ICANN @ PacNOG32

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Agenda

- About ICANN
- Some topics of interest discussed at ICANN
- ICANN's Technical Functions
- DNSSEC Adoption in the region

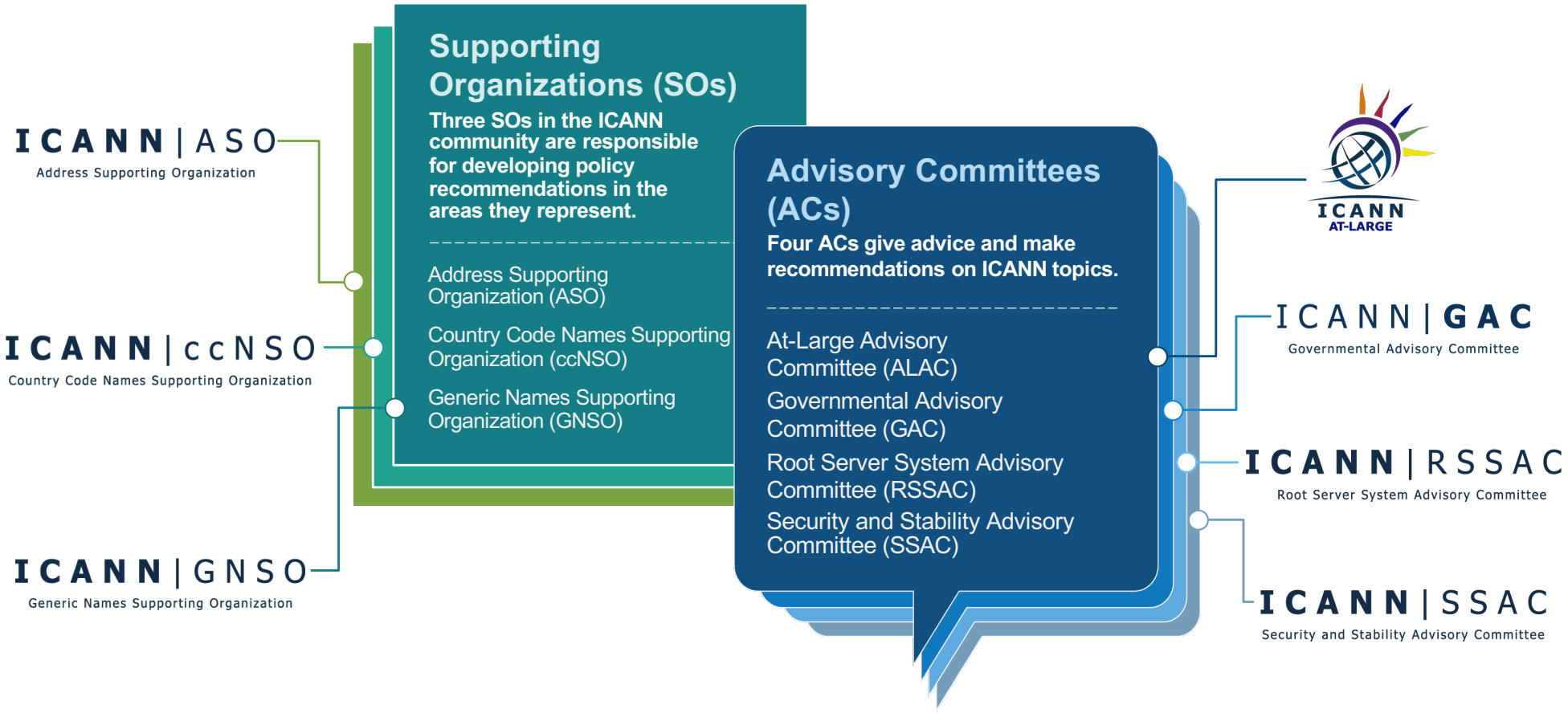
ICANN's Mission

The mission of the Internet Corporation for Assigned Names and Numbers (ICANN) is to **ensure the stable and secure operation of the Internet's unique identifier systems**

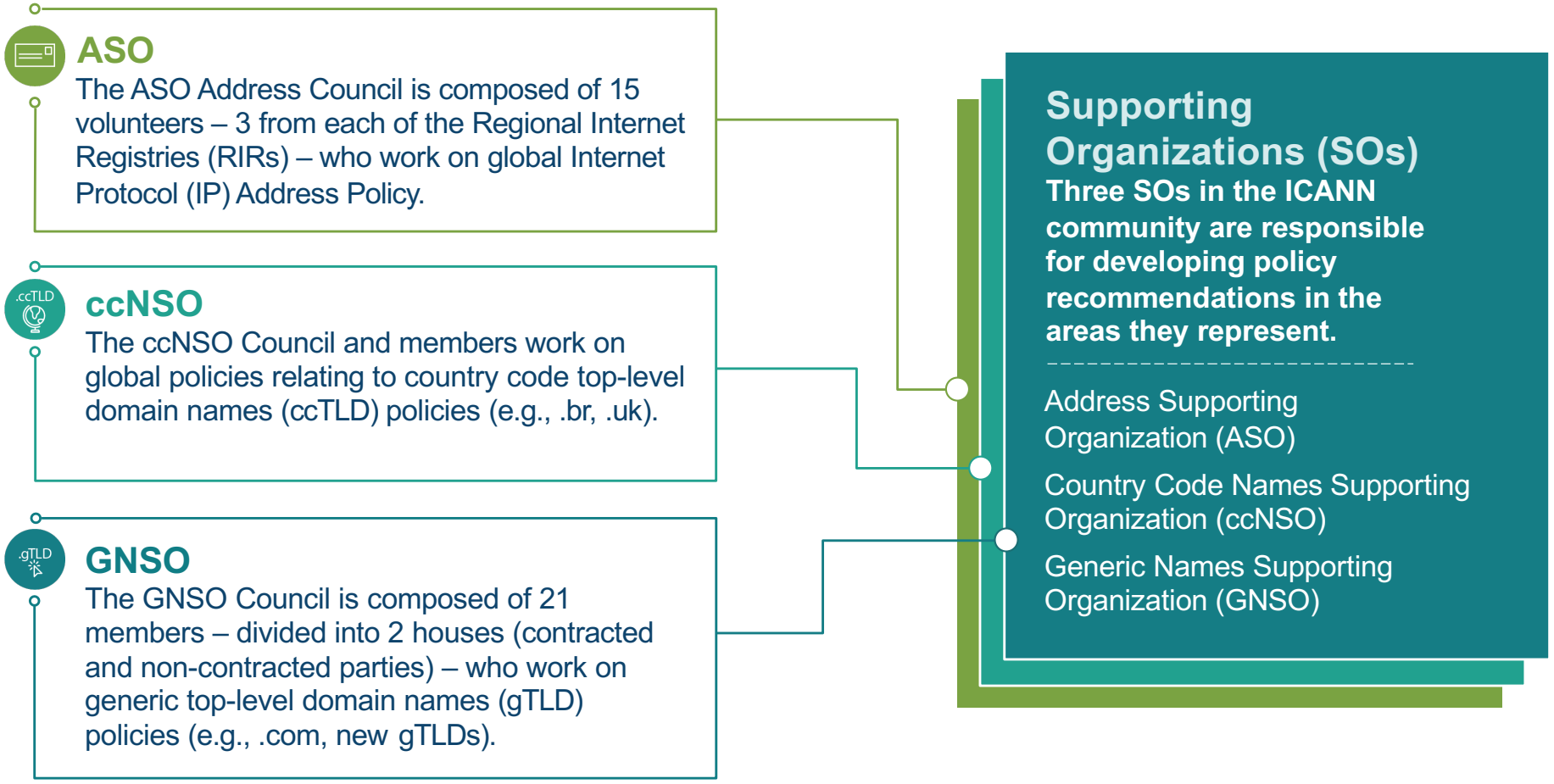
Specifically, ICANN:

1. Coordinates the allocation and assignment of names in the root zone of the Domain Name System
2. Coordinates the development and implementation of policies concerning the registration of second-level domain names in generic top-level domains (gTLDs)
3. Facilitates the coordination of the operation and evolution of the DNS root name server system
4. Coordinates the allocation and assignment at the top-most level of Internet Protocol numbers and Autonomous System numbers
5. Collaborates with other bodies as appropriate to provide registries needed for the functioning of the Internet as specified by Internet protocol standards development organizations

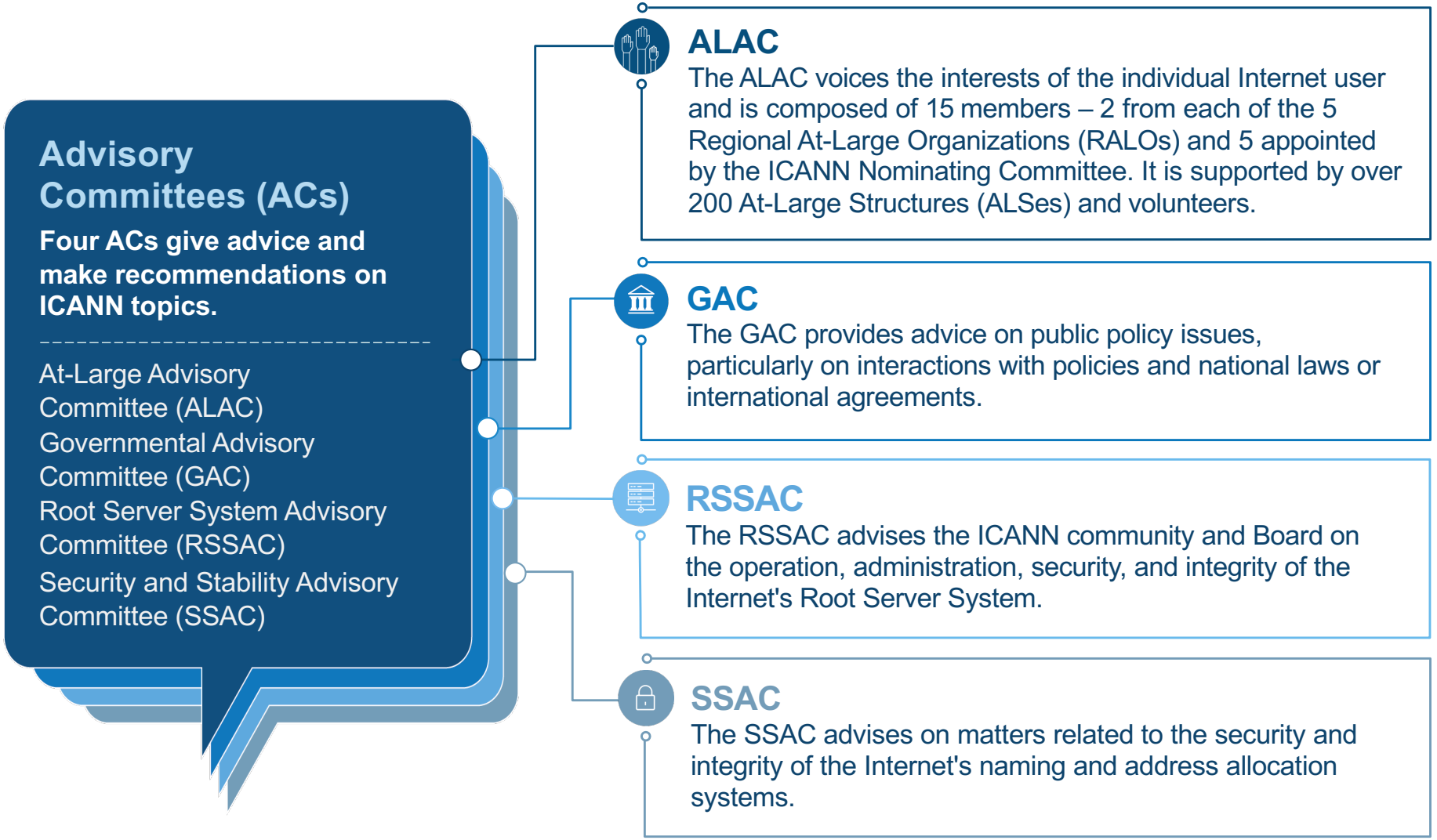
Exploring ICANN's Multistakeholder Community



Supporting Organizations (SOs)



Advisory Committees (ACs)



Some Topics of Interest for you

Recent discussions at ICANN

1

New gTLDs Program: Next Round

The Board approved policy recommendations that set in motion the start of the implementation process for the next round of new generic top-level domain (gTLD) applications.

2

WSIS+20 review

In 2025, the international community will have the opportunity to reaffirm its support to the multistakeholder model of Internet governance. Internet community need to engage decision makers ahead of the process.

3

Universal Acceptance Day 2024

Call for Proposals is now open. UA Day 2024 will be 28 March 2024 to be organized between 1 Mar to 30 May 2024. Emphasis on technical training sessions to help orgs be UA-ready.

Recent discussions at ICANN

4

DNS Abuse

Amendments to the Registrar Accreditation Agreement and Base gTLD Registry Agreement, dealing with DNS Abuse. Voting was conducted at ICANN78 to accept these amendments.

5

Registration Data Request System

RDRS, will be publicly available on 28 November 2023. A free, global, one-stop shop ticketing system that will connect requestors seeking nonpublic data with the relevant ICANN-accredited registrars for generic top-level domains (gTLDs). This once public data (previously available through WHOIS databases) can include information such as a contact name, home or email address, and phone number related to a domain name.

6

ICANN Grant Program

To fund projects that encourage, facilitate, and support ICANN's mission and vision. Applications accepted from not-for-profit organizations from March 2024. $10M in first cycle.

ICANN's Technical Functions

ICANN's Technical Work

Bylaws

ICANN's Bylaws place a strong emphasis on DNS ecosystem security

*"The mission of the Internet Corporation for Assigned Names and Numbers ("**ICANN**")*

*is to ensure the **stable and secure** operation of the Internet's unique identifier systems"*

Our bylaws include many commitments, including:

*"Preserve and enhance the administration of the DNS and the operational **stability**, reliability,*

***security**, global interoperability, **resilience**, and openness of the DNS and the Internet"*

ICANN Strategic Plan 2021-2025 (adopted 23 Jun 2019)

1) Strengthen security of the Domain Name System and the DNS root server system

3) Evolve the unique identifier systems in coordination and collaboration with relevant parties to continue to serve the needs of the global Internet user base

(https://www.icann.org/en/system/files/files/revised-strategic-plan-2021-2025-draft-23may19-en.pdf)

Identifier Operations: PTI

ICANN subsidiary Public Technical Identifiers (PTI), is responsible for the operational aspects of coordinating the Internet's system of unique identifiers

- Number Resources
  - Allocate IPv4, IPv6, and Autonomous System Numbers (ASN) to the Regional Internet Registries
- DNS Operations
  - Maintain the root zone for forward DNS
  - Administer the .ARPA zone for reverse DNS
  - Maintain the trust anchor for **DNSSEC**
- Protocol Parameter Registries
  - Coordinate over 3,000 registries for IETF protocols

(https://pti.icann.org/)

Policy Development: Communities

Throughout the ICANN ecosystem there are numerous communities developing policies and procedures to improve SSR:

- GAC's Public Safety Working Group (PSWG)
  - PSWG "focuses on aspects of ICANN's policies and procedures that implicate the safety of the public" including developing the "DNS Abuse and Cybercrime mitigation capabilities of the ICANN and Law Enforcement communities"
- Security and Stability Advisory Committee (SSAC)
  - SSAC engages in ongoing threat assessment and risk analysis of the unique identifier system to assess where the principal threats to stability and security lie
- Root Server System Advisory Committee (RSSAC)
  - Advises the ICANN Board and community on matters relating to the operation, administration, security, and integrity of the Root Server System

Multifaceted Response to DNS Abuse

The ICANN org-wide program is built upon these three pillars:

Contributing data and expertise to fact-based discussions

Providing tools to the ICANN community

Enforcing contractual obligations with registries and registrars

Baseline for DNS Abuse

Within ICANN, DNS abuse refers to these broad 5 categories of harmful activity:

ICANN neither regulates online content nor has the capabilities to remove content. These limitations, however, do not prohibit ICANN from studying or aiding in the mitigation of DNS abuse.

Measurement

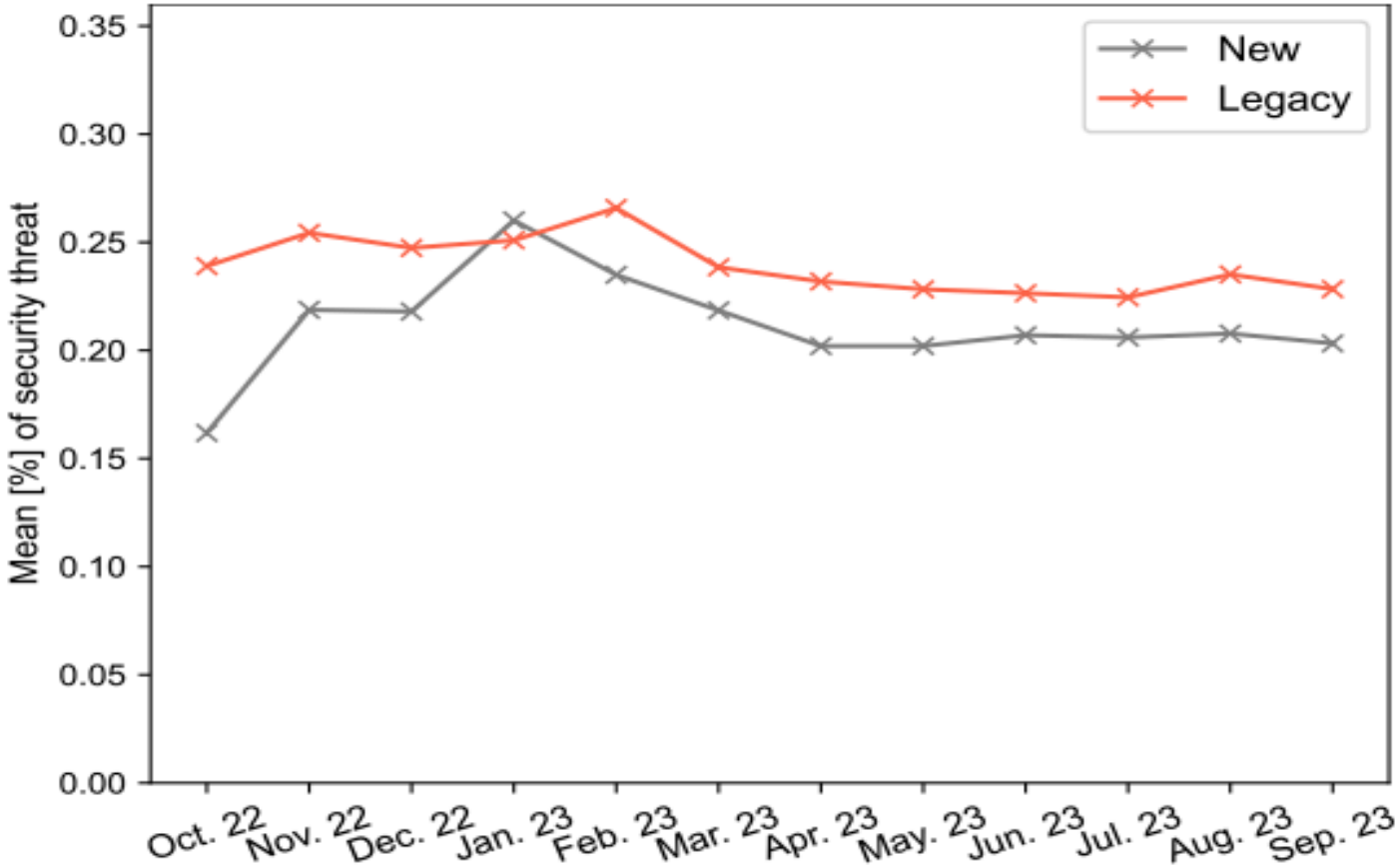
ICANN Org Projects: DAAR

ICANN org supports technical programs to study and help combat DNS abuse.

- The Domain Abuse Activity Reporting System (DAAR) provides verifiable and reproducible data to facilitate analyses that could be useful in making informed consensus policy decisions.
- DAAR assembles a composite of the domain name reputation data that the operational security community observes, reports, and uses.
- How to join DAAR: Interested country code top-level domain (ccTLD) registries can make a request by sending an email to globalsupport@icann.org.

Measurement: DNS Abuse Trend Report

Percentage of domain names identified as security threat over time



Analysis

ICANN Org Projects: **INFERMAL**

A new research project called Inferential analysis of maliciously registered domains (INFERMAL).

The study aims to systematically analyze the preferences of attackers and possible measures to mitigate malicious activities across top-level domains (TLDs) in a proactive way.

Mitigation

ICANN Org Projects: DNSTICR

The Domain Name Security Threat Information Collection and Reporting (DNSTICR) project identifies domain names that appear to have been used for malicious purposes and are related to the COVID-19 pandemic or the Russia-Ukraine war.

ICANN sends well evidenced reports of abuse to Sponsoring Registrar.

Capacity Development

ICANN offers **capacity development and training on mitigating DNS abuse**

ICANN also provides subject-matter expertise to, and participates in, various external cybersecurity groups

Visit icann.org/octo to access the course catalogue

Increasing Accountability

Collaboration with gTLD Registries and Registrars

Important collaboration between the gTLD Registries and Registrars Stakeholder Groups (RySG and RrSG) and ICANN to help address DNS abuse in a tangible way.

By creating clear contractual obligations for registries and registrars to mitigate and or disrupt DNS Abuse.

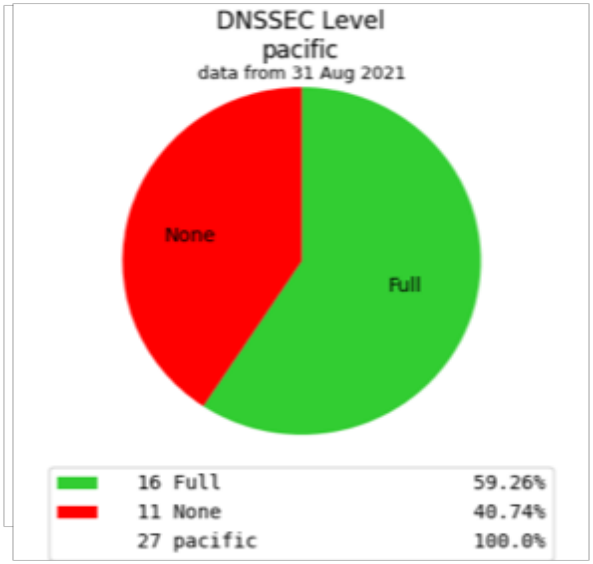
DNSSEC Adoption

Identifier Operations: What is DNSSEC?

Domain Name System Security Extensions (DNSSEC)

- To help prevent DNS abuse, DNSSEC introduces cryptography that provides assurances to users that DNS data they are seeing is valid and true
- Domain name registrants **SIGN** their DNS data
- DNS operators **VALIDATE** all DNS data passing through DNS resolvers

Status of DNSSEC adoption in the region



16 ccTLDs (60%) implemented DNSSEC in the Oceania sub-region:

AU	CC	CX	FM
FJ	KI	NC	NZ
NU	NF	PW	SB
TV	VU	WF	WS

***Our other Ask: Resolver operators in the region, please enable DNSSEC validation**

https://www.icann.org/resources/pages/dnssec-what-is-it-why-important-2019-03-05-en

Get Involved and Informed

Attend an ICANN Public Meeting. Three times a year, ICANN holds free and open public meetings in different regions around the world. Visit **meetings.icann.org** to learn more.

Visit **go.icann.org/journey** to learn how you can attend an ICANN Public Meeting as part of the NextGen@ICANN or ICANN Fellowship programs.

Take a free online course at **learn.icann.org**.

Attend events in your region.

Find and participate in an ICANN community group by visiting **icann.org/community**.

Sign up for ICANN news alerts and regional newsletters.

Engage with ICANN

Thank You and Questions

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