Contractual Compliance

Describe your methodology to answer questions and analyze the materials

- Review background materials on subgroup's wiki page
- Views exchanged in the mailing list, or during the Review Team's plenary calls and subgroup calls
- Open source research

WHOIS1 Recs #5-9 – Data Accuracy

Based on the analysis, what are the main findings?
- Measures now in effect or taken by ICANN to progress WHOIS accuracy:
  - (1) WHOIS Informational Website
  - (2) 2013 RAA introduced contractual obligations to validate and verify data
  - (3) ICANN is in the midst of developing a WHOIS Accuracy Reporting System
  - (4) The WHOIS Data Reminder Policy (WDRP)
- Registrant's rights and responsibilities has been proactively promoted by ICANN
- The requirements for Registrar to validate and verify WHOIS data are contractual obligations according to 2013 RAA.
- The effectiveness of WHOIS ARS
  - (1) WHOIS ARS is an effective way improve WHOIS accuracy.
  - (2) It is suspected that registrars haven't validated and verified WHOIS data upon registration.
  - (3) The confirmed WHOIS data inaccurate rate across the domain space is still high (30~40%), in line with the overall operability accuracy.
  - (4) Seldom Notices of Breach issued by ICANN to registrars.

WHOIS1 Recs #5-9 – Data Accuracy

Based on the analysis, what are the main findings?
- Measures now in effect or taken by ICANN to progress WHOIS accuracy:
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WHOIS1 Recs #5-9 – Data Accuracy

<u>*Domain Name Registrants' Responsibilities:*</u>

1. You must comply with the terms and conditions posted by your Registrar, including applicable policies from your Registrar, the Registry and ICANN.

2. You must review your Registrar's current Registration Agreement, along with any updates.

3. You will assume sole responsibility for the registration and use of your domain name.

4. You must provide accurate information for publication in directories such as WHOIS, and promptly update this to reflect any changes.

5. You must respond to inquiries from your Registrar within fifteen (15) days, and keep your Registrar account data current. If you choose to have your domain name registration renew automatically, you must also keep your payment information current.

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

WHOIS1 Recs #5-9 – Data Accuracy

Based on the analysis, what are the main findings?
- Measures now in effect or taken by ICANN to progress WHOIS accuracy:
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WHOIS1 Recs #5-9 – Data Accuracy

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WHOIS1 Recs #5-9 – Data Accuracy

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

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

(1) Phase 1: Syntax Accuracy (completed in August 2015)
(2) Phase 2: Syntax + Operability Accuracy (ongoing, 5 Cycles till December 2017)
(3) Phase 3: Syntax + Operability + Identity Accuracy (not started yet)

- syntax and operability accuracy by region

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

- Phase 2 [WHOIS ARS Contractual Compliance Metrics](#) are summarized as below

	Cycle 1	Cycle 2	Cycle 3	Cycle 4
Sample records	10,000	12,000	12,000	12,000
Tickets created	2,688	4,001	4,552	4,681
Tickets went to 1st or further notice	1,362	1,524	1,897	1,668
Tickets related domains were suspended or canceled	60.1%	60.6%	65%	72.6%
Tickets led to changing or updating of WHOIS data by registrar	28.2%	25.4%	21.5%	14.9%
Registrars received a Notice of Breach	4	0	0	0
Registrar suspended or terminated	1	0	0	0

WHOIS1 Recs #5-9 – Data Accuracy

Based on the analysis, what are the main findings?

- ICANN has published Annual Report on WHOIS Improvements for 2013, 2014, 2015 and 2016, which outlined the progress of all WHOIS policy related working streams. But **NO** measured reduction in WHOIS data that fall into the accuracy groups Substantial Failure and Full Failure was provided by ICANN.

- It was indicated in 2013 WHOIS Improvements Annual Report that due to feasibility issues, the Board's Resolution addressing Rec#9 (to track the impact of the annual WHOIS Data Reminder Policy (WDRP)) offered an alternative approach to achieving the intended result of this recommendation, which referred back to the implementation of Rec#5-7. This subgroup doesn't think Board's Resolution on this is convincing.

WHOIS1 Recs #5-9 – Data Accuracy

Based on the analysis, what are the main findings?

- ICANN has published Annual Report on WHOIS Improvements for 2013, 2014, 2015 and 2016, which outlined the progress of all WHOIS policy related working streams. But **NO** measured reduction in WHOIS data that fall into the accuracy groups Substantial Failure and Full Failure was provided by ICANN.

- It was indicated in 2013 WHOIS Improvements Annual Report that due to feasibility issues, the Board's Resolution addressing Rec#9 (to track the impact of the annual WHOIS Data Reminder Policy (WDRP)) offered an alternative approach to achieving the intended result of this recommendation, which referred back to the implementation of Rec#5-7. This subgroup doesn't think Board's Resolution on this is convincing.

WHOIS1 Recs #5-9 – Data Accuracy

Implementation of the Whois Data Reminder Policy (WDRP) – 30 November 2004

- 254 registrars (70% of all ICANN-accredited registrars at that time) responded to the "Whois Data Reminder Policy Survey and Compliance Audit."
- Only 44% (111 out of 254) of the respondant registrars did sent WDRP Notices, covered 50% or less of all registrations under sponsorship, and there were considerable WDRP Notices undeliverable.
- Even with all the aspects above, there were still at least several thousands of WDRP Notices led to changes in registrant data.

WHOIS1 Recs #5-9 – Data Accuracy

Based on findings, the subgroup identified the following problems/issues
- Objective of reliable WHOIS data has not been achieved
- WHOIS inaccuracy is believed to be largely under-reported
- Incentives for registrants to provide accurate WHOIS data and for registrars to validate and verify WHOIS data are missing
- WHOIS accuracy of domain names using Privacy and Proxy Services is misty

To address the above problems/issues, the subgroup proposes the following recommendations (if any)
- *None proposed yet*

WHOIS1 Recs #5-9 – Data Accuracy

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To address the above problems/issues, the subgroup proposes the following recommendations (if any)
- *None proposed yet*

WHOIS1 Recs #5-9 – Data Accuracy

Whois Inaccuracy Complaint Form allows Internet users to submit a complaint to ICANN regarding incomplete or incorrect Whois data, including privacy or proxy contact information.

WHOIS1 Recs #5-9 – Data Accuracy

Based on findings, the subgroup identified the following problems/issues
- Objective of reliable WHOIS data has not been achieved
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- WHOIS accuracy of domain names using Privacy and Proxy Services is misty

To address the above problems/issues, the subgroup proposes the following recommendations (if any)
- *None proposed yet*

WHOIS1 Recs #5-9 – Data Accuracy

Looking at the Contractual Compliance Annual Report in 2016, 2017, the most common issues addressed by ICANN with regards to registrar compliance on WHOIS Inaccuracy:

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

WHOIS1 Recs #5-9 – Data Accuracy

As indicated in the Implementation of the Whois Data Reminder Policy (WDRP) – 30 November 2004, One registrar noted that its most accurate contact information is contained in its internal accounting system. It wrote that "[w]e have been fairly successful in keeping this data up to date as registrants who are interested in keeping their domain keep their billing information accurate." Another registrar also suggested that "the billing contact information" to be showed on any given Whois record (see below).

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

WHOIS1 Recs #5-9 – Data Accuracy

Some best practices on verification of Whois data:
- In the years of fighting Avalanche (phishing group), Interdomain, a Spanish registrar, began [requiring a confirmation code delivered by mobile phone](#) in April 2009 which successfully forced Avalanche to stop registering fraudulent domains with them.
- It's also worth mentioning the highly regulated domains where Registry rules require "provide appropriate jurisdictional authorities with the capability at their option and at no cost to make designations in the WHOIS record relevant to the registrant's organizational status in the registrant's jurisdiction."

WHOIS1 Recs #5-9 – Data Accuracy

Based on findings, the subgroup identified the following problems/issues

- Objective of reliable WHOIS data has not been achieved
- WHOIS inaccuracy is believed to be largely under-reported
- Incentives for registrants to provide accurate WHOIS data and for registrars to validate and verify WHOIS data are missing
- WHOIS accuracy of domain names using Privacy and Proxy Services is misty

To address the above problems/issues, the subgroup proposes the following recommendations (if any)

- *None proposed yet*

WHOIS1 Recs #5-9 – Data Accuracy

The Whois data relating to domain names that utilize P/P services has not been touched upon by WHOIS ARS. According to WHOIS ARS Contractual Compliance Metrics, all tickets were closed before 1st Notice for Known Privacy/Proxy service.

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

WHOIS1 Recs #5-9 – Data Accuracy

Based on findings, the subgroup identified the following problems/issues

- Objective of reliable WHOIS data has not been achieved
- WHOIS inaccuracy is believed to be largely under-reported
- Incentives for registrants to provide accurate WHOIS data and for registrars to validate and verify WHOIS data are missing
- WHOIS accuracy of domain names using Privacy and Proxy Services is misty

To address the above problems/issues, the subgroup proposes the following recommendations (if any)

- *Strict compliance enforcement?*
- *Not ICANN but registrars to play a active role in improving data accuracy?*

Lunch

Time: 12:30-13:30

What's Next?

13:30-15:30 – WHOIS1 Rec #4: Compliance

WHOIS1 Rec #4: Compliance

Agenda item #10

Time: 13:30-15:30

Presenter: Susan Kawaguchi

Subgroup Members: Susan, Erika, Carlton, Chris, Thomas

Subgroup Wiki: https://community.icann.org/x/55IEB

WHOIS1 Rec #4 – Compliance

WHOIS1 Recommendation

- *Rec 4 – ICANN should ensure that its compliance function is managed in accordance with best practice principles, including full transparency on resourcing and structure; provide annual reports; appoint a senior executive whose sole responsibility would be to oversee and manage ICANN's compliance function (reporting to Board Committee); provide all necessary resources to manage and scale compliance team's activities.*

And the Objective initially assigned to Subgroup 6, now to be addressed by this subgroup:

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

WHOIS1 Rec #4 – Compliance

Questions the subgroup attempted to answer when assessing this objective:
a) Do the current reports provide the details described above? Are they transparent and complete?
b) Is the current appointment of a senior executive appropriate? Who does this person report to?
c) Does the compliance team have all necessary resources?

Research and background materials used to answer questions:
- WHOIS1 Final Report, Action Plan, & Implementation Reports
- Implementation Briefing Presentation, Answers to Questions, & Written Briefing
- All documents cited in briefing on Recommendation 4 Compliance
- Additional documents relevant to Topic 7 Compliance
- Meeting with Compliance Management (1 February 2018) & Written Answers
- Meeting with ICANN Compliance (28 March 2018) & Written Answers

Describe your methodology to answer questions and analyze the materials
- The subgroup met twice with the Compliance Team (Jamie Hedlund, Maguy Serad, Roger Lim, Andrea), each time providing a list of questions drafted by the subgroup prior to the meeting. Written answers were also provided (see above).

WHOIS1 Rec #4 – Compliance

Based on the analysis, what are the main findings?

RT1-Recommended Principle	Question	Findings and Analysis
a. There should be full transparency regarding the resourcing and structure of its compliance function. To help achieve this ICANN should, at a minimum, publish annual reports that detail the following relevant to ICANN's compliance activities: staffing levels; budgeted funds; actual expenditure; performance against published targets; and organizational structure (including the full lines of reporting and accountability).	Do the current reports provide the details described above? Are they transparent and complete?	The Compliance team has made significant progress in reporting metrics and data in their annual report. They also allocate time during ICANN meetings to meet with the community and provide additional details on their work. The reports are very helpful and quite an improvement over reporting in 2012. In reading the reports it is hard to make an assessment of the issues that are still problematic. 66% of reports to the compliance team are WHOIS inaccuracy reports which comprises the largest areas of the team workload. What is not evident in the data reported is what are the problem areas, what could be improved to assist the team with its work. ICANN Contractual Compliance has an ongoing continuous improvement cycle based on survey feedback, working group and review teams, lessons learned and internal reviews which also drive change. We appreciate that the Compliance team is working hard to receive input from the community.
b. This senior executive should report directly and solely to a sub-committee of the ICANN Board. This sub-committee should include Board members with a range of relevant skills, and should include the CEO.	Is the current appointment of a senior executive appropriate? Who does this person report to?	The Compliance team provided an organizational chart for the reporting structure of the team. Although, the SVP Contractual Compliance & Consumer Safeguards reports directly to the CEO the recommendation explicitly states "report directly and solely to a Board sub-committee." There is no indication that the recommended reporting structure was implemented. The Board action on this recommendation indicates they thought the implemented reporting structure to be adequate. The subgroup will need to ask additional questions concerning the reporting structure. At this point in time we do not believe the recommendation was fully implemented. The intention of the first review team was to ensure this role had the independence needed to perform the compliance function without restriction from the rest of the organization.
c. ICANN should provide all necessary resources to ensure that the compliance team has the processes and technological tools it needs to efficiently and pro-actively manage and scale its compliance activities. The Review Team notes that this will be particularly important in light of the new gTLD program, and all relevant compliance processes and tools should be reviewed and improved, and new tools developed where necessary, in advance of any new gTLDs becoming operational.	Does the compliance team have all necessary resources?	It appears that the Compliance team has all the necessary resources to manage compliance activities. They have improved technology over the years and implemented new systems. ICANN organization has provided the budget for the compliance team to grow. They currently have 25? Employees compared to 6 during the first review. They have implemented a bulk WHOIS inaccuracy reporting tool and improved the single input WHOIS inaccuracy tool since the first review team report.

WHOIS1 Rec #4 – Compliance

Based on findings, the subgroup identified the following problems/issues

RT1-Recommended Principle	Question	Problem/Issue
a. There should be full transparency…	Do the current reports provide the details described above? Are they transparent and complete?	We appreciate that the Compliance team is working hard to receive input from the community but WHOIS inaccuracy report data provided by the compliance team is not clear on several points. We have heard that there is inconsistency in experience and results received from users submitting inaccuracy reports. From the data we have reviewed it is not easy to assess if there is truly a problem or a perception of a problem. More in depth review should be performed of the responses they provided in the second set of questions.
b. This senior executive should report directly and solely to a sub-committee of the ICANN Board….	Is the current appointment of a senior executive appropriate? Who does this person report to?	Additional review is needed to determine whether or not it is feasible to adhere to the intentions of the RT1 recommendation. • Why did the Board make the decision to not implement the recommendation fully? • What challenges would ICANN org face in requiring an employee of the org to report to the Board. • Are there examples of this reporting structure we could review in other businesses?
c. ICANN should provide all necessary resources…	Does the compliance team have all necessary resources?	We may want to take a closer look at how long it takes the compliance team to implement new technology.

WHOIS1 Rec #4 – Compliance

To address the above problems/issues, the subgroup proposes the following recommendations (if any)

Recommendation #1:
All new policies implemented should be required to be measured, audited and tracked by the compliance team. Consistent Labelling and Display policy requires a registrar abuse contact email address and contact phone. This would be displayed in the WHOIS record. Possible to include this in the audit of a registrar?

Recommendation#2: (May belong in the Data Accuracy subgroup)
Require all domain name registrations adhere to the WHOIS requirements in the 2013 Registrar Accreditation Agreement.

Break

Time: 15:30-15:45

What's Next?

15:45-16:15 – WHOIS1 Rec #3: Outreach
16:15-17:15 – Parking lot for items to be further discussed
17:15:17:30 – Review day 2 agenda and provide closing remarks

WHOIS1 Rec #3: Outreach

Agenda item #11

Time: 15:45-16:15

Presenter: Alan Greenberg

Subgroup Members: Alan, Carlton, Erika

Subgroup Wiki: https://community.icann.org/x/5JIEB

WHOIS1 Rec #3 – Outreach

WHOIS1 Recommendation

* *Rec 3 – ICANN should ensure that WHOIS policy issues are accompanied by cross-community outreach, including outreach to the communities outside of ICANN with a specific interest in the issues, and an ongoing program for consumer awareness.*

Questions the subgroup attempted to answer when assessing this objective:

1. Review the multiple "outreach" resources with a specific focus on identifying:
   a) Areas where there we inconsistencies, errors and out of date info
   b) Gaps in the documentation
2. Review the various outreach events and activities

Research and background materials used to answer questions:

* WHOIS1 Final Report, Action Plan, & Implementation Reports
* Implementation Briefing Presentation, Answers to Questions, & Written Briefing
* Documents cited in briefing on Recommendation 3, including
    * WHOIS Information Portal and Consolidated WHOIS Lookup Tool
    * Registrant's Benefits and Responsibilities
    * 2013 RAA - see Section 9
    * Information for Registrars and Registrants
    * Registrant Educational Series
* SME Answer to subgroup's question on outreach activities

WHOIS1 Rec #3 – Outreach

Describe your methodology to answer questions and analyze the materials

- To conduct its research, all members of this subgroup reviewed background materials followed by discussion within the sub-group

Based on the analysis, what are the main findings?

- In summary, the Recommendation was carried out, but it was not well integrated with other WHOIS-related information.
- Significant outreach to communities within ICANN has been carried out.
- *[Add analysis of outreach to communities outside of ICANN here.]*

WHOIS1 Rec #3 – Outreach

Based on findings, the subgroup identified the following problems/issues

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

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

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

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

- It is clear that although WHOIS is an issue of interest to those within ICANN, from a Registrant perspective, it needs to be well integrated with other information with relation to gTLD registration. At the same time, due to interest in privacy issues, it is a subject that stands on its own as well.

WHOIS1 Rec #3 – Outreach

Examples:

WHOIS1 Rec #3 – Outreach

About WHOIS

WHOIS Primer

History of WHOIS

What's on the Horizon?

Technical Overview

   DNS and WHOIS - How it Works

   Domain Name Registration Process

Using WHOIS

   Basics of WHOIS

Glossary of WHOIS Terms

About This Site

WHOIS Primer

This WHOIS Primer summarizes the key components of the WHOIS service, policy, and protocols. It takes into account the many contracts, specifications, standards, protocols, advisories, and policies that collectively describe the ICANN WHOIS program applicable to the collection, display, and use of gTLD domain name registration data.

This Primer is based on the obligations described in the 2013 Registrar Accreditation Agreement (2013 RAA), and the base new gTLD Registry Agreement (New GTLD Registry Agreement [PDF, 649 KB]), and in a few instances other registry agreements, as noted below. As not all registrars and registries are operating under the 2013 RAA or the New gTLD Base Agreement, their actual obligations pertaining to WHOIS may vary. Please refer to the language of the original documents for the text of the obligations related to WHOIS.

On This Page

1. Introduction to WHOIS
2. Uses of WHOIS
3. WHOIS Requirements
4. WHOIS in Domain Name Management and Dispute Resolution Procedures
5. Updating or Modifying ICANN'S WHOIS Program
6. Disclaimer

Registrants' Benefits and Responsibilities

Domain Name Registrants' Rights:

1. Your domain name registration and any privacy/proxy services you may use in conjunction with it must be subject to a Registration Agreement with an ICANN Accredited Registrar.

   - You are entitled to review this Registration Agreement at any time, and download a copy for your records.

2. You are entitled to accurate and accessible information about:

   - The identity of your ICANN Accredited Registrar;

   - The identity of any proxy or privacy service provider affiliated with your Registrar;

   - Your Registrar's terms and conditions, including pricing information, applicable to domain name registrations;

   - The terms and conditions, including pricing information, applicable to any privacy services offered by your Registrar;

   - The customer support services offered by your Registrar and the privacy services provider, and how to access them;

   - How to raise concerns and resolve disputes with your Registrar and any privacy services offered by them; and

Registrant Rights and Responsibilities Under the 2009 Registrar Accreditation Agreement

This page is available in:

English | العربية | Deutsch | Español | Français | Italiano | 日本語 | 한국어 | Português | Русский | 中文

View current policy

27 June 2011

Registrant Rights and Responsibilities Under the 2009 Registrar Accreditation Agreement

Background: One of the new provisions added to the 2009 RAA requires ICANN to develop in consultation with registrars a webpage that identifies available registrant rights and responsibilities. This published document is the result of initial input from a joint working group of the GNSO Council and the At-Large Advisory Committee and subsequent consultations with the registrars; and provides a "plain language" summary of registrant rights and responsibilities that currently exist under the 2009 RAA.

Introduction

This document provides some "plain language" summarization of terms related to Registrant Rights and Responsibilities as set out in the Registrar Accreditation Agreement (RAA), for posting on Registrar websites.

WHOIS1 Rec #3 – Outreach

Resources

▸ About ICANN

▸ Board

▸ Accountability

▸ Governance

▸ Groups

Business

Civil Society

▸ Complaints Office

▸ Contractual Compliance

▾ Registrars

Registrar Library

▸ Changes to Existing
Accreditation

Registrant Educational Materials
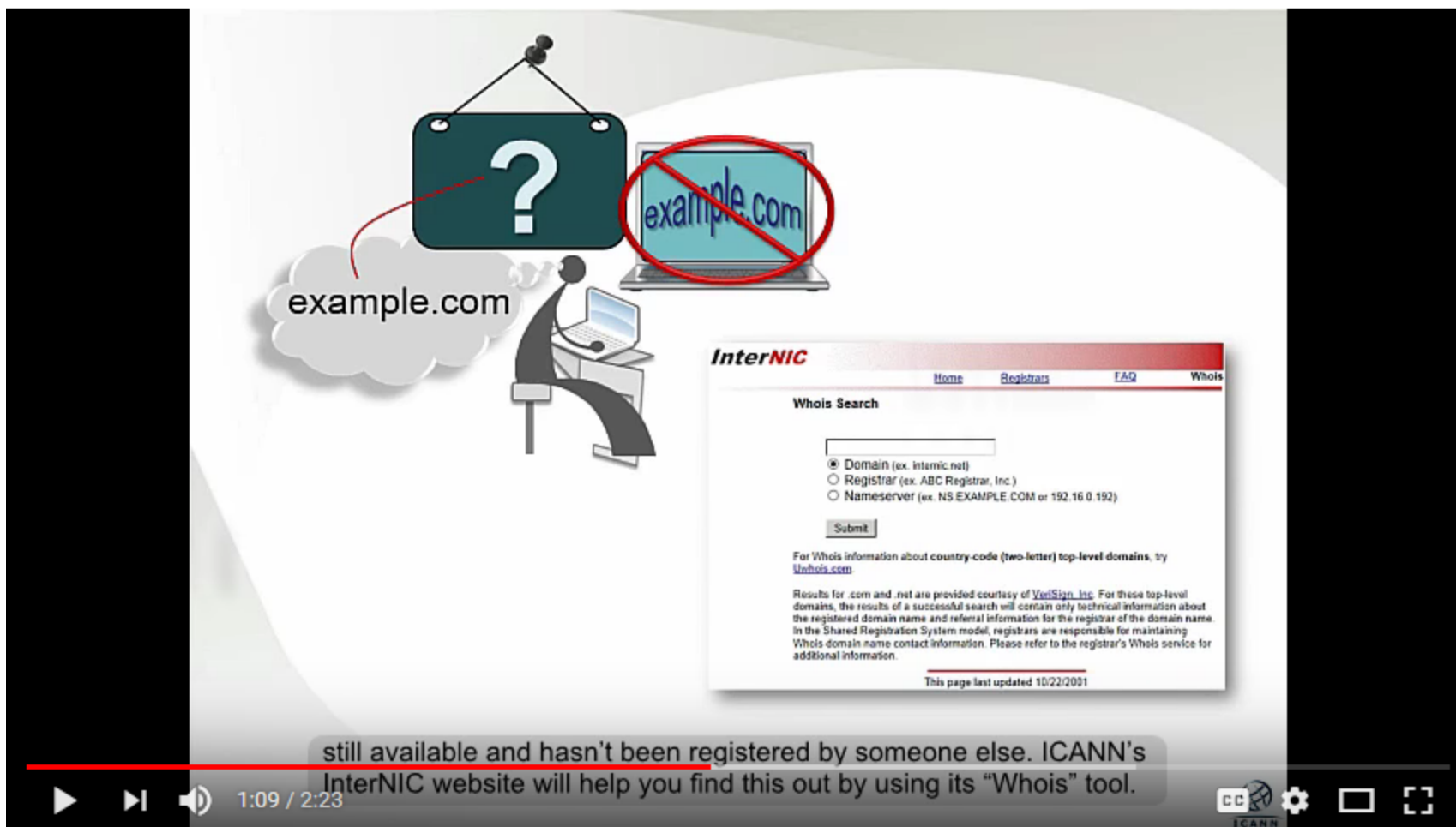
1. What is Domain Name?

2. What is a registrar?

3. How do I renew my domain name?

4. What if I forget to renew my domain name?

WHOIS1 Rec #3 – Outreach

To address the above problems/issues, the subgroup proposes the following recommendations (if any)

- *To be better formulated:*
    - *All public-facing information related to gTLD registrations needs to be reviewed and reformulated. This includes the RAA-related documents on registrant rights, benefits and responsibilities, the WHOIS portal, and the education tools (ICANN Learn, Video tutorials), ensuring up-to-date and consistent messaging.*
    - *Timing for this needs to factor in the timing of both interim and long-term GDPR and privacy considerations.*

Parking Lot (TBD)

Agenda item #12

Time: 16:15-17:15

Presenters: All

ICANN

Review Day 2 Agenda & Closing Remarks

Agenda item #13

Time: 17:15-17:30

Presenters: Review Team Leadership

Day 2 Agenda

08:30-09:00 - Breakfast

09:00-09:15 – Day 1 debrief & day 2 objectives

09:15-09:45 – WHOIS1 Recs #12-14: Internationalized Domain Names

09:45-10:15 – WHOIS1 Rec #11: Common Interface

10:15-10:30 – Break

10:30-12:30 – WHOIS1 Rec #10: Privacy/Proxy Services

12:30-13:30 – Lunch

13:30-14:00 – Update on ongoing community initiatives

14:00-15:15 – WHOIS1 implementation assessment

15:15-15:30 – Break

15:30-16:15 – WHOIS1 implementation assessment

16:15-17:15 – Subgroup 4 – Consumer Trust

17:15-17:30 – A.O.B and closing remarks

RDS-WHOIS2-RT Brussels Face-to-Face Meeting

DAY 2 – 17 April 2018

ICANN

Day 1 Debrief & Day 2 Objectives

Agenda Item #1

Time: 09:00-09:15

Presenters: Review Team Leadership

Day 2 Morning Program

08:30-09:00 – Breakfast

09:00-09:15 – Day 1 debrief & day 2 objectives
09:15-09:45 – WHOIS1 Rec #12-14: Internationalized Domain Names
09:45-10:15 – WHOIS1 Rec #11: Common Interface

10:15-10:30 – Break

10:30-12:30 – WHOIS1 Rec #10: Privacy/Proxy Services

12:30-13:30 – Lunch

Day 2 Afternoon Program

13:30-14:00 – Update on ongoing community initiatives
14:00-15:15 – WHOIS1 implementation assessment

15:15-15:30 – Break

15:30-16:15 – WHOIS1 implementation assessment
16:15-17:15 – Subgroup 4 – Consumer Trust
17:15-17:30 – Review day 3 agenda and closing remarks

Day 2 Objectives

- Present and discuss remaining Subgroup outputs for Objective #1

- Refer to Day 1 – Specific Objectives, including points to consider:
  - Do you have any questions or feedback on each subgroup's output?
  - Are there any overlaps between subgroups that need to be resolved?
  - Did the subgroup fully-address at least Objective #1 items a) and b)?

- Assess the overall implementation of WHOIS1 Recommendations to:
  a) Evaluate overall the extent to which ICANN Org has implemented WHOIS1 recommendations
  b) Assess to the degree practical the extent to which implementation was effective in
     - Addressing the totality of the issues identified by WHOIS1, and
     - Generating information useful to management and evolution of WHOIS
  c) Determine if any further specific measurable steps should be recommended to enhance results achieved through WHOIS1 recommendations

- Begin presenting and discussing Subgroup outputs for Objectives #2-5
  - Starting with Subgroup 4, Consumer Trust

WHOIS1 Recs #12-14: Internationalized Domain Names

Agenda Item #2

Time: 09:15-09:45

Presenter: Dmitry Belyavsky

Subgroup Members: Dmitry, Alan, Lili

Subgroup Wiki: https://community.icann.org/x/85IEB

WHOIS1 Recs #12-14 – IDNs

WHOIS1 Recommendations

- *Rec 12 - The final data model, including (any) requirements for the translation or transliteration of the registration data, should be incorporated in the relevant Registrar and Registry agreements within 6 months of adoption of the working group's recommendations by the ICANN Board. If these recommendations are not finalized in time for the next revision of such agreements, explicit placeholders for this purpose should be put in place in the agreements for the new gTLD program at this time, and in the existing agreements when they come up for renewal.*

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

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

WHOIS1 Recs #12-14 – IDNs

Questions the subgroup attempted to answer when assessing this objective:
1. Verify that reports address all the aspects raised by the WHOIS1 RT and check their status of implementation.
2. As the translation/transliteration questions are not fully-addressed, they need special attention. We cannot implement the metrics necessary for addressing #14 until the implementation is completed.

Research and background materials used to answer questions:
- WHOIS1 Final Report, Action Plan, & Implementation Reports
- Implementation Briefing Presentation, Answers to Questions, & Written Briefing
- Translation and Transliteration PDP's Final Issue Report, March 2013
- Translation and Transliteration PDP web page
- Translation and Transliteration PDP Working Group Final Report, Jun 2015
- IRD Expert Working Group Final Report, September 2015
- Translation and Transliteration IRT wiki
- Translation and Transliteration Implementation Project Status
- ICANN's RDAP Webpage

WHOIS1 Recs #12-14 – IDNs

Describe your methodology to answer questions and analyze the materials
- The subgroup studied the provided materials and the decisions reached by ICANN after the WHOIS1 Report was published.
- The subgroup checked whether the measures taken by ICANN covers the recommendations made by the RT and whether it is necessary to provide any additional measures to fully cover the recommendations.

Based on the analysis, what are the main findings?
- The subgroup treats Recommendations #12, 13, & 14 as fulfilled.
- The implementation of Recommendation 13 depends on RDAP progress.
- The metrics and measures developed by ARS are suitable when the internationalized registration data become available for studying. The measurements will require participants understand corresponding languages.

Based on findings, the subgroup identified the following problems/issues
- *None Identified yet*

To address the above problems/issues, the subgroup proposes the following recommendations (if any)
- *None proposed yet*

WHOIS1 Rec #11: Common Interface

Agenda Item #3

Time: 09:45-10:15

Presenter: Susan Kawaguchi

Subgroup Members: Susan, Volker, Alan

Subgroup Wiki: https://community.icann.org/x/8JIEB

WHOIS1 Rec #11 – Common Interface

WHOIS1 Recommendation

* *Rec 11 – It is recommended that the Internic Service is overhauled to provide enhanced usability for consumers, including the display of full registrant data for all gTLD domain names (whether those gTLDs operate thin or thick WHOIS services); operational improvements should include enhanced promotion of the service to increase user awareness.*

Questions the subgroup attempted to answer when assessing this objective:

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

WHOIS1 Rec #11 – Common Interface

Research and background materials used to answer questions:

- WHOIS1 Final Report, Action Plan, & Implementation Reports
- Implementation Briefing Presentation, Answers to Questions, & Written Briefing
- Documents cited in briefing on Recommendation 11, including
  - WHOIS Informational Microsite
  - WHOIS Consolidated WHOIS Lookup Tool
  - https://www.internic.net/
- Written Briefing on query failures
- Written Answers to subgroup's questions (see below)

Describe your methodology to answer questions and analyze the materials

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

WHOIS1 Rec #11 – Common Interface

Based on the analysis, what are the main findings?
The common interface recommendation was intended to ensure that anyone looking up a WHOIS record could do that easily and from one source. Lack of tracked metrics to ensure the tool provides the data it should or is consistent in providing the data is not acceptable.

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

Specific metrics should be tracked:
> How often are fields returned blank?
> Is data displayed consistently?
> Do all gTlds return results consistently?
> How often does the tool not return results for specific gTlds?
> How big or small is this problem?

WHOIS1 Rec #11 – Common Interface

Recommendations

Recommendation:

Define metrics and or SLA's to be tracked and evaluated to determine consistency of results of queries and use of tool.

Break

Time: 10:15-10:30

What's Next?

10:30-12:30 – WHOIS1 Rec #10: Privacy/Proxy Services

WHOIS1 Rec #10: Privacy/Proxy Services

Agenda item #4

Time: 10:30-12:30

Presenter: Susan Kawaguchi

Subgroup Members: Susan, Volker, Cathrin, Stephanie

Subgroup Wiki: https://community.icann.org/x/7ZIEB

WHOIS1 Rec #10 – Privacy/Proxy Services

WHOIS1 Recommendation

- *Rec 10 – The Review Team recommends that ICANN should initiate processes to regulate and oversee privacy and proxy service providers.*

- *ICANN should develop these processes in consultation with all interested stakeholders.*

- *This work should take note of the studies of existing practices used by proxy/privacy service providers now taking place within the GNSO.*

- *The Review Team considers that one possible approach to achieving this would be to establish, through the appropriate means, an accreditation system for all proxy/privacy service providers. As part of this process, ICANN should consider the merits (if any) of establishing or maintaining a distinction between privacy and proxy services.*

- *The goal of this process should be to provide clear, consistent and enforceable requirements for the operation of these services consistent with national laws, and to strike an appropriate balance between stakeholders with competing but legitimate interests. At a minimum, this would include privacy, data protection, law enforcement, the industry around law enforcement and the human rights community.*

- *ICANN could, for example, use a mix of incentives and graduated sanctions to encourage proxy/privacy service providers to become accredited, and to ensure that registrars do not knowingly accept registrations from unaccredited providers.*

- *ICANN could develop a graduated and enforceable series of penalties for proxy/privacy service providers who violate the requirements, with a clear path to de-accreditation for repeat, serial or otherwise serious breaches.*

WHOIS1 Rec #10 – Privacy/Proxy Services

Questions the subgroup attempted to answer when assessing this objective:

1. Noting that:

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

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

2. The subgroup agreed that this review should

   a) Encompass the work completed both through the RAA specification and the PPSAI PDP, and

   b) Whether the agreed upon details adhere to WHOIS1 Recommendation #10.

WHOIS1 Rec #10 – Privacy/Proxy Services

Research and background materials used to answer questions:
- WHOIS1 Final Report, Action Plan, & Implementation Reports
- Implementation Briefing Presentation, Answers to Questions, & Written Briefing
- Documents cited in briefing on Recommendation 10, including
  - 2013 RAA, including RAA WHOIS requirements for Registrants
  - Privacy & Proxy Services Accreditation Issues (PPSAI) PDP & Final Report
  - GNSO approval of PDP Final Report, GAC Advice-Helsinki Communique, & Board approval of Final Report Recommendations
  - Implementation Plan developed & Current PPAA draft (20 March)
- Additional materials and briefings from the ICANN Org, including
  - Written answers from Registrar Services staff leading PP IRT (20 March)
  - Metrics for P/P Spec in the 2013 RAA
  - Responses from ICANN Compliance and Global Domains Division to Data Accuracy Subgroup Questions (as they relate to P/P Services)

Describe your methodology to answer questions and analyze the materials
- WHOIS1 Recommendation 10 advises that consideration be given to several specific objectives. The subgroup developed initial findings for each objective.

WHOIS1 Rec #10 – Privacy/Proxy Services

Based on the analysis, what are the main findings?

Recommendation 10 Objective	Subgroup's Initial Findings	
1. Clearly labeling WHOIS entries to indicate that registrations have been made by a privacy or proxy service	⊙	Included in PPSAI working group report
1. Providing full WHOIS contact details for the privacy/proxy service provider, which are contactable and responsive	⊙	Included in the PPSAI working group report. While details of the standard report process are still being debated, but there is consensus that providers must provide full data and be contactable and responsive.
1. Adopting agreed standardized relay and reveal processes and timeframes; (these should be clearly published, and proactively advised to potential users of these services so they can make informed choices based on their individual circumstances)	⊙	Law enforcement relay and reveal processes are still being debated and how this would be implemented in a way that would not be burdensome for each side.
	⊙	Final details of such rocesses are currently being debated, however the recommendation objective has already been met with the basis consensus model.
	⊙	Partially defined under 2.4.5 of the RAA spec.
1. Registrars should disclose their relationship with any proxy/privacy service provider;	⊙	Included in PPSAI working group report
	⊙	Partially defined under 2.3 of the RAA spec
1. Maintaining dedicated abuse points of contact for each provider	⊙	Partially defined under 2.4.1 and 2.4.2 of the RAA spec
	⊙	Already agreed by Implementation Review Team.
1. Conducting periodic due diligence checks on customer contact information	⊙	Review has shown no such checks are currently envisioned. Implementing such reviews may violatethe reliance of the underlying registrants on the privacy of their data.
1. Maintaining the privacy and integrity of registrations in the event that major problems arise with a privacy/proxy provider	⊙	Included in PPSAI working group report by mandating data escrow.
	⊙	Partially defined under 2.5 of the RAA spec.
1. Providing clear and unambiguous guidance on the rights and responsibilities of registered name holders, and how those should be managed in the privacy/proxy environment.	⊙	Partially defined under 2.4.4, 2.4.5 and 2.4.6 of the RAA spec.
	⊙	How effective are these rights and responsibility regarding the effectiveness of proxy registrations and the protection of rights of others.

WHOIS1 Rec #10 – Privacy/Proxy Services

Based on findings, the subgroup identified the following problems/issues

- Issue #1: Current funding proposals for accreditation program create concerns of ICANN failing the goal of onboarding all providers of such services due to inflation of costs. ICANN Org staff seems to be unable to justify proposed accreditation fees, which may endanger the entire program.

- Issue #2: Impact of GDPR data redaction requirements on privacy services are yet unknown, but significant impact is expected as personal data becomes hidden by default without use of privacy services.

- Issue #3: The implementation should not be delayed due to the GDPR this process is needed more than ever immediately.

- Issue#4 The recommendation suggests using a mix of incentives and sanctions to encourage and enforce this policy once implemented. The IRT should be encouraged to discuss incentives, compliance actions have been discussed.

Lunch

Time: 12:30-13:30

What's Next?

13:30-14:00 – Update on ongoing community initiatives
14:00-15:15 – WHOIS1 implementation assessment

Update on Ongoing Community Initiatives

Agenda Item #5

Time: 13:30-14:00

Presenters: Review Team Members & ICANN Org

Update on Ongoing Community Initiatives

Other Activities Identified in the ToR	Covered in Subgroup Briefing	For On-Going Status Updates , see…
GNSO PDP on Next-Generation Registration Directory Services	Subgroup 1 Rec 1 (Strategic Priority) & Subgroup 2 (Anything New) Inventory	http://tinyurl.com/ng-rds, in particular https://mm.icann.org/pipermail/gnso-rds-pdp-wg/2018-April/005799.html
Registration Data Access Protocol (RDAP) Implementation	Subgroup 1 Rec 12-14 (IDN)	https://www.icann.org/rdap, in particular https://community.icann.org/display/RP/RDAP+Pilot
Cross-Field Address Validation	Subgroup 1 Rec 5-9 (Accuracy)	https://www.icann.org/news/announcement-3-2017-10-26-en
Translation and Transliteration of Contact Information Implementation	Subgroup 1 Rec 12-14 (IDN)	https://community.icann.org/display/afav
Privacy/Proxy Services Accreditation Implementation	Subgroup 1 Rec 10 (PP)	https://www.icann.org/resources/pages/ppsai-2016-08-18-en
ICANN Procedures for Handling WHOIS Conflicts with Privacy Laws	Subgroup 2 (Anything New) Inventory	https://community.icann.org/display/gnsocouncilmeetings/Motions+30+January+2018, see motion for Adoption of Charter for WHOIS Procedure IAG
Implementation of THICK WHOIS	Subgroup 2 (Anything New) Inventory	https://community.icann.org/display/TWCPI/Thick+Whois+Policy+Implementation
ICANN organization's work with the community on GDPR Compliance with existing agreements with registries and registrars		https://www.icann.org/dataprotectionprivacy, in particular https://www.icann.org/resources/pages/data-protection-announcements-2017-12-08-en

WHOIS1 Implementation Assessment

Agenda item #6

Time: 14:00-15:15

Presenters: All

WHOIS1 Implementation Assessment

Assess the overall implementation of WHOIS1 Recommendations to:

a) Evaluate overall the extent to which ICANN Org has implemented WHOIS1 recommendations

b) Assess to the degree practical the extent to which implementation was effective in

    Addressing the totality of the issues identified by WHOIS1, and

    Generating information useful to management and evolution of WHOIS

c) Determine if any further specific measurable steps should be recommended to enhance results achieved through WHOIS1 recommendations

WHOIS1 Implementation Assessment

- **WHOIS1 Rec #2: WHOIS Policy**

Accept that WHOIS1 RT Recommendation 2 is fully implemented.

Accept that the adoption of the EWG's Final Report and development of the framework for the Board-initiated GNSO RDS PDP[s] is intended to deliver a holistic next generation WHOIS policy framework that would address current set of fragmented and decentralized WHOIS policies.

WHOIS1 Implementation Assessment

- **WHOIS1 Rec #3: Outreach**

All public-facing information related to gTLD registrations needs to be reviewed and reformulated. This includes the RAA-related documents on registrant rights, benefits and responsibilities, the WHOIS portal, and the education tools (ICANN Learn, Video tutorials), ensuring up-to-date and consistent messaging.

Timing for this needs to factor in the timing of both interim and long-term GDPR and privacy considerations.

WHOIS1 Implementation Assessment

- **WHOIS1 Rec #4: Compliance**

Recommendation#1: All new policies implemented should be required to be measured, audited and tracked by the compliance team. Consistent Labelling and Display policy requires a registrar abuse contact email address and contact phone. This would be displayed in the WHOIS record. Possible to include this in the audit of a registrar?

Recommendation#2: (May belong in the Data Accuracy subgroup)
Require all domain name registrations adhere to the WHOIS requirements in the 2013 Registrar Accreditation Agreement.

WHOIS1 Implementation Assessment

- **WHOIS1 Recs #5-9 – Data Accuracy**

Strict compliance enforcement?

Not ICANN but registrars to play a active role in improving data accuracy?

WHOIS1 Implementation Assessment

- **WHOIS1 Rec #11 – Common Interface**

Define metrics and or SLA's to be tracked and evaluated to determine consistency of results of queries and use of tool.

WHOIS1 Implementation Assessment

- **WHOIS1 Recs #15-16: Plan & Annual Reports**

Plan & Annual Reports are essential to guarantee the effective implementation of any recommendations, more specific methodologies on Plan & Annual Reports should be taken in future.

Break

Time: 15:15-15:30

What's Next?

15:30-16:15 – WHOIS1 implementation assessment
16:15-17:15 – Subgroup 4 – Consumer Trust
17:15-17:30 – Review day 3 agenda and closing remarks

WHOIS1 Implementation Assessment

Agenda item #7

Time: 15:30-16:15

Presenters: All

WHOIS1 Implementation Assessment

Assess the overall implementation of WHOIS1 Recommendations to:

a) Evaluate overall the extent to which ICANN Org has implemented WHOIS1 recommendations

b) Assess to the degree practical the extent to which implementation was effective in

   Addressing the totality of the issues identified by WHOIS1, and
   Generating information useful to management and evolution of WHOIS

c) Determine if any further specific measurable steps should be recommended to enhance results achieved through WHOIS1 recommendations

Subgroup 4 – Consumer Trust

Agenda item #8

Time: 16:15-17:15

Presenter: Erika Mann

Subgroup Members: Erika, Carlton, Dmitry, Stephanie, Susan

Subgroup Wiki: https://community.icann.org/x/AZpEB

Subgroup 4 – Consumer Trust

Objective

Consistent with ICANN's mission and Bylaws, Section 4.6(e)(ii), the review team will assess the extent to which the implementation of today's WHOIS (the current gTLD RDS) promotes consumer trust in gTLD domain names by (a) agreeing upon a working definition of "consumer" and "consumer trust" used in this review, (b) identifying the approach used to determine the extent to which consumer trust needs are met, (c) identifying high-priority gaps (if any) in meeting those needs, and (d) recommending specific measureable steps (if any) the team believes are important to fill gaps.

Questions the subgroup attempted to answer when assessing this objective:

1. Is the term 'trustworthiness' the best and only option in determining consumer trust in the gTLD environment as mentioned in the relevant WHOIS report(s)?

2. Is the increase in alternative identities (for example FB) an indication that the current use of gTLDs is not sufficiently advocating consumer trust?

3. A key high priority gap in understanding the consumer trust environment is apparently the lack of sufficient data, as mentioned in the various WHOIS report(s). Are there new developments that need to be considered?

4. Is the decline in awareness for some of the legacy gTLDs (.info, .org) an indication for changing pattern in consumer trust?

5. Security and transparency play a major role in defining a trustful Internet environment. Did the current gTLD and WHOIS system achieve this?

6. Are regulations like the European GDRP increasing consumer trust if major information is missing in the publicly available WHOIS?

Subgroup 4 – Consumer Trust

Research and background materials used to answer questions:
- WHOIS Review Team (WHOIS1) Final Report (2012),
  Appendix F: Consumer Study
- Competition, Consumer Trust & Consumer Choice Review Team Draft Report
- Phase Two Global Registrant Survey, and announcement
- ICANN Bylaws

- The subgroup also plans to ask ICANN's Global Domain Division to provide insight into how "consumer trust" is reflected in their approach to WHOIS policy implementation and enforcement

Describe your methodology to answer questions and analyze the materials
- Agreed to a working definition of "consumer" to include any Internet user, of which registrants are a small subset.
- Agreed to examine "trustworthiness" by determining the extent to which consumer trust needs are met.
- Plan to do a gap analysis by examining the findings and analysis of other subgroups assessing implementation of the WHOIS1 recommendations

Subgroup 4 – Consumer Trust

Based on the analysis, what are the main findings?
- After reviewing available documents, the subgroup finds that the only document which specifically explores the relationship between WHOIS and "Consumer Trust" is the WHOIS1 Final Report
- The topic of Consumer Trust is mentioned in various key context environments. Excerpts have been provided for subgroup analysis.
- Other documents identified as significant in judging the relevance of consumer trust in the broader context of ICANN's consumer and public interest value system: Phase 2 Global Consumer Research Survey & ICANN Bylaws

Based on findings, the subgroup identified the following problems/issues
- Gap analysis to identify areas of WHOIS which may need to be further enhanced to promote consumer trust
- Gap analysis to be repeated after WHOIS evolves to comply with GDPR

To address the above problems/issues, the subgroup proposes the following recommendations (if any)
- *None proposed yet*

Review Day 3 Agenda & Closing Remarks

Agenda item #9

Time: 17:15-17:30

Presenters: All

Day 3 Agenda

08:30-09:00 - Breakfast

09:00-09:15 – Day 2 debrief & day 3 objectives

09:15-10:15 – Subgroup 3 – Law Enforcement Needs

10:15-10:30 – Break

10:30-11:30 – Subgroup 2 – Anything New

11:30-12:00 – Subgroup 5 – Safeguarding Registrant Data

12:00-12:30 – Parking lot for further items to be discussed

12:30-13:30 – Lunch

13:30-15:15 – Subgroups 2-5

15:15-15:30 – Break

15:30-16:10 – Parking lot for further items to be discussed

16:10-16:20 – Work plan review

16:20-17:20 – Wrap-up

17:20-17:30 – A.O.B. & closing remarks

RDS-WHOIS2-RT Brussels Face-to-Face Meeting

DAY 3 – 18 April 2018

ICANN

Day 2 Debrief & Day 3 Objectives

Agenda item #1

Time: 09:00-09:15

Presenters: Review Team Leadership

Day 3 Morning Program

08:30-09:00 - Breakfast

09:00-09:15 – Day 2 debrief & day 3 objectives
09:15-10:15 – Subgroup 3 – Law Enforcement Needs

10:15-10:30 – Break

10:30-11:30 – Subgroup 2 – Anything New
11:30-12:00 – Subgroup 5 – Safeguarding Registrant Data
12:00-12:30 – Parking lot for further items to be discussed

12:30-13:30 – Lunch

Day 3 Afternoon Program

13:15-15:15 – Subgroups 2-5

15:15-15:30 – Break

15:30-16:10 – Parking lot for further items to be discussed
16:10-16:20 – Work plan review
16:20-17:20 – Wrap-up
17:20-17:30 – A.O.B. & closing remarks

Day 3 Objectives

- Present and discuss Subgroup outputs for remaining Review Objectives

- Refer to Day 1 – Specific Objectives, including points to consider:
  - Do you have any questions or feedback on each subgroup's output?
  - Are there any overlaps between subgroups that need to be resolved?
  - Did the subgroup fully-address each Review Objective?

- Assess findings for Review Objectives #2-5 overall
  - Determine if any further specific measurable steps should be recommended

- Critical assessment of current status of each subgroup/issue, prognosis, and the need for any strategic changes

- Consider the review team's work plan in light of progress made and identify next steps to complete and consolidate subgroup reports

Recaps

⊙ **WHOIS1 Recs. 12-14 - IDNs**:

Work was done to the extent it can be done without an RDAP-based WHOIS system

⊙ **WHOIS1 Rec. 11 – Common Interface**:

InterNIC was not overhauled, but common interface was provided

However, common interface has no metrics that can be used to determine its effectiveness

Metrics and SLAs could be used to address this and also to proactively spot non-compliance

Recaps

⊙ **WHOIS1 Rec. 10 Privacy/Proxy Services:**

Several Issues identified based on findings - of those, Volker has an action to clarify.

Two new issues identified: the length of time this recommendation took to implement, and risk fo PP service abuse by criminals

No recommendations at this time specific to Rec 10, but the RT should track the progress of the IRT and consider recommendation(s) related to compliance if necessary.

Consumer Trust:

⊙ Definition of consumer to be address must be broad and include Internet users

⊙ WHOIS contributes to consumer trust, mostly indirectly

⊙ Subgroup will take feedback on-board and use outputs of other subgroups to assess impact of WHOIS1 rec implementation on consumer trust

Subgroup 3 – Law Enforcement Needs

Agenda item #2

Time: 09:15-10:15

Presenter: Cathrin Bauer-Bulst

Subgroup Members: Cathrin, Thomas, Chris

Subgroup Wiki: https://community.icann.org/x/-pIEB

Subgroup 3 – Law Enforcement Needs

Objective

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

Questions the subgroup attempted to answer when assessing this objective:
1. Take into account current and emerging technology, to include the following
2. Cybercrime investigations and enforcement;
3. Data protection laws and enforcement;
4. What's required of the Registrar to retain data under the RAA;
5. A clear direction from Law Enforcement of what is needed; and
6. A better understanding of procedures and requirements by both Law Enforcement and the Registrars.

Subgroup 3 – Law Enforcement Needs

Research and background materials used to answer questions:
- WHOIS Review Team (WHOIS1) Final Report (2012), Chapter 6 and Appendix E: The WHOIS Review team's Law Enforcement Survey
- WHOIS Misuse Study Final Report, especially Section 4. Law Enforcement & Researchers survey
- ICANN61 GAC PSWG - OCTO Update

Describe your methodology to answer questions and analyze the materials
- Informal outreach to law enforcement contacts to solicit input on needs, including for example GAC PSWG, APWG, and SSAC members
- Review prior RT Law Enforcement Survey
- Review the update given by the ICANN Office of CTO to the GAC PSWG
- See also Findings and Analysis for "next steps"

Subgroup 3 – Law Enforcement Needs

Based on the analysis, what are the main findings?
- The subgroup has not gathered findings, but intends to take this approach:
    - Establish working definition of "law enforcement" to be used in this review
    - Each subgroup member will conduct informal outreach to law enforcement contacts
    - Based on initial findings, subgroup may conduct broader formal outreach
    - Formalized outreach (if any) would be structured in a transparent and accessible way (e.g., survey)
- After conducting this research, all subgroup members will review outreach results to determine the extent to which Law Enforcement needs are met by today's WHOIS policies and procedures and high-priority gaps (if any).
- **Note:** The timing and approach used for outreach may be impacted by near-term changes to WHOIS resulting from GDPR compliance efforts.

Based on findings, the subgroup identified the following problems/issues
- *None identified yet*

To address the above problems/issues, the subgroup proposes the following recommendations (if any)
- *None proposed yet*

Break

Time: 10:15-10:30

What's Next?

10:30-11:30 – Subgroup 2 – Anything New
11:30-12:00 – Subgroup 5 – Safeguarding Registrant Data
12:00-12:30 – Parking lot for further items to be discussed

Subgroup 2 – Anything New

Agenda item #3

Time: 10:30-11:30

Presenter: Stephanie Perrin

Subgroup Members: Stephanie, Alan, Susan

Subgroup Wiki: https://community.icann.org/x/_5IEB

Subgroup 2 – Anything New

Objective

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

Questions the subgroup attempted to answer when assessing this objective:
1. For significant new areas of WHOIS (RDS) only, answer these questions:
   a) Have these been implemented properly? What challenges have staff faced in the implementation?
   b) Are Registrars/Registries implementing these in a timely manner?
   c) Are any measurable steps that should be taken to make these new policies and procedures more effective?

Research and background materials used to answer questions:
- ICANN web page on WHOIS Policies (see Findings for list)
- Inventory of New and Changes Made to WHOIS Policies and Procedures Since the First WHOIS Review Team Completed Its Work in 2012

Subgroup 2 – Anything New

Describe your methodology to answer questions and analyze the materials

- To conduct its research, all members of this subgroup reviewed & prioritized the inventoried WHOIS policy and procedure materials
- ✧ The group recognized that many policies and procedures may change in the light of GDPR, and therefore work at the moment is preliminary in cases marked with a star (indicating possible GDPR implications)

Based on the analysis, what are the main findings?

- There are a lot of policies and procedures that have been worked on since 2012
- There are not clear metrics for some of them

Based on findings, the subgroup identified the following problems/issues

- Need to check on a number of outcomes to measure satisfaction of stakeholders with procedures and policy

To address the above problems/issues, the subgroup proposes the following recommendations (if any)

- *None proposed yet*

Subgroup 2 – Anything New

New Policies and Procedures

New WHOIS pages on website:
- Have these been implemented properly? What challenges have staff faced in the implementation? Need to check on both unless overlap

Inter-Registrar Transfer Policy:
- Will this work with Privacy/Proxy services? Have these been implemented properly? Need to check on whether Registrars are satisfied, and whether results of IRT on PPSAI are satisfactory

Additional WHOIS Information Policy (AWIP)**:**
- Is this a compliance issue? Need to check with compliance? Need to check on whether Registrars are satisfied.

New gTLD URS Policy, Procedure and Rules for URS Policy:
- Being discussed in RPM PDP
- No specific WHOIS issues

New gTLD URS Policy, Procedure and Rules for URS Policy:
- Being discussed in RPM PDP
- No specific WHOIS issues

Expired Registration Recovery Policy (ERRP):
- Not clear how fees are being announced when registrar has no website
- We have no metrics on this policy

Subgroup 2 – Anything New

New Policies and Procedures

Thick WHOIS PDP and **Final Report**:
- ✧ See section 7.1 for Thick WHOIS Policy – Stalled due to GDPR and RDAP implementation.

Thick RDDS (WHOIS) Transition Policy for .COM, .NET and .JOBS
- ✧ Stalled due to GDPR and RDAP implementation.

Registry Registration Data Directory Services Consistent Labeling and Display Policy:
- No implications

Privacy & Proxy Services Accreditation Issues (PPSAI) Final Report:
- Subgroup #10 is covering

Translation/Transliteration of Contact Information PDP and **Final Report**

Final Report from the Expert Working Group on Internationalized Registration Data (2015):
- Should note that the work is completed
- Need to verify what issues have arisen

Subgroup 2 – Anything New

New Policies and Procedures

Review of the ICANN Procedure for Handling WHOIS Conflicts with Privacy Law (2014):

- New IAG was created, new trigger recommended
- ✧ May need changes due to GDPR
- ✧ multi-party dissatisfaction with results

Final Report on the Implementation Advisory Group Review of Existing ICANN Procedure for Handling WHOIS Conflicts with Privacy Law (2016):

- Final report voted through GNSO but new group being formed because of multi-party dissatisfaction with results
- New trigger not seen as effective
- ✧ May need changes due to GDPR

RDS/WHOIS Data Retention Specification Waiver and Discussion Document

- Data retention is an RDS issue
- Waiver has been slow for uptake, but working
- ✧ May need changes due to GDPR:
- Need to check on whether Registrars are satisfied.

Subgroup 5 – Safeguarding Registrant Data

Agenda item #4

Time: 11:30-12:00

Presenter: Alan Greenberg

Subgroup Members: Alan, Dmitry, Stephanie, Volker

Subgroup Wiki: https://community.icann.org/x/BJpEB

Subgroup 5 – Safeguarding Registrant Data

Objective

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

Questions the subgroup attempted to answer when assessing this objective:
1. Items a), c) and d) are being covered in both Next Generation RDS PDP and ICANN Org GDPR compliance efforts
2. For Item b), currently all WHOIS data is made available publicly. Although this will surely change as a result of ongoing GDPR compliance efforts, currently there is no protection for that data.
3. Protection against WHOIS (and other) data loss due to Registrar/Registry failure or de-accreditation is required today in the form of Escrow.
4. Subgroup agreed to consider escrow procedures and associated data safeguards used by those who relay and store escrowed data (i.e., Escrow Providers, Registrars and Registries).

Subgroup 5 – Safeguarding Registrant Data

Research and background materials used to answer questions:

- SAC051, Report on Domain Name WHOIS Terminology (2011)
- SAC054, Report on Domain Name Registration Data Model (June 2012)
- RDS/WHOIS Contractual Requirements - Sections on Data Safeguards:
    - 2013 RAA, Section 3.6 - Data Retention Specification
    - 2014 New gTLD Registry Agreement, Spec 2 - Data Escrow Requirements
- Questions for ICANN GDD SME on Escrow rules and procedures
- Questions for Registrars & Registries about data change/loss prevention

Describe your methodology to answer questions and analyze the materials

- **Review of Escrow process as per Registry Agreement, RAA, and relevent IETF documents**
- **Formulate questions for Registrars/ Registries and Escrow agents**

Subgroup 5 – Safeguarding Registrant Data

Based on the analysis, what are the main findings?

- *[Include summary of Findings here]*

Based on findings, the subgroup identified the following problems/issues

- *No explicit problem areas are known at this point.*
- *The only known potential issue is whether there should be requirements for breach reporting by Registrars, Registries and Escrow agents (verifying with ICANN that there are no such requirements now).*

To address the above problems/issues, the subgroup proposes the following recommendations (if any)

- *[Include draft Recommendation(s) here if applicable/available or state N/A]*

Parking Lot (TBD)

Agenda item #5

Time: 12:00-12:30

Presenters: All

Lunch

Time: 12:30-13:30

What's Next?

13:30-15:15 – Subgroups 2-5

Subgroup 2-5

Agenda item #5

Time: 13:30-15:15

Presenters: All

Subgroups 2-5

Refer to Day 1 – Specific Objectives, including points to consider:

- Do you have any questions or feedback on each subgroup's output?
- Are there any overlaps between subgroups that need to be resolved?
- Did the subgroup fully-address each Review Objective?

Assess findings for Review Objectives #2-5 overall:

- Determine if any further specific measurable steps should be recommended

Subgroup 2 – Anything New

- Several items have compliance implications - to be addressed by the compliance subgroup

- Several items already covered by WHOIS1 rec subgroups

- Agree to deal with Reseller lack of transparency under Consumer Trust subgroup

- Agree to make general comment re: dissatisfaction with handling of conflicts with privacy law

- Noting overall that the impact of GDPR has not yet been addressed in this review

Subgroup 3 – Law Enforcement Needs

- It would be useful to survey LE now, to establish a baseline for comparison

- The same survey would need to be re-run post-GDPR to assess impact

- It is important the survey have global reach

- The full RT can assist on survey methodology, and Lili agrees to join subgroup to assist - especially in conducting outreach to her Interpol contacts

Subgroup 4 – Consumer Trust

- Definition of consumer to be address must be broad and include Internet users

- WHOIS contributes to consumer trust, mostly indirectly

- Subgroup will take feedback on-board and use outputs of other subgroups to assess impact of WHOIS1 rec implementation on consumer trust

- Strong direction but still need to do work, being aware of potential for drift into non-WHOIS aspects of CT.

- Subgroup should formulate a recommendation noting lack of Reseller transparency in WHOIS as a gap, to be addressed through policy and/or contractual changes

Subgroup 5 – Safeguarding Registrant Data

- Formulate new recommendation that ICANN should use contemporary standards for secure data storage and retention and breach notification

- Subgroup defers request to interview escrow providers and contracted parties,

- Subgroup wishes to review of contracts in place with escrow providers regarding data storage and breach notification

- Subgroup to develop further findings/issues after examining contracts

Break

Time: 15:15-15:30

What's Next?

15:30-16:10 – Parking lot for items to be further discussed
16:10-16:20 – Work plan review
16:20-17:20 – Wrap-up
17:20-17:30 – A.O.B. & closing remarks

Parking Lot (TBD)

Agenda item #7

Time: 15:30-16:10

Presenters: All

WHOIS1 Implementation Assessment Framework

Definition of effectiveness

The degree to which objectives are achieved and the extent to which targeted problems are solved.

Once a policy has been implemented it is necessary to monitor and evaluate the effectiveness of the policy to determine whether it has been successful in achieving the intended outcomes. ... The impact of policy can be measured with good statistics. If policy cannot be measured it is not good policy.

WHOIS1 Implementation Assessment Framework

Steps to determine effectiveness

1. **Identify issue**
2. **Frame issue** – determine goal of policy, ability to implement the policy and actual results of the policy
3. **Audit outcomes and impacts** - Measurable results short term, intermediate and long term impacts
    a. Sampling
    b. Metrics
    c. Monitoring
    d. Trend analysis
    e. Determine information gaps

4. **Determine whether changes in outcomes are a result of the policy**
5. **Develop recommendations and good practices**

WHOIS1 Implementation Assessment Framework

How can we use this framework for our work in the RT

1) **Identify issue** - The degree to which Whois objectives identified by stakeholders have been achieved and the extent to which problems targeted by the first RT have been solved

2) **Frame issue** – focus on goals of the first RTs recommendations? What problems they were trying to address, ability to implement the policy and actual results of the policy.

One of the issues that the first RT pointed out is that it was difficult to know what the WHOIS policy was and find all the components of the policy in one cohesive document.

From first RT report
"the extent to which ICANN s existing policy and implementation are effective in meeting stakeholder needs")

WHOIS1 Implementation Assessment Framework

3) **Audit outcomes and impacts** - Measurable results short term, intermediate and long term impacts.

Possible questions to use in survey of stakeholders about their needs for WHOIS.
- Have there been improvements since the first RT recommendations?

- Does WHOIS meet your needs for accurate data and why?

- Does WHOIS meet your needs for privacy and why?

- Current WHOIS issues not addressed by the RT recommendations?

- Is the WHOIS policy effective in the current implementation?

- Does ICANN compliance meet stakeholder needs and is it effective?
  a. Sampling
  b. Metrics
  c. Monitoring
  d. Trend analysis
  e. Determine information gaps

WHOIS1 Implementation Assessment Framework

4) **Determine whether changes in outcomes are a result of the policy**
- Have market conditions impacted the WHOIS instead of policy?
- Have applicable law impacted the WHOIS instead of policy?

5) **Develop recommendations** (and recommend good practices)

Review of Subgroup Prognosis & Resourcing

Critical assessment of

- Current status of each subgroup/issue,
- Prognosis,
- and the need for any strategic changes.

Review of Subgroups Prognosis & Resourcing

#	Subgroup	Rapporteur	Work Remaining?	Change in Resourcing?
1	WHOIS1 Rec #1 - Strategic Priority	Cathrin	Significant work	
	WHOIS1 Rec #2: Single WHOIS Policy	Carlton	Close to done	
	WHOIS1 Rec #3: Outreach	Alan	Close to done	
	WHOIS1 Rec #4: Compliance	Susan	Significant work	
	WHOIS Rec #5-9: Data Accuracy	Lili	Close to done	
	WHOIS Rec #10: Privacy/Proxy Services	Volker (Susan)	Significant work	
	WHOIS Rec #11: Common Interface	Volker (Susan)	Close to done	
	WHOIS Rec #12-14: Internationalized Domain Names	Dmitry	Close to done	
	WHOIS Rec #15-16: Plan & Annual Reports	Lili	Close to done	
2	Anything New	Stephanie	Done - reflects in other subgroups	
3	Law Enforcement Needs	Thomas (Cathrin)	Significant work	
4	Consumer Trust	Erika	Significant work	
5	Safeguarding Registrant Data	Alan	Significant work	

Work Plan Review

Agenda Item #8

Time: 16:10-16:20

Presenters: ICANN org

Work Plan Review

DATE	DELIVERABLE
By 24 May	Subgroups to incorporate edits identified in Brussels
By 28 June ICANN62	• Seek community input on draft findings/recommendations • Approve draft findings and recommendations
By 31July	Approve draft report for public comment
7 August – 5 October	Public comment on Draft Report
By 30 November	Update draft report based on public comment and assemble final recommendations
By 21 December	Approve final report for submission to ICANN Board

Per work plan submitted to ICANN Board on 9 February 2018

Any adjustments needed?

Wrap-Up

Agenda Item #9

Time: 16:20-17:20

Presenters: Review Team Leadership & ICANN org

Wrap-Up

- Draft report template

- ICANN62

- Next Steps

A.O.B. & Closing Remarks

Agenda item #10

Time: 17:20-17:30

Presenters: Review Team Leadership

WHOIS1 Implementation Assessment Framework

Steps to determine effectiveness

1. **Identify issue**
2. **Frame issue** – determine goal of policy, ability to implement the policy and actual results of the policy
3. **Audit outcomes and impacts** - Measurable results short term, intermediate and long term impacts
    a.   Sampling
    b.   Metrics
    c.   Monitoring
    d.   Trend analysis
    e.   Determine information gaps

4. **Determine whether changes in outcomes are a result of the policy**
5. **Develop recommendations and good practices**

Appendix

Overview of survey methods used by the
WHOIS Misuse Study

Excerpts from study report and slides developed by:

Nektarios Leontiadis

nektarios.leontiadis at andrew.cmu.edu

Nicolas Christin

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Introduction & Overview

- GNSO Council resolved in 2007 to obtain objective & quantifiable data on various aspects of WHOIS

- Several other studies/surveys commissioned:
    - Privacy/Proxy & Relay/Reveal Survey (Interisle Consulting; report August 2012)
    - Registrant Identification Study (NORC; report June 2013)
    - Technical Requirements Survey (GNSO WG; report August 2013)
    - Privacy & Proxy Service Abuse Study (NPL; report September 2013)

- This study by CMU on WHOIS Misuse will complete the GNSO's projects on WHOIS

See: http://gnso.icann.org/en/group-activities/other/whois/studies

Carnegie Mellon University
CyLab

Project team

CyLab at Carnegie Mellon University selected to perform this study in 2011

- Founded in 2003; a National Science Foundation CyberTrust Center & NSA Center of Academic Excellence

Research Team Leader:

- Dr. Nicolas Christin (Asst. Research Prof., Cylab & CMU Dept of Electrical & Computer Engineering): http://www.andrew.cmu.edu/user/nicolasc/

Researcher:

- Nektarios Leontiadis (BSc., MSc., PhD candidate, CMU Dept of Engineering & Public Policy): http://www.andrew.cmu.edu/user/nleontia/

Goals of the WHOIS Misuse Study

- Examine the hypothesis that *public access to WHOIS data leads to a measurable degree of misuse – that is, to actions that cause actual harm, are illegal or illegitimate, or otherwise contrary to the stated legitimate purpose*

- If the hypothesis is validated:

  - Identify the major **types of misuse**.

  - Determine which **protective mechanisms** are likely to be effective against WHOIS misuse.

High-level methodology

- Descriptive study
  - Analyze past instances of WHOIS misuse through <u>interviews</u> and <u>surveys</u> of parties who experience misuse
  - Per GNSO requirements, all surveys were done independently by CMU with explicit assurances of response privacy & anonymity

- Experimental study
  - Complement findings of the Descriptive study
  - <u>Controlled measurements</u> of WHOIS misuse

Descriptive study

- Registrant survey
  - Experiences of WHOIS misuse
- Registrar/Registry surveys
  - Protective (anti-harvesting) mechanisms in use
  - Aggregate data on WHOIS harvesting attacks
- Expert surveys
  - Cybercrime researchers; Consumer protection, data protection/first responders, and law enforcement organizations
  - Statistics of harmful acts in general
  - Specific cases of WHOIS misuse

Law Enforcement & Researchers Survey

- Cybercrime researchers; consumer protection, data protection/first responders, and law enforcement organizations

- 101 participants
  - 57% security researchers and consultants
  - 20% law enforcements agents
  - 10% government agencies

- Global invitation and response coverage
  - But responses received mainly from Americas (75%), and Europe (18%)

3.1. Selecting a survey panel

As part of the Law Enforcement and Researchers survey, we assembled a geographically diverse group of experts in the fields of security and privacy affiliated with research institutes, academia, law enforcement agencies, Internet Service Providers (ISPs), and national data protection commissions. The goal was to survey experts to whom WHOIS misuse incidents are reported, to ultimately obtain a qualitative global overview of WHOIS misuse, rather than a mere collection of individual misuse incidents.

Geographical region	Type of expertise
North America	Agencies to which security incidents are reported
South America	Large commercial vendor research labs
Europe	Large Internet service providers
Africa	Academic cybercrime research organizations
Asia / Pacific	Law enforcement agencies
	Commercial cybercrime investigators
	National Data Protection Commissioners

Table 1 Recruiting requirement in terms of geographical region and type of expertise

Our approach for recruiting participants was to build upon contacts established at Carnegie Mellon University (CMU) with additional input from ICANN to fill coverage gaps. Once this invitee list was completed, we identified remaining gaps and omissions in terms of the type of expertise we were looking for and geographic coverage, and we successfully managed to amend these deficiencies by researching online for additional invitees that would match our requirements. Table 1 lists the coverage goals for this survey's participants.

Toward the end of the time interval over which the survey was initially conducted, and despite the high response rate (email-based invitation, 25% response rate, corresponding to 29 responses out of 114 invitations at the time), an initial analysis of the responses informed us that we had collected a small number of individual misuse incidents and that we were lacking coverage for South America. We therefore extended the duration of the survey and invited a broader population of law enforcement experts attending the Costa Rica ICANN meeting to participate. The required level of expertise of the additional participants was verified by survey questions specifically structured for that purpose.

4. Law Enforcement & Researchers survey

4.1.   Survey methodology and design details

For the invitation process we built up on contacts established at Carnegie Mellon University and we requested ICANN's input in finalizing the list of parties invited to participate in the survey. We made significant effort to build a geographically diverse set of experts that enabled us to capture the impact and the extent of WHOIS misuse around the world. We were also able to achieve diversity in terms of the types of the expertise of survey participants. (See Section 3.1 for a description of invitee list.)

We used email messages to invite individual experts to participate in the survey. The invitation contained a short description of the study, information about the principal investigator, and links to either participate in the survey or opt out from any future messages and reminders from us. We also offered the option to download the questionnaire and email the responses to us. The content of the invitation is available in Appendix A – Law Enforcement/Researcher survey: Invitation to participate.

When a participant clicks on the link to participate he is presented with a consent form that describes briefly the procedures, requirements, risks, benefits, associated compensation (none), and privacy assurances we offered. The text is available in Appendix A – Law Enforcement/Researcher survey: Consent form.

The survey lasted 8 months – from August 2011 until May 2012 – and collected responses from 101 participants. The survey was implemented with SurveyMonkey and all connections to this service were protected with SSL.[6] The survey questions are available in Appendix A – Law Enforcement/Researcher survey: Survey questions. Invitees were assured that all responses would be treated as confidential, with survey data published in only in aggregate, anonymized form.

Incidents of WHOIS misuse

- 18 respondents provided details on 23 incidents
  - 45% of incidents directly experienced by the respondents
- Email or postal spam in most cases
  - Marketing material
  - Bills for services not requested
- 4 instances of sophisticated planning
  - Phishing, malware, identity theft
- In 11 cases, reoccurrence of misuse was avoided with use of countermeasures (e.g. IP blocking)

Experimentally Measured vs. Survey Reported WHOIS misuse

Carnegie Mellon University
CyLab
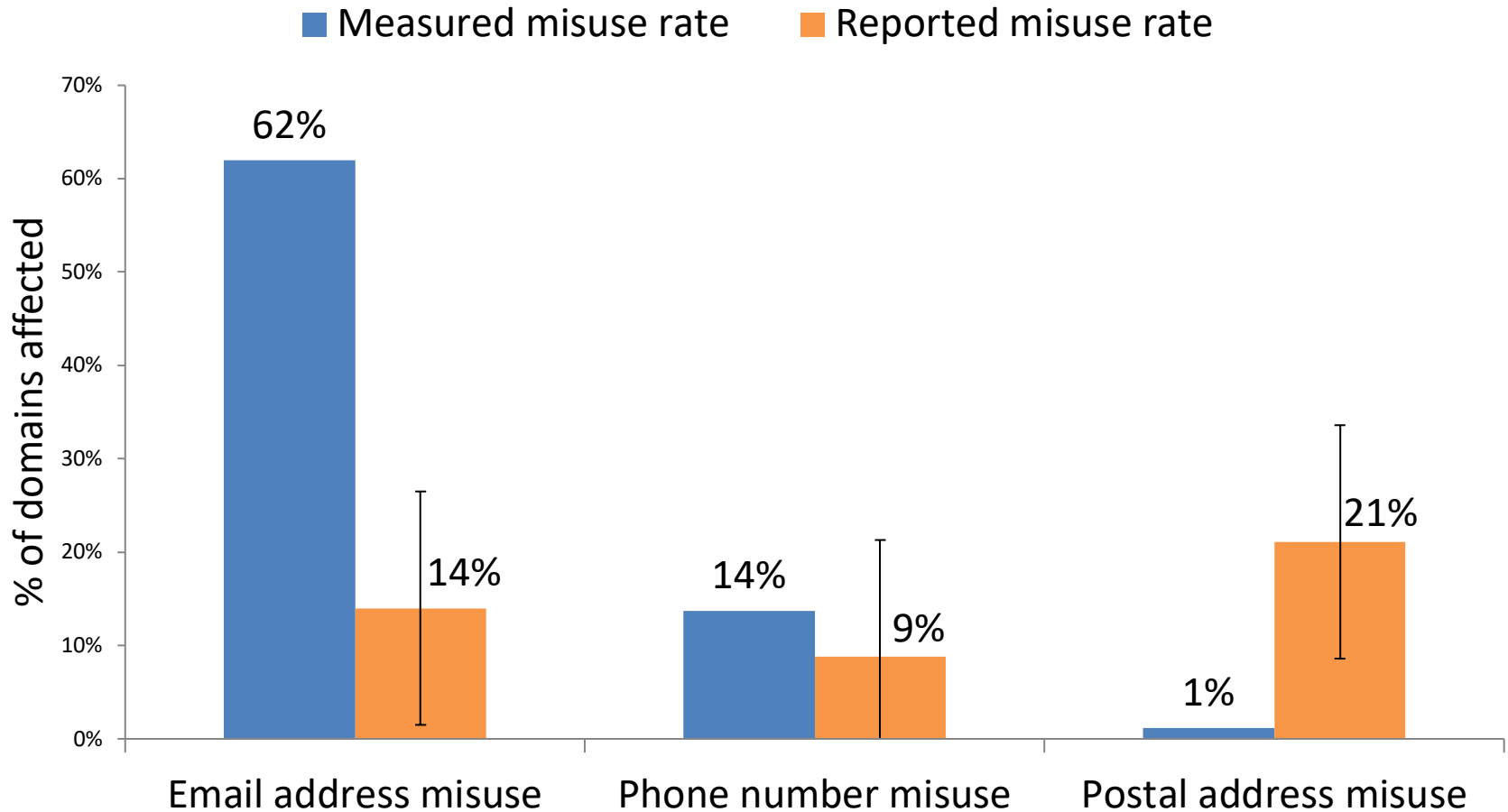
Correlations* affecting WHOIS misuse

*Statistically significant

Variables possibly affecting misuse	Phone number misuse	Email address misuse
WHOIS Anti-harvesting	No correlation	Lack of defense mechanisms linked to 2.3 times <u>more</u> misuse
gTLD	• .BIZ, and .INFO linked with <u>more</u> misuse • .ORG linked with <u>less</u> misuse	• .BIZ linked to <u>more</u> misuse • .COM, .NET, and .ORG linked to <u>less</u> misuse
Domain price	No correlation	Higher priced domains linked to <u>less</u> misuse
Domain name category	No correlation	Domains denoting a <u>person name</u> (e.g. randall-bilbo.com) linked to <u>less</u> misuse
Domain registrar	No correlation	No correlation

For More Information

- To download the full study report, visit: https://www.icann.org/en/news/public-comment/whois-misuse-27nov13-en.htm

- These slides were originally developed by CMU for an ICANN-sponsored webinar: http://gnso.icann.org/en/meetings/transcript-whois-misuse-1200-20131217-en.pdf