

# ccTLDs and a Blitz Tour around the Domain Universe (including APR)

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# What is TLD?

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- A top-level domain (TLD) is one of the domains at the highest level in the hierarchical Domain Name System of the Internet. The top-level domain names are installed in the root zone of the name space. For all domains in lower levels, it is the last part of the domain name, that is, the last label of a fully qualified domain name. For example, in the domain name **www.example.com**, the top-level domain is **com**.

# Types of TLDs

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- Legacy generic TLDs (gTLDs): .com, .biz, .net., edu, etc. (both commercial and special-purpose: .mil, .gov, .int)
- New gTLDs (some 1,900): .hotel, .club, .tokyo, .art, etc. (mostly commercial and community-based);
- Internationalized - in non-Latin character sets (e.g., Arabic, Cyrillic, Hebrew, or Chinese);
- **country-code top-level domains (ccTLD)**: Two-letter domains established for countries or territories. With some historical exceptions, the code for any territory is the same as its two-letter ISO 3166 code (e.g. AF for Afghanistan, .RU for Russia)

# RFC 1591: who operates a ccTLD?

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- The key requirement is that for each domain there be a designated manager for supervising that domain's name space. In the case of top-level domains that are country codes this means that there is a manager that supervises the domain names and operates the domain name system in that country.

# RFC 1951: other conditions

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- ✓ There must be an administrative contact and a technical contact for each domain. For top-level domains that are country codes at least the administrative contact must reside in the country involved.
- ✓ These designated authorities are trustees for the delegated domain, and have a duty to serve the community.
- ✓ The designated manager is the trustee of the top-level domain for both the nation and the global Internet community.
- ✓ Significantly interested parties in the domain should agree that the designated manager is the appropriate party.
- ✓ The designated manager must do a satisfactory job of operating the DNS service for the domain.

# RFC 1951: the Trap

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**Concerns about "rights" and "ownership" of domains are inappropriate. It is appropriate to be concerned about "responsibilities" and "service" to the community (RFC 1951)**

The case of .IR: in 2014, the United States District Court for the District of Columbia issued an order for the Internet Corporation for Assigned Names and Numbers (ICANN) to seize Iran's internet domain (.ir) and IP addresses in order to recover more than \$1 billion in damages that the Islamic Republic owes for its sponsorship of global terror.

ICANN said in a statement that these domains are not assets which can be seized but "part of a single, global interoperable Internet which ICANN serves to help maintain." It added that these domains "are not property, and are not 'owned' or 'possessed' by anyone including ICANN, and therefore cannot be seized in a lawsuit

# RFC 1951: the Trap

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As no one seems to own domains (including ccTLDs), in Asia Pacific, some nations still struggle to get theirs back: .TM for Turkmenistan, .PK for Pakistan, etc.

The stumbling block is re-delegation procedures, which are not easy to complete.

The guiding document is the 2014 Framework of Interpretation (<https://ccnso.icann.org/workinggroups/foi-final-07oct14-en.pdf>)

# The ccTLD World and APTLD

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ccTLDs around the globe are united in 4 regional associations. Those are:

- AFTLD for Africa
- APTLD for Asia Pacific
- CENTR for Europe
- LACTLD for Latin America and Caribbean Islands

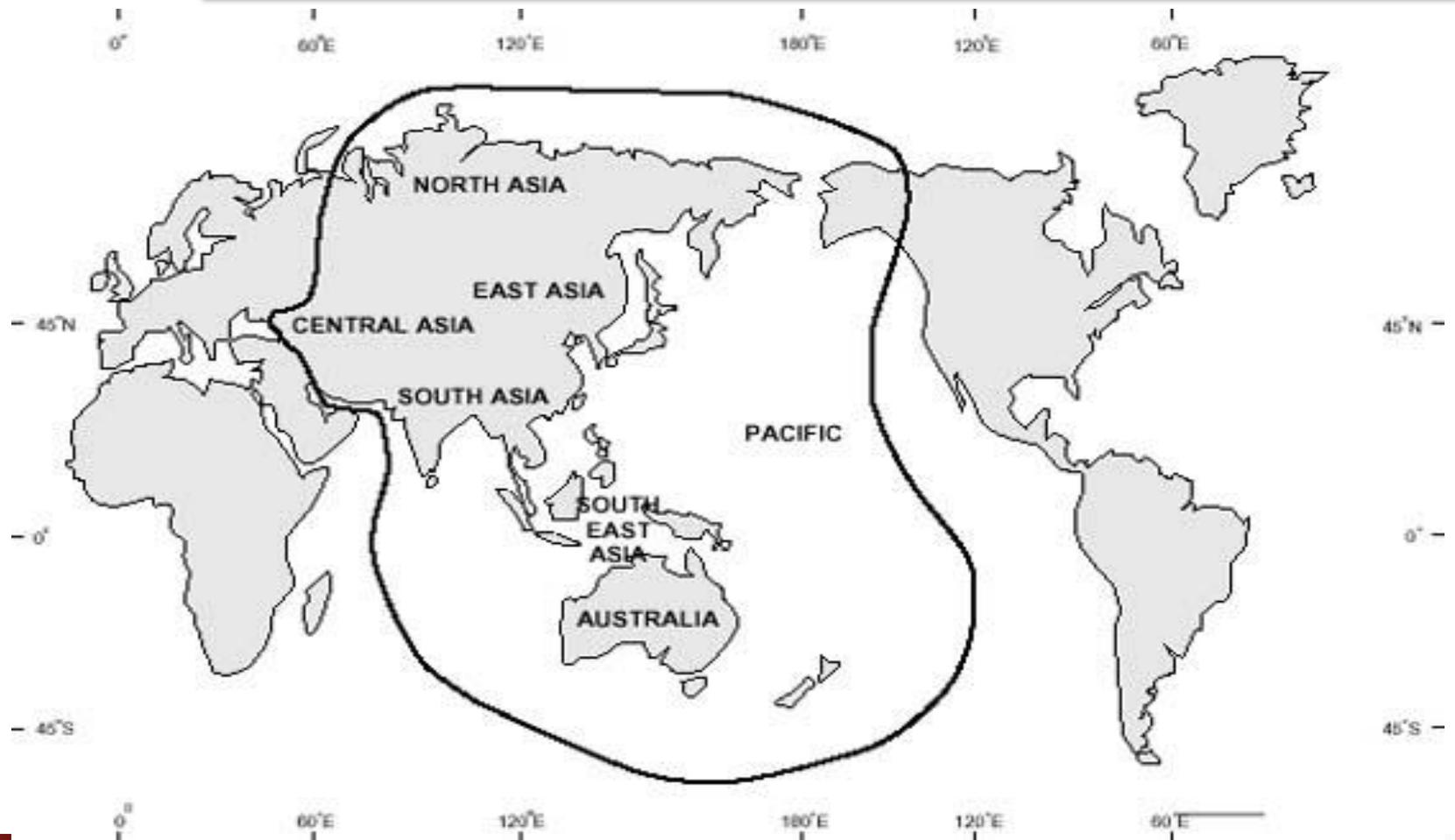
*APTLD was established in 1998 as NGO & NPO.*

*APTLD works as the forum of information exchange regarding technological and operational issues of domain name registries in Asia Pacific region. Also, as an interface to other international Internet coordinating bodies, APTLD fosters and elevates participation of AP ccTLDs in these global fora, as well as acting in the best interest of APTLD members in global Internet policy making process.*

*APTLD is based on membership, and its activities are funded by membership fees.*



# APR at a Glance



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Different classifications used for different purposes

For greater convenience and for the sake of consistency of this presentation, the region is broken down into the following sub-regions:

- Middle East (minus Magrib countries (North Africa) and Israel)
- Asia (minus Turkey)
- Pacific Islands
- “Down Under” (Australia and New Zealand)

# APR at a Glance: Some Common Features

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- Racial, cultural, ethnic, linguistic and religious diversity (>1/3 of the world's languages spoken= roughly 3,200)
- Natural barriers to connectivity between nations (mountain ranges, ocean) (e.g. >20,000 islands)
- Colonization, war, political & economic instability, the availability and use of natural resources and natural disasters have impacted very differently
- The traditionally high role of state (***to be examined below***)
- Because of the above & more, common hindrances for promotion of the Information Society

# APR at a Glance: Internet & ICT

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- Internet penetration rate: region's average 45%, varies from >100% (S. Korea, Australia, Taiwan, HK) to <10% (Papua New Guinea, Nepal, Timor Leste)
- More than 50% of 4.5bn populace are offline
- 90% of users access the internet via a mobile device every day. Reliance on mobile internet in Southeast Asia and the popularity of social media are both key drivers of growth.
- Average cellular speed =10.9Mbps varies from >13Mbps in Singapore and Japan, and 3Mbps - for Bangladesh and Laos
- Broadband access: developing economies, including landlocked countries in Asia and small island states in the Pacific - up to 18% of **monthly average gross national income** (the ITU/UNESCO Broadband Commission's target = 5%)
- Connectivity is the topmost concern for end users in Asia-Pacific
- Over-the-top services (OTT) has become a priority issue for respondents
- 87% of APR residents want more opportunities to participate in Internet policymaking

*©ISOC; Survey, 2015*



# State and ccTLDs: the Background: the White Paper (1998)

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“Neither national governments acting as sovereigns nor intergovernmental organizations acting as representatives of governments should participate in management of Internet names and addresses.”

But :

the White Paper recognized the need to ensure international input into the new DNS. It also acknowledged the authority of national governments “to manage or establish policy for their own ccTLDs.”

# State and ccTLDs: the Background: the GAC Principles (2000, rev. 2005)

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Para 4.

Country code top level domains are operated in trust by the Registry for the public interest, including the interest of the Internet community, on behalf of the relevant public authorities **including governments, who ultimately have public policy authority over their ccTLDs**, consistent with universal connectivity of the Internet.

# State and ccTLDs: the Background: the Framework of Interpretation (2014)

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## Para 5.

The FOIWG interprets “Significantly Interested Parties” (section 3.4 of RFC1591) to include, but not be limited to: a) **the government or territorial authority for the country or territory associated with the ccTLD** and b) any other individuals, organizations, companies, associations, educational institutions, or others **that have a direct, material, substantial, legitimate and demonstrable interest in the operation of the ccTLD(s)** including the incumbent manager. **To be considered a Significantly Interested Party, any party other than the manager or the government or territorial authority for the country or territory associated with the ccTLD must demonstrate that it has a direct, material and legitimate interest in the operation of the ccTLD(s).**

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# Lost in Translation? HOW Some Governments Tend to Interpret All That?

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Geist's survey (2003):

“governments commonly view their national domain names as critical public resources that must be subject to governmental oversight.

189 Gov'ts surveyed of which 56 responded:

- 47% of which: retained ultimate control over their ccTLD by either running the domain as a public entity or enacting legislation granting themselves control over its administration;
- A further 25% have taken steps to assert ultimate authority over their national ccTLD,
- Another 20% were considering formalizing their relationship with their ccTLD and expected that relationship to change in the future.
- Only 7 per cent of governments said they had no role in their ccTLD and had no plans to alter the present situation.

# Lost in Translation? WHY Some APR Gov's Tend to Interpret All That Like That?

## East vs. West

- Centralization vs. decentralized governance processes
- Sacralization of state vs. democracy of taxpayers
- The process of building identity vs. already built identity and the process of civic nation building

# Lost in Translation? WHERE Some APR Governments Intervene?

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- Types of physical world harms that are replicable online (theft, child pornography, IP infringement);
- Rule of law issues (the enforcement of contracts and access to dispute settlement mechanisms);
- To discriminate foreign businesses while promoting local companies;
- Filtering and blocking access resources that advocate political views that the government disagrees with;
- For the sake of national security and sovereignty ;
- For the sake of public interest/safety/health/traditional values (moral grounds, religious beliefs, against promotion of drugs, suicide, etc.)

# ccTLDs and National Legislation: the APTLD Survey (2014)

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## Some highlights and figures

- 73% of members are working in the private sector
- 38% of members do not have any local presence requirements on registrations
- APTLD members may be more impacted by Government relative to other regions with 35% of the members stating the sole basis for carrying out the ccTLD is legislation/contract/directive
- 81% of members are explicitly mentioned in some form of operating agreement, directive, enabling legislation or other the most common being an operating agreement. This is significantly higher than the situation in Europe where the figure is 41%

# ccTLDs and Governments in APR : Who's the Boss (I)

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- **Fully public:** e.g. the Arab members + .ir., .af.; the “*Confucian cultural region*”, a number of Pacific Islands, Central Asia, .az\*
- **“Public-private partnership”=outsourcing:** .tv, .tk, .la\*, .nu
- **Academic:** university-associated: .pg, .th, .lk
- **Private and/or MS-based:** .am, .au, .nz, .in., .id, .ru, .kz, .np, .mo & .hk (“One country-2 systems”), .ph
- **“Hijacked”** (not controlled by the nation/gov’t): .pk\*, .tm\*

\* non-members

# ccTLDs in APR and Governments: Who's the Boss (II)

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- **Direct control/supervision:** policy, HR, funding: Arab states, Confucian cultural region, etc.
- **Public soft power type A=outsourcing:** .tv, .tk, .la, .nu, cc
- **Soft-power type B = “sleeping legislation”/MS-based participation:** .au, .in., .ru, .kz, .lk, .pg, .th...
- **Laissez-fair=ISOC chapter as a manager:** .am, .np, ge

# ccTLDs in APR and Governments: Recent Trends

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- The CN case
- The .IN case
- The .RU case

No linear development, contrasting & diverging processes:

? A Cino-Russia Roadmap on development of “sovereign internet, including creation of a “pilot zone” which should ensure “a stable functioning of national domain zones» of Russia and China

# Going Forward:

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- ccTLDs in APR remain a major center of expertise in areas not directly under their remit, such as IP management, IXP operation, IG and policy advice in ICT in general;
- With a direct commline to State, they provide crucial feedback on good practices thereby contributing to sound public policy shaping;
- The key challenge is striking a balance between the Eastern State's strive for control vs. maintaining as much as possible of the open nature of the Internet while limiting governmental intervention to what is necessary to address the harms associated with its use.

# Thank You

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