gTLD Registry Continuity Exercise Overview 2009

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gTLD Registry Constituency Meeting
3 March 2009
gTLD Registry Continuity Plan

- Plan developed between 2006-Jul 2008; seeks to provide protection for registrants by:
  - Ensuring adoption of “best practices”
  - Providing a mechanism for transfer of names under management in the event of registry failure
- Elements of plan incorporated into draft Applicant Guidebook for the new gTLD process and draft Base Agreement
gTLD Registry Continuity Plan
Timeline 2008 - 2009

2007

- JAN
  - Internal ICANN gTLD Registry Failover Exercise
- APR
  - After Action Report

2008

- JAN
  - Joint ICANN/Registry gTLD Continuity Exercise
- MAR
  - After Action Report
- APR
  - After Action Report
- SEP
  - ICANN Meeting Cairo
- NOV
  - ICANN Meeting Mexico City
- JAN
  - ICANN Meeting Paris

2009

- JAN
  - ICANN Meeting Cairo
- MAR
  - ICANN Meeting Mexico City
- APR
  - ICANN Meeting Paris
- JAN
  - After Action Report
- MAR
  - After Action Report
Continuity Exercise 2009

- Day-long tabletop exercise held 28 January 2009 to examine and test gTLD Registry Continuity Plan
- Scenario based, built on internal ICANN exercise held January 2008
- 65 participants included staff from ICANN and four gTLD registries — Afilias, NeuStar, PIR, and VeriSign
Exercise Development

- Scenario prepared by a core planning team of ICANN and participating registry representatives, focusing on:
  - (1) ICANN and registry roles, responsibilities, and obligations to assure service
  - (2) Registry reporting responsibilities and responsiveness, and ICANN options for action
  - (3) ICANN and registry actions, coordination, and communication to address a registry failure
Purpose and Objectives

- Further validate, test, and improve mutual processes and procedures associated with implementation of gTLD Registry Continuity Plan and other measures to assure registry continuity and resiliency

- Explore how ICANN and registries make decisions, communicate, & coordinate activities to handle crisis response and recovery

- Identify operational impacts and consequences of specific registry disruption and failure scenarios, including policy, legal, liability, security issues that could complicate response and/or impede recovery
Purpose and Objectives, cont.

- Explore roles/responsibilities of ICANN, registries, sponsors, and other organizations that would be involved in response and recovery, including timelines
- Identify readiness gaps and prevention/mitigation options that could help harden against disruptions, assist response/accelerate recovery of a failing registry
- Illuminate public perception issues and examine how public information would be effectively coordinated and communicated
General Observations

- The exercise identified many issues that need to be addressed and incorporated into gTLD Registry Continuity Plan
  - Many of these issues will need further exploration before procedures, policies, and mechanisms are developed
  - This will need to be accomplished collaboratively by ICANN with its registry partners and other Internet Community members through continued cooperation and in some cases targeted exercises or workshops

- Influx of new registries, many with potentially limited continuity planning/execution experience, poses major challenge

- Consequently, continuity-related requirements should be an integral element of new registry contractual arrangements
Selected Recommendations

- ICANN and registries should collectively further explore and better delineate roles/responsibilities, and incorporate in the gTLD Registry Continuity Plan
- ICANN in collaboration with registries and other appropriate organizations should develop criteria and a process for data collection and verification
- ICANN and registries should examine how ICANN could acquire data to monitor service levels, possibly in real-time, to supplement Monthly Reports
- ICANN needs to ensure it has a formal crisis response management function with clearly delineated roles and responsibilities and effective decision-making process
Selected Recommendations, cont.

- ICANN in collaboration with registries and other appropriate organizations should create a working group to explore issues associated with response to an imminent registry failure and develop procedures to assure resumption of failed registry’s services; this would include:
  - Developing a definition for what “continuing operations” means and procedures for ascertaining registry failure, including independent verification
  - A formal process to facilitate data recovery or “freeze” data if necessary and to migrate registry operations
  - How to deal with legal, operational, and other challenges of taking over a failed registry
Selected Recommendations, cont.

- Once registry failure contingency procedures are developed, ICANN and registries should conduct a real-world test of escrowing/recovering data from escrow, and investigate challenges to the rapid restoration of service.

- A pre-approved list of backup registries could be developed with incentives, compensation, and protection provided.

- ICANN and registries need to explore contractual language regarding potential bankruptcy of a registry and obligations of that registry to continue service.
Exercise Utility

- Participants overall rated the exercise in the good-to-excellent range, finding it a useful way to examine a wide range of complex issues and effectiveness of procedures.
- Recommendations for future exercises included focusing on specific technical issues and functional areas, using small groups to more deeply investigate issues and processes.
  - Some participants recommended including more registries; also registrars, and other Internet organizations.
- While the virtual exercise format is practical for geographically dispersed participants, where possible, staff from various organizations should participate together to facilitate information-sharing and build trust.
Next Steps

- Incorporate lessons learned from exercise into updates to gTLD Registry Continuity Plan
- Develop a prioritized Registry Continuity Improvement Action Strategy from the exercise results
- Implement the Registry Continuity Improvement Action Strategy
- Hold additional continuity exercises with a broader set of entities to explore specific technical and other issues and test continuity procedures