



**KINDNS**

# An Initiative to Promote DNS Operational Best Practices

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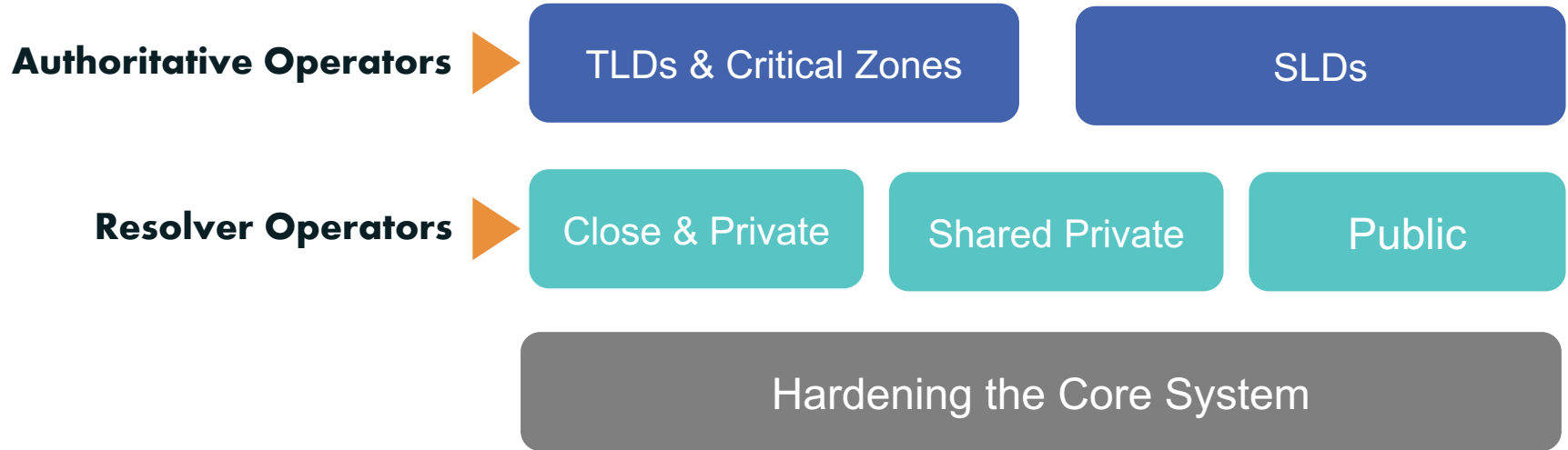
VP, Technical Engagement ICANN  
IDS'2022 - November 2022



## Knowledge-sharing and Instantiating Norms for DNS (Domain Name System) and Naming Security

*An initiative supported by ICANN to produce a simple framework that can help a wide variety of DNS operators, from small to large, to follow both the evolution of the DNS protocol and the best practices that the industry identifies for better security and more effective DNS operations.*

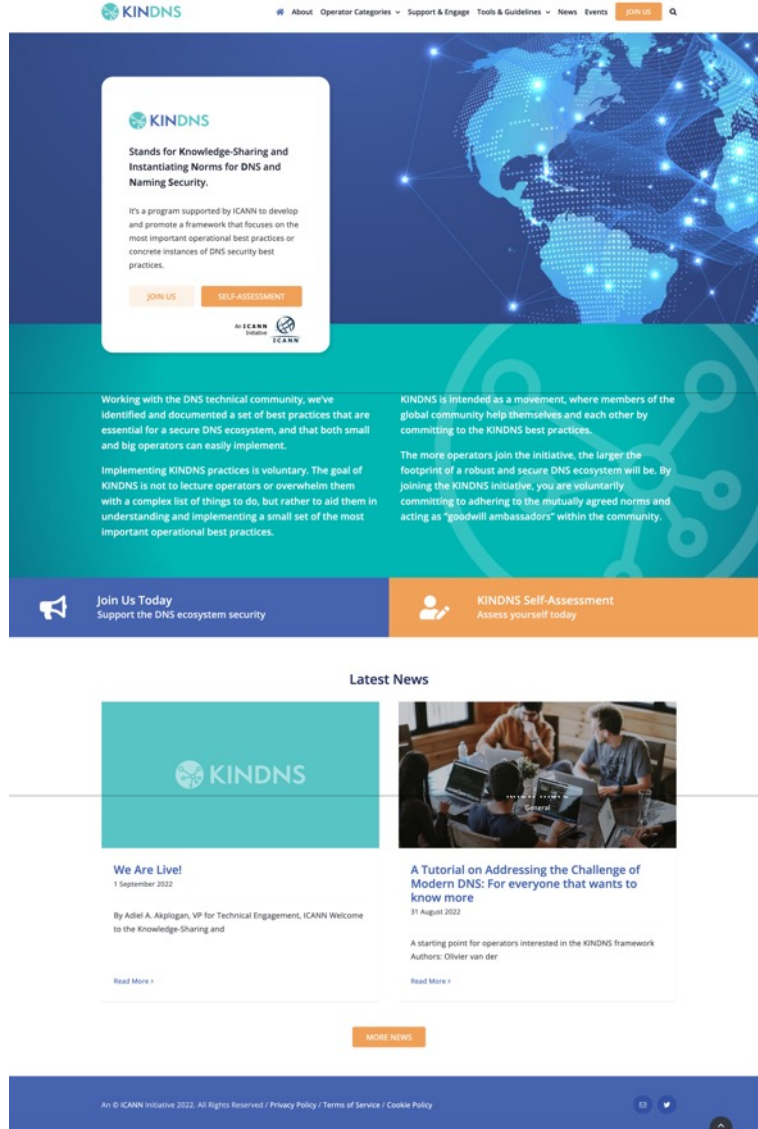
..... is pronounced "**kindness**"



- Each category has 6-8 practices that we will encourage operators to implement. See [www.kindns.org](http://www.kindns.org), for more details
- By joining KINDNS, DNS operators are voluntarily committing to adhere to these identified practices and act as “goodwill ambassadors” within the community.

1. Operators in each category can self-assess their operational practices against KINDNS and use the report to correct/adjust unaligned practices.
  - Self-Assessment is anonymous, and reports can be downloaded directly from the web site.
2. Operators can participate in one or multiple categories covered by KINDNS.
3. Beyond participating as Operator, organizations can also soon participate as sponsors.

# Website – kindns.org



# Early Observations



1015

## Views

Number of times your questionnaire has been opened by someone

608

## Starts

Number of times someone clicked the start button of the questionnaire

158

## Partial responses

Number of responses saved with save and continue, but not finished yet

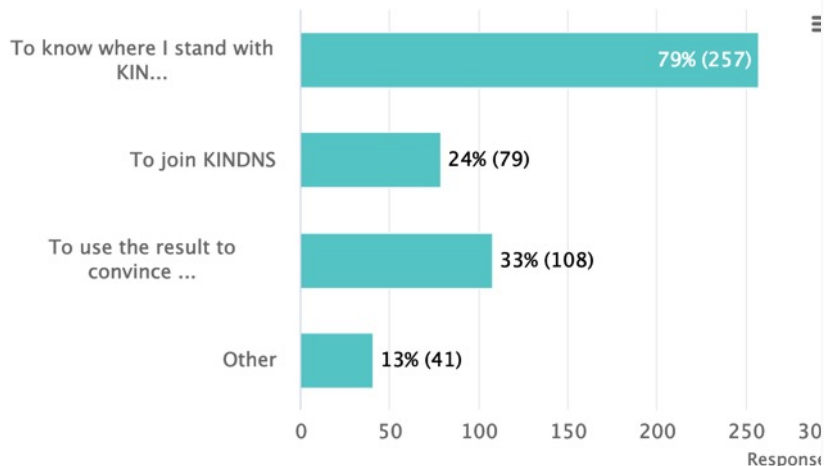
37

## Unfinished responses

Number of times someone exited questionnaire without a complete response

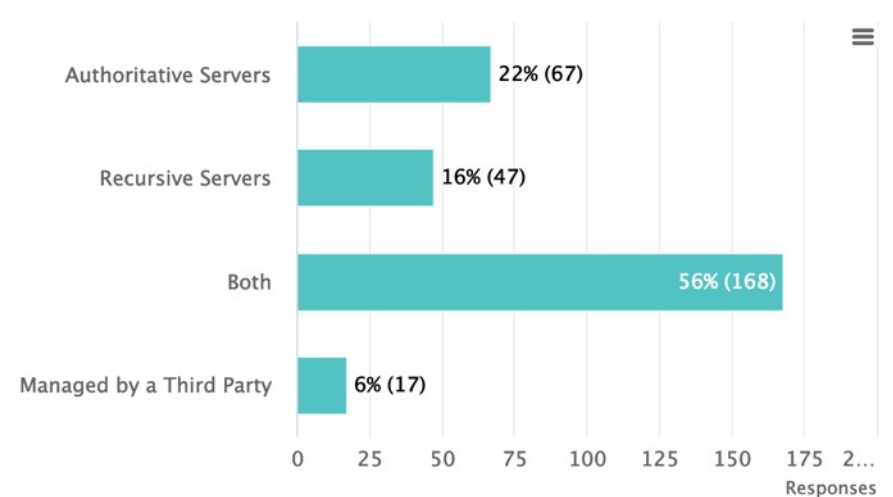
### Why are you taking this self-assessment?

Bar chart



### Part 1 Core DNS Operation Practices Assessment – Which component(s) of the DNS do you run?

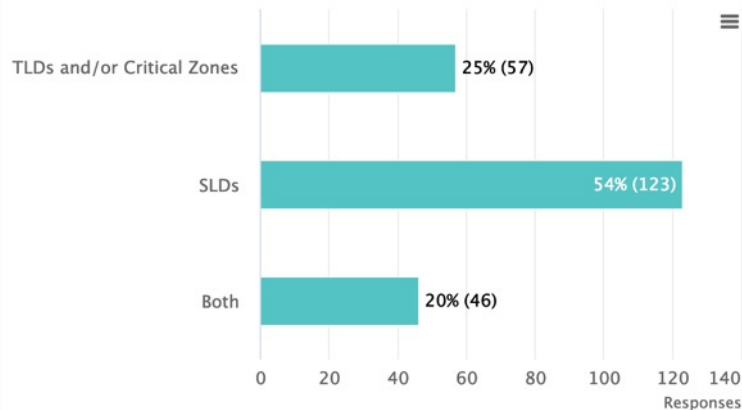
Bar chart



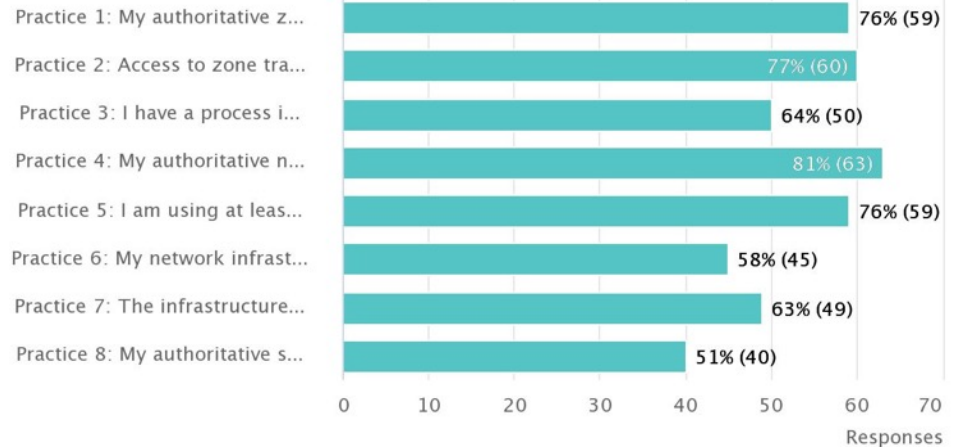
# Early Observations (con't)



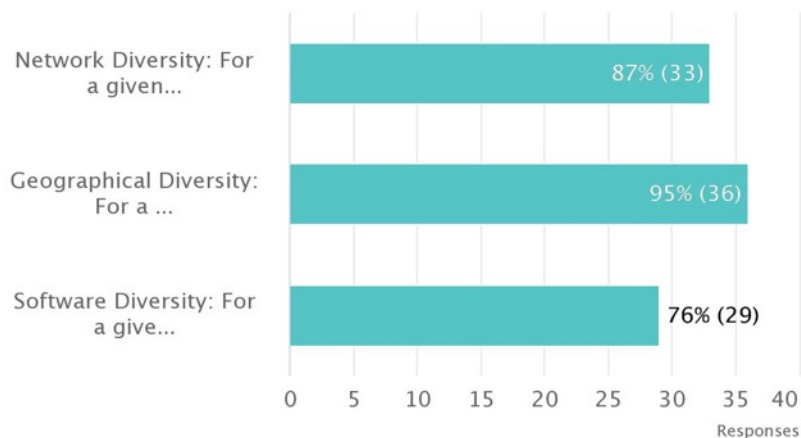
What Type of Authoritative Zone Do You Manage? – Type(s) of authoritative zone that you manage



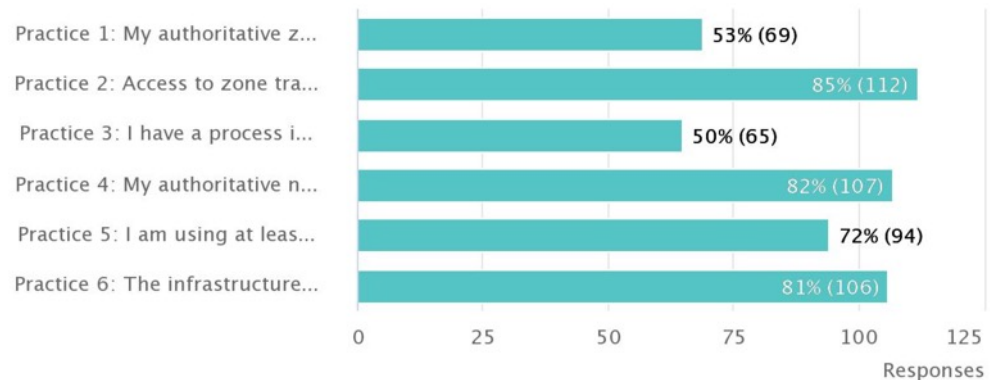
As Authoritative Nameserver manager for one or more TLDs or Critical Zones, I implement and adhere to the following practices:



Can you tell us more about your operational diversity practices?



As operator of Authoritative Nameserver(s) for one or more Second Level Domains (SLDs), I implement and adhere to the following practices:



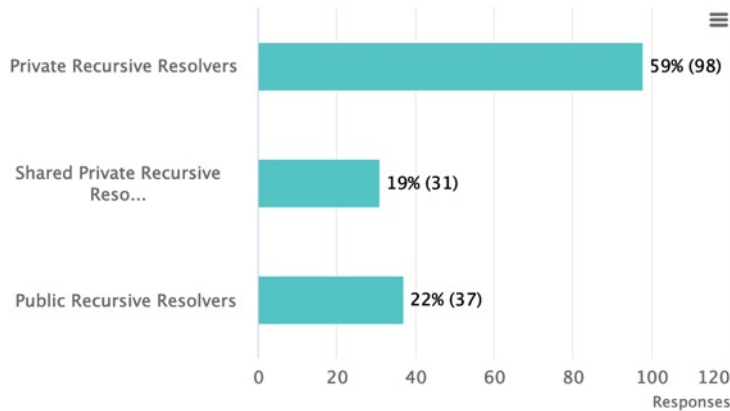


# Early Observations (con't)

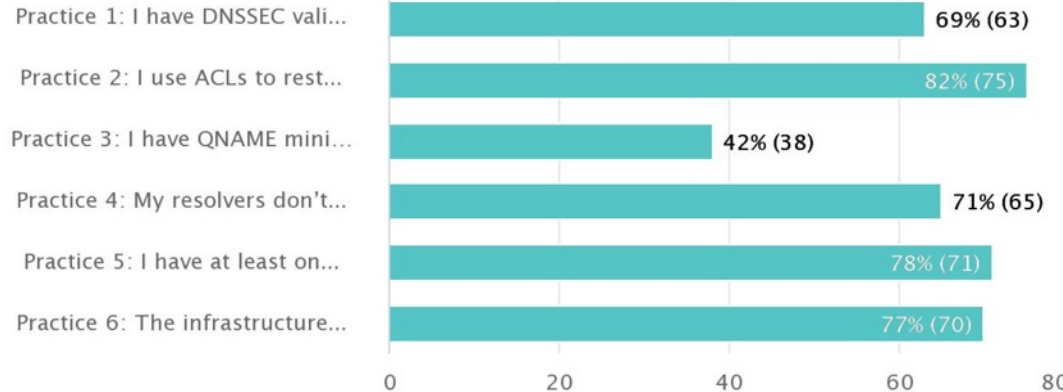


What type of Recursive Resolver do you run? – Type of recursive resolvers you run

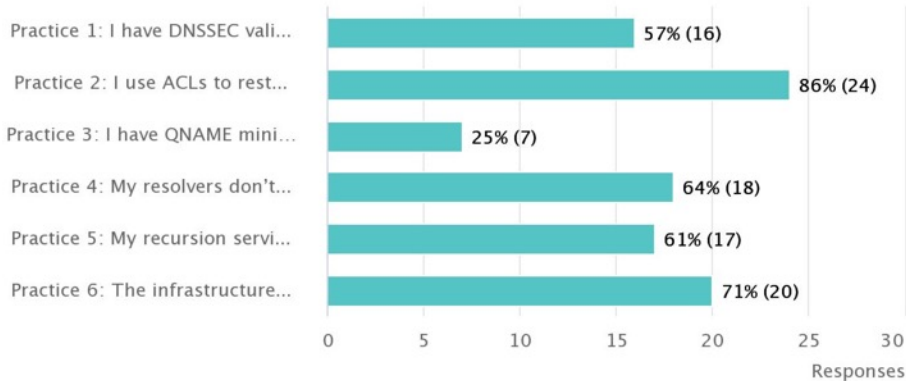
Bar chart



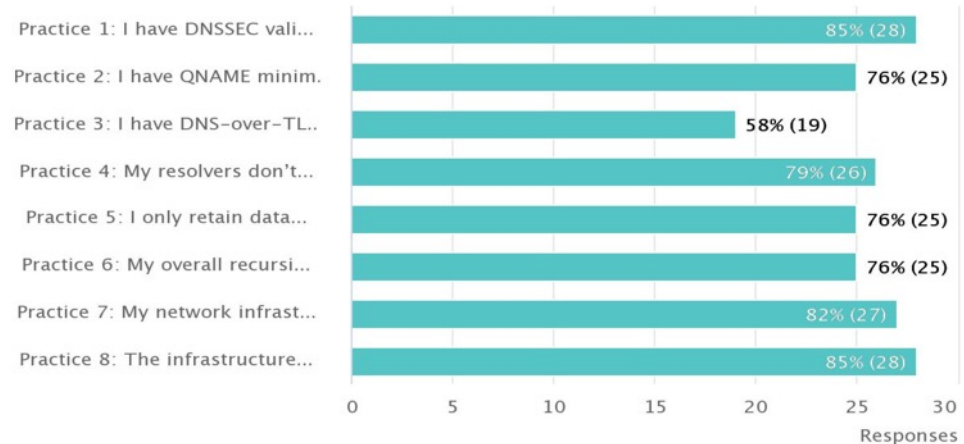
As a Private Recursive Resolver operator, I implement and adhere to the following practices:



As a Shared Private Recursive Resolver operator, I implement or adhere to the following practices:



As operator of a Public Recursive Resolver, I implement or adhere to the following practices :





- ⦿ Launching the **enrollment management** tool
- ⦿ Continue to **engage with operators** to get them on board:
  - *Direct 1:1 Engagements*
  - *Workshops & webinars to raise awareness on KINDNS practices as part of our overall DNS ecosystem security awareness program.*
- ⦿ **Translating** the website and the tools into other languages (*starting with the self-assessment and enrollment tools*).
- ⦿ Working with the community **to define indicators that can help measure** elements of the global DNS operation that are impacted by KINDNS practices' implementation.
- ⦿ **Evolving the Self-assessment** tool to be able to assess all or part of how operators implement the practices.
- ⦿ Continue to encourage operators and partners to **contribute and improve** the practices of framework.

1. **Adding Response Rate Limiting (RRL)** to Authoritative Servers' practice
  - ccTLD and critical Zone Operators
  - Other SLDs too?
2. **Addressing 'Split' responsibilities** for Authoritative servers' operation:
  - Zone file content is controlled by a third party. i.e Root server operators and the root zone itself.
3. **Access reliability:** Reachability over IPv6, RPKI for the prefix used for the DNS servers.
4. **Review team:** Volunteers from the community to work with staff to help with assessing participating candidates or other aspect of KINDNS practice evolution.

<b>Website</b>	<a href="http://www.kindns.org">www.kindns.org</a>
<b>Twitter</b>	<a href="https://twitter.com/4KINDNS">https://twitter.com/4KINDNS</a>
<b>E-Mail</b>	<a href="mailto:info@kindns.org">info@kindns.org</a>
<b>Wiki page</b>	<a href="https://community.icann.org/display/KINDNS">https://community.icann.org/display/KINDNS</a> <i>Where you can still find all the working documents.</i>
<b>Mailing list</b>	<a href="mailto:kindns-discuss@icann.org">kindns-discuss@icann.org</a>

# Engage with ICANN



## Thank You and Questions

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