

# ICANN

## Enhancing DNS Security

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Manager, Regional Relations Caribbean



CTU Roadshow Grenada

Grenada, 17 May 2011

# Agenda

- What is ICANN?
- The Domain Names System (DNS)
- DNSSEC signing platform

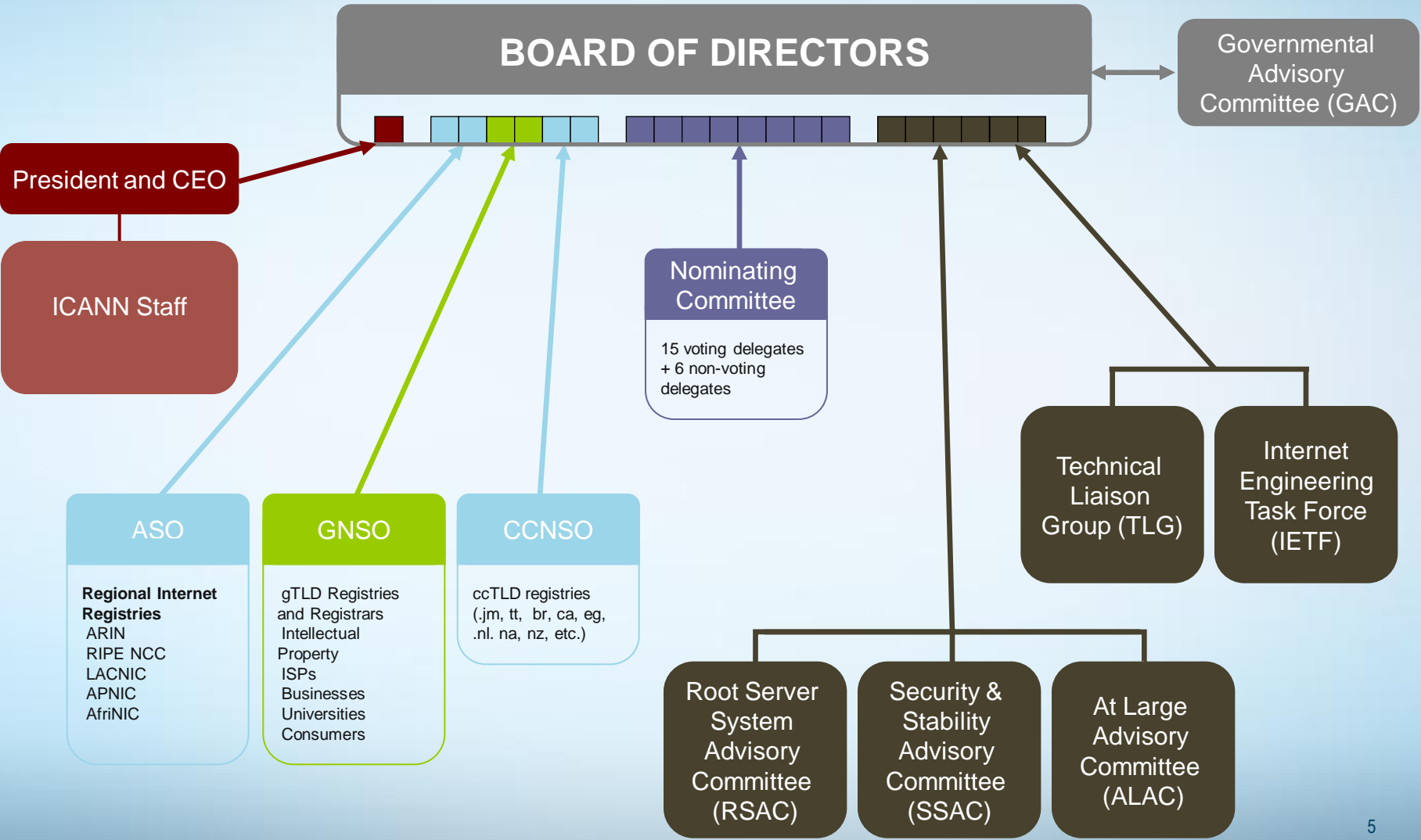
# ICANN' s role

- Internationally organized, non-profit organization that has responsibility for IP address space allocation, protocol identifier assignment, gTLDs and ccTLDs name system management and root server coordination
- Is dedicated to preserving the operational stability of the Internet
- (Not) rules for financial transactions, content control, spam, data protection

# How does ICANN work?

- Bottom-up consensus building model
  - Governments
  - Private sector
  - Technical community
  - Users
- Internationally diverse Board of Directors overseeing the policy development process
- President & CEO, staff

# ICANN's Community



# Accomplishments and ongoing work

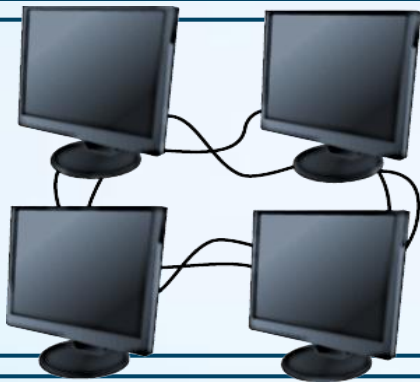
- Established market competition for gTLDs
- Implemented a UDRP (>5000 disputes regarding trademark rights resolved)
- New gTLDs (.aero,.biz, .coop,.info, .museum,.name,.pro,.mobi,.tel) others are being explored (ongoing process)
- Workshops on relevant issues (gTLDs, IDNs, IPv6,etc)
- AoC post JPA
- IDNs

# ICANN welcomes participation

- End users
  - Participation in At Large
- ccTLDs
  - Participation in ccNSO and AF/EoL
- Governments
  - Participation in GAC
- Private sector
  - Registrar accreditation / new gTLDs, IDNs

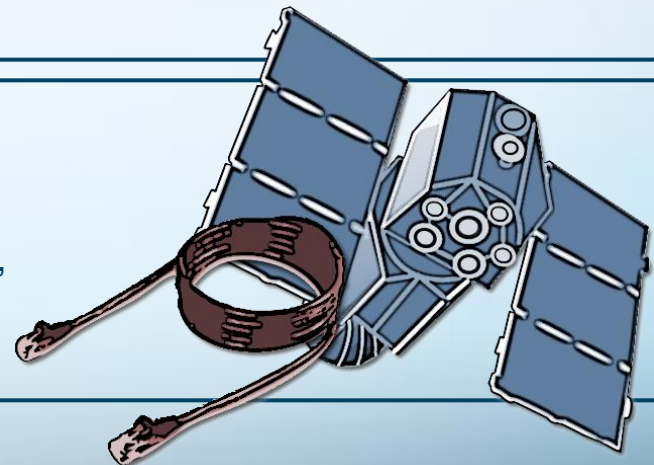
# Internet's Three Operating Layers

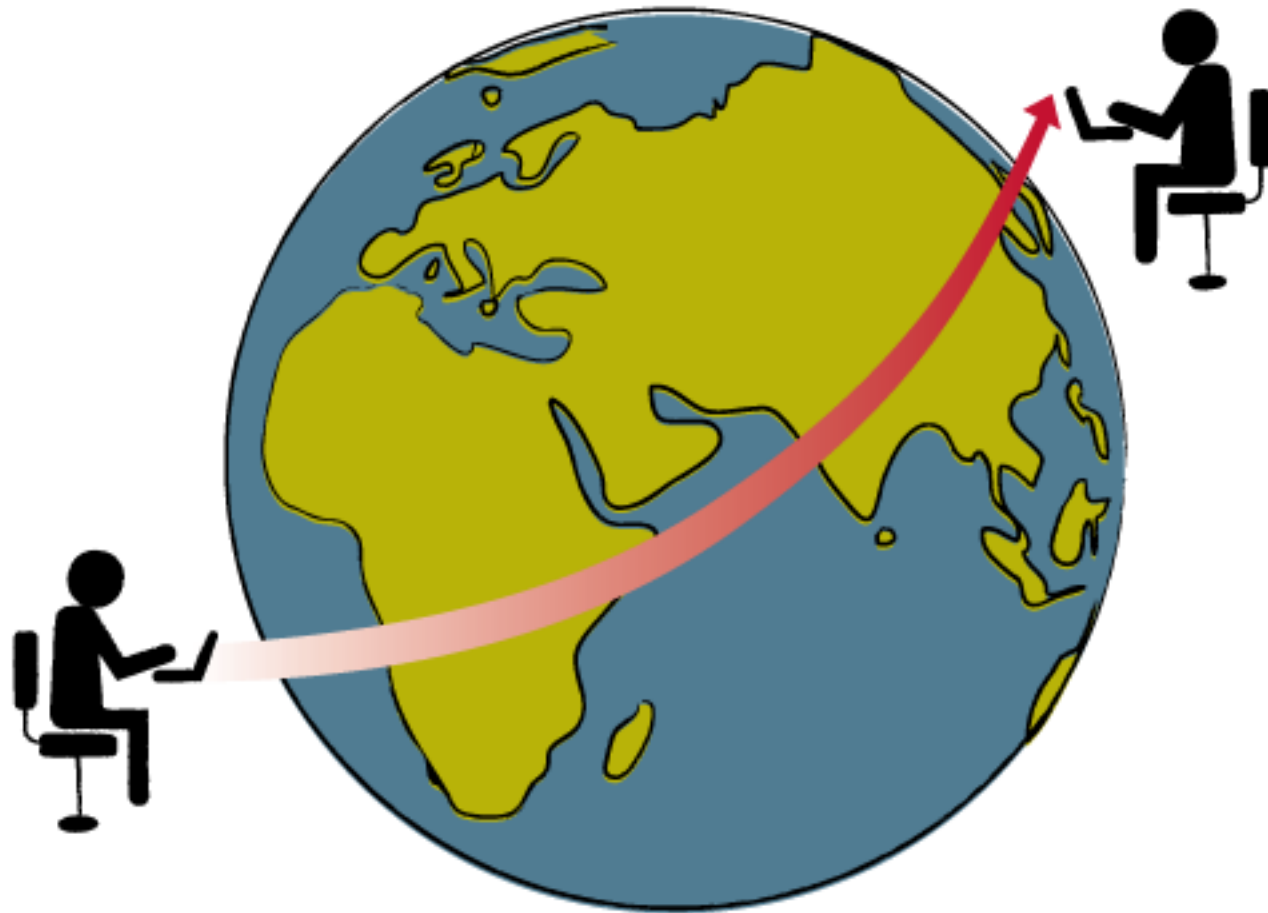
**Content and applications standards (HTML, XML, Java)** – Promotes creativity and innovation in applications leading to email, World Wide Web, ebanking, wiki, Skype, Yahoo, Google, YouTube and much more



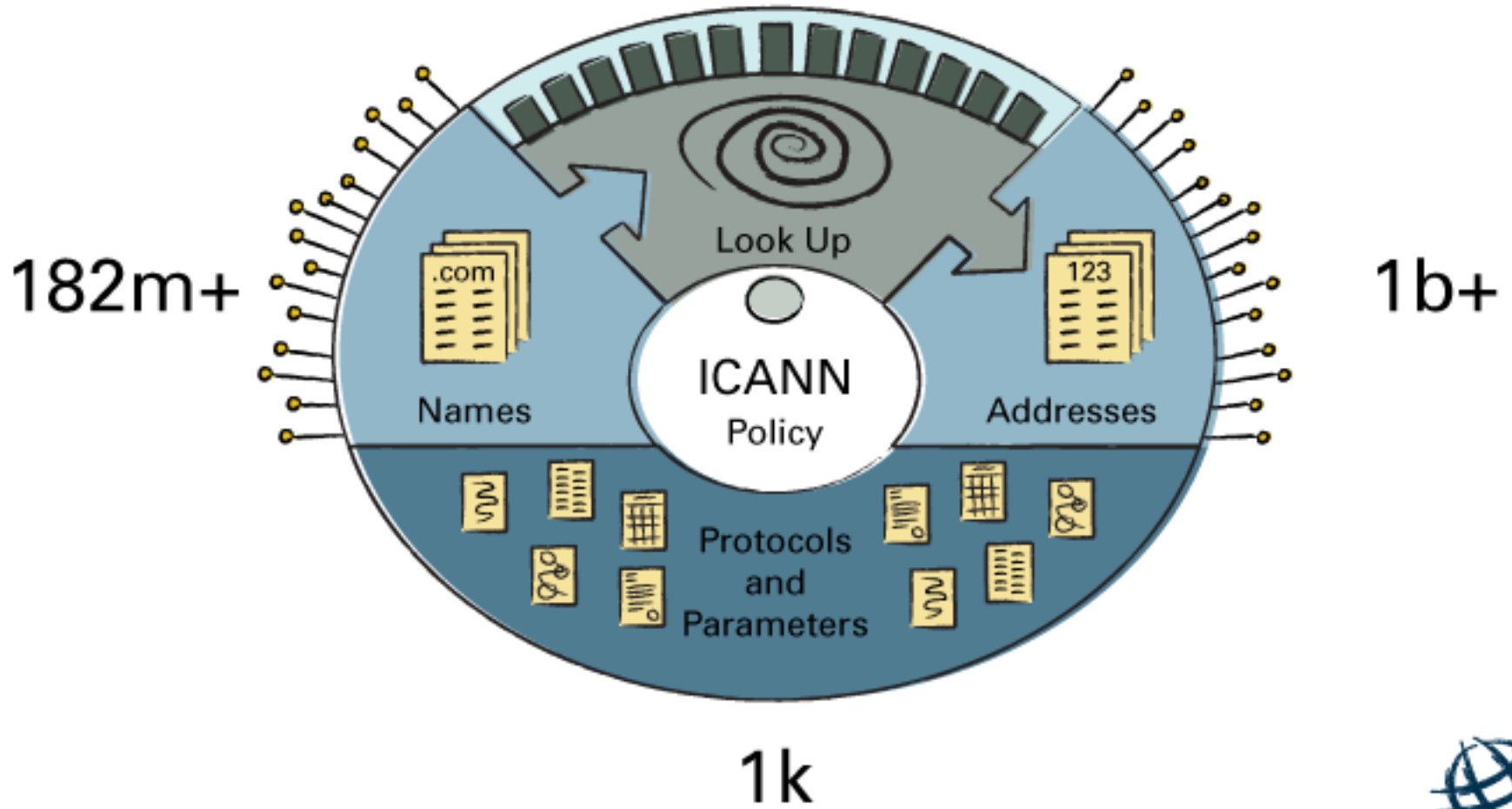
**Internet protocols and standards (TCP/IP, DNS, SSL)** – TCP/IP, controls traffic flow by dividing email and web data into packages before they are transmitted on the Internet

**Telecommunications infrastructure** – Physical network made up of underwater cables, telephone lines, fiber optics, satellites, microwaves, wi-fi, and so on Facilitates transfer of electronic data over the Internet



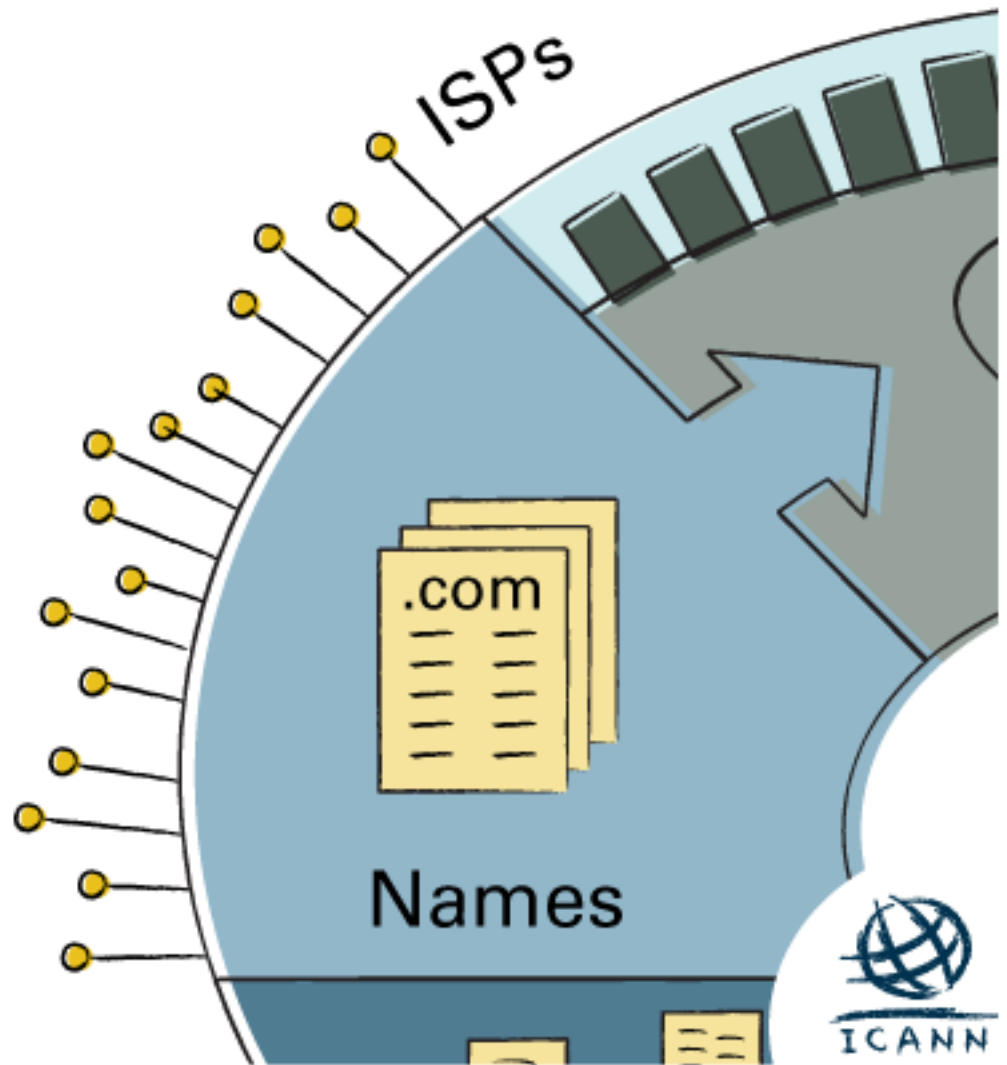


100's of BNs per day



269 Registries

- .org
- .uk
- .net
- .ca
- .me
- .ck
- .au
- .edu
- .fr
- .cn
- .gov
- .biz
- .eg
- .jp
- etc



Register.com

GoDaddy

935 Registrars

269 Registries

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Registrants

Individuals

Corporations

ISPs



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Registrants

Individuals

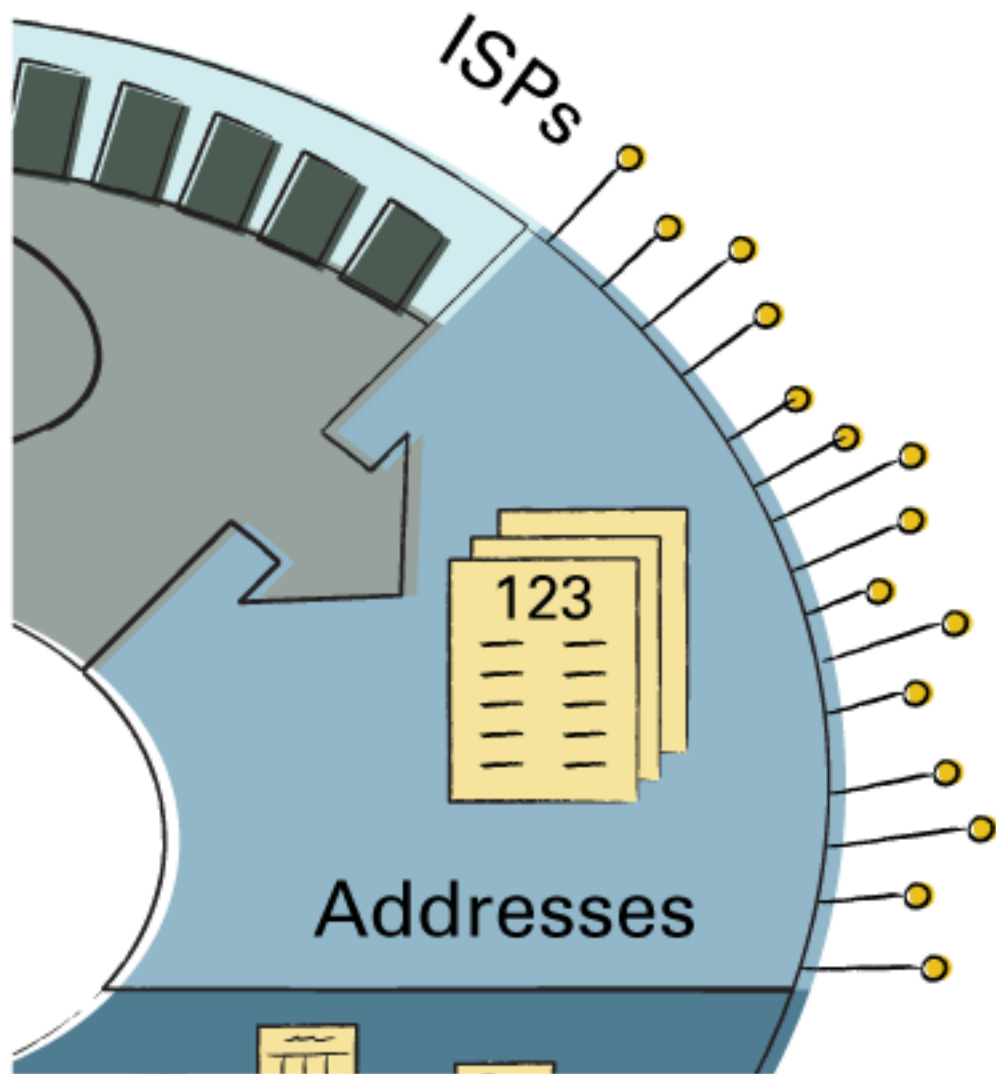
Corporations

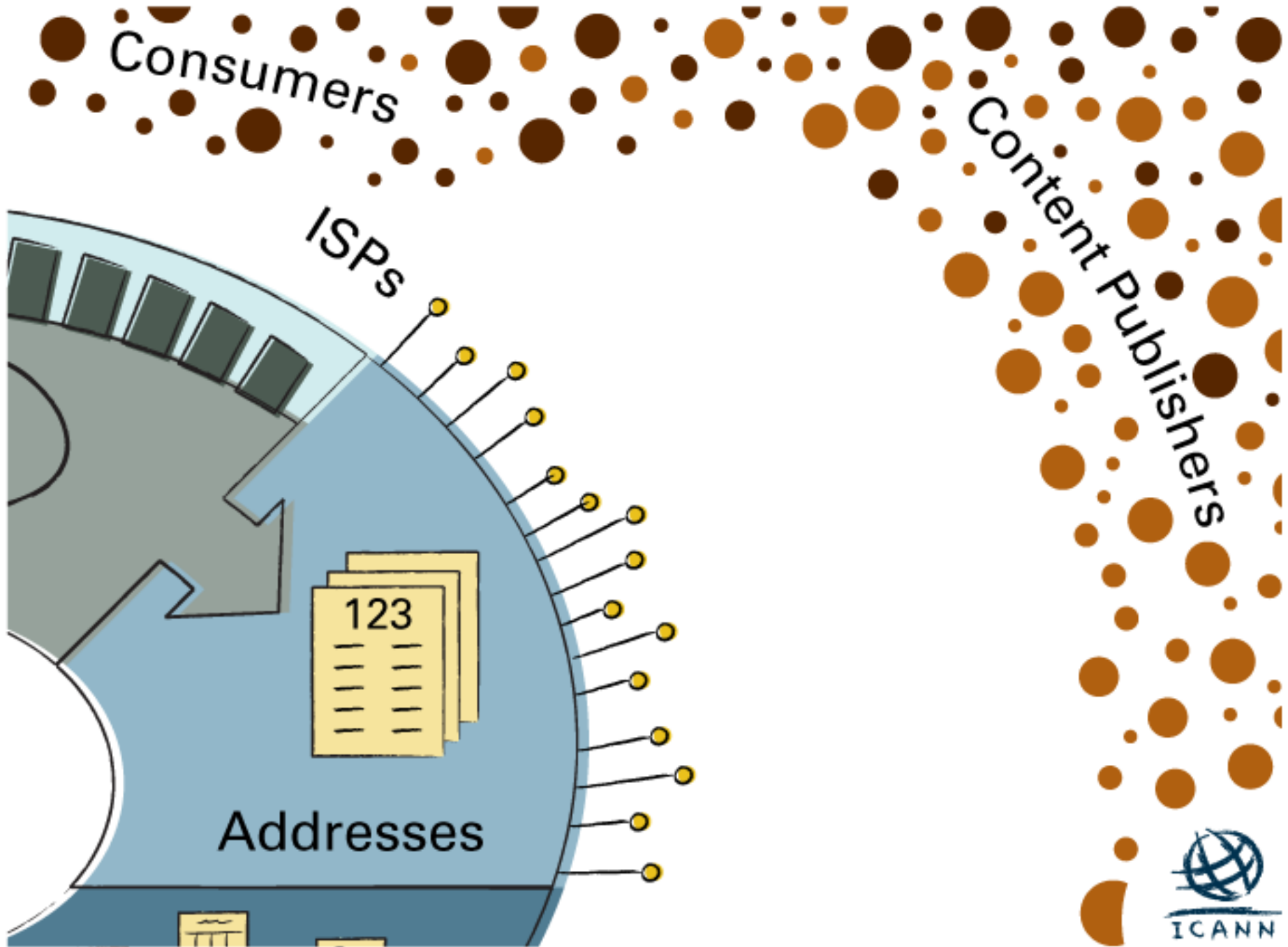
ISPs

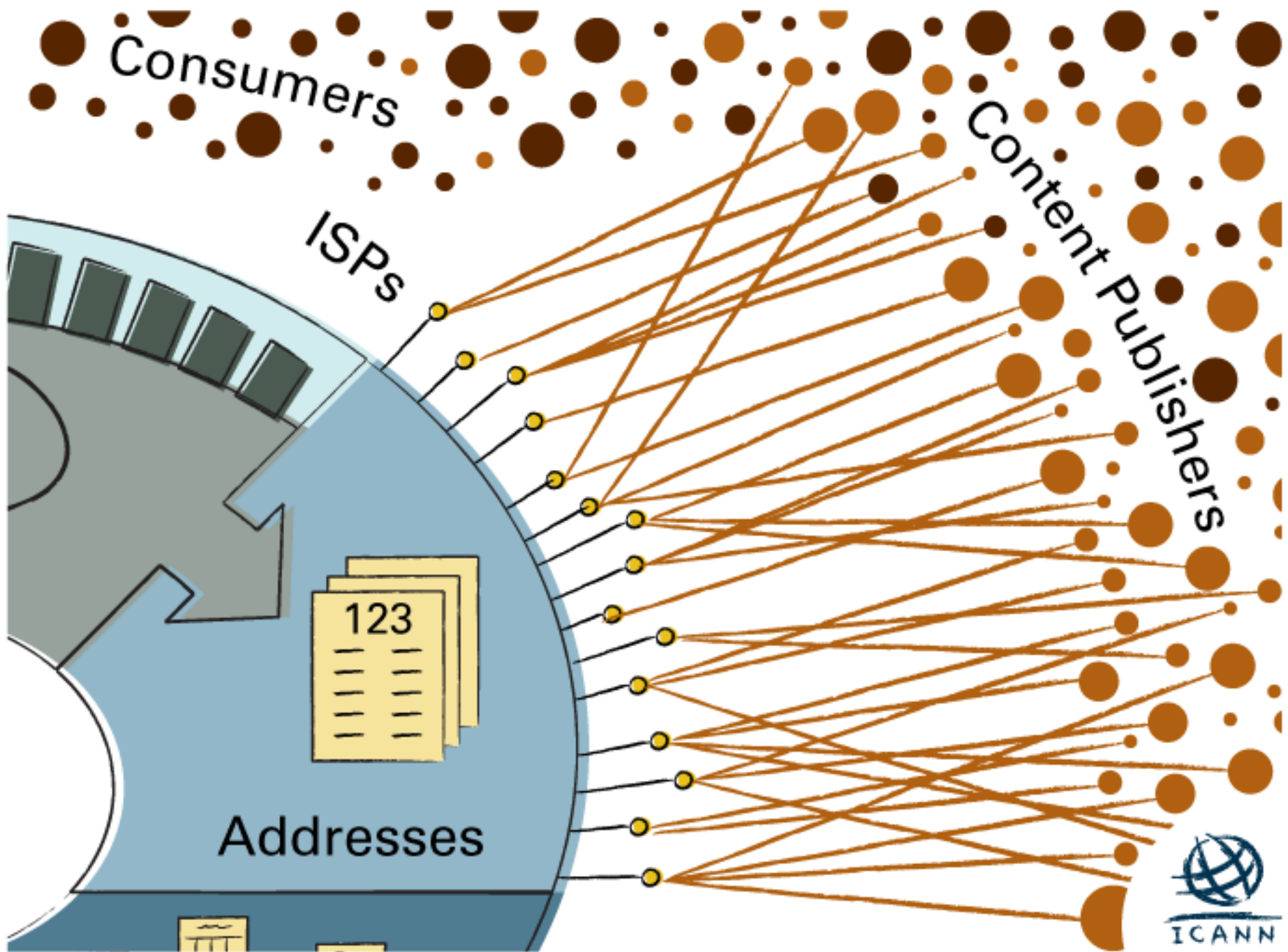
.com

Names









Consumers

ISPs

Content Publishers

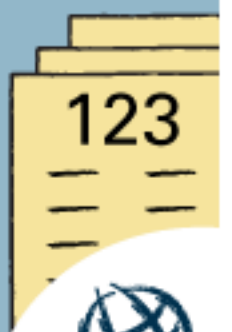
123

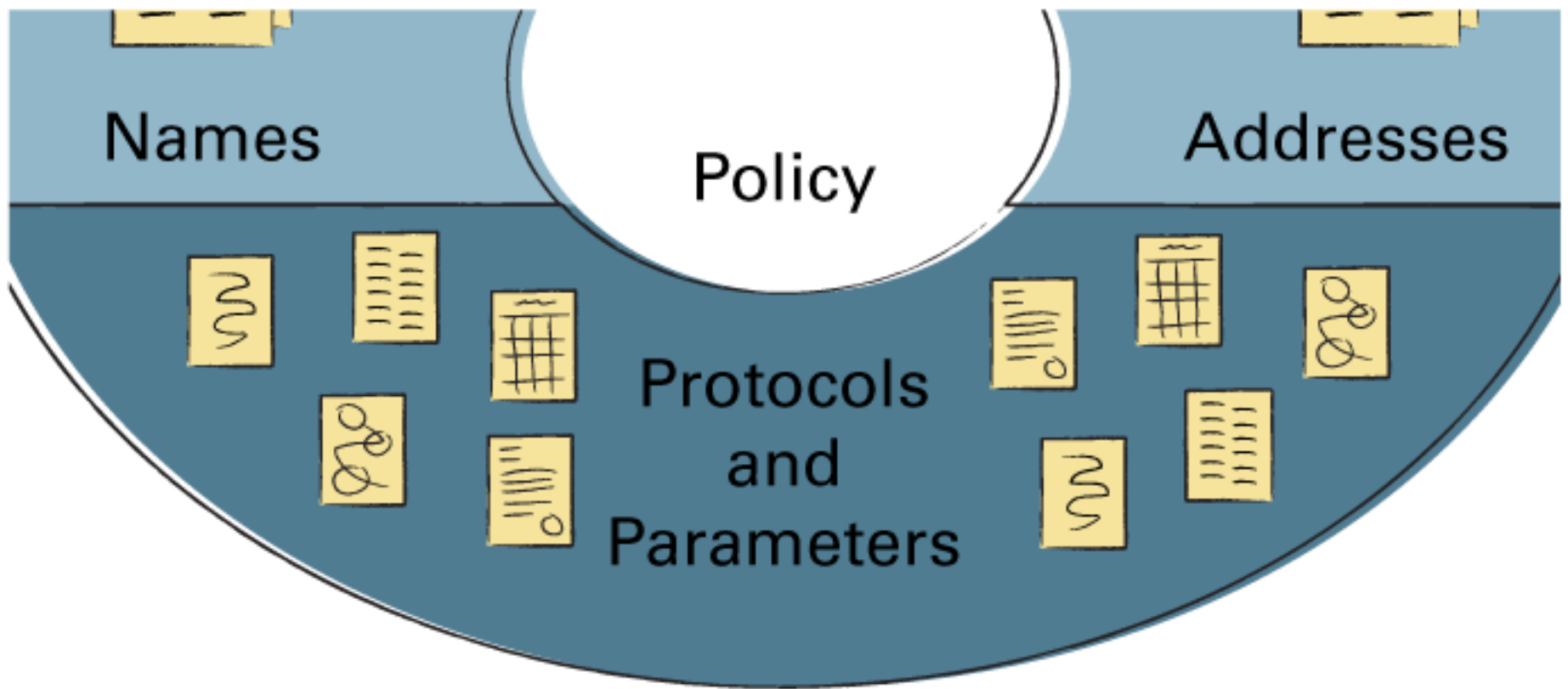
Addresses

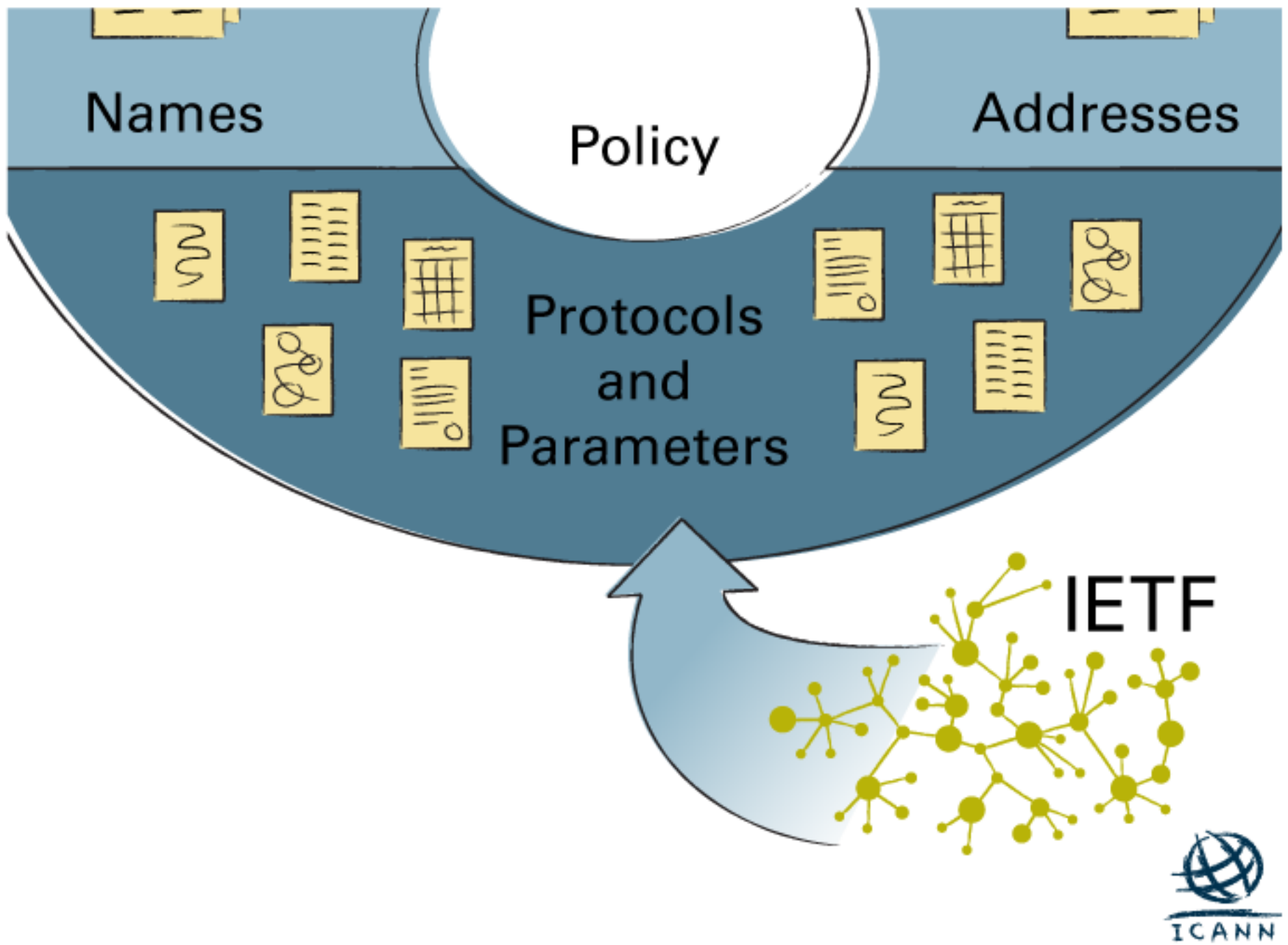


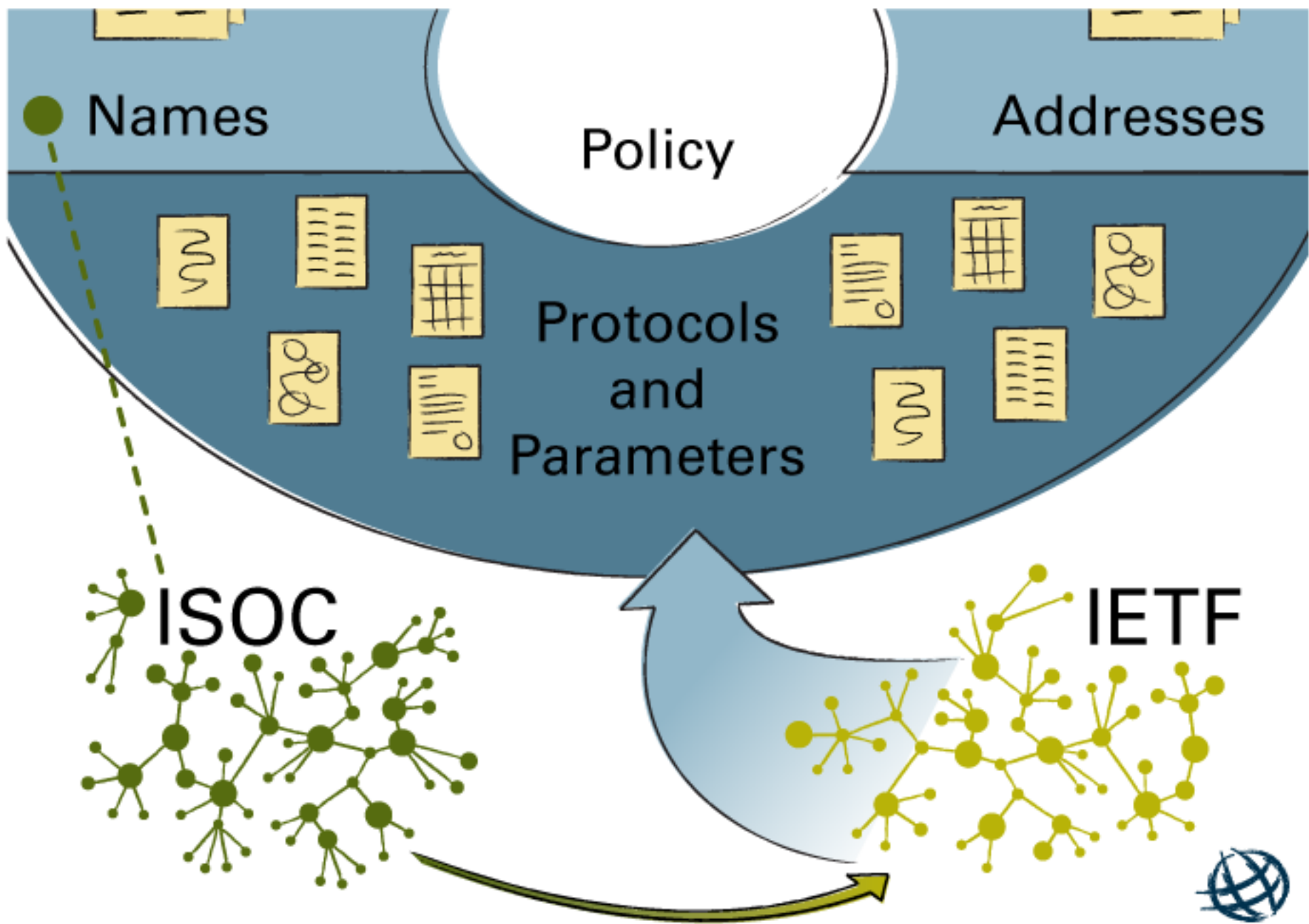
Root Server Operators

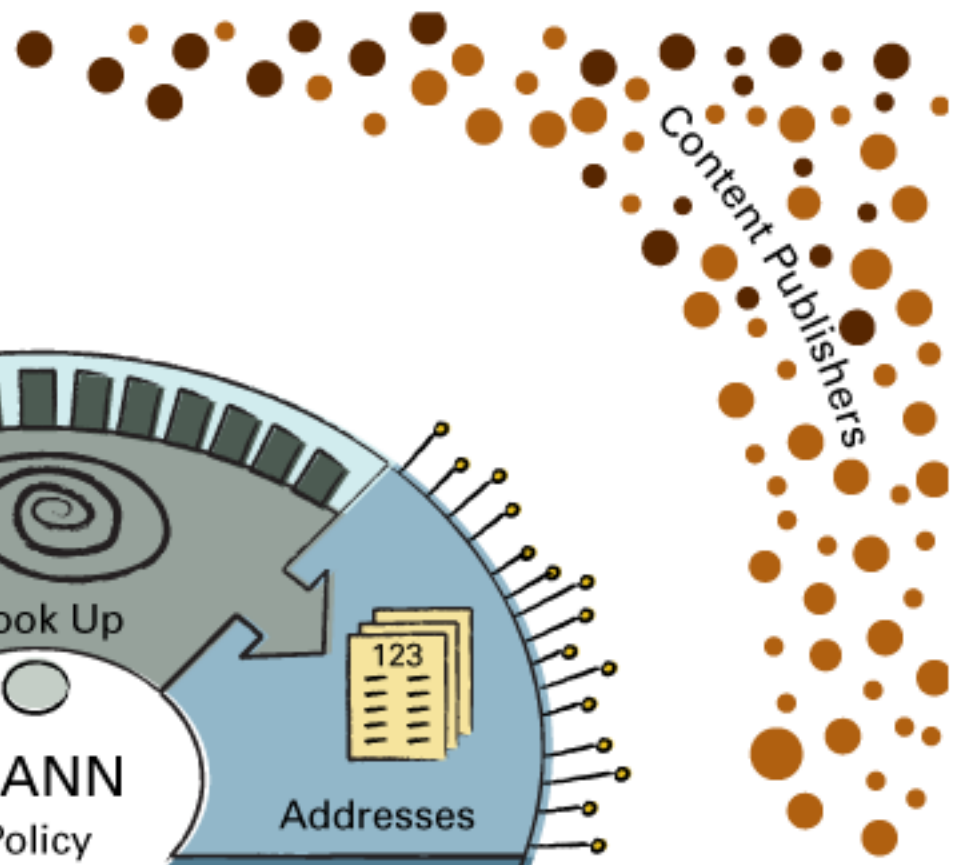
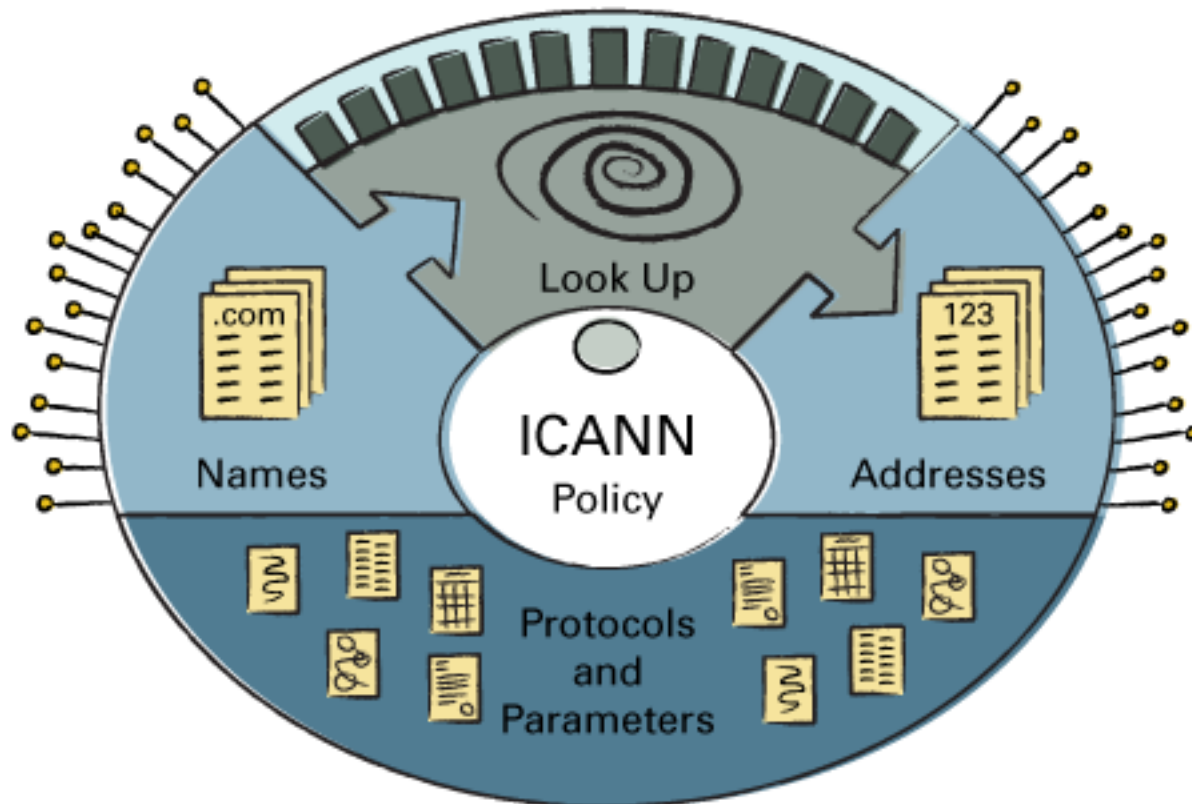
Look Up

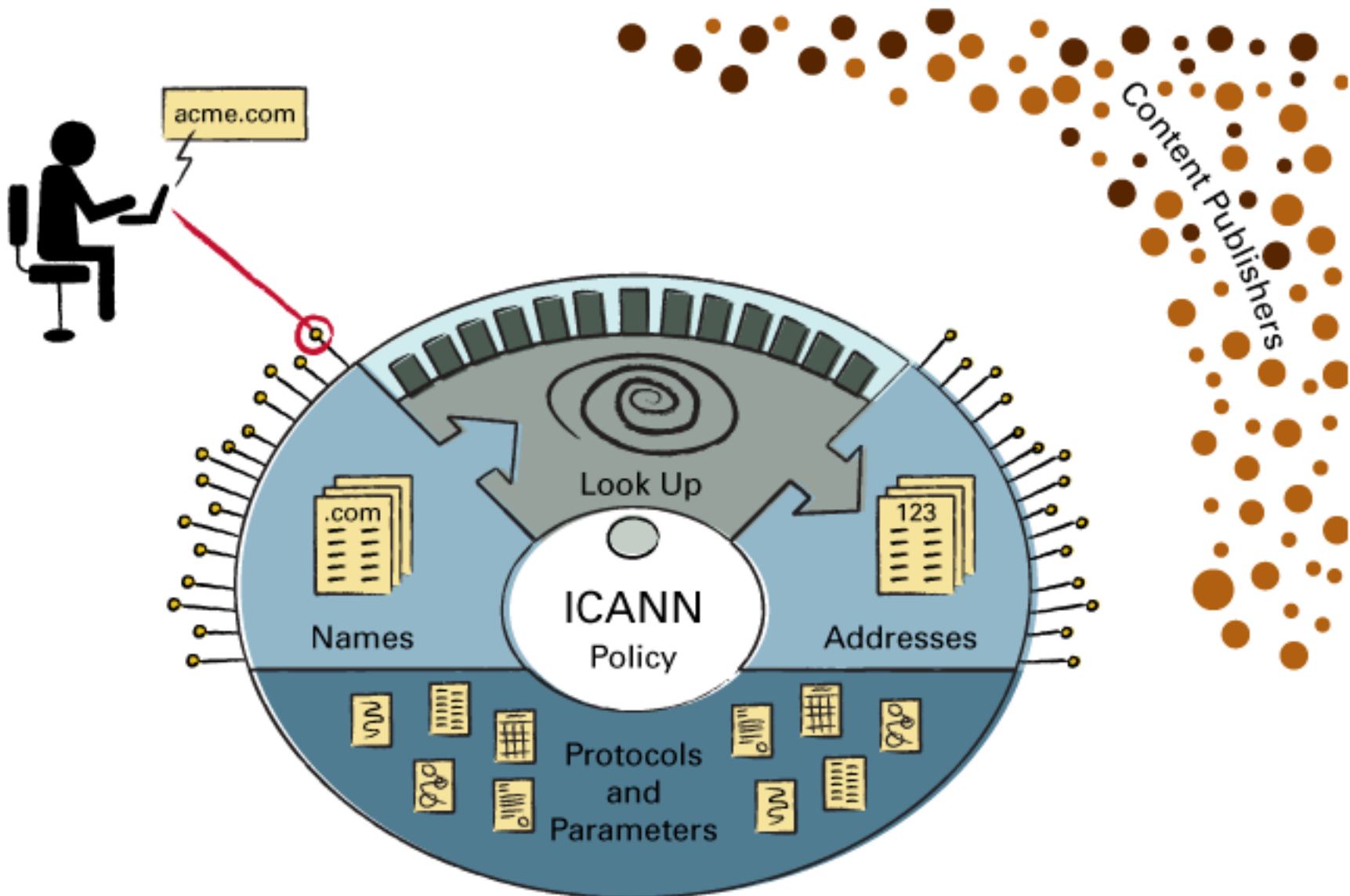


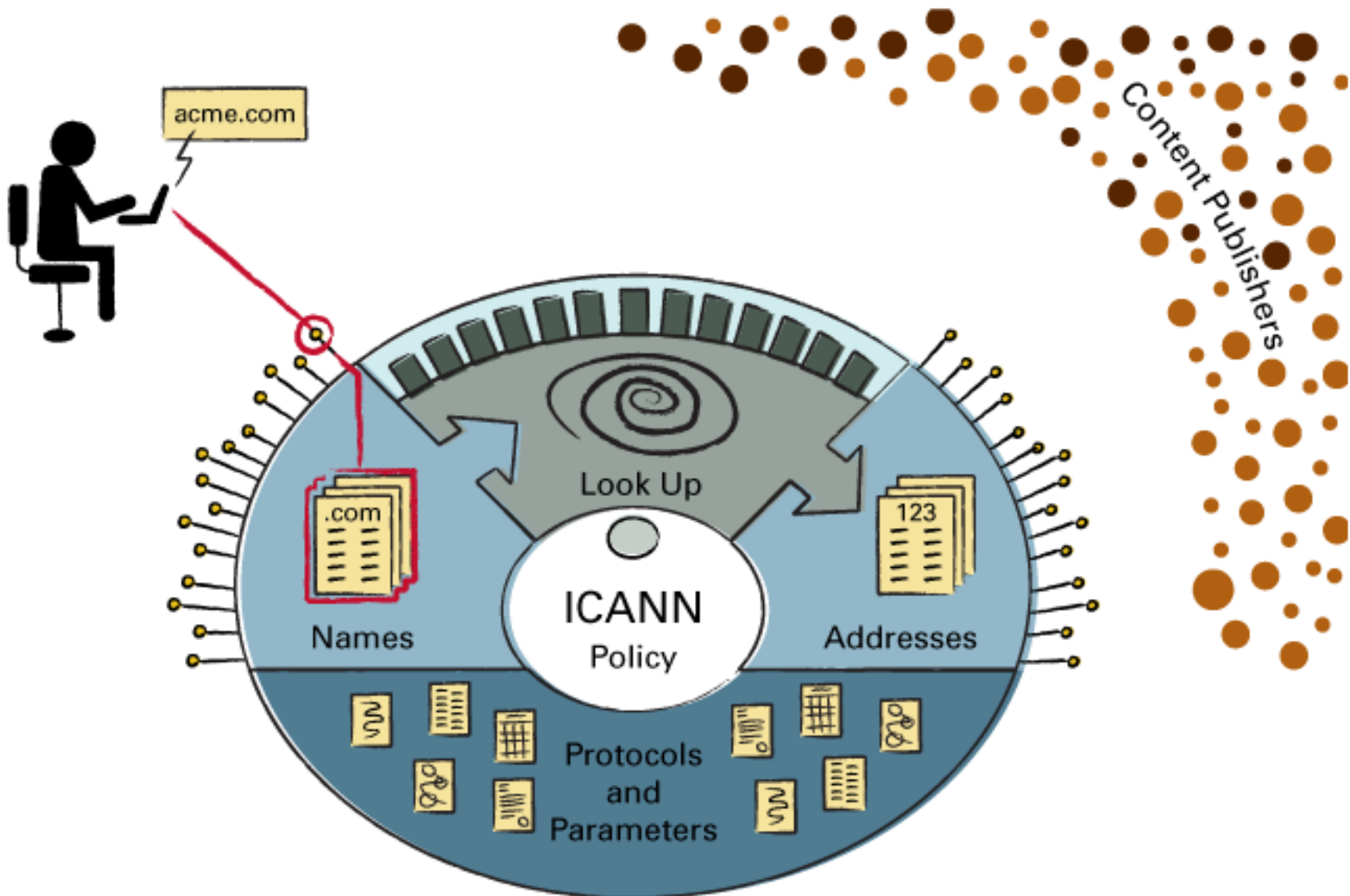


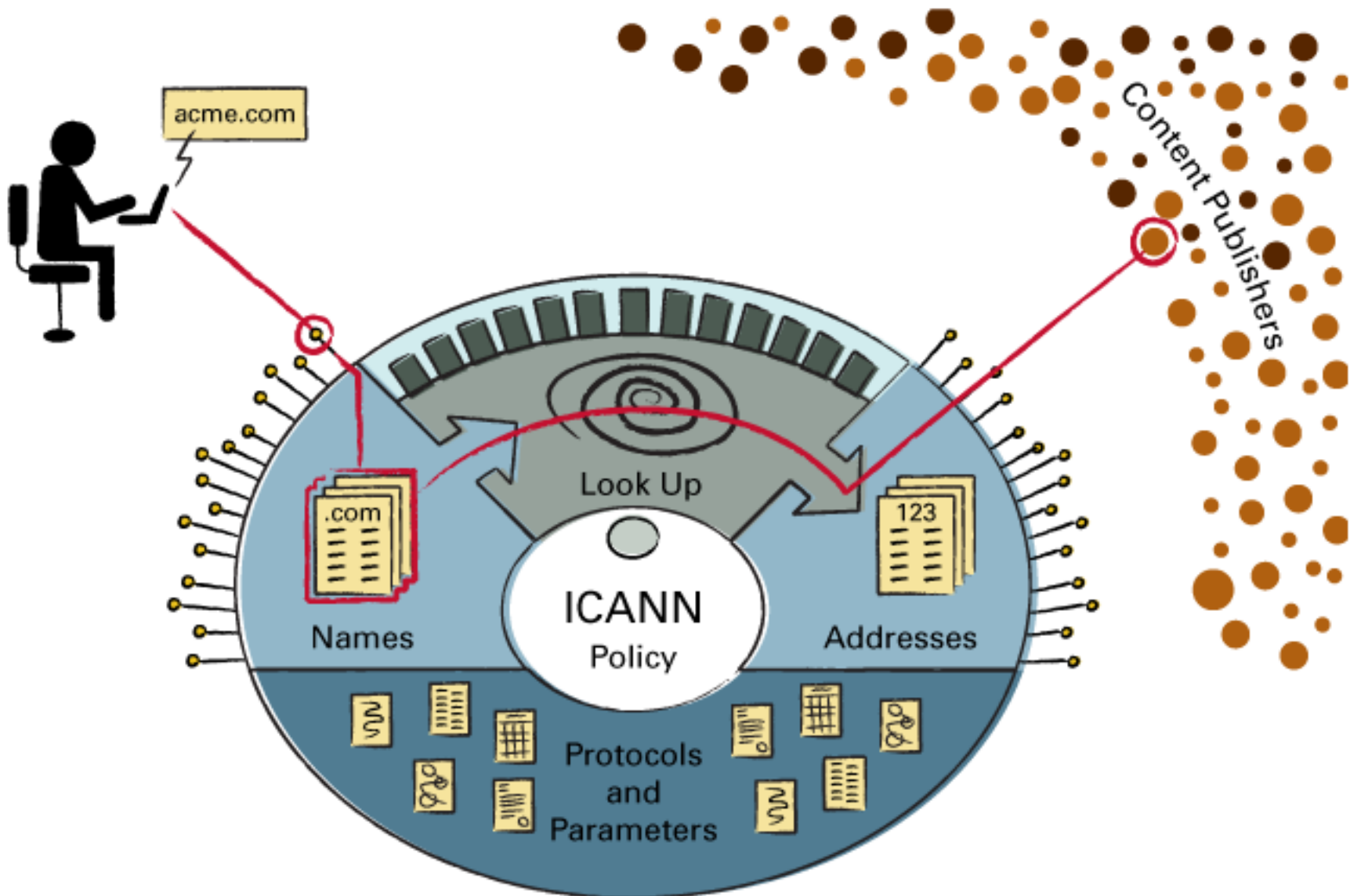


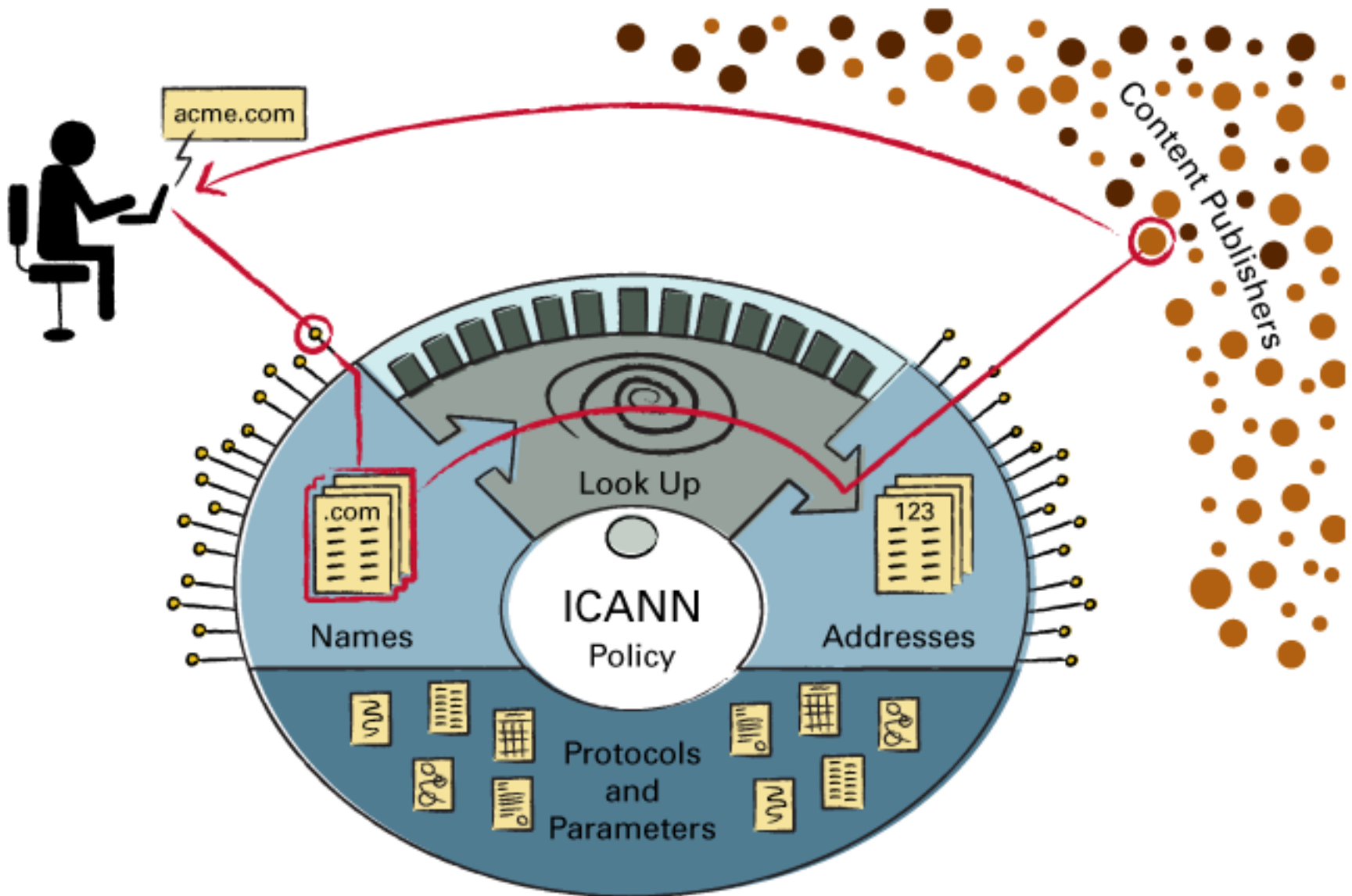
















# DNSSEC Signing Platform

- DNS constantly under attack!!
- DNSSEC = DNS + Security Extensions
- To assist developing nations to be prepared for cyber attacks
- ICANN/PCH collaboration
- No costs involved

Thank you very much!

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