Regulatory Demands to TLD Registries in Japan

26 May 2021

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Growth of Internet and DNS usage

- Internet User penetration: 70.8% - 82.8% (2005 - 2013)
- DNS queries: 5 times more (2005 - 2013)

Number of TLDs

- 5 times more (2005 - 2013)
- DNS queries
- Internet User penetration: 70.8% - 82.8% (2005 - 2013)

Complexity of DNS operation

- More DNS server instances
- More frequent zone update
- Bigger zone
- More cautious needed in operations (e.g., due to DNSSEC)

TLID operators with less experience are emerging

Reference: government's presentation in 2015 when regulation of DNS began to be discussed

Background (1/2)
As a result, not only ccTLD registry but also geo TLD registers became the scope of the Act.

Regulation in Japan (Telecommunications Business Act)

(3) Policy stability
(2) Financial stability
(1) Service stability

Major demands regarding infrastructure

Based on the idea that "DNS has become important as part of the infrastructure", DNS got caught up in this regulation. All the discussion was done under government Telecommunications Council.

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Operators subject to the regulation

- Operators who provide "specified domain name telecommunication services" were subject to the regulation.
- Operators who provide resolution services for authoritative DNS services of ccTLD (.jp) and other geo TLD Registries.
- Operators who provide resolution services for authoritative DNS services for more than 0.3 million domain names.
- Operators who provide "specified domain name telecommunication services" were subject to the regulation.
Impact on TLD registries

• Who are named by the amended law
  - JPRS (jp)
  - GMO Registry, Inc. (nagoya, tokyo, yokohama)
  - BR Registry, Inc. (okinawa)
  - Osaka Registry Co., Ltd. (osaka)

• What obligations (below are principal ones)
  - Reporting significant accidents to gov.
  - Publication of financial accounting statements (every year)
  - Significant DNS failure (at the time of accident without delay)
  - Less significant failure (quarterly)

Who are named by the amended law
Impact to JPRS

• Small Impacts
  – Publication of financial accounting statements
  – Documentation of administrative rules

• Big Impact
  – Reporting significant accidents to government
  – Define the workflow and the scope of information collection & reporting
  – Contracts with outsource DNS operators need to be amended for Registry to be able to impose SLAs and reporting responsibility on them

Small Impacts

Impact to JPRS
• We need to keep alert on this slippery slope to a formal channel.
  - What JPRS wants to publish about the incident can be reported.
  - What JPRS requests must do was publicly defined for the first time.
  - What we had been doing was the demand given by the law.
  - In a sense, this regulation currently put was somewhat acceptable to JPRS.

Overall