Infrastructure & Operations Updates

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APNIC

KYOTO, JAPAN
7 – 14 September 2023

Critical Service Availability Community Consultation

Consultation Methodology

- Online consultation form
  - Open 1-21 June 2023
  - 118 completions + 91 partial completions
  - 84% APNIC Members
  - 51% orgs with 101+ employees, 42% with 50 or less employees
  - 7 to 9% margin of error

- Interviews
  - 11 organizations, mostly large service providers (+ root zone operator, LEA, NIR)
  - Operate at a larger scale or in a complex context

Results

Attitudes to Availability

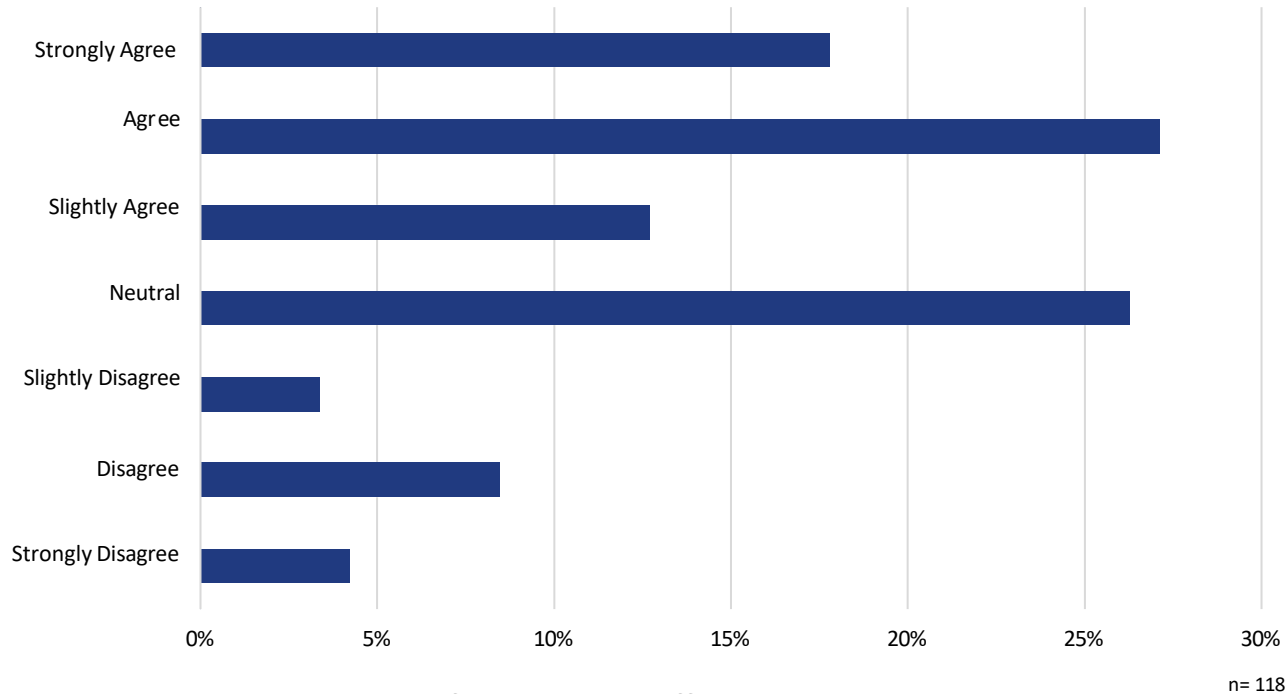**APNIC should commit to a minimum level of availability determined by Members**
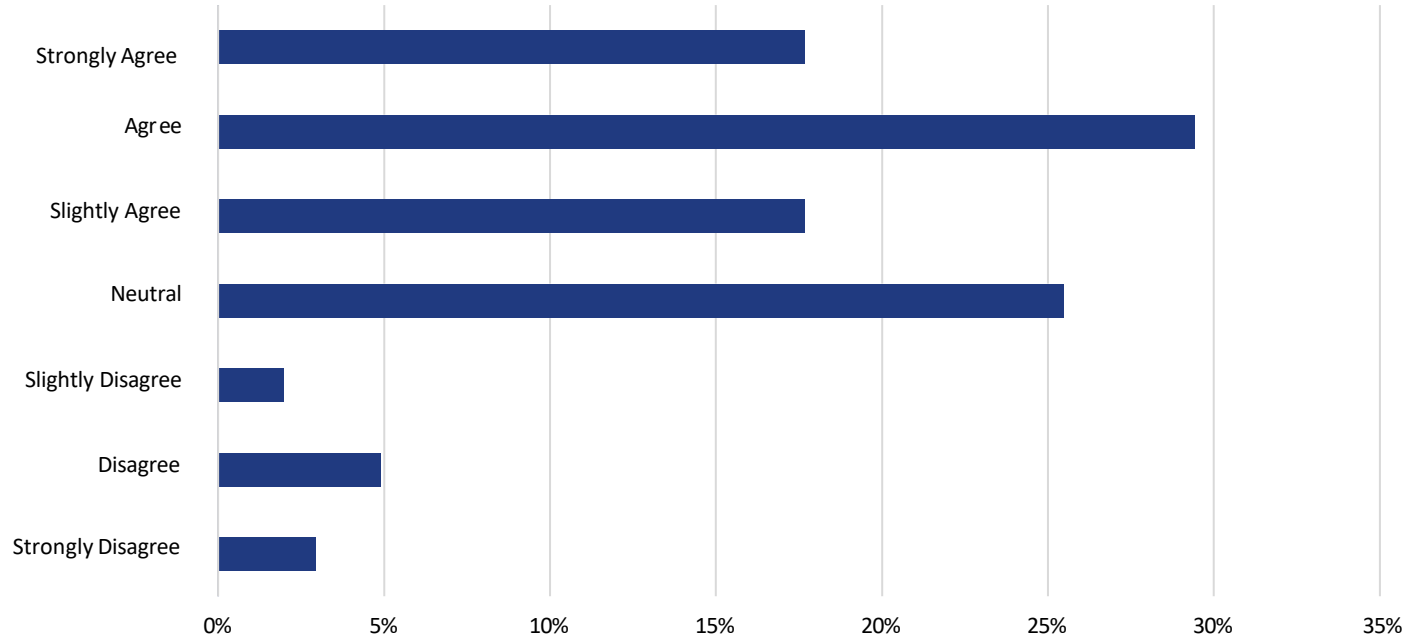
Members only
n=104

- Most members say APNIC should commit to a minimum level

Attitudes to Availability

24/7 availability of APNIC technical support staff is important to us
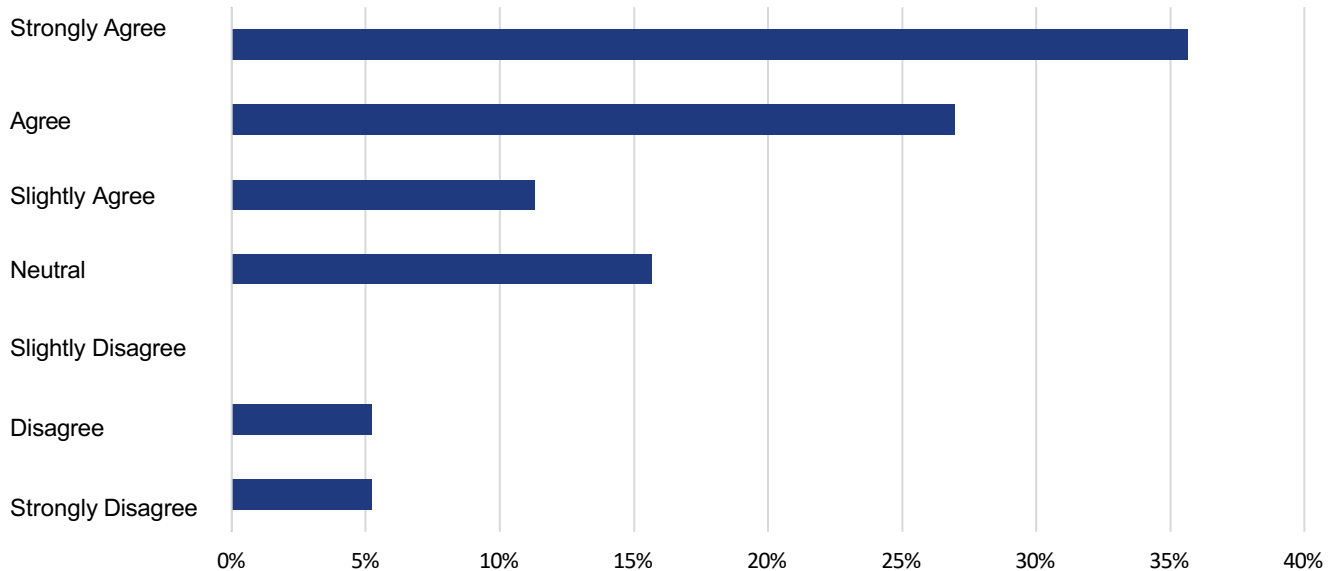

n= 118

- They also value availability of technical staff
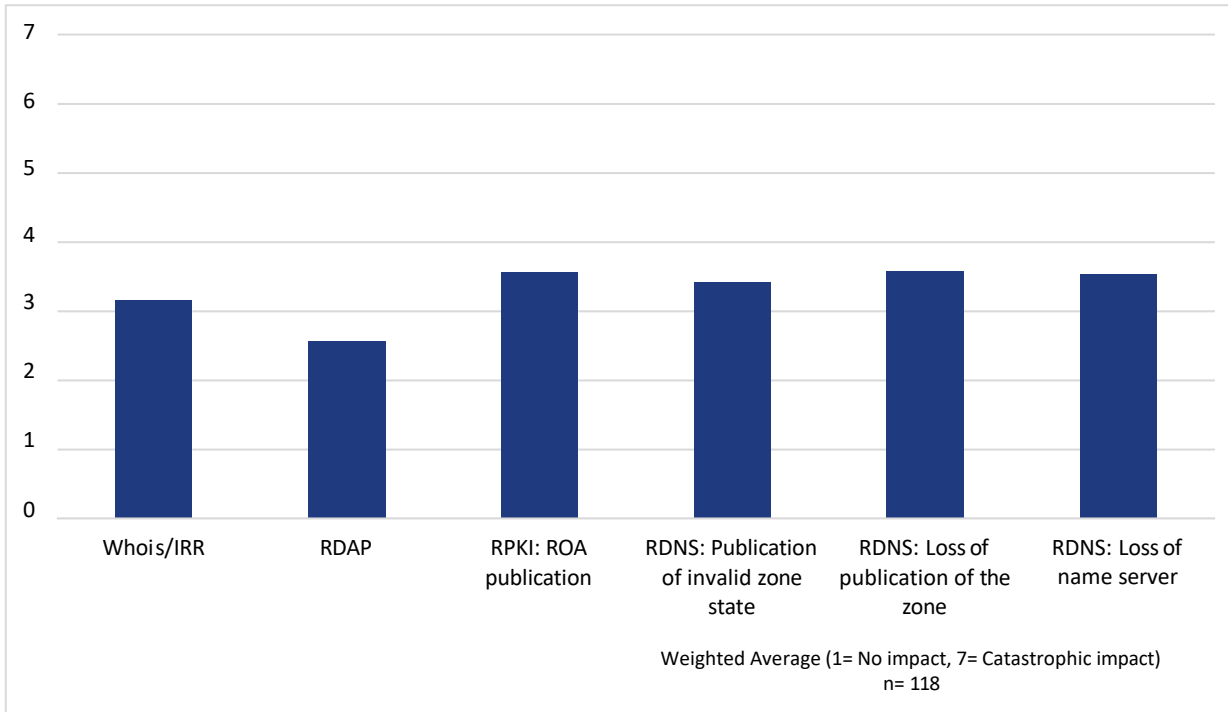
Current outage impacts

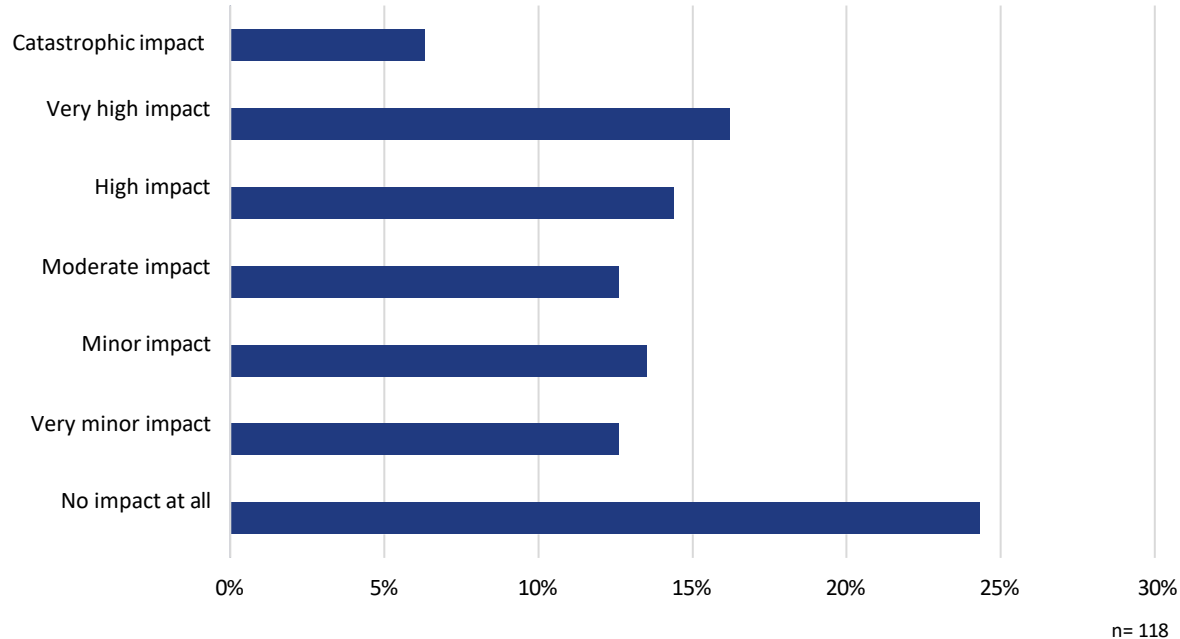Our network operations are rarely disrupted by APNIC outages

n= 115

- 74% agree that their operations are rarely disrupted by APNIC outages
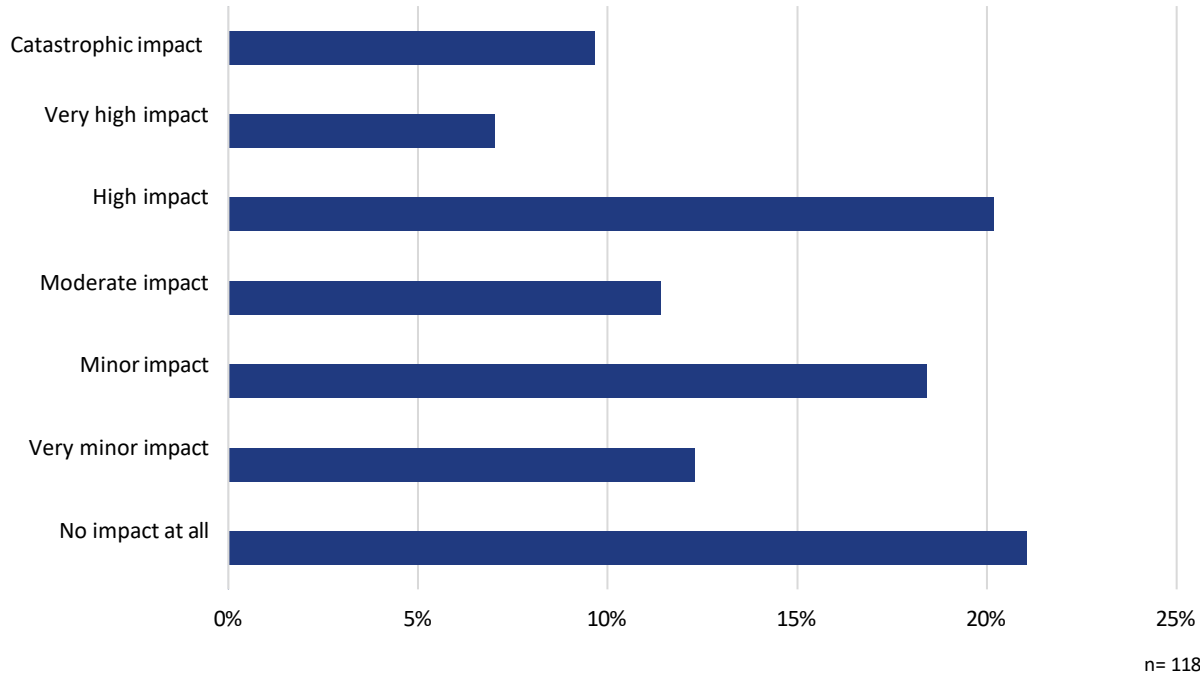
15 Min outage: How would that impact?

Weighted Average (1= No impact, 7= Catastrophic impact)
n= 118

- While different for different orgs, the average is less than 4 (moderate) for all services

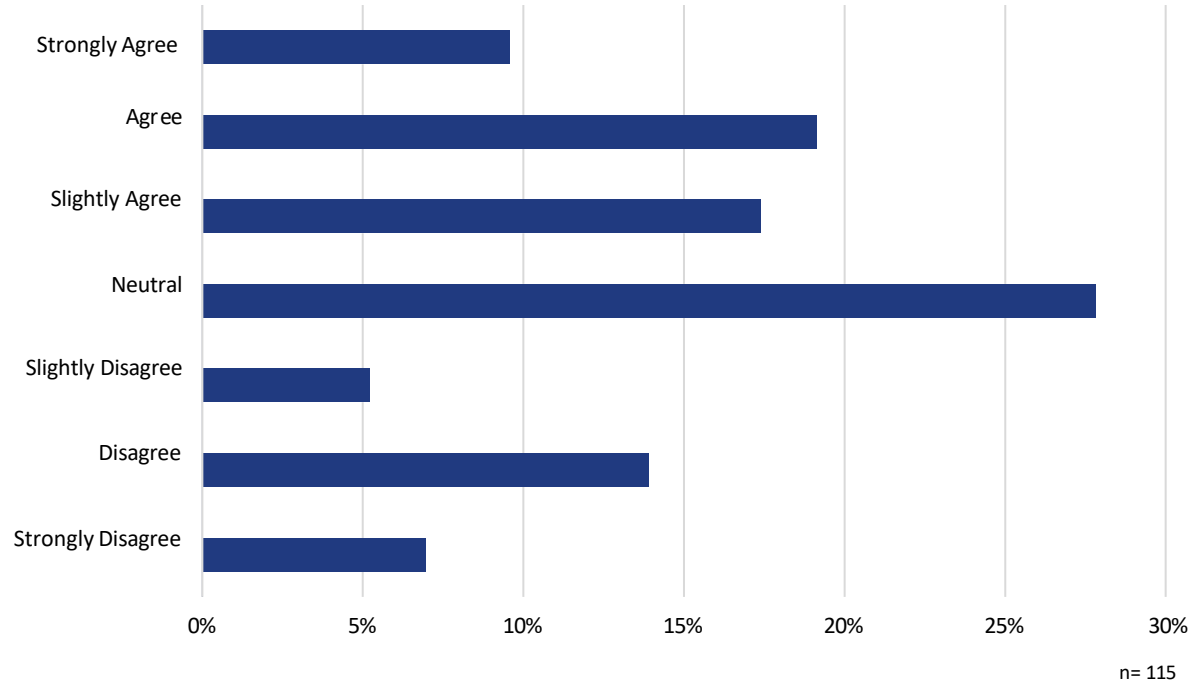# RDNS: Loss of name server

n= 118

- If the name server was lost for 15 minutes, how would that negatively impact your network operations?

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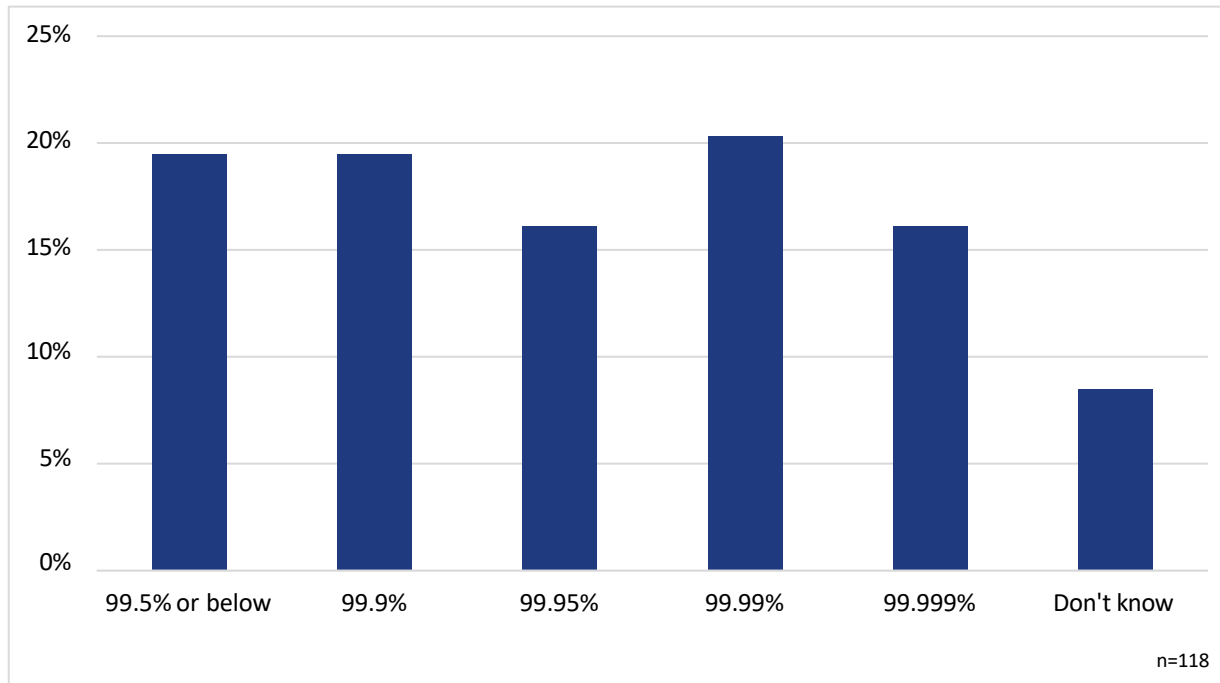# RPKI: ROA publication unavailable

n= 118

- If ROA publication was unavailable for 15 minutes, how would that negatively impact your network operations?
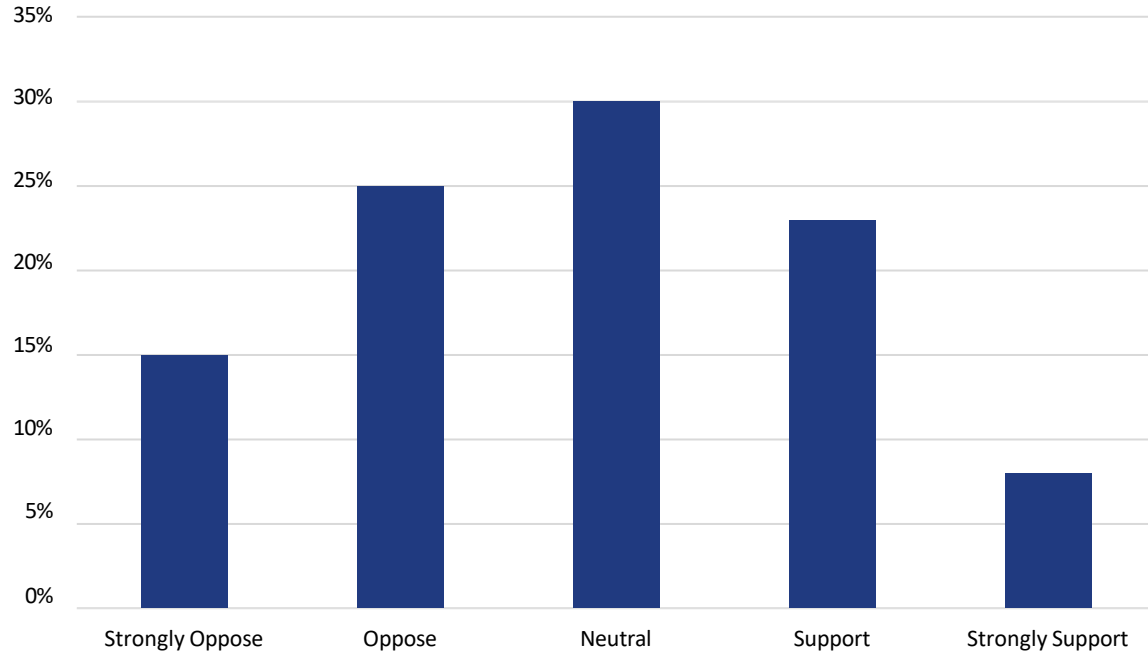
Outage mitigation

n= 115

- 46% agree they have processes and technology in place to mitigate APNIC outages while 26% don't

What do they promise their users?

n=118

- 55% commit to 99.95% availability or less in their own operations
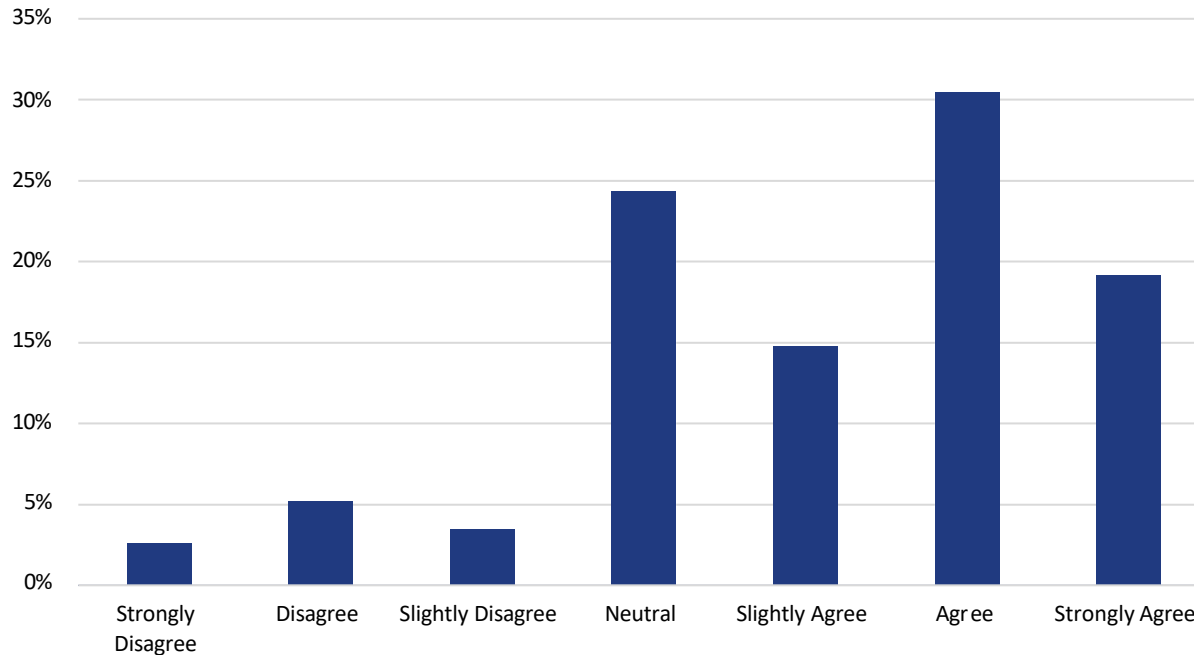
Support increased investment in availability?

All Members
n= 101

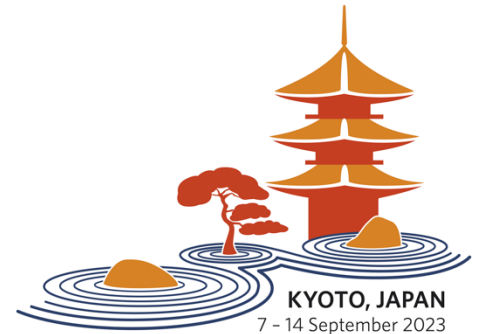- 40% oppose, 31% support

Accuracy is more important

n= 115

- Do you agree with this statement: My organization values higher accuracy of APNIC data more than higher availability of APNIC services

Results summary

Results summary

- Members are largely untroubled by APNIC outages at this time
  - They rarely see an impact
  - And almost half have mitigations in place if an outage occurs
  - Perceived impact of a potential outage is lower than moderate across services

- But 65% say APNIC should commit to a minimum level of availability determined by Members

- Members are not so supportive in further investment in availability
  - They are more supportive in improving data accuracy

Draft plan on the way forward based on the results
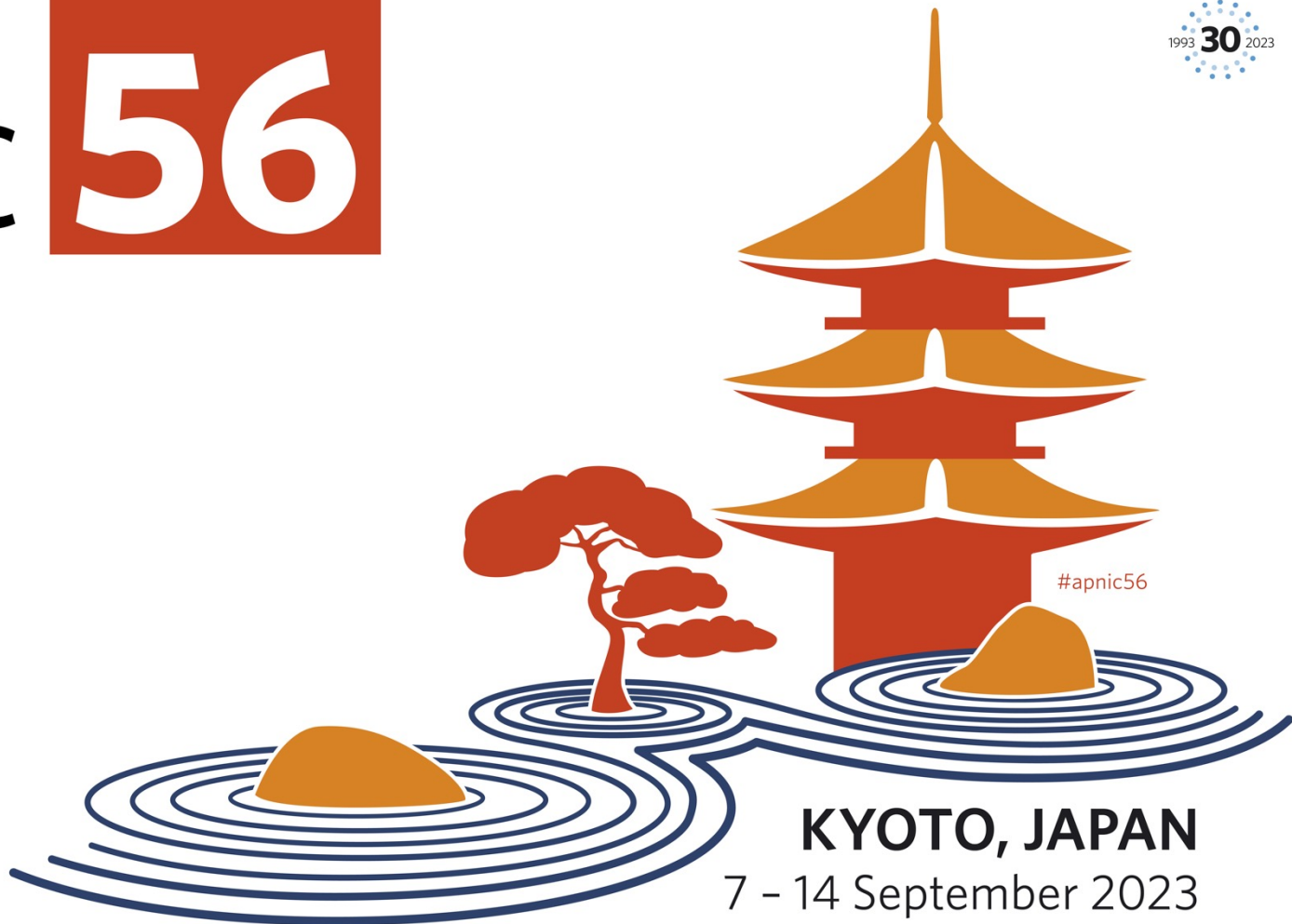
Draft plan on the way forward

- Not set 99.999% as availability target of critical services
  - Continue to use 99.99% as availability target of critical services
    - & 99.95% as target of less critical services

- Improved monitoring and measurement of availability
  - To know how close we are to our targets:
    - E.g. Is it 99.985% or 99.994%?
  - Measurement methodology to be published with a blog post

- Continuous improvement when budget & resources allow
  - Improved change management processes
  - Self-healing/recovery of application components
    - With better automation
  - Improved 24x7 Tier-1 Support with outsourcing

Community Consultation Report

- To be published in a few weeks

- Along with a blog post

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