Security and Privacy ICANN's Role

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Where ICANN fits into the discussion on security and privacy

- Security and privacy in the e-commerce arena encompasses a vast array of topics, involving a wide range of players
- ICANN's mission is limited, including in the security arena, and focuses on the core or underlying infrastructure of the Internet's many layers
  - It is not responsible for issues at the edge of the infrastructure, such as consumer applications, e-mail software, web-browsers, etc.

## Short introduction of ICANN's Mission

- Coordinate, at the overall level, the global Internet's systems of unique identifiers, and in particular to ensure the stable and secure operation of the Internet's unique identifier systems. In particular
  - the allocation and assignment of the three sets of unique identifiers for the Internet, which are
    - Domain names (forming a system referred to as "DNS");
    - Internet protocol ("IP") addresses and autonomous system ("AS") numbers; and
    - Protocol port and parameter numbers.
  - the operation and evolution of the DNS root name server system.
  - policy development reasonably and appropriately related to these technical functions.
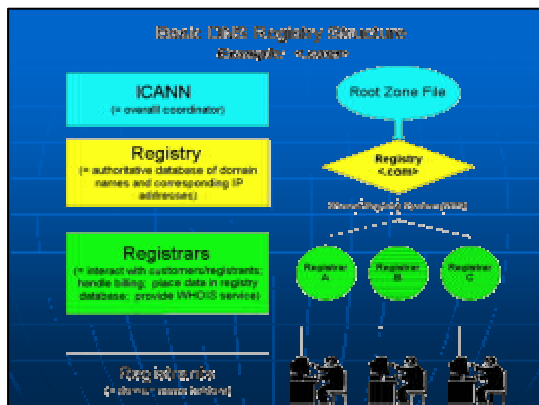
Catalysts

Within ICANN's areas of responsibility, a catalyst from which the ICANN community works together to address security issues proactively or as they arise. This work is done through ICANN's public processes and the appropriate standing committees.

- Security and Stability Advisory Committee
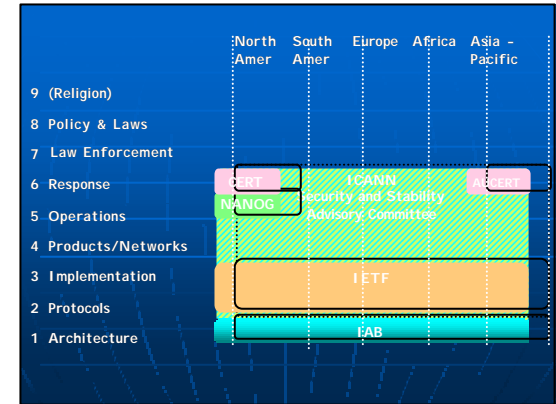- President's Privacy Committee

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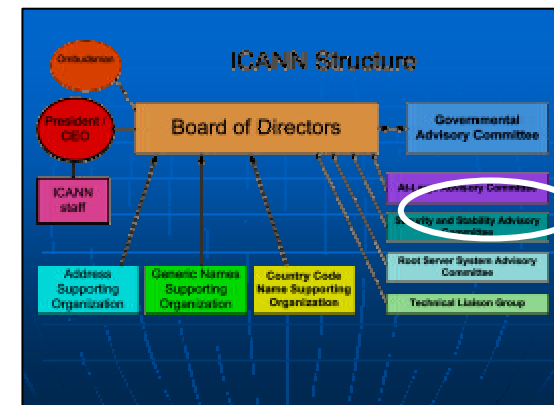
Security and Stability Advisory Committee

- Membership appointed by the ICANN Board
- Responsible for advising the ICANN Board on matters
- relating to the security and integrity of the Internet's
- naming and address allocation systems
  - Identify security focus areas within their purview
  - Communicate with technical community as developments and events necessitate
  - Engage in threat assessment and risk analysis
  - Communicate with ICANN Board regarding activities
- Involves ccTLD operators, gTLD operators, registries, registrars, root server operators, Internet security
  - No policy or political members

Roles

- Respond to board queries and tasks
- Choose topics to probe
- Report to board and to larger community
- Build and maintain a perspective on Internet security

(diagram slide)

	North Amer	South Amer	Europe	Africa	Asia – Pacific
9 (Religion)					
8 Policy & Laws					
7 Law Enforcement					
6 Response	CERT		ICANN Security and Stability Advisory Committee		A-CERT
5 Operations	NANOG				
4 Products/Networks					
3 Implementation			IETF		
2 Protocols					
1 Architecture			IAB		

ICANN Initiatives

- Agreement on formal relationship between Root Server Operators and ICANN
- Tightened procedures for distributing changes to the root zone (CRADA report)
- DNSSEC deployment analysis and road map
- IPv6 transition road map (re DNS)
- DNS service robustness enhancements
- Best practices for ccTLDs

Privacy

- President's Standing Committee on Privacy
  - ICANN's mission does not encompass privacy issues, but existing policies and proposed policies being considered that relate to matters within the scope of its mission often have implications for personal privacy.
    - E.g., Whois discussions touch upon privacy, as well as many other topics.
  - Committee is responsible for monitoring the implications of existing and proposed ICANN policies on the handling of personal data.
- Privacy rules and regulations are for respective jurisdictions to determine

Observations

- Underlying infrastructure is robust and with implementation of additional standards to the DNS must be done carefully
  - E.g., Internationalized Domain Names
  - IPv6
  - DNS SEC, forthcoming protocol to add cryptographically signatures to the domain name system
- Continuous evaluation of the redundancy and resiliency
- Services outside the core of the DNS, or on the edge, are outside of ICANN's scope or mission