ICANN 74
POLICY FORUM
THE HAGUE

CPH DNS Abuse Community Outreach

CPH DNS Abuse Community Outreach Agenda

No.	TOPIC	LEAD
1	Welcome and Introduction (5 mins)	Brian Cimbolic, PIR & Reg Levy, Tucows
2	ICANN DNS Abuse Report (10 mins)	Samaneh Tajalizadehkhoob, ICANN
3	Malicious vs Compromised Domains Update (5 mins)	Graeme Bunton, DNSAI
4	RrSG's www.abusetool.org (5 mins)	Reg Levy, Tucows
5	Spec 11 (3)(b) Reporting Update (5 mins)	Alan Woods, Donuts
6	NetBeacon: DNSAI's centralized abuse reporting tool (5 mins)	Graeme Bunton, DNSAI
7	'Outreach' questions on DNS Abuse for the community (30 mins)	Keith Drazek, Verisign

Questions to Consider

- What initiatives are the SG/ACs engaging in outside of CPH (hosting providers/email providers/CDNs)? Is there scope for the CPH to help in such discussions?

- Are there any areas of concern that an SG/AC continues to hold? What joint efforts can the CPH and the SG/AC engage in to investigate and address it?

- Looking at existing CPH efforts (botnets, malware at scale, etc.): is there any additional clarity needed or can next steps be identified?

CPH Definition of DNS Abuse

DNS Abuse is composed of five broad categories of harmful activity insofar as they intersect with the DNS: malware, botnets, phishing, pharming, and spam when it serves as a delivery mechanism for the other forms of DNS Abuse.

Full details are available on the RrSG website and the RySG website.

RySG
gTLD Registries
Stakeholder Group

ICANN | RrSG
Registrar Stakeholder Group

DNS Security Threats: a four years overview

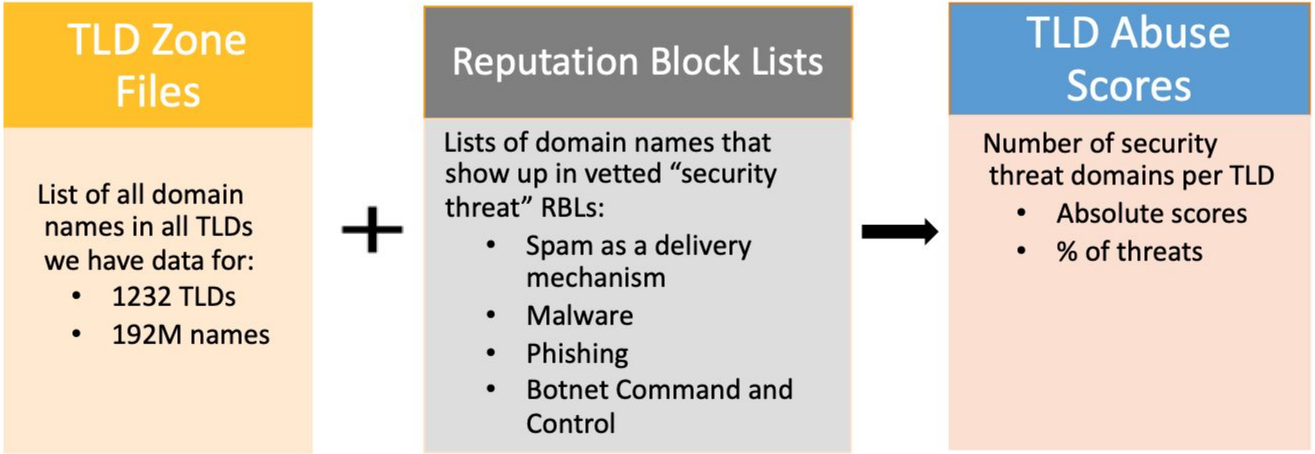
Dr. Samaneh Tajalizadehkhoob

Director of SSR Research

ICANN's Office of CTO

https://www.icann.org/en/system/files/files/last-four-years-retrospect-brief-review-dns-abuse-trends-22mar22-en.pdf

DAAR Methodology in a Glance



TLD Zone Files

List of all domain names in all TLDs we have data for:

- 1232 TLDs
- 192M names

+

Reputation Block Lists

Lists of domain names that show up in vetted “security threat” RBLs:

- Spam as a delivery mechanism
- Malware
- Phishing
- Botnet Command and Control

→

TLD Abuse Scores

Number of security threat domains per TLD

- Absolute scores
- % of threats

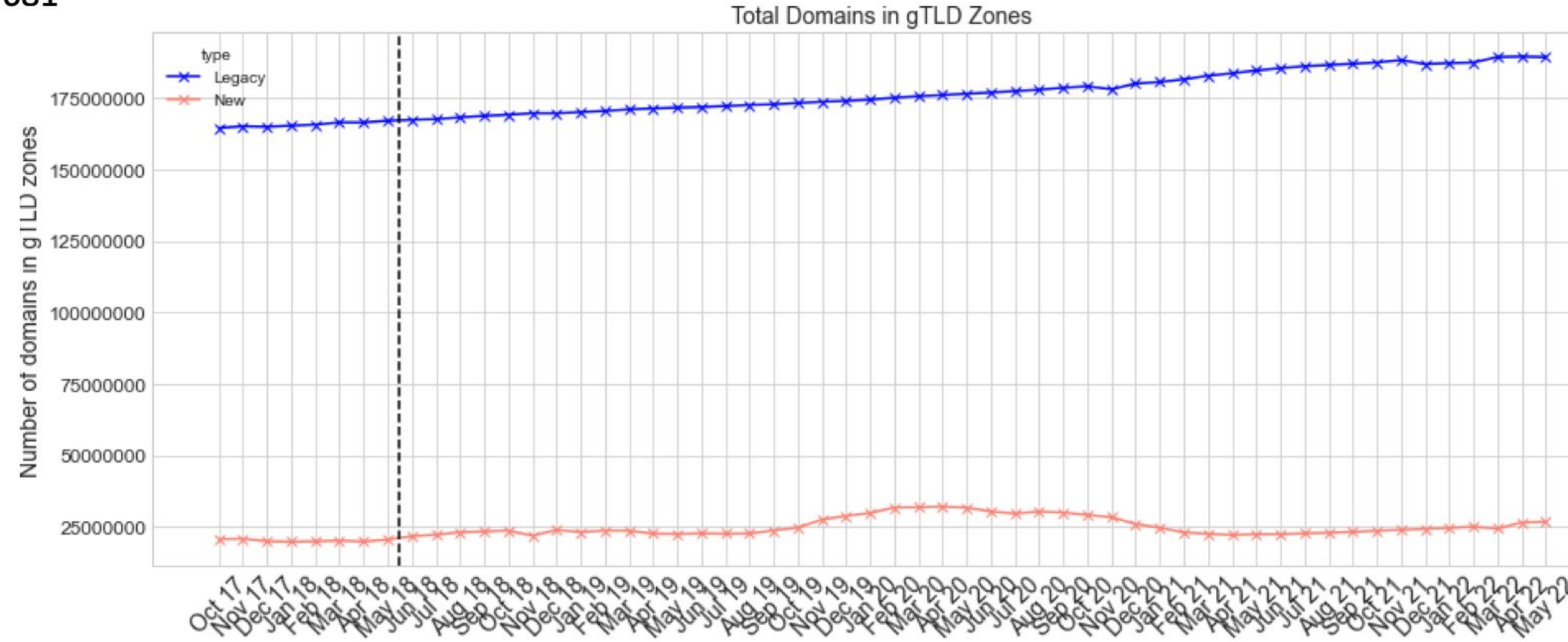
- Monthly reports (from Jan 2018) published at https://www.icann.org/octo-ssr/daar
- Daily scores made available to TLDs via the Monitoring System API (MoSAPI)
  - Allows comparison to monthly statistics

Domain in Zone files

<u>October 2017</u>

Domains: 185,128,681

TLDs: 1231

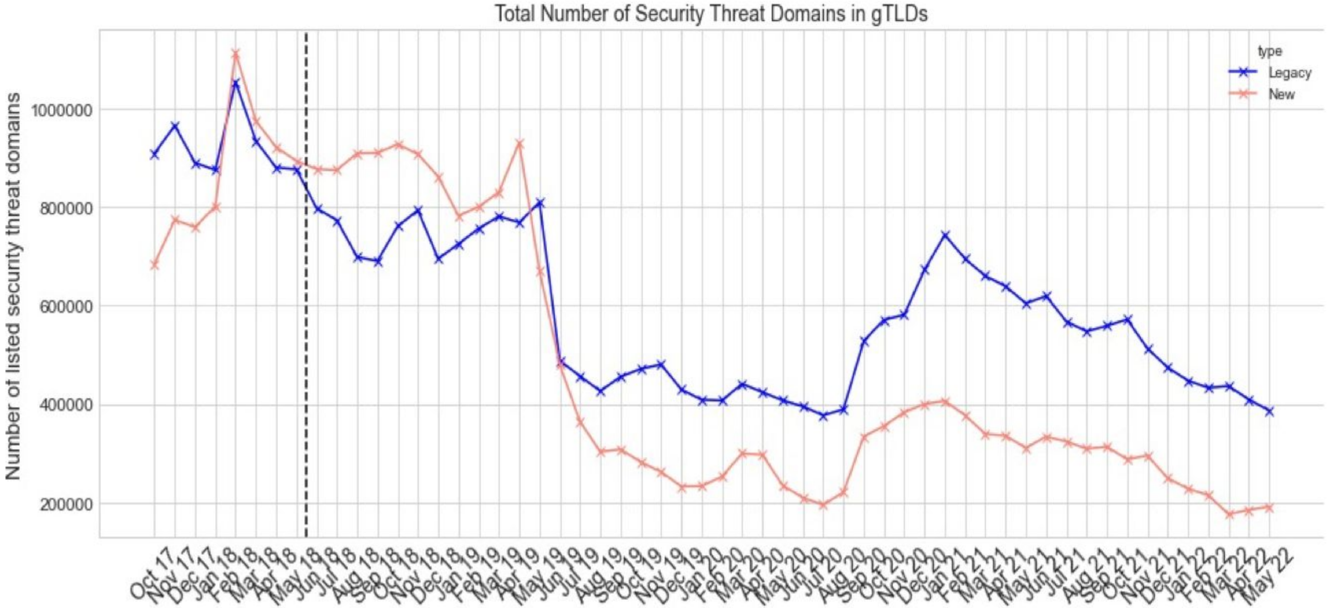


<u>May 2022</u>

Domains: 207,401,252

TLDs: 1180

Total Unique Security Threat Domains



October 2017

Security threat TLDs: 379

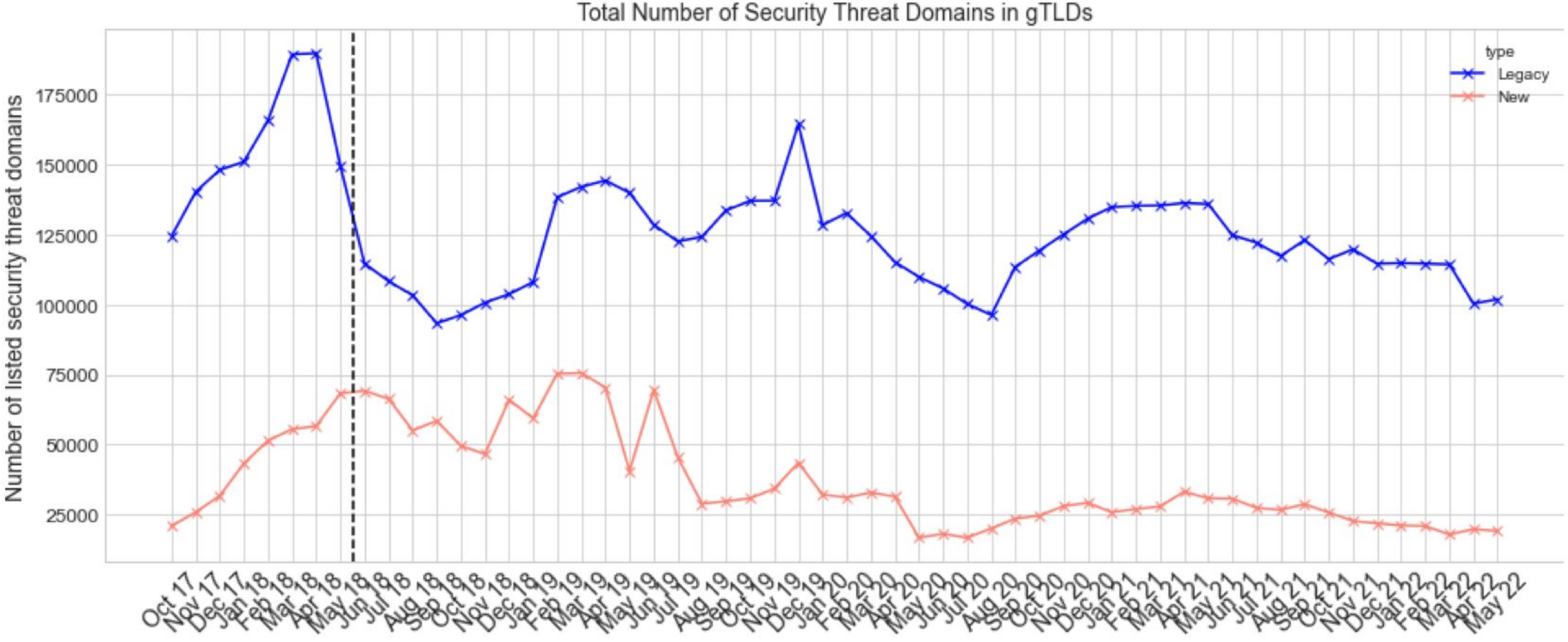
Total security threat domains: 1,593,090 (92% **Spam**, 3% **Phishing**, 3% **Malware**, 2% **Botnet C&C**)

May 2022

Total security threat TLDs: 394

Total security threat domains: 739,906 (81% **Spam**, 12% **Phishing,** 4% **Malware**, 3% **Botnet C&C**)

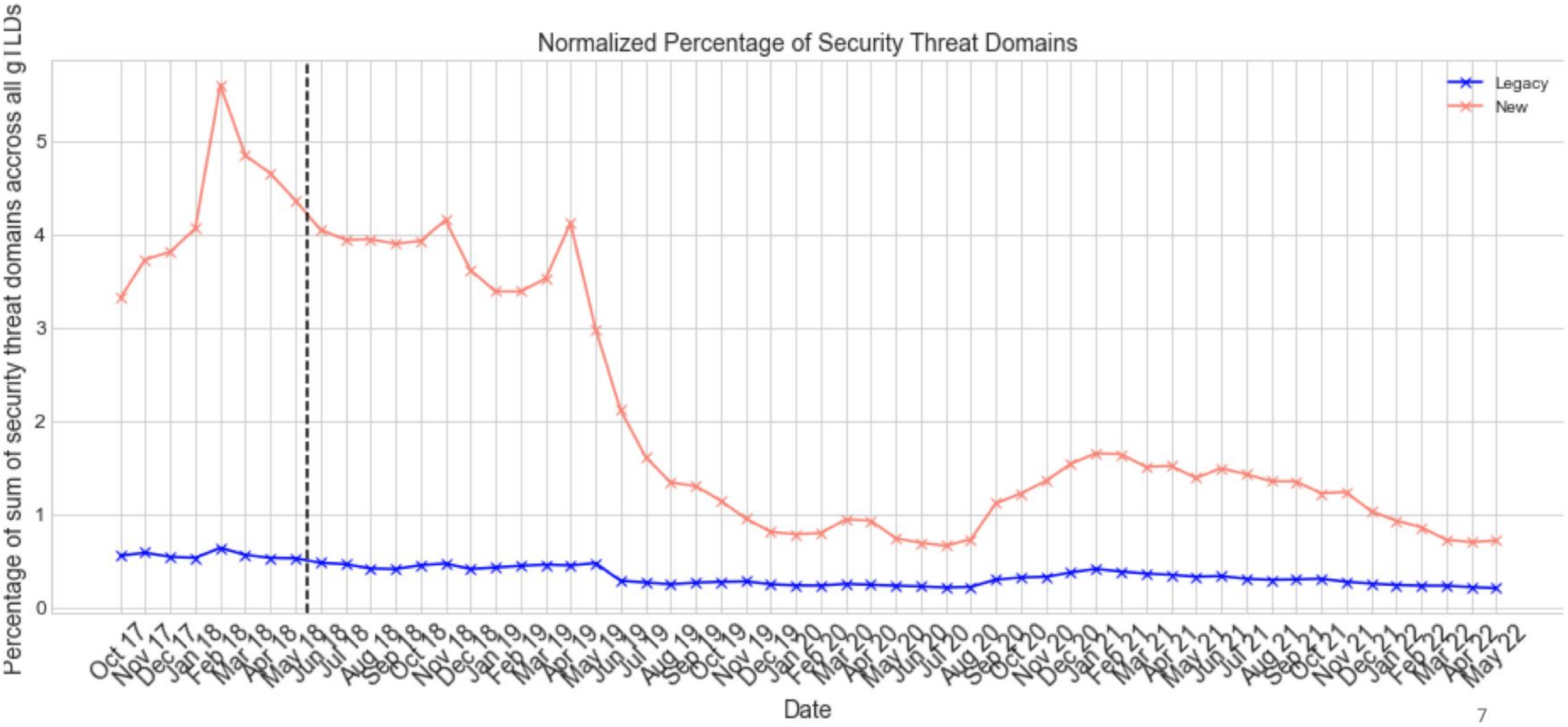
Total Unique Security Threat Domains (Spam Excluded)



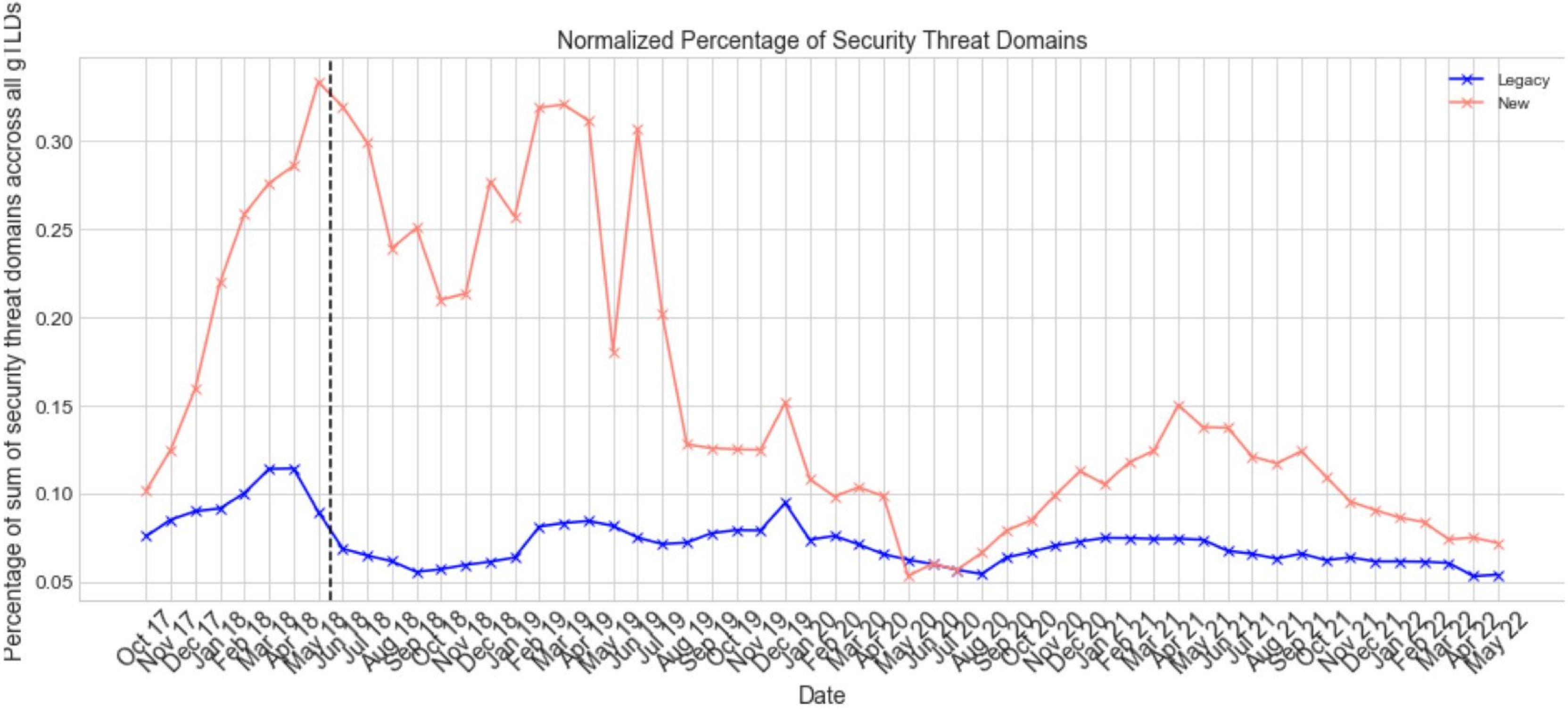
Percentage of Security Threat

$$\frac{(Sum\ of\ all\ domains\ listed\ as\ security\ threat)}{(Sum\ of\ all\ domains\ in\ zone\ file)} * 100$$

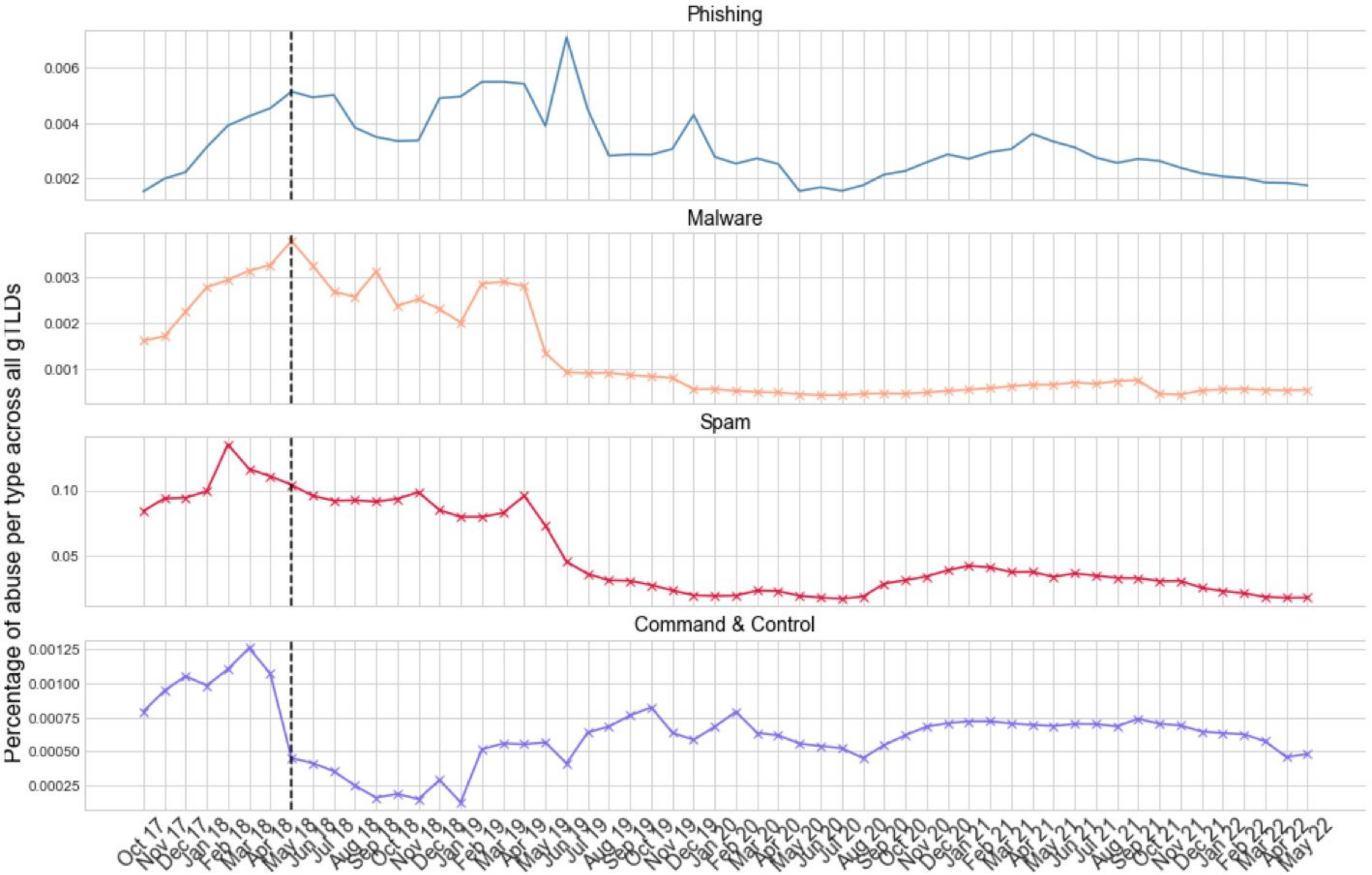
Percentage of Abuse



Percentage of Abuse (Spam Excluded)



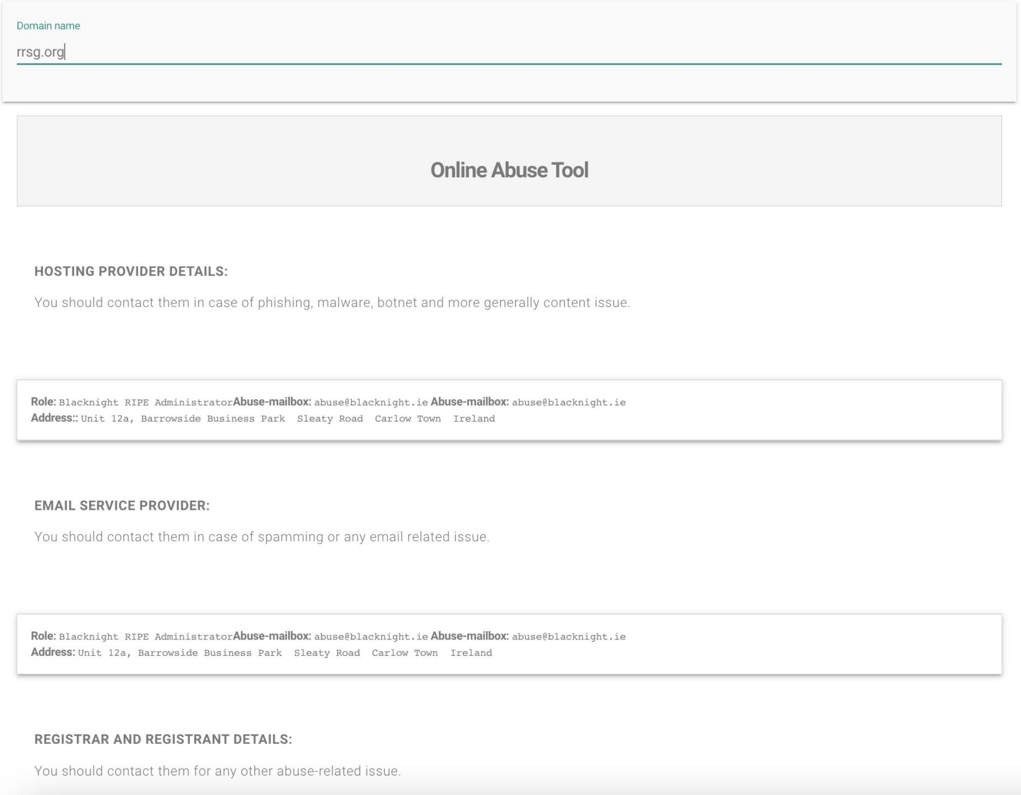
Percentage of Security Threat domains



Malicious vs Compromised Domains Update

- Continuing the work started at the Plenary at ICANN73
- Working on a paper that discusses the distinction, and elaborates options for mitigating each type
- Invited individuals from the security community to participate
- Less best practice, more discussion
- Aiming for publication at ICANN75

RrSG’s abusetool.org



Domain name

rrsg.org

Online Abuse Tool

HOSTING PROVIDER DETAILS:

You should contact them in case of phishing, malware, botnet and more generally content issue.

Role: Blacknight RIPE Administrator**Abuse-mailbox:** abuse@blacknight.ie **Abuse-mailbox:** abuse@blacknight.ie
Address:: Unit 12a, Barrowside Business Park Sleaty Road Carlow Town Ireland

EMAIL SERVICE PROVIDER:

You should contact them in case of spamming or any email related issue.

Role: Blacknight RIPE Administrator**Abuse-mailbox:** abuse@blacknight.ie **Abuse-mailbox:** abuse@blacknight.ie
Address: Unit 12a, Barrowside Business Park Sleaty Road Carlow Town Ireland

REGISTRAR AND REGISTRANT DETAILS:

You should contact them for any other abuse-related issue.

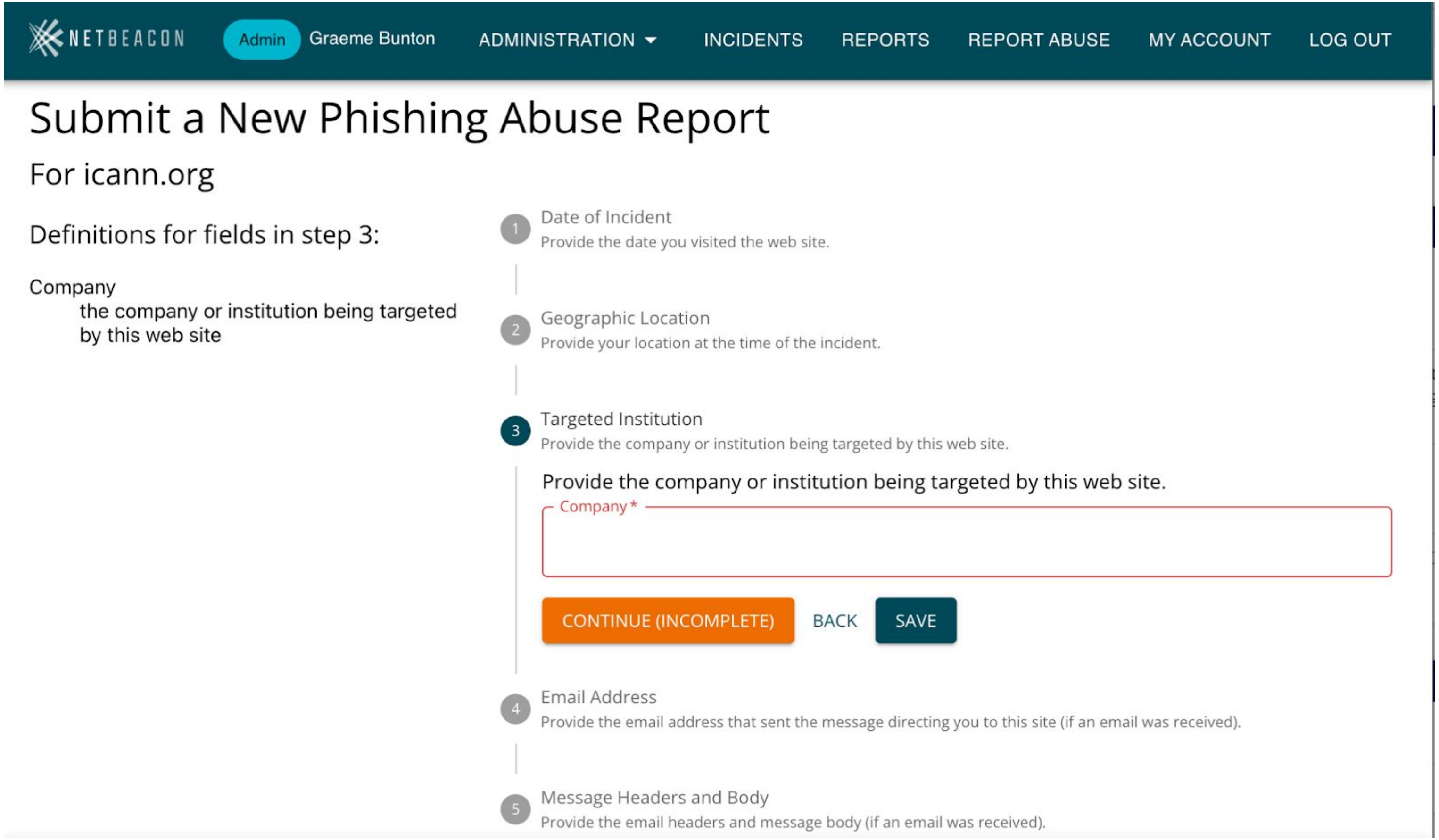
Spec 11 (3)(b) Reporting Update

- Wholly voluntary endeavor to promote transparency in Spec 11(3)(b) reporting
- We have define a simple document based on the obligations - providing a simple notification of identified security threats to ICANN.
- We have shared the draft with ICANN for any further refinements and tweaks.

COMPLETION: Aim to have the process completed and perhaps even implemented by ICANN 75

NetBeacon: DNSAI’s centralized abuse reporting tool

- Free service to report malware, botnets, phishing, and spam to gTLD registrars and registries
- Reduces barriers to report abuse, improves the quality of abuse reports received
  - Standardization, Enrichment, Automatic delivery
- Live and delivering actionable abuse reports as of last week
- ToDo: ccTLDs, hosting, other harms, reporter reputation, escalation paths
- Supported by PIR and CleanDNS



Submit a New Phishing Abuse Report

For icann.org

Definitions for fields in step 3:

Company
the company or institution being targeted by this web site

1. Date of Incident
Provide the date you visited the web site.

2. Geographic Location
Provide your location at the time of the incident.

3. Targeted Institution
Provide the company or institution being targeted by this web site.

Provide the company or institution being targeted by this web site.

Company *

4. Email Address
Provide the email address that sent the message directing you to this site (if an email was received).

5. Message Headers and Body
Provide the email headers and message body (if an email was received).

Our questions for the community

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