1.3 Terminology

- Allocation The process by which the Board makes a decision about allowing a name to be delegated.
- Collision Strings Board term; need to use or map to our preferred term
 - Collision String Registry
 - o reservation a registry of names not to be allocated nor delegated (on the collision string list). Note that multiple organizatoins (i.e., IETF, ICANN) can add names to the reserved list.
- Controlled Interruption (From <u>FAQ</u>) "Controlled interruption is a method of notifying system administrators who have configured their networks incorrectly (knowingly or unknowingly) of the namespace collision issue, and helping them mitigate potential issues."
 - Legacy Controlled Interruption Controlled Interruption that returns an unroutable "magic" IP address (as done in the last round)
 - Enhanced Controlled Interruption Controlled Interruption that returns a protocol-appropriate response, such as the address of a parking page in the case of HTTP/HTTPS.
- Critical Diagnostic Measurement properties that help determine the scope, impact, and potential harm of name collisions
- Day-In-The-Life (DITL) a large-scale data collection project initially undertaken every year since 2006. This data has historically been the primary measurement asset for name collision studies.
- Delegation This process may occur after allocation; it describes the technical process of adding an allocated name to the DNS root zone.
- Harm may include numerous things, from cybersecurity risks to reputational damage to physical impacts, making it difficult to appropriately apply scale and context to this otherwise broad term within the scope of name collisions.
- Name Collision (used in Study 1 and RFP) Name collision "refers to the situation where a name that is defined and used in one namespace may also appear in another. Users and applications intending to use a name in one namespace may attempt to use it in a different one, and unexpected behavior may result where the intended use of the name is not the same in both namespaces. The circumstances that lead to a name collision could be accidental or malicious."
 - Domain Name Collision A name collision in the single resolution protocol of the DNS.
 - Name Collision Assessment Controlled Interuption is a mechanism for Name Collision Assessment
 - Namespace Collision A potential source of name collision involving multiple namespaces, such as the DNS root zone and a blockchain service.
- Query Volume The number of DNS requests received for a string.

- Root Server Identity (RSI) thirteen identities, each of which is named with the letters 'a' to 'm', collectively administered by twelve root server operators. They are authoritative for the 'root-server.net' domain.
- Search List Processing "A Domain Name System (DNS) "search list" (hereafter, simply "search list") is conceptually implemented as an ordered list of domain names. When the user enters a name, the domain names in the search list are used as suffixes to the user-supplied name, one by one, until a domain name with the desired associated data is found or the search list is exhausted." ¹
- Source Diversity The number of distinct source IP addresses, distinct /24 or /48 IP blocks, and/or distinct number of ASNs requesting a string. This results in three different measurements/numbers used in DNS query analysis

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 $^{^{1}\,\}underline{https://www.icann.org/en/system/files/files/sac-064-en.pdf}$