## Thursday 22 January 2009

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00</td>
<td>Continental BREAKFAST</td>
</tr>
<tr>
<td>09:30</td>
<td>Welcome &amp; Introductions - Craig Schwartz</td>
</tr>
<tr>
<td>10:00</td>
<td>Key Issues &amp; Messages from Recent ICANN Meeting - Tim Cole</td>
</tr>
<tr>
<td>10:30</td>
<td>Global Partnership Update - Massimiliano Minisci</td>
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<tr>
<td>11:00</td>
<td>Coffee BREAK</td>
</tr>
<tr>
<td>11:30</td>
<td>ICANN Independent Review Process (45) - Marco Lorenzoni</td>
</tr>
<tr>
<td>12:00</td>
<td>Registry Presentations: .MOBI, .ASIA</td>
</tr>
<tr>
<td>12:30</td>
<td>LUNCH BREAK</td>
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<tr>
<td>13:00</td>
<td>LUNCH BREAK</td>
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<tr>
<td>13:30</td>
<td>Internationalized Domain Names Update (45) - Tina Dam</td>
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<tr>
<td>14:00</td>
<td>New gTLDs Update (45) - Craig Schwartz</td>
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<tr>
<td>14:30</td>
<td>CRAI Update - Craig Schwartz</td>
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<tr>
<td>15:00</td>
<td>Coffee BREAK</td>
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<tr>
<td>15:30</td>
<td>DNSSEC Presentation - David Maher</td>
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<tr>
<td>16:00</td>
<td>Contractual Compliance Update - David Giza &amp; William McKelligott</td>
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<tr>
<td>16:30</td>
<td>Networking / Free Time</td>
</tr>
<tr>
<td>18:00</td>
<td>Dinner Event (RSVP Required)</td>
</tr>
<tr>
<td>19:00 - 22:00</td>
<td>Sponsored by <a href="https://www.domainsbot.com">DomainsBot</a></td>
</tr>
</tbody>
</table>

Buses depart @ 19:15 from the hotel
Welcome & Introductions

Tim Cole
Chief Registrar Liaison

Craig Schwartz
Chief gTLD Registry Liaison
Key Issues & Messages from Recent ICANN Meeting

Tim Cole
Chief Registrar Liaison
Cairo Meeting
2-7 November 2008

- 33rd International Meeting
- 1,702 people attended
- 144 different countries represented
- Next meeting will be in Mexico City, Mexico
  1-6 March 2009
What Happened and What Are The Next Steps?

- Many meetings, workshops, public forums and informal discussions were held over eight days by the different stakeholders of the ICANN model:
  - Business interests
  - Civil society
  - Governments and government agencies
  - Internet service providers
  - Registrants
  - Registrars
  - Registries
  - The technical community
Several Key Issues and Themes Evolved During The Meeting

- New gTLDs
- IDNs and IDN Fast Track
- Improving Institutional Confidence
- Independent Reviews
- DNSSEC and Security
- Business Access Agenda
- Special Guests: Dr. Hamadoun Touré and Meredith Atwell Baker
- Other Matters
New gTLDs

- Draft application guidebook released prior to the meeting for those wishing to apply for a new genetic top-level domain
- Several meetings and workshops were held in Cairo to explain the guidebook and to receive input, including introductory sessions in English and Arabic
- Discussions and presentations were held with various constituencies
- More feedback came through public forum sessions
New gTLDs – Next Steps

- Public comment has been received and will be summarized and posted shortly
- ICANN will procure evaluation services for certain aspects of the process
- Additional consultations will be held in various global locations
- Global communications plan underway
IDNs and IDN Fast Track

- Draft implementation plan for IDN Fast Track released prior to the meeting that would allow a limited number of IDN ccTLDs to be introduced before formal development process is finalized.
- Several meetings were held in Cairo to discuss IDNs, including introductory sessions in English and Arabic.
- The Fast Track and the introduction of IDNs was also discussed in two joint sessions of the chairs of the Supporting Organizations and Advisory Committees and was the subject of numerous updates provided throughout the week.
IDNs and IDN Fast Track – Next Steps

- Public comment has been received and will be summarized shortly
- IETF is finalizing IDN protocol
- Issues remain concerning such things as the relationship between IDN ccTLD operators and ICANN and how to resolve contention between existing TLDs and new ones
- Update to Fast Track implementation plan will be released before Mexico City
Improving Institutional Confidence

- Launched at Paris meeting in June
- The aim is for community to discuss possible changes to ICANN in advance of the completion of the JPA in September 2009
- Two public comment periods
- Global outreach campaign
- Three main documents:
  - Improving Institutional Confidence in ICANN
  - Transition Action Plan
  - Frequently Asked Questions
- Joint session held for Chairs of Supporting Organizations and Advisory Committees
- Public session
Improving Institutional Confidence – Next Steps

- Additional consultations sessions were held after Cairo (Africa and India)
- Implementation plan will be created to reflect issues identified by the community
- Expect plan to be published prior to Mexico City meeting
Independent Reviews

- Each of ICANN’s Supporting Organizations and Advisory Committees must undergo a review every few years to make sure that the organization as a whole continues to serves the needs of the global Internet community.
- Several reviews currently underway of to be launched soon
- Update on this provided to Board in Cairo
- New staff member dedicated to this process (Marco Lorenzoni)
Independent Reviews – Next Steps

- Reviews at different stages:
  - GNSO
  - Nominating Committee
  - ALAC
  - Board of Directors
  - RSSAC
  - SSAC
  - Others
DNSSEC and Security

- Several briefings held on the “Kaminsky hole”
- How DNSSEC functions and how it could be used to prevent such abuses
- Workshop and open meeting on topic held in Cairo
- Subject of ongoing community dialogue
Business Access Agenda

- Second ICANN meeting to offer a specific agenda and targeted meetings for business leaders (first was in Paris)
- Effort underway to more fully engage the global business community in ICANN’s processes
- Many briefings conducted on topics such as:
  - New gTLDs
  - IDNs
  - Special meeting with ICANN Board of Directors
Dr. Hamadoun Touré is Secretary-General of the International Telecommunication Union (ITU) Effort underway to more fully engage the global business community in ICANN’s processes.

Dr. Touré stressed the importance of collaboration between the ITU and ICANN.
Meredith Atwell Baker is Acting Assistant Secretary for Communications and Information at the US Department of Commerce and responsible for the relationship ICANN shares with the US government.

- She acknowledged institutional progress made by ICANN over prior 10 years.
- Stressed community involvement as vital.
Other Matters

- ICANN signed an Exchange of Letters with the managers of .eg, Egypt's country-code top-level domain
- The .mobi and .coop registries were authorized to make single-letter domains available
- A new working group will study and review the issues related to the definition of the ICANN Geographic Regions and submit proposals for community and Board consideration
Sydney was chosen as the location for the June 2009 meeting and the Board asked Staff to review the possibility of Seoul as the host for the October 2009 meeting, with the European meeting deferred until a later date.

Since it was ICANN’s annual meeting, the Board was reformed with new members Katim Touray (NomCom appointee), Thomas Roessler (TLG liaison) and Ram Mohan (SSAC liaison). Previous SSAC chair Steve Crocker became a voting member of the Board following his selection by the Nominating Committee.

Peter Dengate Thrush was re-elected as chairman; Roberto Gaetano was re-elected as vice-chairman.
Global Partner
Department Overview

Massimiliano Minisci
Regional Relations Manager: Europe
The Internationalization of ICANN and the Globalization of its Operations

- International participation / multi-stakeholder environment
  - Engagement in and responsiveness to the regions
  - ICANN’s worldwide outreach and knowledge building efforts
  - Represent ICANN at events and meetings in the regions
  - Disseminate news and developments in the regions served

- Promote international participation.
- Bring issues and feedback from the regions back to ICANN
  - Help bridge cross-cultural divides
- Assist in gathering input and perspectives from around the world
- Negotiate/support agreements, partnerships and MoU’s
  - Support ICANN’s Fellowship Program
Global & Strategic Partnership Roles

- Increase regional participation in ICANN and better address regional issues falling under ICANN's mandate
- Point of contact for feedback to ICANN from region represented (vice-versa)
- Outreach and liaison, information sharing and contribute to capacity building amongst Internet stakeholders
- Work to satisfy ICANN Strategic Plans
Regional Relations Goals

- Contribute to ICANN’s **organizational excellence** in operation
- Support **policy development processes** in the regions
- Engage proactively with **regional stakeholders** and respond to the needs of the ICANN community
- Provide support to **increase participation** in and efficiency of the ICANN multi-stakeholder environment and mandate
- Assist with **outreach activities**
Regional Relations Managers: Where in the World

- Russia and CIS: Veni Markovski
- Africa: Anne-Rachel Inné
- Australia/Pacific: Save Vocea
- Latin America: Pablo Hinojosa
- Caribbean: Shernon Osepa

- Asia: looking for candidates
Global Partnerships: From ICANN to the Regions

- Bring the multi-stakeholder model to the regions
- Engage and be responsive to the regions
- Support ICANN’s worldwide outreach and knowledge building efforts
- Represent ICANN at events and meetings in the regions
- Disseminate news and developments in the regions served
Global Partnerships: From the Regions to ICANN

- Promote international participation in ICANN
- Bring issue awareness and feedback from the regions to ICANN
- Help bridge cross-cultural divides
- Assist in gathering input and perspectives from around the world
- Negotiate support agreements, partnerships and MoUs
- Support the Fellowship Program
Thank You

massimiliano.minisci@icann.org
Organizational Review: An Overview

Marco Lorenzoni
ICANN - Director, Organizational Review
Summary of Presentation

- Objectives of OR
- What we review
- Phases of the process
- Public participation
- Coordination
- Status of reviews
The Board shall cause a periodic review (...) of the performance and operation of each Supporting Organization, each Supporting Organization Council, each Advisory Committee (other than the Governmental Advisory Committee), and the Nominating Committee by an entity or entities independent of the organization under review.

The goal of the review (...) shall be to determine (i) whether that organization has a continuing purpose in the ICANN structure, and (ii) if so, whether any change in structure or operations is desirable to improve its effectiveness.

The results of such reviews shall be posted on the Website for public review and comment, and shall be considered by the Board no later than the second scheduled meeting of the Board (...). The consideration by the Board includes the ability to revise the structure or operation of the parts of ICANN being reviewed by a two-thirds vote of all members of the Board. (...)

The Governmental Advisory Committee shall provide its own review mechanisms.
Phases of the Process

- TOR writing
- Cons. selection
- Ind.nt review
- WG work
- Implementation
- Assess.nt effects
Public Participation

TRANSPARENCY, ACCOUNTABILITY: publication of outputs

TOR writing → Cons. selection → Ind.nt review → WG work → Implement. → Assess.nt effects

PARTICIPATION: public comments, public presentations
Coordination (Steering ORs)

Board

Structural Improvement Committee

WG1, WG2, WG3, WG4, WGN

Mandate assignment

Reporting duty

Staff support

Review processes
Registry Presentations

.MOBI & .ASIA
Lunch Break

European Regional Gathering of ICANN-Accredited Registrars and gTLD Registries

Rome, Italy 22-23 January 2009
Internationalized Domain Names

Tim Dam
Director, IDN Program
Status Report Topics

- IDN ccTLD Fast Track Process
- IDNs in New gTLDs
- IDN TLDs in IANA Function
- IDNA Protocol Revision
- IDN Guidelines
- IDN Wiki
Overall Fast Track Process

- A process for introduction of a limited number of IDN ccTLDs that:
  - Are associated with the ISO3166-1 list
  - Will meet near term demand for ready territories/countries
  - Preserve stability of the DNS
  - Do not pre-empt the IDN ccPDP
  - Are not based on characters from the Latin script
  - Are non contentious

- Requested by the ICANN Board at the Paris meeting:
  - Resolved (2008.06.26.05)...submit a detailed implementation report including a list of any outstanding issues to the Board in advance of the ICANN Cairo meeting in November 2008

- Based on recommendations: [IDNC WG Final Report](#)
Draft Implementation Plan Revision

- Public comment through 7 January 2009
- Staff review of received comments
- Staff revision of implementation plan
- Revision to be issued prior to Mexico Meeting
- Module 7 topic proposed solutions to be posted prior to Mexico Meeting

M 1: General Intro & Background Info
M 2: Fast Track Eligibility Requirements
M 3: TLD String Criteria and Requirements
M 4: Technical Committee Considerations
M 5: Request and Evaluation Process
M 6: TLD Delegation Process
M 7: Discussion of Additional Topics
M 2: Fast Track Eligibility Requirements

- ISO3166-1 Representation
  - the country/territory must be on ISO 3166-1 list
    - Exception is the EU, also eligible
  - ccTLD operator can act as requestor with support from country/territory provided

- Reason for Limitations
  - Guiding Principle B and F from IDNC Final Report:
    - Experimental in nature
    - Not pre-empting the IDN ccPDP outcome

<table>
<thead>
<tr>
<th>Country Names</th>
<th>ISO 3166-1-alpha-2 code</th>
</tr>
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<tbody>
<tr>
<td>A</td>
<td></td>
</tr>
<tr>
<td>AFGHANISTAN</td>
<td>AF</td>
</tr>
<tr>
<td>ÁLAND ISLANDS</td>
<td>AX</td>
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<tr>
<td>ALBANIA</td>
<td>AL</td>
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<td>ALGERIA</td>
<td>DZ</td>
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<td>AMERICAN SAMOA</td>
<td>AS</td>
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<td>ANDORRA</td>
<td>AD</td>
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<td>ANGOLA</td>
<td>AO</td>
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<td>AI</td>
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<td>ANTARCTICA</td>
<td>AQ</td>
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<td>ANTIGUA AND BARBUDA</td>
<td>AG</td>
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<td>AR</td>
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<td>AU</td>
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<tr>
<td>AUSTRIA</td>
<td>AT</td>
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<tr>
<td>.....</td>
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</tbody>
</table>
M 3: TLD String Criteria & Requirements

- **Language and Script Criteria**
  - official language for the country/territory
    - ISO 639 language in UNGEGN Manual
    - administrative language ISO 3166-1, column 9 or 10
    - relevant public authority confirmation
      - used in official communications
      - serves as a language of administration
    - Non-Latin scripts only

- **Meaningfulness Criteria**
  - Name, part of the name, or acronym of country/territory

- **Number of Strings Per Country/Territory**
  - One (1) per official language or script

- **Technical Requirements**
  - Standard DNS and specific IDN requirements
M 3: IDN TLD Technical Requirements I

- The string must be a valid internationalized domain name, as specified in technical standards [http://www.icann.org/en/topics/idn/rfcs.htm](http://www.icann.org/en/topics/idn/rfcs.htm). This includes the following:
  - Must only contain Unicode code points that are defined as “Valid,” and be accompanied by unambiguous contextual rules where necessary.
  - Must be fully compliant with Normalization Form C.
    - See examples in [http://unicode.org/faq/normalization.html](http://unicode.org/faq/normalization.html).
  - The string must consist entirely of characters with the same directional property.
  - The string must not begin nor end with a digit (in any script).
The label must meet the relevant criteria of the ICANN Guidelines for the Implementation of Internationalized Domain Names. This includes the following, non-exhaustive, list of limitations:

- All code points in a single label will be taken from the same script as determined by the Unicode Standard Annex #24: Unicode Script Property.

- Exceptions are permissible for languages with established orthographies and conventions that require the commingled use of multiple scripts. However, even in the case of this exception, visually confusable characters from different scripts will not be allowed to co-exist in a single set of permissible code points unless a corresponding policy and character table is clearly defined.
M 4: Technical Committee Considerations

- Technical requirements are core criteria
- All IDN ccTLD strings in the Fast Track will undergo technical evaluation, proposed
  - By the entire Technical Committee
  - Issues identified will receive further review by 3-person panel
  - Decision reached within 30 days

- The Technical Committee may seek clarifications from the requestor if issues are identified
- The Technical Committee is to be formed
M 7: Additional Topics

- Relationship w/ICANN
  - Ensuring compliance with IDN technical standards
  - Possible establishment of financial contributions
  - gTLD contracts vs. ccTLD frameworks/history
- IDN ccTLD association w/ICANN community
  - Compliance with consensus policies
- Prevention of contention w/existing & applied-for TLDs
- IDN table and variant characters
Responses to the RFI Letters

- # of letters to national governments: 252
- # of letters to ccTLD operators: 252
- # of received responses: 58
- # interested in Fast Track IDN ccTLD: 32
  - Listed IDN ccTLD string: 30
  - Not listed IDN ccTLD string: 10
  - Some not interested listed Latin based string
- Total 14 languages represented
- Earliest available: within 3 months
- Latest available: end 2010
IDN gTLDs

- Included in the process for New gTLDs
- Review of contention process to include IDN ccTLDs
- IDN Technical requirements the same
  - No difference between an IDN gTLD and IDN ccTLD from technical standpoint
IDN TLDs in IANA Function

- A guide to the delegation procedure for existing country-code top-level domains is described at:
- Requests for delegation of a ccTLD comprises
  - Formal template
  - Supporting documentation
- Augmentations for IDN ccTLDs relates only to IDN specifics, such as inclusion of:

<table>
<thead>
<tr>
<th>1. A-label</th>
<th>2. U-label</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Short-form of string (English)</td>
<td>4. Language of label (ISO630-1)</td>
</tr>
<tr>
<td>5. Language of label (English)</td>
<td>6. Script of label (ISO 15924)</td>
</tr>
<tr>
<td>7. Script of label (English)</td>
<td>8. Unicode code points (list)</td>
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</table>
Rationale for IDNA Revision

- RFC4690 provides basis for revision, issues, solution
- Reasons and results of the revision:

<table>
<thead>
<tr>
<th>Current Version</th>
<th>Revised Version</th>
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<tbody>
<tr>
<td>Unicode version 3.2</td>
<td>Unicode version independent</td>
</tr>
<tr>
<td>Some/New characters excluded</td>
<td>All characters in Unicode will have a status</td>
</tr>
<tr>
<td>Not all words can be represented</td>
<td>Not all words can be represented</td>
</tr>
<tr>
<td>Exclusion Based:</td>
<td>Inclusion Based:</td>
</tr>
<tr>
<td>- Table based</td>
<td>- Property and procedure based:</td>
</tr>
<tr>
<td></td>
<td>- Protocol-valid (w/context rules)</td>
</tr>
<tr>
<td></td>
<td>- Disallowed</td>
</tr>
<tr>
<td></td>
<td>- Unassigned</td>
</tr>
<tr>
<td>App developers have difficulty in</td>
<td>Separates registration and resolution in</td>
</tr>
<tr>
<td>understanding description of standard</td>
<td>detailed steps</td>
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</tbody>
</table>
IDNA Protocol and IDN Wiki – Try It Out

- Old protocol implemented and reviewed at:
  - [http://idn.icann.org](http://idn.icann.org)
    - IDNA ToASCII
    - IDNA ToUnicode

- If you can’t type in an IDN then search for your favorite newspaper online and copy-paste it or you can copy-paste text from the IDN wiki
  - Continuously new languages, IDN resources and expertise
IDN Guidelines

- Will be a requirement for all new TLDs that implement IDNs
  - Including gTLDs and Fast Track ccTLDs
- Will be amended to be in coordination with final protocol revision
tina.dam@icann.org
http://icann.org/topics/idn
New gTLDs

Craig Schwartz
Chief gTLD Registry Liaison
New gTLDs Update

- Public comment on Draft Applicant Guidebook (English) closed 15 December
- Public comment on Draft Applicant Guidebook (translations) closed 7 January
- In excess of 300 comments received totaling more than 1,200 pages of text
Public Comment Fora

- Module 1: Introduction to New gTLDs Application Process
- Module 2: Evaluation Procedures (including evaluation criteria)
- Module 3: Dispute Resolution Procedures
- Module 4: String Contention Procedures
- Module 5: Transition to Delegation (including the draft registry agreement)
- Module 6: Terms and Conditions
Themes of Comments

- Financial considerations
- Protection of legal rights
- TLD string requirements
- Geographical names
- Contention resolution
- Draft registry agreement
Financial Considerations

- Evaluation fee: $185,000
  - Processing costs: est. $100k
  - Risk/unexpected costs: est. $60k
  - Program development costs: $26k

- Annual registry fee: $75k
Protection of Legal Rights

- Applicants to describe methods to protect legal rights
- All applicants are subject to the challenge process on infringement of legal rights
- Approved applications would be required to comply with UDRP
TLD String Requirements

- Current requirement: “Applied-for strings must be composed of three or more visually distinct letter or characters in the script, as appropriate.”

- This may be problematic for some families of scripts (e.g., Asia region)
Geographic Names

- Currently:
  - Protection of a limited set of geographic names (country and territory)
  - Statement of approval or non-objection
  - Challenge process
- GNSO recommended no reserved names list
- Governmental Advisory Committee (GAC) – advocates process similar to draft Guidebook
Contestation Resolution

- Voluntary cooperation between applicants
- Comparative evaluation – 12pt. scoring system
  - Nexus between Proposed String and Community
  - Dedicated Registration Policies
  - Community Establishment
  - Community Endorsement
- Auctions – method of last resort
Draft Registry Agreement

- Equitable treatment
- Process for changes to registry agreement
- Price controls
  - Tiered pricing
  - Effect on existing registry operators; registrants
- Structural separation (CRA Report)
Tentative Proposed Timeline

- Comment period opens 24 October
- Comment period closes 15 December
- Analysis of public comments early February
- Additional public consultations mid February
- Draft Guidebook reissued TBD
- Mexico City meeting 1-6 March
- Comment period closes TBD
- Final Guidebook complete TBD
- Board approval May Board meeting
- Final Guidebook posted TBD
- Asia Pacific meeting 21-26 June
- Application window opens TBD
CRA Report

- Study of structural separation of registry and registrar functions
- Genesis
- Public comment period and consultations
- Summary posted, analysis forthcoming
Restrictions on Acquisition of Ownership or Controlling Interest in Registrar. Registry Operator shall not acquire, directly or indirectly, control of, or a greater than fifteen percent ownership interest in, any ICANN-accredited registrar.
Structural Separation

- Common marketplace mechanism?
- Effect on competition
- Effect on innovation
- Growth (viability) of new TLDs
CRA Proposals

- Single-owner TLD
  - Registry and Registrant are the same
  - Separation could create inefficiencies
  - Security concerns and equal access

- Hybrid Model
  - Registry could own a registrar
  - Registrar could not serve the Registry’s TLD
Themes in Public Comments

- Competition
- Threshold exceptions
- Role of price caps
- Registries and Registrars should be treated equally
- Any change should be retroactive to existing TLDs
- Focus of report only on traditional model
Model Themes

- Hybrid; restriction against serving owned TLD
- Legal separation of entities, cross-ownership ok, no threshold
- Self-management to pre-determined threshold of names
- Closed TLDs
Next Steps

- Synthesis document on comments and proposed models
- Explanatory memorandum/recommendation for model
- Additional consultations including session in Mexico City
DNSSEC Presentation

David Maher
PIR
ICANN Contracting Excellence

Compliance Strategies For Superior Results

David Giza
Senior Director, Contract Compliance

William McKelligott
Auditor, Contract Compliance
Agenda

- Contractual Compliance Strategy
- Compliance Objectives
- Community Expectations
- Key Compliance Activities
- Compliance Developments
- Re-crafting Audit Scope
- Registrar/Registry Audit Calendar
- WDRP and Registrars with Resellers
Contractual Compliance

Business Strategy

- **Build and Maintain** strategic, collaborative contractual relationships
- **Use** leading-edge, innovative contractual compliance tools to create value and deliver mutual business objectives
- **Focus** on contractual aspects that really matter – trust, approach to dealing with problems, meeting stakeholder needs and providing incentives to perform
Contractual Compliance

Objectives

- **Operational** – Enhance the stability, reliability, security and global interoperability of the Internet
- **Risk Assessment** – Identify, mitigate and manage ICANN’s most significant contractual risks
- **Compliance** – Ensure contracted parties adhere to norms the Internet community has established in registry and registrar agreements and ICANN policies
Contractual Compliance
Objectives (cont’d)

- **Enforcement** – Give strength or force to the terms of the Registrar Accreditation Agreement (RAA) and Registry Operator Agreements
- **Business Partner** – Contractual compliance team works collaboratively with contracted parties to achieve community expectations
Community Expectations of Contractual Compliance

- Prevent competitive advantages for non-compliant registrars and their resellers
- Enforce contracts equitably amongst all parties
- Transparency and openness through consistent reporting
- Fairness
Contractual Compliance Team

David Giza
david.giza@icann.org
Senior Director

Stacy Burnette
stacy.burnette@icann.org
Director

Khalil Rasheed
khalil.rasheed@icann.org
Compliance Audit Manager

William McKelligott
william.mckelligott@icann.org
Auditor

Constance Brown
constance.brown@icann.org
Compliance Program Specialist
Contractual Compliance Team

Key Activities

- Relationship Development
  - Site Visits
  - Regional Gatherings
- Daily Compliance Responsibilities
  - Respond to Compliance Inquiries
  - Manage Consumer Complaints
  - Conduct Audits
  - Enforce Contract Terms including Consensus Policies
    - UDRP, WDRP, Inter-Registrar Transfer Policy and Expired Domain Deletion Policy
Contractual Compliance
Developments

- Contractual Compliance Newsletter
  - Published Monthly
    - New Schedule (quarterly)
  - Contains Information Regarding:
    - Enforcement Statistics
    - Audit Observations and Findings
    - Customer Service Statistics
    - Advisories
    - Compliance Processes
    - Upcoming Events
  - [http://www.icann.org/compliance/newsletter/](http://www.icann.org/compliance/newsletter/)
Contractual Compliance
Developments (cont’d)

- **2008-2009 Staff Additions**
  - Senior Director (Marina del Rey)
  - Auditor (Washington, DC)

- **2009-2010 Proposed Staff Additions**
  - Contractual Compliance Program Manager – Whois Matters (TBD)
  - Compliance Analyst (TBD)
  - Auditor (Australia)
Re-Crafting Audit Scope

- Audit Provision in updated RAA
- Consultations with Registries and Registrars (forthcoming)
- Ensure Audit Reports are more useful
- What information would be useful to you?
- Send your comments to William at: william.mckelligott@icann.org
Compliance Audit Activities
Prior/Ongoing

- Registrar Audits
  - Web Site Content - Renewal & Deletion Policies
  - Primary Contact Information
  - Fees
  - Data Escrow/Retention
  - Insurance Verification
  - Whois Data Accuracy Investigation
  - Whois Data Reminder Policy
Compliance Audit Activities
Prior/Ongoing (cont’d)

- Registrar Audits
  - Code of Conduct
  - Fees
  - Performance Specifications
  - Reserved Names
Compliance Studies
Ongoing

- Whois Data Accuracy
  - Assess Accuracy of Registrant Data in the Whois Database

- Registrar Privacy/Proxy Registration Services
  - Assess the Extent to Which Registrants Are Using Privacy/Proxy Registration Services
Registrar/Registry Audit Calendar

- Registrar Transfer Policy Audit
- Registrar Deletion & Renewal Policies Web Site Audit
- Registry Reporting Requirements under the AGP (Add Grace Period) Limits Policy Audit
Registry Site Visit Schedule

- ICANN site visits with Registry operators to introduce and familiarize new staff with Registry facilities
- VeriSign, Inc. site visit December 2008
- 3 site visits planned in 2009
  - Q2 NeuStar
  - Q3 Afilias Limited
  - Q4 Registry Services Corporation
WDRP 2008

- 876 Respondents (about 93%)
- 109 Registrars used LogicBoxes, a third-party vendor, to send notices to Registrants
- Registrars have unique business relationships with Resellers

Comments:
- “…it is difficult to monitor notices sent through their reseller”
- “…registrants are confused by notices sent from the registrars that were secured by their resellers”
- “[One registrar] receives complaints from their resellers about contacting their customers”
Dinner Event
Buses Depart Hotel at 19:15
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00</td>
<td>Continental <strong>BREAKFAST</strong></td>
</tr>
<tr>
<td>09:30</td>
<td>Welcome &amp; Introductions - Craig Schwartz</td>
</tr>
<tr>
<td>10:00</td>
<td>ICANN Policy Updates - Marika Konings</td>
</tr>
<tr>
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<tr>
<td>11:00</td>
<td><strong>Coffee BREAK</strong></td>
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<tr>
<td>11:30</td>
<td>Security Update - Greg Rattray</td>
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<tr>
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<td>12:30</td>
<td>Registry Presentations: .CAT, .ORG</td>
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<td>15:00</td>
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<td>16:00</td>
<td>Status Update on RAA Proposed Amendments - Tim Cole</td>
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<td>16:30</td>
<td>Add Grace Period Update - Craig Schwartz</td>
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</tbody>
</table>
Welcome & Introductions

Tim Cole
Chief Registrar Liaison

Craig Schwartz
Chief gTLD Registry Liaison
ICANN Policy Update

Marika Konings
Policy Director
ICANN Structure

Address Supporting Organization
- Regional Internet Registries
  - ARIN
  - APNIC
  - AfriNIC
  - RIPE NCC

Generic Names Supporting Organization
- Intellectual property
- ISPs
- Businesses
- Registrars
- Non-Commercial

County Code Names Supporting Organization
- ccTLD Registries
  - .us, .uk, .au, .it, .nl, and so on

ICANN Board of Directors
- ASO
- GNSO
- CCNSO
- GAC
- RSSAC
- SSAC
- ALAC
ICANN Policy Staff

- Denise Michel - Vice President, Policy Development (California, USA)
- Liz Gasster - Senior Policy Counselor (GNSO) (California, USA)
- Margie Milam - Senior Policy Counselor (GNSO) (California, USA)
- Robert Hoggarth - Senior Policy Director (Washington, DC, USA)
- Marika Konings - Policy Director (GNSO) (Brussels, Belgium)
- Glen de Saint Gery - Secretariat (GNSO) (Cannes, France)
- Bart Boswinkel - Senior Policy Advisor (ccNSO) (Netherlands)
- Gabriella Schittek - Secretariat (ccNSO) (Warsaw, Poland)
- Nick Ashton-Hart - Director for At-Large (Geneva, Switzerland)
- Heidi Ullrich - Manager At-Large Regional Affairs (California, USA)
- Mathias Langenegger - Secretariat (At-Large) (Geneva, Switzerland)
- Dave Piscitello - Senior Security Technologist (SSAC) (S. Carolina, USA)
- Marilyn Vernon - Executive Assistant (California, USA)
Current Policy-Related Activities

- GNSO Improvements
- WHOIS
- WHOIS and IDNs
- Inter-Registrar Transfer Policy Review
- Fast Flux Hosting
- Registration Abuse Policies
- Post-Expiration Domain Name Recovery
- IDN ccTLDs
- ASO – Global policy for remaining IPv4 address space
- SSAC Activities
- At-Large Summit
GNSO Improvements –
Background and Key Objectives

- Like all ICANN structures, the GNSO is subject to periodic independent review
- Current review began in February ’05
- Key objectives of GNSO review during this period have been:
  - Maximizing the ability for all interested stakeholders to participate;
  - Ensuring recommendations can be developed on gTLD “consensus policies” for Board review, and that the subject matter of “consensus policies” is clearly defined;
  - Ensuring policy development is based on thoroughly-researched, well-scoped objectives, and are run in a predictable manner that yields results that can be implemented effectively; and
  - Improving communications and administrative support for GNSO objectives.
GNSO Improvements – Five Main Areas of Improvement

- Based on input from the independent review effort, a working group of the ICANN Board Governance Committee (BGC-WG) focused on five main areas for GNSO improvements:
  - Adopting a Working Group Model
  - Revising the Policy Development Process
  - Restructuring the GNSO Council
  - Enhancing Constituencies
  - Improving Communications and Coordination with ICANN Structures
- The GNSO has established Work Teams to develop specific implementations ideas for each of these areas.
GNSO Improvements – 2008 Developments

- February: In New Delhi, ICANN Board accepted BGC-WG GNSO Improvements Report
- March/April: Public Comment Forum On BGC-WG Recommendations – Staff implementation planning and GNSO implementation Planning Team efforts
- May: Structure for implementation developed by GNSO Implementation Planning Team
- June: ICANN Board approved BGC-WG Recommendations except Council structure – special consensus working group (CWG) formed
- July: CWG deliberated and reported to ICANN Board
- August/October: Board decisions regarding new Council Structure and GNSO approved implementation structure
- November/December: GNSO Steering Committees/Work Teams began implementation planning/work
GNSO Improvements – More Information/Volunteers/Input

- For more information about the effort (background and the latest developments) see the GNSO Improvements Information Page at: http://gnso.icann.org/en/improvements/

- Community Volunteers for the GNSO Improvements Implementation Work Teams can contact: gnso.secretariat@gnso.icann.org
WHOIS Background & Update

- Oct. 2007 – GNSO Council decided that a comprehensive, objective understanding of key facts on WHOIS will benefit future policy development; and initiated steps to determine what studies should be done.
- Public input was solicited, analyzed; categories identified include:
  - WHOIS misuse
  - Compliance with data protection laws, RAA
  - Availability of privacy services
  - Demand and motivation for use of privacy services
  - Impact of WHOIS data protection on crime and abuse
  - Proxy registrar compliance with law enforcement and dispute resolution requests
  - WHOIS data accuracy
WHOIS Studies
Recent Activities

- March 2008 – Council formed group to study options
- April – GAC published recommendations for further WHOIS studies, see: [http://www.icann.org/correspondence/karlinstor-thrush-16april08.pdf](http://www.icann.org/correspondence/karlinstor-thrush-16april08.pdf)
- June – Study group agreed studies should only be done if resulting information advances public policy goals; disagreed about whether studies should be done
- June – GNSO Council convened group to draft hypotheses for each study recommendation, completed by end of August
- September to present – Constituencies and Council are discussing which studies, if any, should be assessed for cost and feasibility. Staff will provide cost estimates for selected studies. Weekly Council calls have been held since Cairo to assess priorities.
- Subsequently, Council and Staff will consider what data gathering and studies should be pursued.
WHOIS – References to Current Documents and Information

- Link to GNSO WHOIS resolution of 31 October 2007
  http://gnso.icann.org/resolutions/#200710
- WHOIS Study Group Report to the GNSO Council, 22 May 2008
- WHOIS Hypothesis WG Report, 26 August 2008
  http://gnso.icann.org/issues/whois/whois-study-hypothesis-group-report-to-council-26aug08.pdf
- GAC WHOIS study recommendations of 16 April 2008
  http://www.icann.org/correspondence/karlins-to-thrush-16april08.pdf
- September 2008 ALAC statement on WHOIS studies
  https://st.icann.org/alac-docs/index.cgi?statement_on_whois_hypothesis_working_group_studies_al_alac_st_0908_3
WHOIS and IDNs

- IDN standards only apply to domain name composition, and do not cover how registration information is collected, stored and displayed in WHOIS. This is left as a local matter for registrars and registries.
- Are there general principles that registries and registrars could adopt to minimize any potential negative impact on WHOIS?
- Should the ICANN community consider a successor to WHOIS that can better accommodate the anticipated needs of the community and IDN TLDs?
WHOIS and IDNs
Potential Future Studies

- Study the inclusion of international characters in domain registration records and possible impacts on WHOIS services. Specifically, does the presence of international characters in domain registration records create new opportunities for exploitation or misuse of WHOIS services?
- Study how the presence of international characters in domain registration records will affect WHOIS and the user communities who rely on WHOIS for a wide range of acceptable uses.
- In considering future studies of WHOIS, in relation to the introduction of IDN TLDs, registry and registrar experiences with implementing IDN second level labels should be considered.
Inter-Registrar Transfer Policy

- GNSO review of inter-registrar transfer policy identified 20+ potential areas for clarification and improvement
- Total of 6 PDPs planned to address specific categories
- First PDP – reasons for denial of transfer requests – new text proposed for reasons #8 and #9 - Approved
- Remaining 4 PDPs will be addressed consecutively with possibility of overlap as resources permit
IRTP Part A deals with “new IRTP issues” such as exchange of registrant e-mail addresses between registrars, electronic authentication and partial bulk transfers.

Working Group aims to finalise report and recommendations following review of public comments and final constituency statements.

Deadline for comments: 30 January 2009

Fast Flux Hosting

- Techniques used by cyber-criminals to evade detection by modifying rapidly IP addresses and/or name servers
- SSAC advisory issued January 2008
- Staff published Issues Report 26 March, recommended additional fact finding and research to develop best practices and guidelines
- May 2008 – GNSO launched PDP and created a chartered working group to answer several questions about scope and impact of fast flux activity and potential solutions
Fast Flux Hosting (cont’d)

- Working Group convened on 11 July 2008
- Working Group published Initial Report – Open for public comment
- WG is especially looking for input on potential next steps. Current ideas include:
  - Redefine issue and scope of charter
  - Explore the possibility to involve other stakeholders in the policy development process (e.g. ccNSO, GAC but also external stakeholders such as APWG)
  - Explore other means to address the issue instead of PDP
  - Highlight which solutions could be addressed by policy development, best practices and/or industry solutions
  - Consider whether registration abuse policy provisions could address fast flux
  - Fast Flux Data Reporting System
Registration Abuse Policies

- Issues report submitted to the GNSO Council on 29 October 2008
- Report provides overview of registration abuse provisions in registry and registration agreements
- Report finds that there is no uniform approach by registries-registrars to address abuse, no universally accepted definition of what constitutes abuse
Registration Abuse Policies (cont’d)

- Report does not identify how these registration abuse provisions are adhered to, are implemented in practice or deemed effective in addressing registration abuse.
- Report recommends GNSO Council to review and evaluate findings, identify specific policy issues and undertake further research.
- GNSO adopted motion on 18 December 2008 to form a drafting team to create a proposed charter for a working group to investigate the open issues documented in the report.
Post-Expiration Domain Name Recovery

- Issues report requested by ALAC
- Submitted to the GNSO Council on 5 December 2008
- ALAC request alleges that current measures ‘have proven to be ineffective,’ ‘loss of domain name can cause significant financial hardship’ and previous attempts to instill predictability for post-expiration domain name recovery are ‘not successful’
Post-Expiration Domain Name Recovery (cont’d)

- Issues report provides overview of requirements and practices related to the Auto-Renew Grace Period and Redemption Grace Period
- Report finds amongst others that current grace periods might not address concerns raised by ALAC, RGP is not a consensus policy, auto-renewal policies are voluntary and certain provisions in registration agreements might not be understood by registrants
Post-Expiration Domain Name Recovery (cont’d)

- Report recommends initiation of PDP to review and consider changes addressing whether adequate opportunity exists for registrants to redeem expired domain name, expiration related provisions in registration agreements are clear enough, adequate notice exists re. expirations, additional measures are needed to indicate a registration has expired, to enable the transfer of a domain name in RGP

- Report recommends that further information should be sought from ICANN compliance staff to better understand how RAA provisions on availability of information on deletion and auto-renewal policy are enforced
IDN ccTLDs – Fast Track

- Long-term policy and shorter-term fast track processes being developed
- First draft Implementation Plan published prior to Cairo meeting. Comment period closed on 7 January 2009. Staff will summarize and consider public comments and will submit a detailed second version Implementation Plan prior to March 2009 Mexico meeting.
- Core issues open for continued discussion:
  - Legal arrangement IDNccTLD and ICANN;
  - Financial contribution IDNccTLDs to ICANN;
  - Potential contention Issues IDN ccTLD string and existing TLDs and TLD string under application in new gTLD process.
A policy for handling of the last IPv4 address blocks in the IANA free pool has been developed by the RIRs.

The policy states that when the IANA free pool has been reduced five/8 IPv4 address blocks, one block shall be allocated to each of the five RIRs.

The policy has been adopted by all RIRs and is expected to reach the ICANN Board during January 2009 for Board decision in Mexico City.
Recent Publications:
- SAC030: Survey of DNSSEC Capable DNS Implementations
- SAC033: Domain Name Registration Records and Directory Services

Activities:
- Studying domain hijacking incidents involving high value domain registrants
- Preparing a “DNSSEC status report” for Mexico City ICANN meeting to meet commitments SSAC made in SAC026 Statement to ICANN and Community on DNSSEC deployment
ICANN Paris meeting: ICANN Board of Directors resolves to fund a global summit of internet users, which will take place during the ICANN Mexico City meeting in March 2009.

Approximately 95 representatives from Internet user organizations from all five ICANN geographic regions will participate in the Summit.

Goal: Strengthen the global network of Internet users involved in ICANN and develop common policy positions on current ICANN policy areas.
How To Keep Up To Date And Participate?

- Sign up for the monthly Policy Update

- Submit public comments and participate in Working Groups
  [http://gnso.icann.org/announcements/](http://gnso.icann.org/announcements/)

- Check the ICANN web site on a regular basis
  [http://www.icann.org](http://www.icann.org)
Thank You
Questions/Comments Welcome: policy-staff@icann.org
Coffee Break

EUROPEAN REGIONAL GATHERING
OF ICANN-ACCREDITED REGISTRARS AND gTLD REGISTRIES
Rome, Italy 22-23 January 2009
Collaboration for a More Secure DNS and Internet

Greg Rattray
ICANN Chief Internet Security Advisor
Overview

- Internet as an Ecosystem & Rising Challenges
  - Changing Expectations
- The DNS, Security and ICANN/Registry/Registrar Roles
  - Current responsibilities to address threats/risks to DNS users, registrants, registries/registrars themselves; system as a whole
  - ICANN role and activities
  - Discuss how Registries/Registrars help themselves and the overall system?

How can ICANN enhance its contribution?
The Internet as an Ecosystem

- Built as experiment; now part of everyday life
  - Assumed benign, cooperative users
- Now involves a wide variety of systems, stakeholders, opportunities & risks
  - Governments, corporations, civil society, criminals
- Malicious actors now use Internet
  - Growing centers of gravity – militarily, economically, socially
  - Anonymity & ability to leverage 3rd Parties for Bad Acts
- Will we a tipping point in inability to address growth of malicious activity and capability?
  - My mother-in-law: Can I safely use my credit card?
Vulnerability Statistics

Today we receive more than 25 vulnerabilities every day.

<table>
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<tr>
<th>Year</th>
<th>2000</th>
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<td>Vulnerabilities</td>
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<td>4,129</td>
<td>3,784</td>
<td>3,780</td>
<td>5,990</td>
<td>8,064</td>
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Note: The number of estimated reports for 2007 is based on the current volume being reported.
Information from SE/CERT CC Jan 2008.
**Attack Sophistication vs. Required Knowledge**

- Email propagation of malicious code
- "Stealth"/advanced scanning techniques
- Widespread attacks using NNTP to distribute attack
- Widespread attacks on DNS infrastructure
- Executable code attacks (against browsers)
- Automated widespread attacks
- GUI intruder tools
- Hijacking sessions
- Internet social engineering attacks
- Packet spoofing
- Automated probes/scans
- Widespread denial-of-service attacks
- Techniques to analyze code for vulnerabilities without source code

**1990**
Information from SE/CERT CC Jan 2008

**2004**

- DDoS attacks
- Increase in worms
- Sophisticated command & control
- Anti-forensic techniques
- Home users targeted
- Distributed attack tools
- Increase in wide-scale Trojan horse distribution
- Windows-based remote controllable Trojans (Back Orifice)
Internet as Ecosystem: Levels of Challenges

- For specific actors
  - Secure Data (e.g. hacked data base)
  - Malicious disruption (e.g. DDOS vs. DNS server)
  - Are your partners/suppliers (resellers) secure?

- For system as whole
  - Weak actor creates externalities
    - Rise of zombies and bots; misuse of the DNS
  - Infrastructure disrupted – DDOS vs. DNS roots/TLDs

Who’s Responsible? Accountable?
Rise of Organized Crime via Internet

- Very large scale cyber fraud and extortion
- Drives market for tools, services and products
  - Root kits/key loggers; web sites; credit cards & identities
- Presence of commercial “hubs” of mailcious activity
  - RBN (see iDefense); 3322.org (see Business Week)
  - Web-hack.ru forum offering a “quality DDoS service for $80 to 250 USD for a 24-hour attack” (iDefense)
- Bot nets increasing in size and sophistication
  - 1.5M sending spam; Stormnet alone 1+ M?; 150M total¹
  - Techniques to hide - one-time use; fast-flux over DNS

¹ Secure Computing July 2007; Information Week Sep 07; Vint Cerf at Davos 2007
How A Phishing Attack Works

Tunnel Established

Install this software!

Target: Users

Target 1

Internet
WWW Proxy
Mail Server
Malicious Uses of Bots & Botnets

- Denial of Service Attacks
  - Extortion; Competition; Punish; Political
- Spamming and Traffic Monitoring
- Keylogging and Mass Identity Theft
- Pay-Per-Click Systems Abuse
Bot Nets and Complexity of Attacks

**Actors Involved**
- Code Developers
- Botnet Developer (t = X)
- Bot Controller (t = Y)
- Owners of assets (C2 and bots)
- DNS operators
- ISPs
- Target (s) (to include firewall, IDS, proxies, targeted network asset)

Who’s responsible?
Who should be subject of retaliation?
- What type? Legal notice, arrest, digital disruption?
Who should be part of a cooperative mitigation and defense?

Attack the swamps, not the fever
“Fast Flux” Challenges

- Use large number of fast-changing domain records and associated servers using round-robin IP addresses and a very short Time-To-Live (TTL)
  - Stormnet estimate: 2,000 hosts, 384 providers in over 50 countries
  - Sophisticated techniques: use of load balancing and proxy redirection; “motherships” employ web server virtual hosting configurations able to manage the content availability for thousands of domains simultaneously on a single host
- Honeynet Project: “Robustness, obfuscation capabilities, scalability and increased availability of fast-flux service produce an increased ROI for criminals”

Who analyzes/identifies?
Who decides on “taking off net?”
Nations, Security and the Internet

- Governments see themselves as ultimate arbitrators of responsibility (sovereignty); security about control
- Internet is challenging to core values
  - Control infrastructure/dialogue vs. innovation/privacy
- Rising threats; rising concern; ID responsibility
  - At actor level – standards; regulate; courts
  - At system level – who “governs” Internet
    - ICANN role vis-a-vis ITU
    - Who provides ensure the DNS is available and not misused?

How to satisfy government stakeholders?
Events and Calls for Action

- Rising tide of events
  - Continuing DOS attacks against core DNS operations; hijacking of registrant DNS resolutions
  - Business Week article on eSpionage: Threat is advanced & persistent; Traditional defense do not work: adversaries after crown jewels
  - Cyber attacks on Estonia and Georgia (May 2007 and xxx)
- US Cyber Security Initiative; NATO Cyber Defense; UN initiatives to include arms control proposals

Are ICANN/registries/registrar seen part of the problem?
The DNS, Risks and Security/Resiliency Roles

- Significance of DNS – almost everyone uses to get around Internet
- Managed as a Distributed System with Diffuse Roles and Responsibilities
  - User; ISP; Registry/Registrar; ICANN
- Must address a range of threats and risks
  - To User; to Registry; to System as a whole

We as a community need to understand/map the DNS risk landscape
Challenges Related to New gTLDs

- Stability of the root server system and potential for disruptive impacts to users
  - Also relates to many changes at once – IPv6; IDNs; DNSSEC
  - SSAC and RSSAC plan to address
- Fears of increasing space for malicious actors to hide in larger DNS space
  - Will ICANN be able to effectively work with registry and registrars to limit abuse?
ICANN Roles and Responsibility

- **ByLaws:** To coordinate, overall, the global Internet's system of unique identifiers, and to ensure stable and secure operation of the Internet's unique identifier systems
- **Core:** Ensure system stability and resiliency; critical infrastructure protection; protect registrants
- **Contributor:** Identification of DNS abuse; challenges to Internet security
- **Not content control:** not involved related to cyber espionage and cyber war

ICANN currently drafting plan to articulate role and contributions
What is ICANN Doing?

- Continued implementation of agreements
  - With Registries/Registrars on Data Escrow, WHOIS, other provisions
- Participating in Anti-Phishing Working Groups & other forums to understand effective approaches to identify abuse
- Enhancing and exercising the gTLD registry continuity plan
- ccTLD capacity-building initiative – managerial and technical training in planning and response to disruptions (DDOS focus)
- DNSSec – working towards implementation at root; multiple stakeholders have a say in deciding on approach
- DNS Security, Stability & Resiliency symposium early February

How can ICANN help foster capacity and resiliency?
gTLD Continuity Planning and Exercises

- Per its Strategic Plan, ICANN has sought to establish a plan to address the financial, technical, or business failure of a registry operator
- Most recent plan version – July 2008. Key provisions involve:
  - Information Sharing
  - Event/Crisis Management & Communications
  - Business Continuity; Data Security and Escrow
  - TLD Transition & Registry Closure
- ICANN has begun associated exercise program to evaluate and improve the plan
- Next step: Establish program for live testing of data escrow and recovery
gTLD Registry Failover Exercise – Jan 08

- 2008 exercise involved five scenarios touching on following elements:
  - Escalation of temporary issues
  - Implications of DNSSEC
  - Failure of a sponsored TLD
  - IDNs
  - Natural disaster
  - Government/regulatory action on gTLD
  - DDoS attack/terrorist attack
  - “Bad” acts
- Use to refine gTLD continuity plan and begin to establish implementation notes
  - Tabletop exercise of plan occurs next week
ccTLD Security and Resiliency Capacity Building Initiative

- Partnered with ccTLD regional organizations to provide training/exercise events to develop capacity
  - Managerial-level Attack and Disaster Response Planning course – process & best practice (two sessions already)
  - Technical-level hands-on defense techniques in simulated threat environment
  - Workshop to establish exercise programs
- Multiple events planned for Winter/Spring 09
  - Exercise Manila Feb; ADRP Pre-Mexico City Mtg; technical training in Tanzania April; joint ADRP w/CENTR in May

Looking to leverage lessons and partners
Registry/Registrar Critical Functions

1. Maintenance of name servers and DNS for domains
2. Shared Registration System
3. WHOIS service
4. Registrar Billing and Accounting Information
5. Data Security and Data Escrow
6. IDN Tables (if IDNs are offered by the registry)
7. DNSSEC Keys (if DNSSEC is offered by the registry)
Risks to Registries/Registrars

- Loss of data integrity; misuse of DNS
  - Establishing chain of trust by employees, customers, partners & DNS/WHOIS servers
  - Registrars targets of phishing themselves (SSAC 028)

Ensure processes can identify & recover from hijacked, corrupted and lost data?

- Inability to change or provide data for designated purpose - DDOS vs. DNS Server

Ensure processes agreements can ensure resilience in the face of disruption?
Risks to DNS as a Whole

- Large-scale Cache Poisoning
- Registry/Registrar Failures (in varying degrees)
- Root server/TLD DDOS Attacks
Responsibilities to Address Risks by Registry/Registrar

- Per agreements (with ICANN & customers)
  - Data Integrity and Escrow
  - Enforcement of WHOIS accuracy
  - Modifications to allow DNSSec implementation

Are agreements properly focused? Need for collaborative mechanisms focused on security?
Possible Practices to Stem Abuse?

- Ensure effective contact for abuse complaints and procedures for acting as appropriate
- Actively seek to identify fraudulent domain registration
- Actively seek to identify and act against domains hosting abusive activity
- Ensure registrar/reseller itself has effective anti-phishing programs
- DNSSEC – protect users & system against cache poisoning; effective implementation crucial

What is the best approach to collaboratively establishing such a set of effective practice?

Resources: APWG Anti-Phishing Recommendations for Registrars; SSAC 028
Potential Steps to Improve Investigation of Abuse?

- Establish dedicated abuse contact
  - Ensure this is part of Whois response; consistent with other records; prominent on web site
  - Contact responsive and effective; work collaboratively to establish metrics
- Require resellers to do the same
- ICANN maintain comprehensive abuse contact list and publish via internic.net
  - Cooperate to safeguard against false complaints
  - Periodically verify contact accuracy
Mitigating Disruption of Registry/Registrar Operations

- Infrastructure Approaches (More Server Capacity, Peering, and Anycasting) – protect assets against denial of service
- Assessing, Planning & Exercising – understand risks, establish processes, improve capacity
Utility of Exercises

- Provide operational environment to evaluate people, processes, and technology
- Assessment
  - Provides more accurate measure of how effective an enterprise’s response will be
  - IT Security compliance checking is static snapshot in time
- Training – make people capable & adaptable
  - Anticipate difficult situations; practice response
Registry Presentations

.CAT & .ORG
Registrar Data Escrow & RAA Terminations Update

Mike Zupke
Registrar Liaison Manager
RDE Update

- Statistics on ICANN dashboard
- 812 Registrars currently enrolled w/Iron Mountain
- 97% of gTLD name data currently in escrow
- 1 third party escrow agent approved (NCC Group)
RDE Update (cont’d)

- Latest Developments:
  - Currently conducting manual audits of RDE data of selected registrars
  - Augmented deposit file validation to be implemented by March 2009
  - Systematic (random and selective) auditing to commence by July 2009
  - RDE data crucial to efficient transition in recent termination
RAA Terminations

- De-accredited Registrar Transition Procedure adopted by Board
  - Developed through community consultation
  - De-accredited registrar may propose gaining registrar
  - ICANN posts RFI & select gaining registrar by negotiation, RFP, or auction
  - Applies to all RAA terminations (voluntary and involuntary)
De-Accredited Registrar Transition Procedure – Typical Scenario

1. Assess available registration data
2. Solicit proposal from terminated registrar
3. Post RFI
   - Short (1 week) response time
   - Average 8-9 qualification questions
4. Negotiate with qualified applicants
   - Can take 1-2 weeks
   - Weighted follow-up questions
   - Based on objective criteria
RAA Terminations (cont’d)

- Experience with DRTP
  - Activated 7 times in past year
  - 5 RFIs posted, 1 diverted, 1 pending
  - 2 “voluntary” transfers, 3 “involuntary” transfers
  - Transition time reduced from ‘weeks’ to ‘days’ through use of DRTP
  - Data availability challenge remains - in some cases resulting in litigation
Registrar Constituency Presentation

Jon Nevett
Chair
Why Do Registrars Join?

- The Registrar Constituency Represents and Advances the Interests of Registrars at ICANN
- All Registrars Benefit By Joining:
  - Communicate with Peers
  - Attend Constituency Meetings
  - Use Mailing Lists
  - Learn First about Issues that Affect Registrars
  - Participate in ICANN Policy Development
  - Elect Representatives to ICANN GNSO
  - Vote on Issues of Importance to the Community
  - Participate in Petitions to the ICANN Community
  - Represent Registrars on Task Forces and Other Working Groups
Why Join – Hot Issues

- Contract Issues – Registrar Accreditation Agreement, Registry Agreements, & Registry-Registrar Agreements
- Recent/Active GNSO Task Forces/Working Groups
  - Transfer Policy
  - Domain Name Tasting
  - New TLDs
  - Registration Abuse Policies
  - Expired Names Practices
  - Whois Issues
  - IDNs
  - Fast Flux
- GNSO Reform – Impacts on registrar influence
- Compliance Efforts
- ICANN Budget – How much registrars pay to ICANN
How To Join?

- To join, contact the Registrar Constituency Assistant – Cristin Donahue – at cristin@icann-registrars.org
- Constituency Officers
  - Chair: Jon Nevett
  - Vice Chair: Jean Christophe Vignes
  - Treasurer: Jeff Eckhaus
  - Secretary: Mason Cole
- GNSO Representatives
  - Adrian Kinderis (Asia-Pacific)
  - Tim Ruiz (North America)
  - Stephane Van Gelder (Europe)
- Cost: US $500 per year for 2008-09 Fiscal Year (July-June)
  - Dues will be pro-rated for partial year
  - Paid to Constituency (not ICANN)
Coffee Break

European Regional Gathering of ICANN-Accredited Registrars and gTLD Registries

Rome, Italy  22-23 January 2009
RAA Update

Tim Cole
Chief Registrar Liaison
Add Grace Period Update

Craig Schwartz
Chief gTLD Registry Liaison
Add Grace Period (AGP) – Update

- AGP Limits Policy
- AGP Budget Provision
- AGP Delete Statistics
- Next Steps
AGP Limits Policy

- ICANN community response to Domain Tasting
- ICANN Board adopted on 26 June 2008
- ICANN advisory to implement posted on 17 December 2008
- Policy effective date: 1 April 2009
During any given month, an applicable gTLD Operator may not offer any refund to a registrar for any domain names deleted during the AGP that exceed (i) 10% of that registrar's net new registrations (total net 1-10 year adds) in that month, or (ii) fifty (50) domain names, whichever is greater.

A Registrar may seek an exemption from the application of such restriction in a specific month, upon the documented showing of extraordinary circumstances.
AGP Limits Policy (cont’d)

- AGP limits are calculated monthly on a per-TLD basis
- Policy requires ICANN staff to monitor and report AGP activities to GNSO at six-month intervals for a period of two years
- Results of activities to be publicly posted
- Post-implementation analysis will be conducted and additional policy work may be performed
ABC Registrar:
- registers 1,000 names
- deletes 250 names during AGP
- net new registrations = 750
- AGP deletes with full refund is \( (750 \times 10\% = 75) \) or 50, whichever is greater
- Registrar is allowed 75 deletes (refundable)
- Registrar is charged for 175 excess deletes (250 less 75 allowed). Cost to registrar is US$1,050 (175*US$6.00).
AGP Limits Policy – Example 2

ABC Registrar:
- registers 1,000 names
- deletes 250 names during AGP
- net new registrations = 750
- AGP deletes with full refund is (750 * 10% = 75) or 50, whichever is greater
- Registrars is allowed 75 deletes (refundable)
- Registrar requests and is granted exemption for 100 AGP deletes (refund issued)
- Registrar is charged for 75 excess deletes (250 less 75 allowed, less 100 exemption). Cost to registrar is US$450 (75*US$6.00).
AGP Budget Provision

- 1 July 2008 – 30 June 2009
- Short-term solution until AGP Limits Consensus Policy was implemented
- Provides for transaction fee (currently US$0.20) charge for AGP deletes that exceed the maximum of (i) 10% of that registrar's net new registrations in that month (defined as total new registrations less domains deleted during AGP), or (ii) fifty (50) domain names, whichever is greater
ABC Registrar:
- registers 1,000 names
- deletes 250 names during AGP
- net new registrations = 750
- AGP not subject to transaction fee is $(750 * 10\% = 75)$ or 50, whichever is greater
- Registrars is allowed 75 deletes (no charge)
- Registrar is charged for 175 excess deletes (250 less 75 allowed). **Cost to registrar is US$35** $(175*.20)$. 
AGP Delete Statistics

- Prior to AGP Budget Provision
  - May 2008: 18.4M
  - June 2008: 17.6M

- Since AGP Provision
  - July 2008: 2.8M
  - August 2008: 2.1M

- AGP Limits Policy will likely result in few AGP deletes subject to the excess deletion fee
Questions & Meeting Wrap-Up