# Proposed

Name Collision Analysis Workflow

As of 13 October 2021

## Proposed Name Collision Analysis Workflow

- Review risk of applying
- 1. Application submitted
- 2. Capture a picture of the collisions
- 3. Applicant prepares addendum to application
- 4. Board gets package for review

### 0. Review risk of applying

- Are name collisions present?
  - What data should be available and where? At ICANN?
  - DITL data review
  - Pre-publish top N list
    - ITHI
    - IMRS Hedgehog
  - Other real-time data
- What should applicant include in their application about their analysis?
- How does this get done?
  - Some kind of technical review team to support applicants?

### 1. Application Submitted

- Technical package with name collision analysis must be included
  - Only if name collisions present?
  - Draft mitigation plan?
  - Draft remediation plan?
  - Trending data?
- How does this get done?
  - Some kind of technical review team to support applicants?

- 2. Capture a picture of the collisions (1 of 3)
  - Some kind of technical review team will need to exist to collect the facts

- Define the "picture" to create
  - Based on the critical diagnostic measurements
- Assumes passive data at root or other DNS sources are available
  - Technical Review Team creates a technical package
  - Technical Review Team explains the package to the applicant
- What is the role of controlled interruption or a honeypot?

- 2. Capture a picture of the collisions (2 of 3)
  - Critical Diagnostic Measurements
    - Query Volume (DNS query count)
    - Query Origin Diversity (IP distribution / Network diversity: ASN distribution)
    - Query Type Diversity
    - Label Diversity
    - Other characteristics: OSINT of string being used

- 2. Capture a picture of the collisions (3 of 3)
  - Find the *impact* 
    - Do we know why it's leaking?
    - What is the source of the collision?
    - When did collisions start? time window for analysis
    - What could happen and what would the impact be if the delegation actually takes place?
  - What is the role of the technical review team with respect to finding the impact?

### 3. Applicant prepares addendum to application

- Assume applicant wants to proceed with application
  - Could choose to withdraw
- Analysis of "impact"
- Remediation proposal
- Mitigation proposal
- Is controlled interruption or a honeypot need?

- 4. Board gets package for review
  - Three possible outcomes
  - YES approve application
  - NO reject application
  - MAYBE
    - Temporary delegation for either Controlled Interruption or Honeypot
    - Iterate on steps 2 and 3
    - Applicant integrated to do risk management and create addendum
    - Revised package to the Board for a final decision