

# Improving WHOIS- An Update



20 November, 2013



# Agenda

1. Introduction
2. Demo of the WHOIS Website
3. IETF Update
4. New Registrar Obligations
5. Contractual Compliance Update
6. Policy Update
7. Internationalized Registration Data
8. Questions

# Introduction: Mandate and Purpose



## + ICANN Board directives

1. Implement WHOIS Review Team recommended improvements
2. Redefine the purpose and provision of gTLD registration data – Expert Working Group

## + Action Plan developed with details of implementation efforts addressing the WHOIS Review Team Recommendations

- See: <http://www.icann.org/en/about/aoc-review/whois/implementation-action-08nov12-en.pdf>

## + 2013 WHOIS Improvements Annual Report

- See: <http://whois.icann.org/sites/default/files/files/improvements-annual-report-04nov13-en.pdf/>

# Comprehensive effort in response to WHOIS Review Team Report

## Nov. 2012 Board Resolution

- ❑ Focus: *Enforce current contractual obligations & increase communication/outreach*
- ❑ Detailed Plan for each recommendation
- ❑ Activities span contract negotiations, compliance, online tools



***Demo of Whois Website***  
***whois.icann.org***



**DEMO of the WHOIS Website**  
**[whois.icann.org](http://whois.icann.org)**



A stylized world map in a light blue, dotted or pixelated font, centered on a dark blue background. The map shows the outlines of continents and major landmasses.

# Future Enhancements Phases II and III of the WHOIS Website

# WHOIS Search Look-Up Tool Phase II



Place where people could initiate a look-up of global gTLD WHOIS records

## Next Steps-

- Development currently under way
- Implementation Plan for WHOIS Search Portal to be published
- Beta Launch- Early 2014



# WHOIS Accuracy Sampling and Reporting System

## Phase III of WHOIS Website



1. Statistical methodology
2. Access to WHOIS records
3. Parser to automate contact data extraction
4. Automated address verification
5. Call center to call all sampled records.

**Next Step:** Design Experiment Published for Community Evaluation - Early 2014

# IETF UPDATE

*STATUS OF WEIRDS*

*Olaf Kolkman*

# 2013 RAA Whois Update



**Mike Zupke**  
**Director, Registrar Programs**

**21 November 2013**



# 2013 RAA – Brief Background

- Twelve law enforcement community requests + ALAC & GNSO input + years of negotiations + lots of public comment
- Result: 2013 RAA
  - New form of agreement, with “specifications”
  - Streamlined amendment process, with continued deference to GNSO processes, etc.
  - Enhanced compliance tools (e.g., suspension)
  - Predictable renewal
  - Registrants’ Benefits & Responsibilities

# 2013 RAA – Key Whois Provisions

- Whois Accuracy Program
  - Whois SLA
  - Abuse Point of Contact (ID'd in Whois)
  - Interim Privacy & Proxy Specification
  - IPv6 access requirement
  - Port 43 Whois provided by “thick” TLDs
  - “Bulk Whois” obligation suspended
  - Recognition of national law issues
- ( + Transition Addendum )

# Whois Accuracy Program

- Registrars affirmatively testing accuracy of Whois and account holder data:
  - No blank fields
  - Email, tel, address fields formatted per applicable standards & conventions
  - Email or tel affirmatively verified with customer
  - Postal addresses validated (upon further work by ICANN & registrar WG to identify appropriate validation tools)
- ICANN building accuracy monitoring tools

# Whois SLA

- Whois format now standard across all registrars (on 2013 RAA)
  - Additional/new data required (including abuse point of contact)
  - Fields now specified
  - Field order is uniform
  - Field labels set by the spec
- Uptime, round-trip time, data refresh time, all subject to minimum requirements & testing

# Privacy Proxy Specification

- Enhances consumer awareness and informs stakeholders of available processes
- Registrars (or their P/P services) must:
  - Disclose service terms
  - Provide/publish abuse POC
  - Make contact information available
  - Publish “reveal” and “relay” policies
  - Describe available customer service
  - Escrow customer data
- Expires w replacement policy or Jan 2017



# 2013 RAA – Current Status

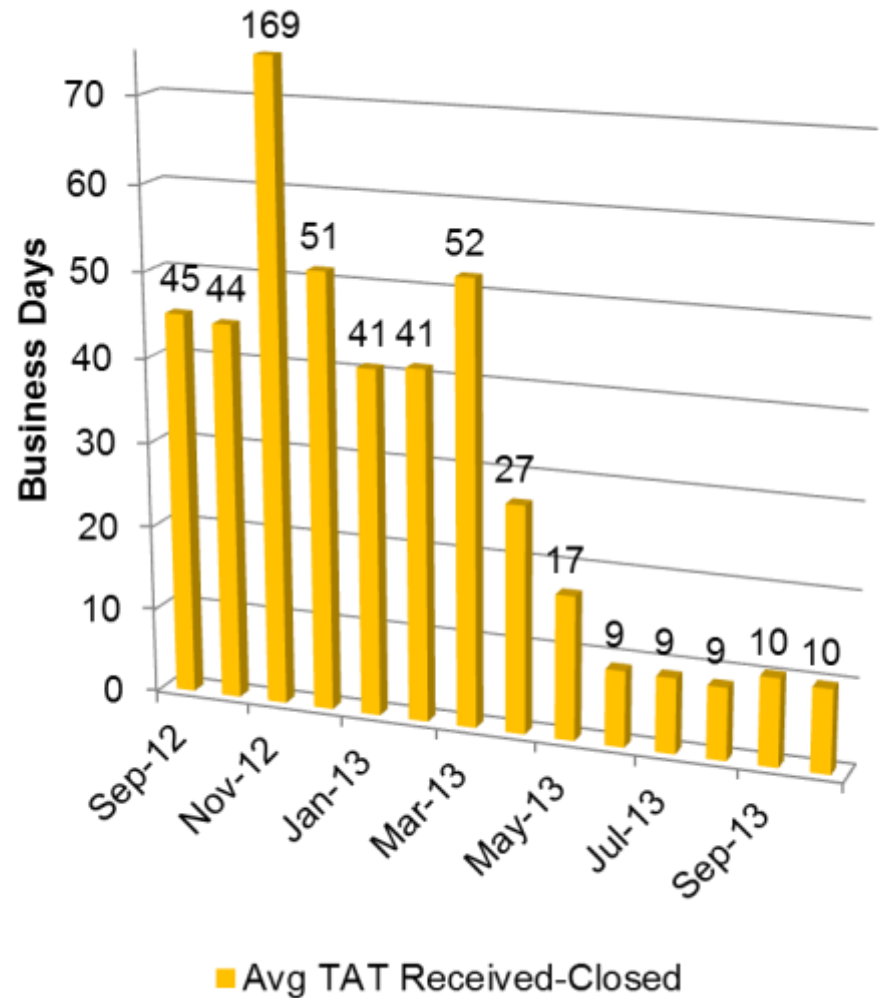
- 106 registrars have signed, representing over 60% of gTLD names
- 75 registrars in queue for “early adoption”
- 4 in-person & webcast registrar training sessions conducted in U.S., China, Germany, Argentina (tomorrow)
- Ongoing bi-weekly registrar webinar series
- Rr Whois advisory posted 31 July 2013
- New RAA Questions ticketing system
- FAQs & more outreach to come

A stylized world map rendered in a light blue, dotted or pixelated texture, centered on a dark blue background. The map shows the outlines of continents and major landmasses.

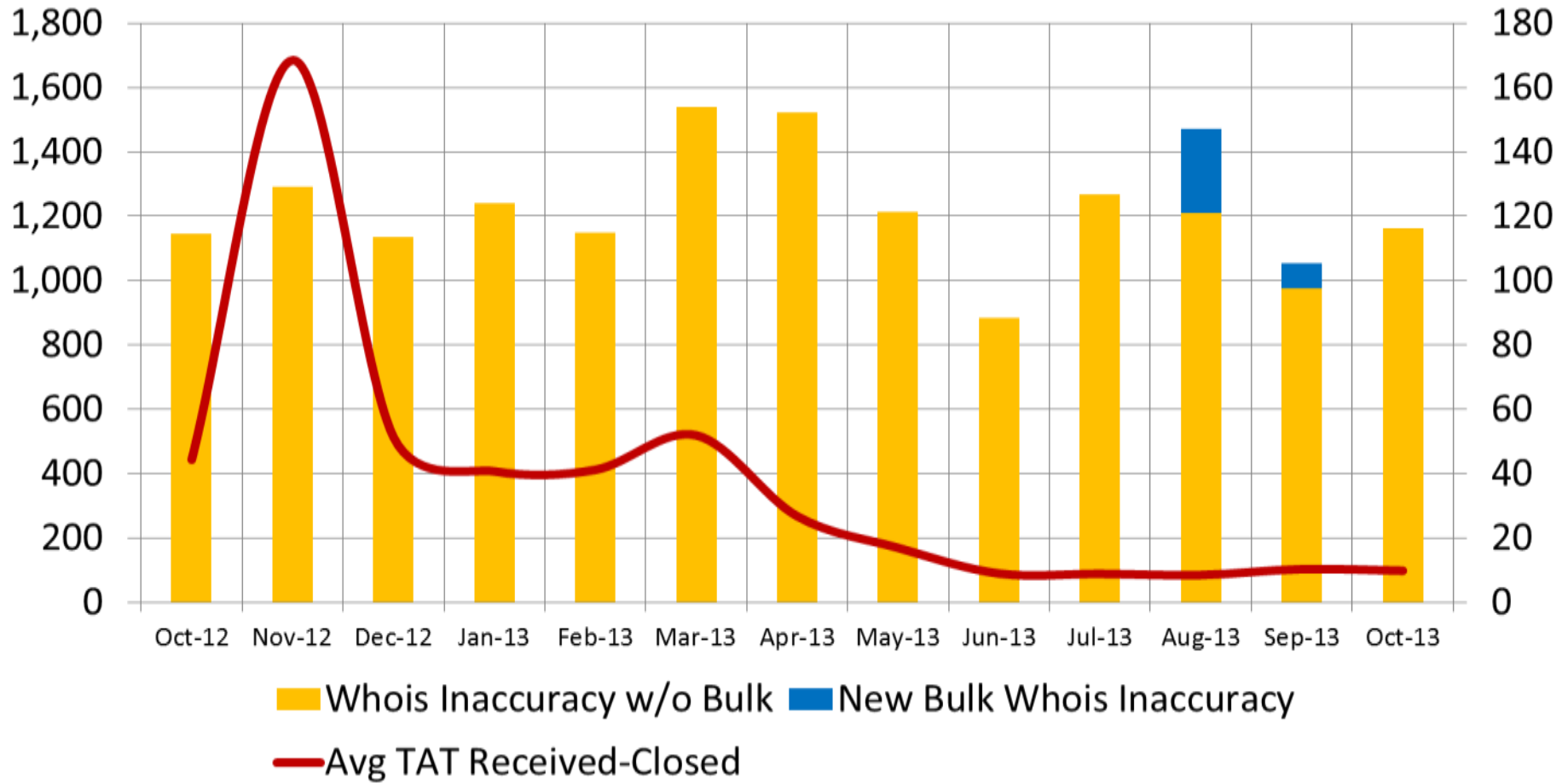
# Contractual Compliance

# Process & System Improvements

- ✓ Reduced process steps from five to three
- ✓ Fact based processing
- ✓ Cross-team training
- ✓ Cleared ticket backlog
- ✓ March - Increased automation
- ✓ Maintain turn-around SLAs



# Whois Inaccuracy Volumes

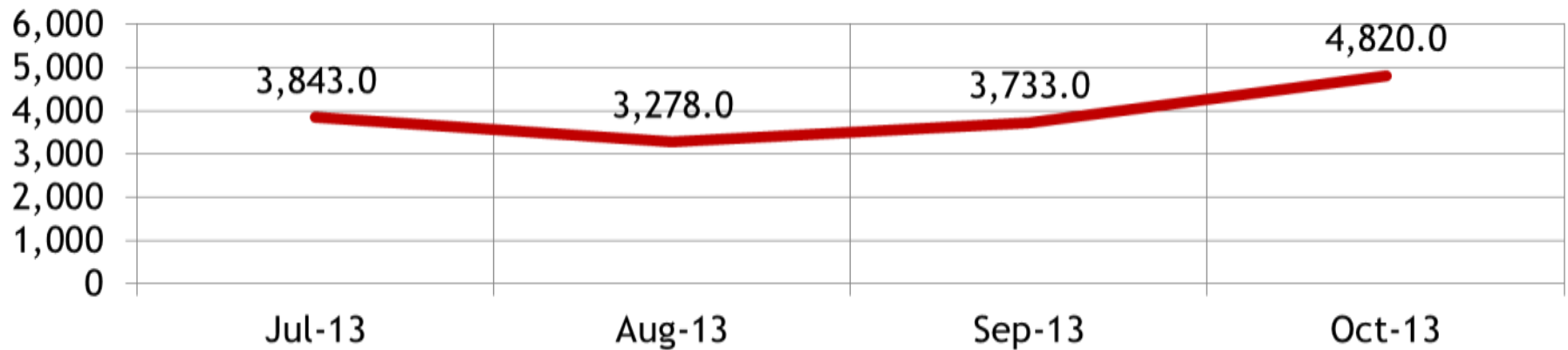


# Improved User Experience and additional features

July – Oct 2013 web hits

ICANN.ORG FAQs

Three month sample shows 80% of users are unique month to month

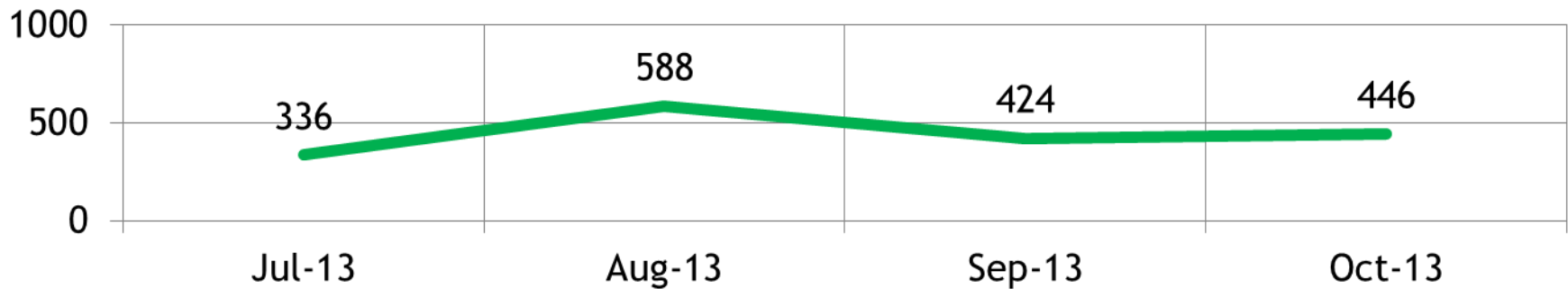


- ✓ Frequently Asked Questions in 6 UN languages
- ✓ Multiple and bulk Whois Inaccuracy submission (new features)
- ✓ Improved complaint submission forms
- ✓ Compliance outreach by region and by registrar

# Improved and Increased Community Reporting

July – Oct 2013 web hits

myICANN.ORG Compliance Metrics

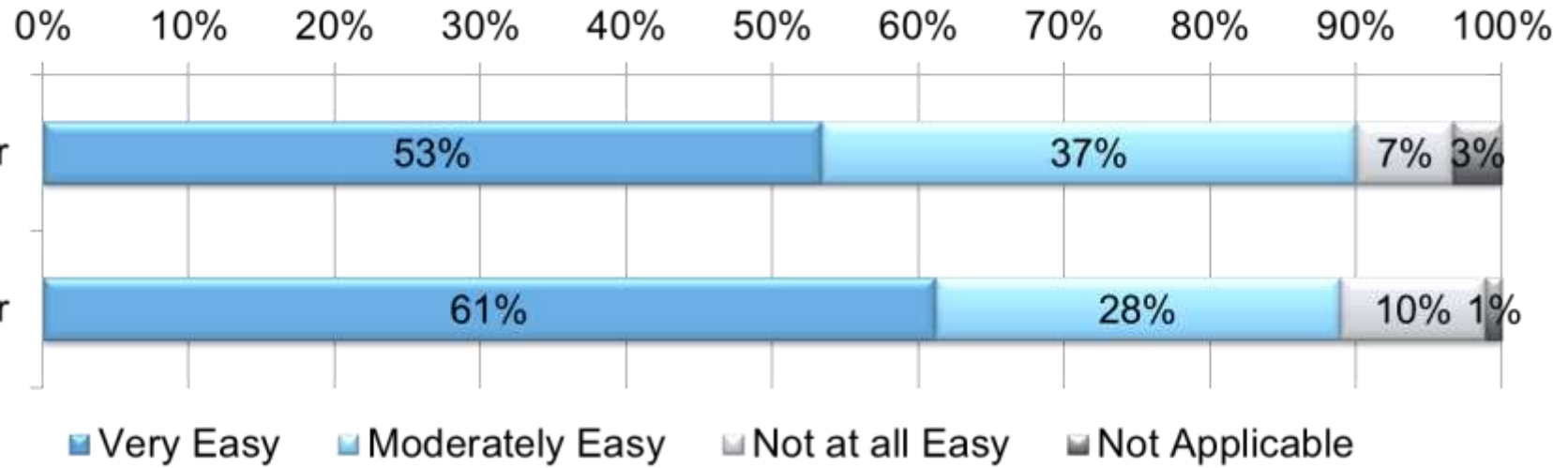


- ✓ Compliance Metrics on MyICANN
- ✓ Publish Monthly Updates in 6 UN languages
- ✓ Publish Annual Report in 6 UN languages
- ✓ Published Year-One Audit Program Report

# Pulse Survey in Complaint Closure

## July – Oct 2013 results

### Overall, how do you rate the complaint experience?

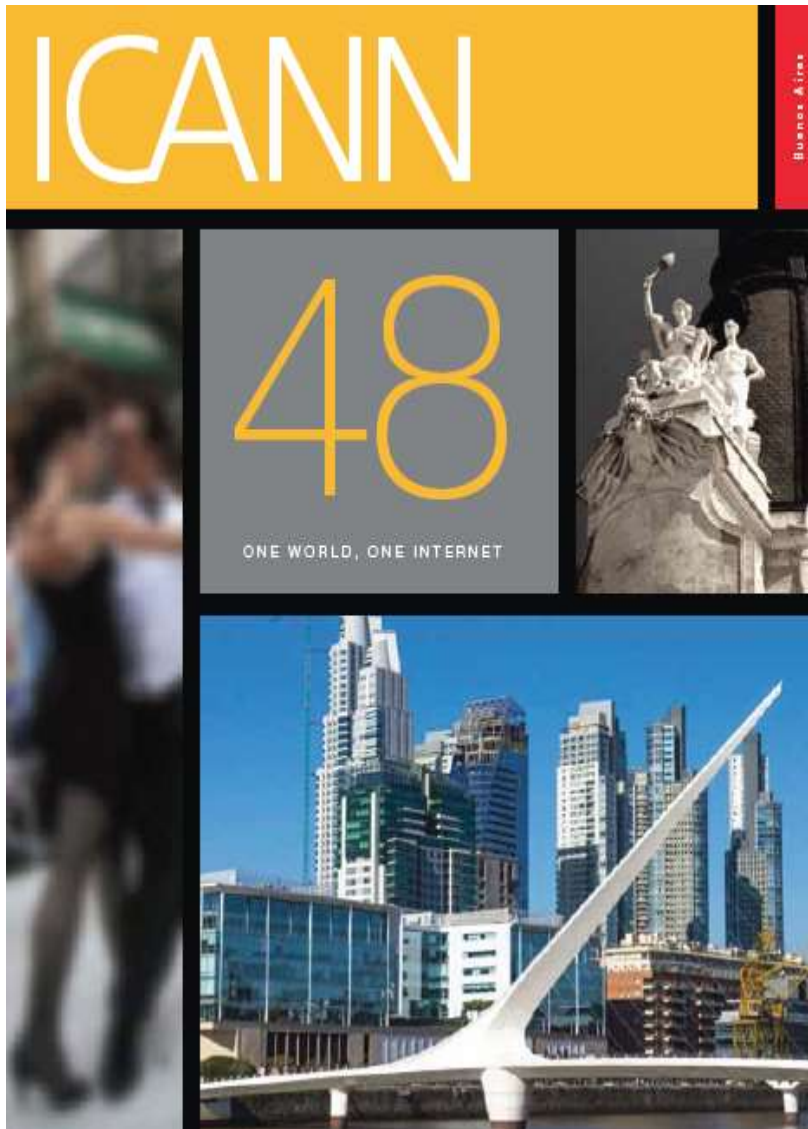


- Pulse Survey URL link included in all Closure notification emails to Reporters and Registrars

# Accomplishments Summary

- Process & System Improvements that led to shorter response time, process consistency and fact based decision making
- Improved User Experience and additional features
- Improved and Increased Community Reporting
- Added Pulse Survey in complaint closure email
- Completed Year-1 Audit Program at 99% compliance rate





# Update on GNSO Whois-related Policy Activities



# OVERVIEW OF GNSO WORK



- GNSO-commissioned Whois Studies: *nearing completion*
- PDP on Privacy & Proxy Services Accreditation Issues: *launched*
- PDP on Thick Whois: *nearing completion*
- PDP on Translation & Transliteration: *launched*

# I. WHOIS STUDIES



Carnegie  
Mellon  
University  
CyLab

- GNSO commissioned several studies between 2009-11
- Final GNSO-commissioned Whois studies now completed & awaiting public comment
- Whois Privacy & Proxy Abuse Study
  - Performed by National Physical Laboratory, UK
  - Public comment period closed 13 November 2013
- Whois Misuse Study
  - Performed by Carnegie Mellon University, USA
  - Public Comment after Buenos Aires



# NPL's Whois Privacy & Proxy Abuse Study: Summary of Findings & Public Comments



- Study tested two hypotheses

#1: *"A significant percentage of the domain names used to conduct illegal or harmful Internet activities are registered via Privacy or Proxy services to obscure the perpetrator's identity."*

➤ Finding: TRUE

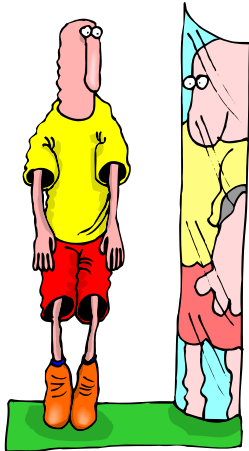
#2: *"The percentage of domain names used to conduct illegal or harmful Internet activities that are registered via Privacy or Proxy services to obscure identity is significantly greater than the equivalent percentage of domain names used for entirely lawful Internet activities."*

➤ Finding: ONLY PARTLY TRUE

# NPL's Whois Privacy & Proxy Abuse Study: Additional assessments to enable comparison



- Accuracy of Whois phone numbers for domain names used to conduct illegal or harmful Internet activities. Finding:  
*“Domains registered for illegal/harmful activity rely on multiple ways to hide contact details, but an above-average number of legitimate domains also do not provide accurate contact information (phone number)”*



- Whois for domains used to conduct certain lawful/harmful activities, chosen to mirror bad actors

*Note: This study was NOT designed to assess privacy/proxy use across ALL domains*

# NPL's Whois Privacy & Proxy Abuse Study: Scope of Activities Studied

## Studied

- Phishing
- Advanced Fee Fraud and other complex scams
- Unlicensed Pharmacies
- Typosquatting
- Child Sexual Abuse Image websites
- Domains appearing in Spam (SURBL)
- Domains associated with Malware (StopBadware)
- Domains subject to UDRP Process
- Lawful/Harmless websites chosen to mirror above

## Did Not Study

- Spam beyond Phishing/Fake Pharma
- DoS or DNS Cache Poisoning
- Intellectual Property Theft beyond Typosquatting, Fake Pharma, Spam
- Media Piracy
- Identity Theft
- Harrassment or Stalking
  
- Different use rates by country
- Differences between privacy vs. proxy service (and vice versa)

# NPL's Whois Privacy & Proxy Abuse Study: Summary of Findings

	<b>Work package</b>	<b>Maliciously registered?</b>	<b>Usage of privacy or proxy services</b>
WP6.4	Legal pharmacies	no	low
WP6.3	Law firms	no	low
WP1t	Phishing: third parties	no	low
WP6.6	Typosquatted domains	no	average
WP8	StopBadware domains	some	average
WP6.2	Executive search consultants	no	average
WP1c	Phishing: compromised sites	no	average
WP6.1	Banks	no	high
WP5	Child sexual abuse image websites	yes	high
WP1m	Phishing: malicious registration	yes	very high
WP9	Domains subject to UDRP	some	very high
WP7	SURBL domains	mostly	very high
WP6.5	Adult websites	no	very high
WP2	Advanced Fee Fraud	yes	extremely high
WP4	Typosquatting	yes	extremely high
WP3	Unlicensed pharmacies	yes	extremely high

# CMU's Whois Misuse Study: An Update



- Analyzes the extent, nature, and impact of harmful actions taken by those who misuse Whois contact information by
  - (1) surveying registrants, registries, registrars, experts and law enforcement;
  - (2) conducting experiments to measure Whois contact misuse
- Hypothesis tested by CMU:  
*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.*



# CMU's Whois Misuse Study: Preview of Findings



**Sneak  
Preview**

- Although survey responses rates were low
  - 29.8% of surveyed Registrants reported Whois email address misuse
  - 12.3% of surveyed Registrants reported Whois phone number misuse
  - 29.8% of surveyed Registrants reported Whois postal address misuse
- No other type of misuse was reported or measured at a statistically-significant level
- CMU's draft report will contain further details regarding significance of gTLD, domain price, registrant type, anti-harvesting on Whois Misuse

# Next Steps



- ICANN staff to summarize and analyze public comments to NPL's study (end Nov.)
- CMU's Misuse study to be published for public comment after Buenos Aires
- CMU team will present findings at webinar (early Dec.)
- GNSO to consider next steps concerning study findings and important issues not addressed by the studies

# Additional Information on Whois activities

- Whois Studies Overview & Status  
<http://gnso.icann.org/en/group-activities/other/whois/studies>



## II. PDP ON ISSUES RELATING TO PRIVACY & PROXY ACCREDITATION SERVICES



- ICANN Board initiated negotiations for new RAA in 2011
- Simultaneously requested GNSO Issue Report on “remaining issues”
- New 2013 RAA approved in June 2013
- Remaining issues identified as those relating to accreditation of privacy & proxy services

# Current Status & Next Steps



- Draft Charter for PDP Working Group approved by GNSO Council in Oct. 2013
- Call for Volunteers issued in Nov. 2013 (see <http://gnso.icann.org/en/announcements/announcement-06nov13-en.htm>)
- WG plans informal discussion in Buenos Aires: Thursday 21 Nov. at 8 a.m.
- Will take into account EWG work and findings from Whois Privacy/Proxy Abuse Study

### III. PDP ON THICK WHOIS

- ICANN specifies Whois requirements through the registry and registrar agreements
- Registries use different services to satisfy their obligations:
  - ‘thin’ Whois: A thin registry only stores and manages the information associated with the domain name
  - ‘thick’ Whois: Thick registries maintain and provide both sets of data (domain name and registrant) via Whois.
- Thick Whois has certain advantages e.g. transfers, but there may be negative consequences that should be explored in order to determine whether ‘thick’ Whois should be required for all

# Recent Developments



- WG reviewed all comments received
- Achieved full consensus on report and its recommendations
- Final Report published on 21 October recommends that:

***The provision of thick Whois services, with a consistent labelling and display as per the model outlined in specification 3 of the 2013 RAA, should become a requirement for all gTLD registries, both existing and future***

# Implementation Recommendations

- Subsequent public comment forum and the notification by the ICANN Board to the GAC to request input on any considerations related to the transition from thin to thick Whois
- Undertake a legal review of law applicable to transition of data from a thin to thick model and give due consideration to potential privacy issues that may result from the transition from thin to thick Whois
- Creation of an Implementation Review Team





# Next Steps



- GNSO Council adopted recommendations unanimously at its meeting on 31 October
- Public comment opened on the recommendations prior to Board consideration

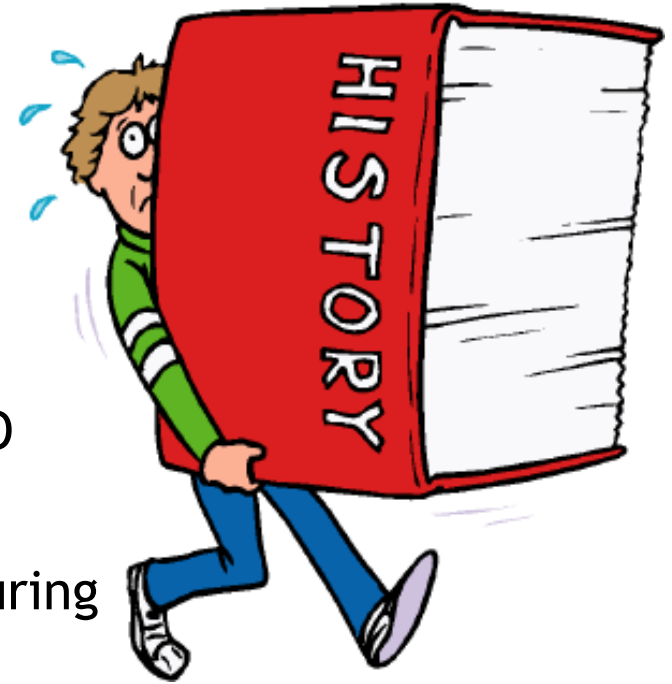
# Further Information



- Public Comment Forum - <http://www.icann.org/en/news/public-comment/thick-whois-recommendations-06nov13-en.htm>
- Thick Whois Final Report - <http://gns0.icann.org/en/issues/whois/thick-final-21oct13-en.pdf>
- DT Workspace - <https://community.icann.org/display/PDP/Home>

# IV. PDP on Translation & Transliteration of Contact Information

1. Initial Report published on 21 March 2013
2. PDP initiated by GNSO on 13 June 2013
3. Drafting Team submitted Charter to GNSO Council on 30 September
4. GNSO Council adopted revised Charter during its meeting in Buenos Aires
5. Call for Working Group Volunteers to be published shortly



# The two issues of the transliteration and translation PDP

The Working Group Charter poses two substantive questions to the Working Group:

1. Should local contact information be translated into one language (such as English) or should it be transliterated into one script (such as Latin)?
2. Who should decide who should bear the burden to either translate or transliterate contact information?



# Related Issues



- Staff has commissioned a **commercial feasibility study** on translation and transliteration of contact information to help inform Working Group.
- Another, forthcoming Working Group will determine the appropriate internationalized domain name registration data requirements, including relevant outcomes of this PDP.

Image credit: [www.dkit.ie](http://www.dkit.ie)

# Next Steps



- Adoption of Charter
- Formation of Working Group
- Outreach to SOs/ACs to solicit community input to the Charter questions.
- Working Group drafts an Initial Report

# Further Information

Working Group Wiki Space:

<https://community.icann.org/display/tatcipdp/Translation+and+Transliteration+of+Contact+Information+PDP+Home>

GNSO Council Motion:

<https://community.icann.org/display/gnsocouncilmeetings/Motions+13+June+2013>.

Final Issue Report on Translation and Transliteration of Contact Information:

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



WHOIS Review Team  
Internationalized  
Registration Data Expert  
Working Group

James Galvin (WG Chair)



# WHOIS Review Team Recommendations

See the document, pages 17 at:

<http://www.icann.org/en/about/aoc-review/whois/final-report-11may12-en.pdf> for the complete text of the recommendations

- ICANN should task a working group to determine appropriate internationalized domain name registration data requirements and evaluate available solutions
- 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

# WHOIS RT WG on internationalized registration data

1. Call for Working Group volunteers published on 8 July 2013
2. Formation of WG on 18 September 2013
3. Charter approved by WG on 13 November 2013
4. WG Deliberations *[ongoing]*
5. WG First Draft *[estimated by ICANN Singapore Meeting]*



# WG Deliverables

- Requirements for internationalized registration data (IRD)
- A data model for the IRD that matches the requirement



# Further Information

Working Group Wiki Space:

<https://community.icann.org/display/whoisird/WHOIS+RT+IRD+WG+Home>

Working Group Members

<https://community.icann.org/display/whoisird/WHOIS+RT+IRD+WG+Members>

Working Group Charter

<https://community.icann.org/display/whoisird/Documents+and+Presentations>



# Thank You

## Any Questions?