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DISSERTATION

NATIONAL SOVEREIGNTY IN INTERNET GOVERNANCE: THE CASE OF THE TURKISH ccTLD

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ABSTRACT

The importance of the country code top-level domains (ccTLDs) has grown over time along with the increasing importance of the Internet. Many governments, who were not paying attention to the governance of the ccTLDs in the early days of the Internet, started to claim that the administration of their ccTLDs is a matter of national sovereignty. They demanded greater involvement in their ccTLDs by establishing a legal basis for the management of the ccTLDs or determining who operates the ccTLD. However, ICANN, a private corporation in the United States, and the United States government has the final authority on the management of ccTLDs, so the place of nations-states' sovereignty claims in the ccTLD governance is ambiguous. This study aims to research to what extent the national sovereignty claims for ccTLDs are correct. It is argued that the sovereignty claims are correct if there is a relationship established between a country and its ccTLD.

1. INTRODUCTION

In 2008, a new law on electronic communications was adopted in Turkey where the issues related to the management of the Internet domain names were mentioned for the first time in Turkish legislation. In this new law, it was stated that the Turkish government shall determine the procedures and principles regarding the management of domain names and determine which organization would allocate domain names. This was an attempt to regulate domain names with ".tr" as the suffix, representing the country code top-level domain (ccTLD) for Turkey, because it was considered to be the sovereign right of the government to decide on the issues related to the .tr.

However, there exists another authority deciding on who can be the manager of a ccTLD and under what conditions, and in this ccTLD management regime, which is global in nature, traditional national sovereignty claims are not valid. Besides, domain names under the .tr have been administered by an academic institution since 1991 and they did not consent to the anticipated transfer of the .tr management to another entity. Therefore, the claimed authority on the .tr administration by the Turkish government became questionable.

The political and legal concerns that arose regarding the anticipated transfer of the .tr administration from the incumbent operator to another entity led to this study. The main purpose of this dissertation is to assess whether the national sovereignty claims of the Turkish government for its ccTLD are correct.

The subject of this study is the national sovereignty claims for ccTLDs only. Therefore, the national sovereignty claims regarding country names registered as second-level domains under generic top-level domain names are not in the scope of this dissertation since such domain names are subject to different set of rules. Also, Internationalized Domain Names (IDN) ccTLDs are not in the scope, because although they are called as "code", some of the IDN ccTLDs are country names of the corresponding countries in their languages.

The questions to be explored in this dissertation are as follows:

- How has the current global ccTLD delegation and re-delegation procedure evolved to its present form?
- Should the issue of delegation and re-delegation of a country's ccTLD administration be affected by national sovereignty claims?
- To what extent are the national sovereignty claims of the Turkish government in respect of ccTLD delegation and re-delegation procedure correct?
- Is the ccTLD delegation and re-delegation procedure acceptable or justifiable from a developing country's perspective as with Turkey?
- Is there a room for improvement in the current procedure of ccTLD delegation and re-delegation?

Since the issues related to those questions also pertain to the Internet governance field, firstly the term Internet governance will be unpacked in the Introduction. Then, the tension between the national sovereignty and Internet governance will be explained. Thirdly, the basics of domain names and the main actors in this field will be given.

In the second part, the evolution of the global ccTLD policy will be analysed to understand the rationale behind the current ccTLD governance. In the third part, national sovereignty claims for ccTLDs, the source of these claims and the controversies that emerged between nation-states and other parties as a result of the global ccTLD governance will be elaborated. Also, what nation-states have done to assert their claimed rights to ccTLD governance will be given. In the fourth part, the .tr case will be discussed by giving an overview of the ccTLD and explaining the anticipated .tr re-delegation. Then, national sovereignty claims regarding the .tr will be assessed. Finally, some concluding remarks and some proposals for improving the current ccTLD delegation and re-delegation procedure will be given.

1.1. What is Internet Governance?

Internet governance is a complex and ambiguous topic.[1] The meaning of it varies depending on the background and objectives of those who invoke it. Also, its meaning has changed over time since the term's first use in the late 1990s.[2] Some use the term as equivalent to *Internet regulation*[3], while some note that *governance* is a broader term encompassing the institutional politics surrounding such regulation.[4]

Internet governance tackles the following questions: 'who rules the internet, in whose interest, by which mechanisms and for which purpose?'[5] In the narrow sense, Internet governance is used to refer to a set of policy issues related to the global coordination of Internet domain names and addresses. But then, a United Nations (UN) Working Group (the Working Group on Internet Governance - WGIG) charged with developing a working definition of Internet governance expanded the meaning of the expression.[6] According to the WGIG:

> Internet governance is the development and application by Governments, the private sector and civil society, in their respective roles, of shared principles, norms, rules, decision-making procedures, and programmes that shape the evolution and use of the Internet.[7]

WGIG identified four key public policy areas that are potentially relevant to Internet governance as follows:

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[1] Lawrence B. Solum, *Models of Internet governance*, Chp.2 in *Internet governance: infrastructure and institutions*, eds. Lee A. Bygrave, Jon Bing, (Oxford: OUP, 2009), p.48

[2] Eric Brousseau, Meryem Marzouki, *Internet governance: old issues, new framings, uncertain implications*, Chp.17 in *Governance, Regulations and Powers on the Internet*, eds. Eric Brousseau, Meryem Marzouki, Cécile Méadel, (New York: CUP, 2012), p.368

[3] Malte Ziewitz, Ian Brown, *A prehistory of internet governance*, Chp.1 in *Research Handbook on Governance of the Internet*, ed. Ian Brown, (Cheltanham: Edward Elgar, 2013), p.22

[4] Ian Brown, Christopher T. Marsden, *Regulating Code: Good Governance and Better Regulation in the Information Age*, (Cambridge: MIT Press, 2013), p.13

[5] Rolf H. Weber, *The legitimacy and accountability of the internet's governing institutions*, Chp.5 in *Research Handbook on Governance of the Internet*, ed. Ian Brown, (Cheltanham: Edward Elgar, 2013), p.99

[6] Milton L. Mueller, *Networks and States: The Global Politics of Internet Governance*, (Cambridge, Mass.: MIT Press, 2010), p.9

[7] The UN Working Group on Internet Governance – WGIG, *Report of the Working Group on Internet Governance*, June 2005, p.4, www.wgig.org/docs/WGIGREPORT.pdf , [Accessed 24 June 2013]

- Issues relating to infrastructure and the management of critical Internet resources, including administration of the domain name system and Internet protocol addresses, administration of the root server system, technical standards, peering and interconnection, telecommunications infrastructure, including innovative and convergent technologies, as well as multilingualization;
- Issues relating to the use of the Internet, including spam, network security and cybercrime;
- Issues that are relevant to the Internet but have an impact much wider than the Internet, such as intellectual property rights or international trade; and
- Issues relating to the developmental aspects of Internet governance.[8]

1.2. National Sovereignty and Internet Governance

The origin of the modern system of sovereign nation-states is conventionally cited as the Treaty of Westphalia, which enabled each nation-state's sovereignty over domestic affairs and created a separate field of international law. The notions of sovereignty depend on the integrity of the capacity to exert control in a well-defined territory[9].

However, the Internet challenges national sovereignty rights over communication and information policies by providing communication which is transnational in scope and boundless in scale; by distributing control; by its new institutions outside of the nation-state system, and by bringing about radical changes in collective action capabilities.[10]

In the debate on the role of nation-states in Internet governance, two extreme sides can be identified as cyber-libertarianism and cyber-conservatism.[11] Cyber-libertarians like Barlow, in his online manifesto *A Declaration of the Independence of*

[8] *Supra* n.7, p.5
[9] Antony Taubman, *International Governance and the Internet*, Introduction in *Law and the Internet*, eds. Lilian Edwards, Charlotte Waelde, 3rd edn. (Portland: Hart Publishing, 2009), p.27
[10] *Supra* n.6, p.4, 5
[11] *Supra* n.6, p.2, 3, 4

Cyberspace, stated that 'Governments of the Industrial World,...I come from Cyberspace...You have no sovereignty where we gather...'[12] These early advocates of the Internet supported its freedom and independence and they believed that the technology can resolve the problems of politics and governance. Nation-states were viewed as irrelevant distractions. On the other side of the debate, which is cyber-conservatism, the continued power and the dominance of the states in determining the policy for the Internet are emphasized. For example, Goldsmith and Wu argued that nothing fundamentally new is happening around the institutions of communication and information and they praised a "bordered Internet."[13]

The main controversy about the ccTLD governance is whether and how the nation-states must be involved in the global ccTLD administration. One of the difficulty with the issue is that '[t]he essential legal character of the international governance of names and addresses,...is difficult to situate within the established categories of public and private law, municipal and international law, and multilateral governance and self-regulation.'[14]

1.3. The Basics of the Internet Domain Names and the Main Actors

The Internet is defined as "a network of networks". Each computer in these networks has to get a unique address which is called the Internet Protocol (IP) address so that they can find each other and communicate on the Internet[15]. However, IP addresses are numeric, (e.g., 155.245.94.160) and so hard to remember for people. Therefore, domain names like "essex.ac.uk" as the 'human-friendly address of a computer' were introduced. The alphanumeric text strings to the right of an "@" in an electronic mail address or appearing after the World Wide Web (www) abbreviation in a web site address are the domain names.[16] However, while users can use domain names to access a computer, computers still need IP addresses to communicate, so; domain

[12] Chris Reed, *Making Laws for Cyberspace*, (Oxford: OUP, 2012), p.5, 6
[13] *Supra* n.6, p.2, 3, 4
[14] *Supra* n.9, p.29
[15] Travis D. Shahan, *The World Summit on the Information Society and the Future of Internet Governance*, 10 Computer L. Rev. & Tech. J. 325 2005-2006, p.327
[16] A. Michael Froomkin, *Wrong Turn in Cyberspace: Using ICANN to Route Around the APA and the Constitution*, 50 Duke L.J. 17 2000-2001, p.37, 38

names need to be translated into IP addresses. 'This system of using domain names as handlers to IP addresses and the scheme that translates one into another constitute the Domain Name System (DNS).'[17]

The DNS was designed hierarchical and the structure of domain names reflects this design. There are usually three levels in this hierarchy.[18] The part of a domain name located in the rightmost is called top-level domain (TLD). For example, in the address www.example.com, ".com" is the TLD, while "example" is the second-level domain (SLD), and any other parts are lumped together as third-or-higher-level domains.[19] TLDs can be traditionally grouped into two categories as generic TLDs (gTLDs) and country code TLDs (ccTLDs).[20] For instance, in the domain name "example.com", ".com" is a gTLD, while in "essex.co.uk", ".uk" is the ccTLD for the United Kingdom (UK). Originally, there were seven gTLDs: .edu, .com, .gov, .mil, .net, .org, and .int.[21] Recently, the traditional TLD terminology has been extended to reflect the introduction of new gTLDs.[22] Moreover, after the introduction of IDNs, which enable TLD characters in non-Latin alphabets such as Chinese or Arabic,[23] IDN TLDs can be counted as another TLD category. There are currently 318 TLDs, 255 of which are two-letter ccTLDs and 40 of which are IDN ccTLDs.[24]

A list of all TLDs and the list of the machines that have the master lists of registrations in each TLD are kept in a data file called the 'root zone file', which is also called as the 'root zone', the 'root' or the 'legacy root'.[25] The root zone file is the heart of the DNS, because it informs Internet users which computers are authoritative for a given TLD.[26] Although it is technically possible that there could be alternative

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[17] Francis Augusto Medeiros, *Is '.com' international? The .com gTLD: an analysis of its global nature through the prism of jurisdiction*, International Journal of Law and Information Technology, (2013), pp. 1–44, p.4

[18] Caroline Wilson, *Domain Names and Trade Marks: An Uncomfortable Interrelationship*, Chp.9 in *Law and the Internet*, eds. Lilian Edwards, Charlotte Waelde, 3rd edn. (Portland: Hart Publishing, 2009), p.313

[19] *Supra* n.16, p.39

[20] *Supra* n.18, p.313

[21] Jon Bing, *Building cyberspace: a brief history of Internet*, Chp.1 in *Internet governance: infrastructure and institutions*, eds. Lee A. Bygrave, Jon Bing, (Oxford: OUP, 2009), p.35

[22] *Supra* n.18, p.313

[23] ICANN, Internationalized Domain Names, http://www.icann.org/en/resources/idn, [Accessed 2 September 2013]

[24] IANA, Root Zone Database, http://www.iana.org/domains/root/db, [Accessed 9 September 2013]

[25] *Supra* n.16, p.39, 42

[26] *Supra* n.15, p.329

TLDs which are not included in the legacy root, domain names registered under such TLDs cannot be accessed by the large majority of the users as a result of lack of consensus or inertia among people.[27]

The root zone file is maintained on thirteen different computers, called root servers. The root servers are identified by letters from A to M.[28] The A-root-server maintains the authoritative copy of the root zone file and the twelve other root servers copy the file from the A-root-server. Ten of the root servers are located in the United States (US), and the remaining three are located in the UK, Japan, and Sweden.[29] The A-root-server is operated by a US government contractor, VeriSign (formerly Network Solutions Inc. - NSI).[30]

The root zone file is administered by a central authority. Originally, this authority was John Postel, who is one of the fathers of the Internet. Then, the administration of the root, also known as the Internet Assigned Numbers Authority (IANA) function, was delegated by the US government to the Internet Corporation for Assigned Names and Numbers (ICANN), a private non-profit corporation in California.[31] Today ICANN occupies the position of a global industry regulator for the domain name registration services market.[32]

Each TLD has a body called 'registry' which is responsible for the registration of domain names, domain name register management and the management of the TLD primary name servers. The domain name registration can be done by a separate entity called 'registrar' which acts as an intermediary between end-users and the registry.[33]

End-users who want to obtain a domain name registered under a particular TLD must obtain it from the registry for that TLD, or if there are registrars, they can apply to the registrars. Before registering a domain name for an end-user, the registry or the

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[27] *Supra* n.16, p.42
[28] *Supra* n.16, p.43
[29] *Supra* n.15, p.328, 329
[30] A. Michael Froomkin, *Almost Free: An Analysis of ICANN's 'Affirmation of Commitments'*, 9 J. on Telecomm. & High Tech. L. 187 2011, p.203
[31] A. Michael Froomkin, *When We Say US™, We Mean It!*, 41 Hous. L. Rev. 839 2004, p.858
[32] *Supra* n.6, p.230
[33] *Supra* n.18, p.316

registrar queries the registry's database to make certain that the domain name is available because a domain name cannot simultaneously be registered for a different end-user since the DNS requires that each domain name be unique. If the requested domain name is available, then the registrar or the registry marks it as taken, and associates the name of the domain name holder and contact details provided by the end-user with the record. The end-user who obtained a domain name is called 'registrant'.[34] While TLD assignments are imposed on end-users by ICANN, lower level domain names are usually created by registrants freely.[35]

Each ccTLD is also managed by a registry for that country.[36] The allocation of the ccTLD resources is called "delegation" of ccTLDs.[37] The terminology for the entity to who a ccTLD is delegated has evolved over time from 'Manager' to 'Sponsoring Organisation'.[38] A "re-delegation" of a ccTLD is a change from one registry to another. ICANN, through its IANA subsidiary, runs a process for determining whether to accept a delegation or re-delegation application for a ccTLD.[39]

[34] *Supra* n.16, p.41
[35] Gregory R. Hagen, *Sovereign Domains and Property Claims*, 11 Int'l J.L. & Info. Tech. 1 2003, p.5
[36] *Supra* n.35, p.5
[37] Youn Jung Park, *The National ccTLD Disputes: Between State Actors and Non-State Actors*, 13 Int'l J. Comm. L. 186 & Pol'y 185 2009 , p.188
[38] ICANN ccNSO Delegation and Redelegation Working Group, *Report on the Delegation of ccTLDs*, 7 March 2011, http://ccnso.icann.org/workinggroups/drd-wg-final-report-07mar11-en.pdf, [Accessed 29 August 2013], p.18
[39] A. Michael Froomkin, *ICANN and the domain names system after the 'Affirmation of Commitments'*, Chp.2 in *Research Handbook on Governance of the Internet*, ed. Ian Brown, (Cheltanham: Edward Elgar, 2013), p.34

2. EVOLUTION OF GLOBAL ccTLD POLICY

2.1. Pre-ICANN Period

2.1.1. RFC 920

The history of the global ccTLD policy starts with the development of DNS in 1983.[40] The way how the DNS was managed and administered was influenced by the technical specifications of this system. The first document describing what would be the system of domain naming was Request for Comments (RFC) 920.[41] The RFCs are the output of the Internet Engineering Task Force (IETF) and they became the 'law' of the Internet in the sense of operational practice.[42]

RFC 920 included the norms for the assignment of responsibility for the management of TLDs. Moreover, it was acknowledged that the English two-letter country codes established in ISO-3166 would be the basis for the TLDs for nation-states. The concept of domain registration entailing a hierarchy of delegation among organizations and the association of domains with specific organizations were also outlined in RFC 920.[43]

In March 1985, the first ccTLD, .us for the US, was created and delegated. Later in the same year, Postel delegated the .uk as the UK's ccTLD, although the country code for this country is .gb in ISO-3166 list, reflecting the early ccTLD policymaking's ad-hoc nature. The third ccTLD delegation made in 1985 was .il for Israel. By the early 1990s, requests for ccTLD delegations increased substantially, because more countries became connected to the Internet and governments began to see the full socioeconomic potential of a ccTLD.[44]

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[40] Peter K. Yu, *The Origins of ccTLD Policymaking*, 12 Cardozo J. Int'l & Comp. L. 387 2004, p.390
[41] Daniel J. Paré, *Internet Governance in Transition: Who Is the Master of This Domain?*, (Lanham, Md.: Rowman & Littlefield, 2003), p.15
[42] Milton L. Mueller, *Ruling the Root: Internet Governance and the Taming of Cyberspace*, (Cambridge, Mass.: MIT Press, 2002), p.94
[43] *Supra* n.41, p.15
[44] *Supra* n.40, p.390, 391

The critical role of delegating ccTLDs to specific applicants was carried out by Postel at the Information Science Institute (ISI) of the University of California[45] as part of a research project funded by the US Defence Advanced Research Projects Agency (DARPA). When the DARPA entered into a new contract with the ISI in 1988, Postel began to call his work of managing protocol standards a function of the 'Internet Assigned Numbers Authority' (IANA).[46]

The first public document to mention IANA was RFC 1083.[47] However, in this document there was not any reference to the founding or to the reasons underpinning the creation of this organisation.[48] IANA's "policy-setting authority" over assignment functions was claimed to be derived from the Internet Activities Board.[49] Also, after its establishment in 1992, the Internet Society (ISOC) was named as a source of authority for IANA. Yet, IANA was not referenced in the contract between the DARPA and the ISI, so; the precise legal status of the IANA remained unclear for the duration of the contract.[50] Indeed, IANA described a function more than an entity.[51]

Nevertheless, the authority claims had significant legitimacy within the technical community, because Postel was respected and trusted within this community.[52] According to Pare, the subtle manner in which IANA first appeared and the significant role it played for the coordination of IP addresses and domain names reflects the informal administration form of internetworking while it was in the education and research realms.[53] Under the rubric of IANA, Postel remained in charge of administering names and numbers on the Internet until his death in 1998,[54] pursuant to the authority delegated from the US government.[55]

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[45] *Supra* n.42, p.88
[46] Lee A. Bygrave, Terje Michaelsen, *Governors of Internet*, Chp.3 in *Internet governance: infrastructure and institutions*, eds. Lee A. Bygrave, Jon Bing, (Oxford: OUP, 2009), p.102, 103
[47] *Supra* n.42, p.93
[48] *Supra* n.41, p.17
[49] *Supra* n.42, p.93
[50] *Supra* n.46, p.103
[51] *Supra* n.41, p.17
[52] *Supra* n 42, p.93
[53] *Supra* n.41, p.17
[54] *Supra* n.37, p.187
[55] *Supra* n.16, p.53

The concept of "responsible person" was used by Postel to make ccTLD delegations from 1985 to 1993.[56] In RFC 920 "responsible person" is defined as the individual identified as having the authority and the technical expertise for the administration of the names within the domain.[57] The delegations of ccTLDs were made on a first-come-first-served basis. There was no explicit policy for resolving conflicts occurring as a result of competing applications for the same ccTLD assignment. In such cases Postel usually used subtle forms of pressure on the disputing parties so that they could agree on a solution among themselves, for example, he refused to make any delegation until the parties settle the dispute.[58]

2.1.2. RFC 1591

The ad-hoc policy for the delegation of ccTLDs was needed to be changed with a more explicit arrangement, because of the growing demand for ccTLDs by the governments after the increasing commercialization of the Internet in the early to mid-1990s. Then, in 1994 Postel published RFC 1591 which included the policy on delegation and administration of ccTLDs.[59] RFC 1591 is still important because it is one of the policy documents guiding IANA in managing the root zone today.[60]

As stated in RFC 1591, there must be a designated manager for supervising the ccTLD name space and since this manager is the "trustee" of the TLD for both the nation and the global Internet community, he must be "equitable" to all who request a domain name. Also, the manager must do a "satisfactory job" of operating the DNS service for the domain. Besides, "significantly interested parties" in the domain should agree that the designated manager is the appropriate party.[61] The criteria of

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[56] *Supra* n.42, p.88
[57] John Postel, Joyce Reynolds, RFC 920, *Domain Requirements*, Oct.1984, Responsible Person, p.3
[58] *Supra* n.42, 88, 89
[59] George Christou, Seamus Simpson, *International Policy Implementation Through Gate Keeping: The Internet Corporation for Assigned Names and Numbers*, Chp.6 in *International organizations and implementation: Enforcers, managers, authorities?*, eds. Jutta Joachim, Bob Reinalda, Bertjan Verbeek, (London: Routledge, ECPR, 2008), p.78
[60] IANA, Procedures and Guides, Policy Guidance, http://www.iana.org/domains/root/procedures, [Accessed 29 August 2013]
[61] *Supra* n.40, p.392

trusteeship were defined in vague terms and only one man (Postel) had the right to determine who best qualified as a trustee.[62]

On the technical side, '[t]here must be a primary and a secondary nameserver that have IP connectivity to the Internet and can be easily checked for operational status and database accuracy by...the IANA.' Also, '[t]here must be an administrative contact and a technical contact for each domain.'[63]

According to some scholars, '[t]he classic elements that constitute a state (nation, government and territory) were downplayed or entirely absent from' RFC 1591. Managers of the ccTLDs were not required to be nationals of the corresponding countries and no explicit role was given to governments. The administrative contact was required to reside in the territory of the country and the manager was required to competently provide service to residents, however, the server that hosts the domain was not required to be physically located in the country's territory.[64]

IANA's adherence to the ISO 3166-1 list for ccTLD delegations was also stressed in RFC 1591.[65] It was stated that deciding what is and what is not a country is not IANA's business.[66] Another key principle set forth in RFC 1591 was that 'concerns about rights and ownership of domains are inappropriate. It is appropriate to be concerned about responsibilities and service to the community.'[67]

To resolve disputes about delegations, an "Internet DNS Names Review Board" was proposed in RFC 1591, but it was never established.[68] In case of a dispute, as stated in RFC 1591, 'IANA tries to have any contending parties reach agreement among themselves, and generally takes no action to change things unless all the contending parties agree', however, if the designated manager has substantially misbehaved, then

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[62] *Supra* n.42, p.126
[63] John Postel, RFC 1591 *Domain Name System Structure and Delegation*, March 1994, Art.3(1), Art.3(5)
[64] Stephen D. McDowell, Philip E. Steinberg, Tami K. Tomasello, *Managing the Infosphere: Governance, Technology, and Cultural Practice in Motion*, (Philadelphia: Temple University Press, 2008), p.129, 130
[65] *Supra* n.59, p.78
[66] *Supra* n.40, p.392
[67] *Supra* n.41, p.20
[68] *Supra* n.42, p.125, 127

IANA would intervene.[69] What kind of actions of the managers must be counted as misbehaviour is not defined in the document.[70]

RFC 1591 was described as 'anachronism' by some commentators because of an outdated view of the goals and spirit of TLD administration included in it and also because of its failure in resolving emerging conflicts over ccTLD governance. However, it still forms the baseline for division of responsibilities between ccTLD registries and ICANN.[71]

2.1.3. ccTLD News Memo #1

In 1997, ccTLD News Memo #1 was issued by IANA as another document, which is important for ccTLD governance. Today it is still in use. In this memo, 'the desires of the government of the country' was counted as an important additional factor which has emerged since RFC 1591 was written, and it was stated that the desires of the government of the country would be taken very seriously and they would be a major consideration for IANA in any transition discussion. Also, IANA's involvement in any resolution of a dispute was defined as a 'process, leaving at least one party unhappy', so an agreement reached among the parties themselves was encouraged.[72]

Between 1985 and 1998, 240 ccTLDs were delegated by Postel.[73] Following the Internet's growth in size and scope since the mid-1990s, the US government decided to privatize the DNS[74] and to establish a more formal structure for DNS management that has been in 'Postel's capable hands.'[75]

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[69] *Supra* n.40, p.392
[70] ICANN ccNSO Delegation and Redelegation Working Group, *Report on the Re-delegation of ccTLDs Where the Incumbent Operator does not Consent*, 7 March 2011, http://ccnso.icann.org/workinggroups/drd-wg-final-report-without-consent-07mar11-en.pdf, [Accessed 29 August 2013], p.15
[71] Lee A. Bygrave, Susan Schiavetta, Hilde Thunem, Annebeth B. Lange, Edward Phillips, *The naming game: governance of the Domain Name System*, Chp.5 in *Internet governance: infrastructure and institutions*, eds. Lee A. Bygrave, Jon Bing, (Oxford: OUP, 2009), p.158
[72] IANA, *ccTLD News Memo #1*, 23 October 1997, Art.2, http://www.iana.org/reports/1997/cctld-news-oct1997.html, [Accessed 29 August 2013]
[73] *Supra* n.37, p.188
[74] *Supra* n.40, p.395
[75] *Supra* n.16, p.70

2.2. ICANN Period

The proposals on how to transfer the management of the DNS to a private sector-based administration were released by the US Department of Commerce (DoC) in the form of a Green Paper in January 1998. The purpose of this new administration was to execute the functions that IANA had been responsible for. The Green Paper was widely perceived as overly US-centric by non-US-based actors.[76]

In the light of comments received following the Green Paper, the DoC issued a nonbinding statement of policy, known as DNS White Paper.[77] The DoC announced its intention to recognize a new not-for-profit corporation to be formed by private sector stakeholders to administer DNS.[78] This new organization was required to be representative of Internet users around the globe. Also, the authority of national governments 'to manage or establish policy for their own ccTLDs' was acknowledged.[79] In addition, the White Paper reiterated the four principles guiding the evolution of the DNS; stability, competition, private bottom-up coordination, and representation.[80]

The DoC's proposals emerged in the form of the Internet Corporation for Assigned Names and Numbers (ICANN) in September 1998.[81] It was a private not-for-profit corporation in California, with Postel as its chief technical officer. In November 1998, the DoC entered into an agreement with ICANN for the transfer of DNS management.[82]

2.2.1. Internet Coordination Policy 1 (ICP-1)

One of the key reasons for the establishment of ICANN was to institutionalize and to document the framework for ccTLD delegations[83]. So, in May 1999 ICANN issued

[76] *Supra* n.41, p.31
[77] *Supra* n.40, p.395
[78] *Supra* n.42, p.173
[79] *Supra* n.40, p.395, 396
[80] *Supra* n.41, p.32
[81] *Supra* n.21, p.36
[82] *Supra* n.40, p.396
[83] ICANN, *Administering the Root: Delegations and Redelegations – Every country is unique*, ITU Workshop on Member States' experiences with ccTLD, Geneva, 3-4 March 2003, http://www.icann.org/cctlds/administering-the-root-25feb03.pdf, [Accessed 28 August 2013], p.1

Internet Coordination Policy 1 (ICP-1) on ccTLD administration and delegation. As a document combining RFC 1591 and the ccTLD News Memo #1,[84] ICANN claimed that ICP-1 did not change anything in the policy affecting the administration of DNS delegations.[85] As Yu noted, its purpose was '[t]o "announce" [ICANN's] taking over of IANA's function and to emphasize its authority over ccTLD matters'.[86] However, ICP-1 has never been supported by the ccTLD community whereas RFC 1591 was accepted as the appropriate policy by a majority of ccTLD managers.[87]

2.2.2. ICANN Board Decisions

The institutional structure of the ICANN includes a Board of Directors at the top.[88] In September 2000, the ICANN Board decided to allow the delegation of elements of the ISO3166-1 Exceptionally Reserved List as ccTLDs under certain circumstances. This policy has only been used once for the approval of the .eu, the ccTLD for European Union ('EU'). Also, in September 2001, the ICANN Board decided that individuals should not be allowed as delegees for ccTLDs anymore, and since this decision no ccTLD has been delegated to an individual.[89]

Although the main delegation polices, which are RFC 1591 and ICP-1, do not require ccTLD registries to sign a contract, the ICANN Board decided to require sponsorship agreements with managers prior to the approval of delegation requests in September 2000.[90] ICANN declared that '[n]o country is, or can be, an island of this globally interdependent [system]'.[91] However, ICANN's attempts to reach an agreement with the ccTLD registries on a contract failed; only few registries have signed such contracts.[92] Among the reasons for rejection by registries were the payment

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[84] *Supra* n.40, p.397
[85] ICANN, ICP-1 ccTLD Administration and Delegation, http://www.icann.org/en/resources/cctlds/delegation, [Accessed 28 August 2013]
[86] *Supra* n.40, p.397
[87] *Supra* n.70, p.11
[88] Mawaki Chango, *Accountability in Private Global Governance: ICANN and Civil Society*, Chp.13 in *Building global democracy?: Civil Society and Accountable Global Governance*, ed. Jan Aart Scholte , (Cambridge: CUP, 2011), p.271
[89] *Supra* n.38, p.13, 14
[90] *Supra* n.38, p.13
[91] *Supra* n.59, p.78
[92] ICANN, ccTLD Agreements, http://www.icann.org/en/about/agreements/cctlds, [Accessed 28 August 2013]

obligations in the provisions and some governments' displeasure regarding the assertion of ICANN's power over the registries of their country codes.[93] Also, ccTLD registries have little to gain from entering into the contractual relationship with ICANN because their names are already in the root[94] and ICANN lacks any clear authority to withdraw them.[95] The result is that ccTLD managers are free to develop their own structure and policy for their domains provided that this does not contravene any requirement, as specified in ICP-1.[96]

In order to formalize its relationship with ccTLDs ICANN implemented other strategies. Currently there are two different methods: signing the Accountability Framework and exchanging formal letters.[97] Since 2006, 42 ccTLD registries preferred exchange of letters, while 27 ccTLD registries preferred signing Accountability Framework.[98] ICANN and the ccTLDs entering into these exchanges formalize their relationship in a way that avoids making them legally liable to each other.[99] The ICANN Board decision regarding the requirement of sponsorship agreements was never modified by the Board, although it is currently not being applied.[100]

2.2.3. The GAC Principles for Delegation of ccTLDs

In 2000 the Governmental Advisory Committee (GAC), as one of the advisory committees of the ICANN, issued the 'Principles for Delegation and Administration of Country Code Top Level Domains' (the 'GAC Principles').[101] The purpose of this document was to describe the model for institutionalizing the relationship between ICANN, ccTLD delegations, and the relevant national governments or public

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[93] Tamar Frankel, *Governing By Negotiation: The Internet Naming System*, 12 Cardozo J. Int'l & Comp. L. 449 2004, p.482, 483
[94] Milton Mueller, Jisuk Woo, *Spectators or Players?: Participation in ICANN by the "Rest of the World"*, Chp.14 in *Governing Global Electronic Networks: International Perspectives on Policy and Power*, eds. William J. Drake, Ernest J. Wilson III, (USA: MIT Press, 2008), p.513
[95] *Supra* n.42, p.225
[96] *Supra* n.71, p.156
[97] *Supra* n.71, p.159
[98] *Supra* n.92
[99] Lee Bygrave, *Contract vs. Statute in Internet Governance*, Chp.8 in *Research Handbook on Governance of the Internet*, ed. Ian Brown, (Cheltanham: Edward Elgar, 2013), p.175
[100] *Supra* n.38, p.13
[101] *Supra* n.40, p.398

authorities. A three-way 'communication-based regime' placing governments at the apex of the triangle was proposed by the GAC instead of the old system of bilateral delegations.[102] So, it was emphasized that the ultimate public authority over a ccTLD belongs to the national government.[103]

Many found the document controversial and antithetical to the interests of ccTLD managers.[104] For example, as a form of counteraction against the GAC Principles, non-state ccTLD managers presented the Best Practice Guidelines for ccTLD managers of the Council of European National Top Level Domain Registries (CENTR) in 2000.[105] Other groups, such as the Internet Rights Coalition in the US declared that the '[ccTLDs]...are not the subject of sovereignty or international law.'[106]

Also, ICANN initially resisted to the GAC Principles, because it feared that 'ccTLD delegations could become political footballs that changed hands with every change in a state's politics.'[107] However, ICANN later extensively used those principles to justify their re-delegation efforts.[108]

In 2005 the GAC updated those principles.[109] The principle of subsidiarity for management of ccTLDs, which was manifested in RFC 1591, has been lifted up and given explicit form by this GAC document. It was stated that 'ccTLD policy should be set locally, unless it can be shown that the issue has global impact and needs to be resolved in an international framework.'[110]

Although the GAC Principles do not constitute formal ICANN policy, IANA Reports on delegations or re-delegations consistently and explicitly referred to the GAC

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[102] *Supra* n.42, p.206, 207
[103] Wolfgang Kleinwachter, *From Self-Governance to Publicprivate Partnership: The Changing Role of Governments in the Management of the Internet's Core Resources*, 36 Loy. L. A. L. Rev. 1103 2002-2003, p.1117
[104] *Supra* n.40, p.398
[105] *Supra* n.37, p.191
[106] *Supra* n.103, p.1118
[107] *Supra* n.42, p.207
[108] *Supra* n.40, p.398
[109] ICANN, GAC, Principles and Guidelines for the Delegation and Administration of Country Code Top Level Domains, 2005, http://archive.icann.org/en/committees/gac/gac-cctld-principles.htm, [Accessed 29 August 2013]
[110] *Supra* n.71, p.158

Principles in addition to RFC 1591 and ICP-1, from 2000 to the end of 2009. Then, all mention of the GAC Principles had been dropped from IANA Reports. So, it is not clear now if these principles are still being considered in delegation and re-delegation decisions about ccTLDs.[111]

2.2.4. The ccTLD Delegation and Re-Delegation Procedure

IANA publishes a guide on delegation and re-delegation procedure in its web site. According to this guide, when a request for delegation or re-delegation is submitted, IANA requires some information showing that the request meets the eligibility criteria, which are both technical and administrative. The documentation used in the evaluation of the request includes the following:

- information showing the change serves the local interest in the country;
- documentation demonstrating the technical and administrative capabilities of the organization receiving the redelegation;
- a description of the legal status of the organization, the names of contacts in any in-country government agencies who have a say in the delegation/redelegation;
- a detailed description of how existing ccTLD operations will be transferred to the proposed new operator, in the case of a redelegation;
- documentation showing that the new operator will operate the domain in a fair and equitable manner; and,
- the approvals of the current contacts for the TLD, in the case of a redelegation.[112]

Then, IANA prepares a detailed report recommending a course of action to the ICANN Board. The ICANN Board makes a decision based on the IANA report. If the Board's decision is not in favour of the request, IANA informs the applicant of that decision. If the Board approves the request, another report is prepared and submitted to the DoC for authorisation. After the DoC approves the IANA report, IANA makes the proposed data changes and VeriSign implements the required name server changes

[111] *Supra* n.70, p.28
[112] IANA, Understanding the ccTLD Delegation and Redelegation Procedure, 2007, http://www.iana.org/domains/root/delegation-guide, [Accessed 22 July 2013]

in the root-zone[113]. What is clear from this procedure is that the ultimate authority for the approval of the request is the US government.

Documentation showing that the request serves the local interest includes statements from national Internet service providers ('ISPs'), Internet user groups, and the ISOC chapters showing support for the request. However, government support is mentioned not under documentation required for showing the local support, but under a separate 'Government contact' section, as follows; 'the applicant should provide documentation indicating that any appropriate government officials have been [*informed*] about the request', while support from the relevant government department is not counted as a pre-requisite for the approval of the request.[114]

The process for re-delegating a ccTLD is not very public and not instantaneous.[115] For cases where the incumbent ccTLD registry did not approve the re-delegation request, IANA says that 'it is not possible to predict a timetable' for such complicated proceedings.[116] There is no guidance in any policy or procedure for the re-delegation of a ccTLD without the consent of the incumbent operator.[117]

[113] *Supra* n.112
[114] *Supra* n.112
[115] *Supra* n.39, p.34
[116] *Supra* n.112
[117] *Supra* n.70, p.26

3. NATIONAL SOVEREIGNTY AND ccTLD GOVERNANCE

3.1. What is in a ccTLD?

In RFC 920 two main criteria were used for the classification of domain names: territory and substance, while any clarification regarding the reasoning for choosing such criteria was not provided.[118] Mathiason notes that the original intention for the creation of ccTLDs was to allow countries to use their names to register sites.[119] As stated by ICANN, the initial objective of delegating ccTLDs was to enable 'local Internet communities worldwide to develop their own locally-responsive and -accountable DNS services, and to encourage all parts of the world to 'get online.''[120]

Nation-states claim that the ccTLD 'stands for' or 'represents' the country, but, according to Mueller, this semantic relationship is arbitrary, because there could be many different TLDs referring to a specific country.[121] Also, Froomkin asserts that a ccTLD is 'just a convention, a two-character label chosen by one private body, the ISO, and then repeated by another, IANA'.[122] However, Wass argues that ccTLDs are not only a technological convention anymore, because, by their use and governance, ccTLDs evolved into a means of communicating national cultures, values, identities, and priorities.[123] For its people, a ccTLD may represent the identity of the country and its history. 'The full riches of patriotism may be compressed and packaged in the [ccTLD].'[124]

Since the early days of the Internet, the business of domain name registrations under ccTLDs has grown into a considerable size in some countries.[125] The value of domain

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[118] *Supra* n.17, p.5
[119] John Mathiason, *Internet Governance: the new frontier of global institutions*, (London: Routledge, 2009), p.88
[120] *Supra* n.83, p.1
[121] *Supra* n.42, p.244
[122] *Supra* n.31, p.880
[123] Erica Schlesinger Wass, *Lots of Dots*, Introduction in *Addressing the World: National Identity and Internet Country Code Domains*, ed. Erica Schlesinger Wass, (USA: Rowman & Littlefield Publishers, 2003), p.ix, xii, xvii
[124] *Supra* n.93, p.468
[125] *Supra* n.94, p.513

name market is given as about three billion US Dollars per year.[126] As of the close of the fourth quarter of 2012, more than 252 million domain names had been registered across all TLDs and more than 40 per cent of these domain names are registered in ccTLDs. Domain name registrations under the .de (Germany's ccTLD) and the .tk (Tokelau's ccTLD) are the second and the fourth largest among all TLDs including .com. Total ccTLD registrations increased by 21.6 percent in 2012 as compared to the previous year,[127] and they continue to increase in many developed and developing countries.[128]

Many ccTLDs require the fulfilment of certain territory or nationality requirements for registration.[129] For example, registration of domain names under .ca and .us requires local presence of registrants as a prerequisite to registration. By this requirement, as von Arx and Hagen claims, an association between the country and the registrant is created. In a report prepared for the .ca, positive attitudes toward .ca were found to lie in this ccTLD's emotional and patriotic appeal as the domain 'by and for Canadians'.[130] The .us registry said that '[b]y its very nature, a ccTLD denotes a sense of nationalism, generates a mental image in one's mind of that country, and establishes an impression about that country's relative position in technological advancement.'[131]

Some governments asserted that their ccTLDs constitute property and that this property belongs to them.[132] In Singapore, governmental ccTLD registry attempted to register .sg as a trademark, but then it withdrew its application after ICANN informed it that Singapore did not actually have rights to the .sg.[133] During the process of

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[126] Milton L. Mueller, *Property and Commons in Internet Governance*, Chp.2 in *Governance, Regulations and Powers on the Internet*, eds. Eric Brousseau, Meryem Marzouki, Cécile Méadel, (New York: CUP, 2012), p.56

[127] VeriSign, The Domain Name Industry Brief, Report, vol 10(1), April 2013, http://www.verisigninc.com/assets/domain-name-brief-april2013.pdf, [Accessed 29 August 2013]

[128] *Supra* n.94, p.513

[129] *Supra* n.17, p.4

[130] Kim G. von Arx, Gregory R. Hagen, *Sovereign Domains A Declaration of Independence of ccTLDs from Foreign Control*, 9 RICH. J.L. & TECH. 4 (Fall 2002), p.6

[131] *Supra* n.35, p.21

[132] *Supra* n.93, p.475

[133] Kenneth Neil Cukier, *Internet Governance, National Interest and International Relations*, Background Paper for the United Nations ICT Task Force Meeting, 24-26 March 2004, New York, p.3, http://www.cukier.com/writings/cukier-UNnetgov-mar04.pdf, [Accessed 29 August 2013]

creation of the .eu, the European Commission (EC) suggested that the EU requires ownership of this TLD in order to exercise its overseeing powers over the domain.[134]

In some countries, ccTLDs are used to create or reinforce the national identity. For example, the EC had recognized that '[t]he creation of a .eu suffix would certainly increase the power of the EU brand.'[135] During the creation process of the .eu, the EU states' claim to .eu was 'as strong as their claim to the territory.'[136] Another example was Belgium which decided to sport its ccTLD, the .be, as its international symbol in an attempt to rebuild the country's reputation after years of scandals involving government corruption.[137] In Sweden, to re-establish a national identity online and to divert registrations from other TLDs to .se, registration rules were liberalized in 2003.[138] In a ccTLD workshop in the Internet Governance Forum (IGF), it was noted that '[e]ach ccTLD represents the country's national identity on the web.'[139]

Some ccTLDs are used as a revenue-generating source for the corresponding countries.[140] For example, the island nation of Tuvalu sold the rights to its ccTLD.tv to a US firm.[141] The.tv has been marketed as a means of attracting users to web sites specializing in television and video content.[142] The island of Niue has generated enough revenue to provide free Internet service to all its residents by marketing its ccTLD .nu to Scandinavian countries, because 'nu' means 'now' in the languages of those countries.[143] Other countries, which encourage foreigners to register a domain name under their ccTLDs for a fee, to capitalize on the economic value of their ccTLDs include Moldavia (.md), Turkmenistan (.tm), and Tonga (.to).[144] Those

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[134] *Supra* n.130, p.6
[135] *Supra* n.31, p.843
[136] *Supra* n.93, p.480
[137] *Supra* n.31, p. 844
[138] *Supra* n.123, p.xvi
[139] IGF, *Around the ccTLDs world: The journey continues*, Workshop-93, 2012, http://wsms1.intgovforum.org/content/no93-around-cctlds-world-journey-continues#report, [Accessed 27 August 2013]
[140] *Supra* n.40, p.402, 403
[141] Daniel W. Drezner, *Sovereignty for Sale*, 2001, http://www.foreignpolicy.com/articles/2001/09/01/sovereignty_for_sale, [Accessed 27 August 2013]
[142] *Supra* n.41, p.108
[143] *Supra* n.141
[144] *Supra* n.31, p.860

ccTLDs are valuable because they form an expression, which would be desirable for some companies to have as suffixes in their domain names.[145]

However, some has criticized the substitution of ccTLDs for commercial TLDs because this blurs the distinction between them.[146] Some has suggested creating sub-categories for ccTLDs as follows: traditional ccTLDs and commercial ccTLDs.[147] The 'exploitation' of the semantic properties of ccTLDs in such a way to create a business, which is not related to the corresponding country, is seen by some as an evidence for the arbitrariness of the semantic relationship between the ccTLD and the country.[148]

In addition to their economic importance, ccTLDs started to become more meaningful politically and socially. For example, .tp for East Timor, which was delegated before the country won its independence, was used as a platform by activists to launch political protests.[149] Frankel argues that a ccTLD can give the corresponding government the political legitimacy that it may otherwise lack or that may be hotly debated and fought over, as seen in the case of .ps delegation for Occupied Palestine Territory.[150] China's attempts to open its doors and integrate its economy with Western nations were also reflected in their ccTLD policies.[151]

Moreover, ccTLDs are considered to be an essential part of the critical infrastructure.[152] Critical infrastructures, such as telecommunications, electrical power systems, gas and oil, banking and transportation, are systems whose incapacity or destruction would negatively affect the defence or economic security of a nation.[153] Internet itself is also becoming a critical infrastructure because other critical infrastructures are increasingly becoming dependent on it.[154] In many countries, ccTLDs are most likely the first layer of the DNS and they may be one of the few

[145] *Supra* n.93, p.469
[146] *Supra* n.41, p.108
[147] *Supra* n.18, p.319
[148] *Supra* n.42, p.244
[149] *Supra* n.123, p.xv
[150] *Supra* n.93, p.468, 468fn37
[151] *Supra* n.123, p.xvii
[152] *Supra* n.139
[153] *Supra* n.35, p.16
[154] *Supra* n.130, p.13

points of contact of the global Internet in developing countries.[155] In Canada, for example, .ca is viewed as 'a key public resource, helping to promote the development of electronic commerce in Canada and important to [Canada's] future social and economic development.'[156]

Also, ccTLDs have important implications for public policy. Essential services related to citizenship, education and health are linked to a local TLD which is bound by the local jurisdiction.[157] Besides, the administration of a ccTLD involves resolution of some matters which should reflect national policy principles, such as categorisation of SLDs under a ccTLD,[158] or definition of rules regarding the restriction of the semantic content of ccTLDs, which is directly related to freedom of speech.[159] This power over language also enables ccTLD managers to impact freedom of assembly through how web sites can be used as virtual forums, for example by not allowing the registration of domain names including the names of certain religious groups.[160]

3.2. National Sovereignty Claims

Nation-states do not have sovereignty over their corresponding ccTLDs, as they do, for example, over their telephone country codes.[161] However, governments have demanded greater say in the delegation and re-delegation of their ccTLDs[162], as a result of the ccTLDs' socio-economic, political or symbolic importance. ccTLDs started to be viewed in various ways, for instance:

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[155] *Supra* n.139
[156] *Supra* n.35, p.17
[157] *Supra* n.139
[158] Gbenga Bamodu, *Information Communications Technology and E-Commerce:Challenges and Opportunities for the Nigerian Legal System and Judiciary*, The Journal of Information, Law and Technology 2004 (2), http://www2.warwick.ac.uk/fac/soc/law/elj/jilt/2004_2/bamodu/, [Accessed 26 July 2013]
[159] Scott P. Sonbuchner, *Master of Your Domain: Should the U.S. Government Maintain Control over the Internet's Root?*, 17 Minn. J. Int'l L. 183 2008, p.201
[160] Kenneth Neil Cukier, *Multilateral Control of Internet Infrastructure and its Impact on US Sovereignty*, 2004, Telecommunications Policy and Research Conference, Alexandria, VA, October 2004, p.2, http://www.cukier.com/writings/cukier-netgov-TPRC04.pdf, [Accessed 30 August 2013]
[161] *Supra* n.160, p.17, 59
[162] *Supra* n.94, p.514

- as attached to the reputation of the country, or as valuable national assets belonging to the respective sovereign nations,[163]
- as a national resource under states' sovereignty,[164]
- as a matter of national pride,[165] and
- as a vital national interest and a platform for national economic growth and the institutions of civil society brought online.[166]

The national sovereignty issues mostly emerge from the issue of who decides to delegate a ccTLD to which registry. In many cases national governments claim to have more direct control over who is delegated the ccTLD representing their country.[167] Especially state actors from a more government-centered political culture such as those from Asia started to have the view that ccTLDs should belong to governments instead of private parties.[168] In South Africa, legislation that 'provided for government control of domain administration, instead of government participation' was enacted.[169] The .uk registry Nominet was criticised by the Director for the Information Economy in the Department for Business, Enterprise and Regulatory Reform as follows: 'It is hard to find another example like the DNS where such a vital aspect of the critical national infrastructure is left in the hands of a private company which is unlicensed and unregulated.'[170]

Also, it is claimed by some governments that 'nations should not have to request permission from the [US], or a [US] corporation, to decide who controls the ccTLD' since control over one's ccTLD is argued to be a matter of national sovereignty.[171] For example, the EC declared that:

> To the greatest degree possible, decisions about ccTLDs (including what strings are utilised, who operates the registry and what policies the registry should follow besides

[163] *Supra* n.42, p.244
[164] *Supra* n.46, p.118
[165] *Supra* n.119, p.89
[166] *Supra* n.40, p.402
[167] *Supra* n.94, p.512, 513
[168] *Supra* n.37, p.200
[169] *Supra* n.93, p.475
[170] Christopher T. Marsden, *Internet Co-Regulation: European Law, Regulatory Governance and Legitimacy in Cyberspace*, (Cambridge: CUP, 2011), p.124, 124fn105, 126
[171] *Supra* n.159, p.198

> those set out by ICANN) should be made by the responsible public authority and the local Internet community concerned and not by the IANA contractor.[172]

In a survey circulated among the International Telecommunication Union (ITU) member states and conducted by Geist in 2004, it was found that 'every government that responded either manages, retains direct control, or is contemplating a formalized relationship with their national ccTLD'. Also, it was stated that 'the survey reveals increasing consensus among respondents on the need for national governments to assert a proprietary interest in their national ccTLD.'[173] However, the CENTR criticised Geist's conclusions for being misleading due to the flaws in the methodology and for ignoring the part the private sector has been playing in the growth and stability of the Internet.[174]

Kleinwachter opposes strengthening the 'information sovereignty' of the state because strong national regulation of ccTLDs could lead to restrictions of free speech and privacy,[175] while Bamodu argues that the operation of a ccTLD, at least requires government backing and some form of legitimacy for the ccTLD registry because of the policy and legal matters arising from the operation of the ccTLD, although it does not necessarily require direct governmental involvement.[176] Also, Goldsmith and Wu, not in the context of ccTLD governance but for Internet regulation in general, argues that while it is true that there is always a risk of abuse of government power even in most democratic ones, '[democratic government] remains the least-bad system known to history.'[177]

According to Mueller, by claiming that governments should have the authority to determine who is assigned the ccTLD for their country, they are asserting a right to

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[172] Milton Mueller, *European Commission Paper #5: ccTLDs and yet another power grab*, September 2011, http://www.internetgovernance.org/2011/09/21/european-commission-paper-5-cctlds-and-yet-another-power-grab/, [Accessed 8 July 2013]
[173] Michael Geist, *Governments and Country-Code Top Level Domains: A Global Survey*, Version 2.0, February 2004, p.2
[174] Tim Mertens, *CENTR Replies to ITU Study on ccTLD Governance*, January 2004, http://www.circleid.com/posts/centr_replies_to_itu_study_on_cctld_governance/, [Accessed 30 August 2013]
[175] *Supra* n.103, p.1123
[176] *Supra* n.158
[177] Jack Goldsmith, Tim Wu, *Who Controls the Internet?: Illusions of a Borderless World*, (New York : OUP, 2006), p.140, 142

share with ICANN the power to make TLD delegations.[178] However, as he argues, standard concepts of exclusive sovereignty cannot be easily applied to the DNS root administration, because it is a global, shared resource and creation of ccTLDs includes not only a delegation of responsibility to a local actor, but also a globalized form of coordination and recognition by the rest of the world.[179] He notes that a globally compatible Internet requires coordinated mechanisms to manage name and address assignments, and ICANN meets this global coordination needs.[180]

On the other hand, von Arx and Hagen advocate the acknowledgment by national governments that nations are authoritative for their respective ccTLDs.[181] Hagen claims that the assumption that the current hierarchical DNS resource, which is controlled by ICANN and the US, cannot be changed to incorporate national sovereignty is wrong; instead it could be changed in such a way that the role of the A-root-server can be diminished by creating national ccTLD roots and coordinating naming assignments as peers rather than recognizing a unique root authority superior to ccTLDs. He calls this structure as "sovereign domains."[182]

As Mueller argues, national sovereignty claims, based on the semantic relationship between the country and the ccTLD, are 'tenuous and sometimes wholly artificial' because of the arbitrariness of this semantic relationship.[183] Moreover, Froomkin asserts that:

> It is difficult to see under what legitimate theory any state could claim an exclusive right to use [two-character labels chosen by the ISO and IANA] as an appurtenance of sovereignty when those labels [(country codes)] do not have significance as a result of anything the government or its people did, nor as a result of a long-accepted historic practice, but instead (for almost all countries) as a result of private actions by foreigners abroad.[184]

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[178] *Supra* n.42, p.244
[179] *Supra* n.172
[180] *Supra* n.6, p.61
[181] *Supra* n.130, p.16, 17
[182] *Supra* n.35, p.2, 31
[183] *Supra* n.42, p.225, 244
[184] *Supra* n.31, p.880

However, Hagen criticizes Mueller's argument for not taking into account 'the fact that the use of a country code may be tied to national policies that go beyond a mere semantic association between the country and its ccTLD'. He also argues that for countries there is no need 'to claim that a particular string of symbols exclusively represents a country and that they have rights to enter that abbreviation in the root zone file', instead they need to claim the right to create a name space as a conventional name space for each country within their own territory.[185]

As Mueller claims, the choice of country codes listed in ISO list by Postel as a naming convention inadvertently helped to reproduce the political geography of the pre-Internet international communication regime in the Internet, although these codes were intended to be 'nothing more than an identifier of what country a domain administrator was in' and they were just part of a private name space.[186] In contrast, McDowell, Steinberg and Tomasello assert that despite the Postel's original intentions for the use of ccTLDs, '[Mueller's] indignation makes sense only if one assumes that some essential or pure domain of global civil society is being violated by similarly essential or rigid institution of sovereignty'. By noting that 'claims of state sovereignty have always been based upon the manipulation of signifiers', they argue that:

> the partial incorporation of state signifiers and state authority into the Internet should be seen not as a violation of a formerly pure medium or as a parody of the state ideal, but rather as another phase in the ongoing process by which states constitute themselves through uneven integration and signification in the multifaceted social environment within which they construct and exercise their power.[187]

[185] *Supra* n.35, p.31
[186] *Supra* n.42, p.243
[187] *Supra* n.64, p.132, 133

3.3. Controversies

3.3.1. ccTLD Delegation Conflicts

State actors did not care or were not paying attention to the Internet in the early days of its growth.[188] However, as the Internet's significance has grown after 1991, the first ccTLD conflicts began to occur.[189]

A group of controversies was about which nationalities qualified for a ccTLD. The ISO 3166-1 list, which forms the basis for the delegation of ccTLDs, is a reasonably objective standard.[190] However, use of this list instead of the list of UN member states, according to Park, has caused very complicated political dynamics of ccTLD administration.[191] Many of the country codes in ISO 3166-1 list were not sovereign governments. For example, .hk for Hong Kong and .tw for Taiwan Province of China were delegated as ccTLDs in addition to .cn for China.[192] In 2003, Chinese government asked ICANN why .tw existed since it seemed to legitimize Taiwan as an independent nation.[193] In some cases, the national governments claimed to have more control over the ccTLDs associated with their protectorates, which were also delegated a ccTLD as a result of their country codes' presence in ISO 3166-1 list.[194]

Moreover, ISO 3166-1 list did not include all political entities. Entities omitted from this list were concerned about the possibility of the frustration of their political aspirations caused by IANA's actions or lack of its actions. For instance, the Palestinians could not receive the .ps ccTLD until the ISO 3166-1 list included the Occupied Palestinian Territory. Despite the dissolution of Soviet Union, the corresponding ccTLD .su[195] continues to exist in the root zone database.[196] When the name of Yugoslavia was officially changed to Serbia and Montenegro in 2003, the ISO recommended that those using the .yu (the ccTLD for Yugoslavia) continue to do

[188] *Supra* n.94, p.512
[189] *Supra* n.42, p.125
[190] *Supra* n.42, p.125, 126
[191] *Supra* n.37, p.187
[192] *Supra* n.119, p.89
[193] *Supra* n.133, p.3
[194] *Supra* n.94, p.513, 514
[195] *Supra* n.40, p.393, 394
[196] *Supra* n.24

so until the new code is announced because the process of determining a code would take a while. This one-way dependence on ISO codes is criticised by some for making registrants and Internet users beholden to the ISO for their timetable.[197]

Some of the controversies occurred as a result of the failure in properly implementing the policy. Whereas RFC 1591 requires that at least the administrative contact for a ccTLD must reside in the country involved,[198] this was often not the case for developing country ccTLDs. For example, in .ly ccTLD delegation, a British company successfully registered Libya's ccTLD by submitting the company owner's Tripoli address as the address of the administrative contact to fulfil residency requirement. 'IANA lacked the capacity to monitor such things.'[199] In some cases, ccTLDs were delegated to unaccountable commercial entities that had limited ties to the concerned domain. In the .bt case, Bhutan government applied to the ITU for assistance to reclaim its ccTLD .bt.[200]

For a registry, delegation of ccTLD means a kind of exclusive right to register a domain name ending with that ccTLD for anyone who wants such a domain name, because there is only one country code on the ISO-3166 list for each nation-state or geographic territory.[201] In some disputes after 1991, different governmental organisations from the same country competed for the right to be delegated the ccTLD for that country. Sometimes, people requested a change in the delegation, although they did not have the claimed authority from their governments.[202]

By the mid-1990s, the ccTLDs for virtually all existing countries had already been delegated by Postel. Postel assigned most ccTLDs to 'the first person that asks for the job'[203] without written agreements.[204] Decision on which person was to administer a

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[197] Martin Maguire, *East Timor's .TP: From a Virtual Initiative to a Political Reality*, Chp.2 in *Addressing the World: National Identity and Internet Country Code Domains*, ed. Erica Schlesinger Wass, (USA: Rowman & Littlefield Publishers, 2003), p.22
[198] *Supra* n.40, p.393
[199] *Supra* n.42, p.127, 283n31
[200] *Supra* n.40, p.393
[201] *Supra* n.94, p.512
[202] *Supra* n.42, p.125
[203] *Supra* n.40, p.390, 391
[204] *Supra* n.71, p.158

ccTLD was most of the time taken in an implementation stage of a research project.[205] As a result, university computer science departments or education and research networking organizations were the delegates for most ccTLDs instead of the governmental institutions that historically had the authority over communication, such as communication ministries or post, telephone, and telegraph monopolies.[206] Even individual Internet pioneers became ccTLD delegates in some countries.[207] Between 1994 and 1997, many of the ccTLDs were delegated to commercial entities by Postel.[208]

The administrative informality which had worked well within the networking community, partly because of Postel's moral authority, was viewed as problematic by other parties such as state actors that are not from this community.[209] From the perspective of most governments, non-state actors which became the registries for their ccTLDs as a result of Postel's delegation practice through informal procedures, has administered these ccTLD resources 'without any consent' of the state actors.[210] Moreover, the interests of the existing ccTLD registries have not always been in line with the interests and official communication policies of the national governments.[211] As explained by ICANN in 2003, nine of twelve re-delegation proceedings were strongly connected to national ccTLD disputes, however, as of 2009, the details of the ccTLD dispute negotiation are not available publicly for sovereignty matters.[212] In nine ccTLD re-delegations, which are .cx, .iq, .ly, .md, .ky, .uz, .so, .ke, and .au, there was no consent of the incumbent ccTLD registry to the transfer of the ccTLD management to another registry.[213]

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[205] *Supra* n.37, p.188
[206] *Supra* n.42, p.88
[207] *Supra* n.94, p.513
[208] *Supra* n.42, p.127
[209] *Supra* n.41, p.16, 20
[210] *Supra* n.37, p.188
[211] *Supra* n.94, p.513
[212] *Supra* n.37, p.189, 194
[213] *Supra* n.70, p.18, 25

3.3.2. Controversy over Unilateral Control of the US on ICANN

3.3.2.1. How and Why US Control?

In addition to the policy documents RFC 1591 and ICP-1, ICANN's management over ccTLDs was governed in the background by an agreement, called Memorandum of Understanding (MoU) between ICANN and the US government.[214] This agreement was later replaced by a Joint Project Agreement (JPA)[215], which established guidelines and milestones for ICANN to demonstrate its progress and adequacy. After JPA's expiration in September 2009, a new agreement called Affirmation of Commitments (AoC) was put in place. The US government took one step away from unilateral oversight of ICANN by allowing the JPA to expire and putting the AoC into place without any real legal status.[216]

Other than MoU and later JPA, there has been a separate contract between ICANN and the US government for performance of the IANA functions such as the operational management of the root zone file and the assignment of IP numbers.[217] ICANN's power to delegate or re-delegate ccTLDs derived from this second agreement.[218] Unlike JPA, the contract between ICANN and the US government for IANA functions was renewed in October 2012 for three years.[219] The second contractual element to the US government's oversight of ICANN is the cooperative agreement with VeriSign, which controls the operation of the root and ensures that ICANN policies are implemented.[220]

The reason for those relationships is that it was the US government who funded the research projects resulting in the core set of Internet Protocols, and so; at the time of ICANN's establishment, only the US government was in a position to make decision about the way the Internet infrastructure was operated and handled.[221] In other words,

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[214] *Supra* n.71, p.156
[215] *Supra* n.39, p.28
[216] *Supra* n.6, p.245, 249
[217] *Supra* n.39, p.28
[218] *Supra* n.30, p.206
[219] ICANN, ICANN's Major Agreements and Related Reports, http://www.icann.org/en/about/agreements, [Accessed 29 July 2013]
[220] *Supra* n.6, p.245
[221] *Supra* n.88, p.270

it could not have been possible to create a regime for Internet governance without the acquiescence of the US government as it is said that 'possession is nine-tenths of the law.'[222]

However, it was repeatedly indicated by the US government that its authority over the DNS was temporary.[223] In 1998 in the White Paper it was said that a transition from the US government control to a private sector-led management was going to be allowed for the DNS.[224] In addition to privatization, a demand for the internationalization of Internet governance was one of the political drivers of the process that created ICANN.[225] However, 'ICANN was not what it seemed.'[226] In contrary to the declared initial intentions, the US has retained its increasingly controversial contractor role.[227] The obvious contradiction between the allegedly private governance regime for the critical Internet resources such as domain names and IP numbers and the special role afforded one country has been criticised by other countries.[228]

3.3.2.2. Why does it matter for national sovereignty?

The US government's authority over the root and the ICANN allows the US to unilaterally decide on delegation or re-delegation of other countries' ccTLDs.[229]

The power to control the root includes the ability to delete a ccTLD.[230] According to Sonbuchner, erasing a country's ccTLD from the A-root-server would mean the end of that country's Internet presence for the majority of Internet users, because all websites using that suffix would be erased and anybody would be prevented from e-mailing such addresses. As he notes, '[t]his may be the reason why some of the main critics of ICANN are countries with poor relationships with the [US].'[231]

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[222] *Supra* n.94, p.509
[223] *Supra* n.6, p.246
[224] *Supra* n.177, p.168
[225] *Supra* n.94, p.511
[226] *Supra* n.177, p.169
[227] *Supra* n.94, p.509
[228] *Supra* n.6, p.215, 246fn53
[229] *Supra* n.159, p.201
[230] *Supra* n.30, p.211
[231] *Supra* n.159, p.230

A Brazilian delegate has expressed the view that until their government has a guaranteed right regarding the appearance of the .br in the root server, and has the ability to decide who operates their ccTLD, they cannot provide full security to their citizens in .br.[232] During the World Summit on the Information Society (WSIS) process, some countries from Arab world expressed their concerns about the US government's power to remove their presence on the Internet should it wish to do so for political reasons.[233] Von Arx and Hagen argues that US power over the root may be used as a strategic military advantage against the target of a threat, for example, the US could delete Iraq's ccTLD for from the root, if it decides to extend the UN embargo against Iraq into cyberspace.[234]

In addition to the ability to delete, power to control the root includes the ability to re-delegate a ccTLD from one registry to another. The .us case, where ICANN bypassed its own procedures that other countries are required to follow and re-delegated the .us ccTLD to another registry because the US government required it to do so, showed that US government's unilateral power over the root exists not only in theory but also in practice. Moreover, in other cases such as re-delegation of ccTLDs for Iraq and Afghanistan, as Sonbuchner claims, 'it is reasonable to conclude that ICANN felt pressure' to re-delegate the .iq or the .af upon the request of these '[US]-backed governments' because of the US control on ICANN.[235] Also, Park argues that, as seen in the re-delegation case of Ukraine's ccTLD .ua, when the security service of Ukraine, which is a successor of the KGB (security agency of the Soviet Union), wanted to take over .ua administration, ICANN did not respond to this re-delegation request for political reasons.[236]

On the other hand, according to Drake, the fears of countries about the possibility of cutting a country off from the Internet by the US are incorrect.[237] Also Froomkin

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[232] Adam Peake, *Internet governance and the World Summit on the Information Society (WSIS)*, Report Prepared the Association for Progressive Communications (APC), June 2004, p.12
[233] *Supra* n.59, p.84
[234] *Supra* n.130, p.12
[235] *Supra* n.159, p.198, 202
[236] *Supra* n.37, p.197
[237] William J. Drake, *Introduction: The Distributed Architecture of Network Global Governance* , Chp.1 in *Governing Global Electronic Networks: International Perspectives on Policy and Power*, eds. William J. Drake, Ernest J. Wilson III, (USA: MIT Press, 2008), p.46

asserts that 'whatever geo-strategic power exists over the root, it can only be exercised once', because the international community would ensure that erasing or re-delegating a ccTLD for political reasons, for example in case of a real war or cyber-war, 'never happened again by switching to an alternate system that no longer relied on a file that the [US] could manipulate single-handedly.'[238] Also, the US government's statements about ICANN's independence in the AoC, according to Froomkin, may be seen as a promise not to order VeriSign to insert a change into the root without a recommendation from ICANN. Froomkin also argues that due to increasing use of social networking sites like Facebook, and extensive use of search in cyberspace, if it is true that '[e]ighty percent of all online sessions begin with search', the importance of DNS's human-readable naming system is likely to decrease in future.[239]

Apart from the power of re-delegating or erasing a ccTLD, controlling the root means the power to implement ccTLD policy, at least in theory. In practice, most ccTLDs did not sign an agreement with ICANN as explained in detail above. For some countries such as Syria, it is politically unacceptable to sign up to any contract with ICANN because they argue that 'there should be no US government influence over the management of what was perceived as a sovereign domain name.'[240] However, there are eight registries who signed a Sponsorship Agreement with ICANN[241]. According to von Arx and Hagen, ccTLD policies mandated by contractual terms and conditions may diminish the sovereignty of nations to adopt laws independently of ICANN. For instance, as stated in the sponsorship agreements, a ccTLD must conform to ICANN policies where they concern:

> the interoperability of the Delegated ccTLD with other parts of the DNS and Internet; technical operational capabilities and technical performance of the ccTLD operator; and the obtaining and maintenance of, and public access to, accurate and up-to-date contact information for domain name registrants.[242]

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[238] *Supra* n.30, p.220, 222
[239] *Supra* n.39, p.35, 47
[240] *Supra* n.59, p.78, 80
[241] *Supra* n.92
[242] *Supra* n.130, p.10, 11

Von Arx and Hagen claims that, broad interpretation of terms such as 'interoperability' and 'technical operations capabilities' may lead to subtle effects on the regulation of registries, name policy, privacy, critical infrastructure, and national defence in other nation-states.[243]

Another example where the continuing special role of US may constitute a problem was seen during the latest renewal of the IANA contract between the US government and ICANN. After expiration of the IANA contract in March 2012, the US has announced that no acceptable bid for the contract was received. In other words, it was announced that ICANN was not qualified to operate the IANA. Although the contract was renewed later, this move was seen by some commentators as 'bad for multi-stakeholder governance and bad for predictable and stable process.'[244] This example shows that the actor responsible from the management of the root zone file involving ccTLDs may be changed by the US government unilaterally, while nation-states cannot have a say about this change.

US control of the root was supported by some because of the belief that the US was the only country that could impartially supervise ICANN. However, as seen in the .xxx (a TLD that would be restricted to adult content) controversy, the US DoC asked ICANN to delay a decision on the delegation of the .xxx TLD as a result of domestic politics in 2005. Although ICANN have made a decision that the .xxx proposal met all of its eligibility criteria, it complied with the request of the US government for a delay.[245] The .xxx controversy made many governments more aware of the implications of unilateral oversight of ICANN by a single country.[246]

A relatively recent issue reproducing the conflicts over US unilateral control is related to the implementation of a new security standard in the DNS, which is called Domain Name System Security Extensions (DNSSEC). DNSSEC introduces the public-key

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[243] *Supra* n.130, p.11
[244] Milton Mueller, *NTIA plays chicken with the IANA contract*, March 2012, http://www.internetgovernance.org/2012/03/10/ntia-plays-chicken-with-the-iana-contract/, [Accessed 27 July 2013]
[245] *Supra* n.6, p.71, 73
[246] James P. Muldoon, *New Types of Organizations and Global Governance in the Twenty-First Century: The case of ICANN*, Chp.9 in *International Organizations As Self-Directed Actors: A Framework for Analysis*, ed. Joel E. Oestreich, (Abingdon: Routledge, 2012), p.258

cryptographic signed data into the DNS and provides source authentication, integrity verification and authenticated denial of existence. However, full deployment of DNSSEC hardens the hierarchical character of the DNS, because the safety valve of defection to an alternative root server system, which serves as an option in case of an abuse of the control over the DNS root by US government or by ICANN, would be shut off. Therefore, the control over the root would be locked in the US and ICANN. Russia, for example, considered it unacceptable for its ccTLD to be cryptographically signed by any foreign entity.[247]

3.3.2.3. Is there a need for the continuing US control over the root?

The AoC did not change the possibility of re-delegating or erasing a ccTLD by the US government.[248] In 2005, the US government announced its intention to 'maintain its historic role in authorizing changes or modifications to the authoritative root zone file'. They claim that the US authority over the root is needed to ensure the 'stability and security of the DNS.'[249]

However, the assertion of US authority over the root was first put in place in 1998 due to competition policy reasons. The official operator of the root, NSI at that time, could decide who would be allowed to compete in the market for domain name registration because of its implicit power to add new TLDs to the root, or to refuse to do so and this could lead to uncontrolled market entry upon the regime forced by antitrust lawsuits. Thus, the US government make an amendment in the cooperative agreement so that the contents of the root can be controlled by a public authority, instead of a private market player. In short, preserving the 'stability and security of the DNS' was not a concern.[250] Also, from technical point of view, as Kleinwachter puts it, '[t]here is no need for modifications of zone files to be approved by the US Government...The system will not collapse if the zone file does not pass the table of a civil servant in the [US DoC].'[251]

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[247] *Supra* n.6, p.236, 237, 238
[248] *Supra* n.39, p.34, 35
[249] *Supra* n.177, p.170, 171
[250] *Supra* n.6, p.245, 246
[251] Wolfgang Kleinwachter, *WSIS and Internet Governance: The Struggle over the Core Resources of the Internet*, Comms. L. 2006, 11(1), 3-12, p.9

3.3.3. Controversy over ICANN

ICANN considers itself the proper global authority for all changes in ccTLD delegations.[252] However, global regulatory regimes traditionally have been established by international treaties among governments and governments consider themselves to be the legitimate representatives of the public interest.[253] Therefore, the legitimacy of a private not-profit corporation under Californian law acting as a global coordinator of the critical internet resources has been a problem from some governments' perspective.[254] For example, nation-states like South Africa, China, and Brazil questioned ICANN's authority to make global public policy decisions independently of national governments or international agreements.[255]

The assumptions on which the ICANN regime was based were fundamentally hostile to the principle of national sovereignty.[256] During the formation of the policy for the Internet by the US government in the late 1990s, 'private sector leadership' was seen as a solution to the possibility of imposing inconsistent or conflicting national laws upon the Internet.[257] In the White Paper, it was noted that 'neither national governments acting as sovereigns nor intergovernmental organizations acting as representatives of governments should participate in management of Internet names and addresses'.[258] Also, there was a feeling that the very nature of the Internet requires greater independence.[259] Hence, ICANN's bylaws completely forbade government officials from serving as directors. However, as national governments began to claim right to their ccTLDs, their marginalized representation within ICANN's organizational structure became a source of resentment for governments.[260]

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[252] *Supra* n.94, p.513
[253] *Supra* n.42, p.223
[254] *Supra* n.5, p.107
[255] Milton Mueller, John Mathiason, Hans Klein, *The Internet and Global Governance: Principles and Norms for a New Regime*, Global Governance 13 (2007), 237–254, p.240
[256] *Supra* n.94, p.512
[257] *Supra* n.94, p.510
[258] *Supra* n.40, 2004, p.395
[259] *Supra* n.246, p.244
[260] *Supra* n.159, p.196, 197

Many governments and government-affiliated organizations have defined ICANN's accountability as hardly far-reaching.[261] The unilateral control of ICANN by the US constitutes the core problem of global accountability.[262] While accountability implies that the stakeholders who form part of the governance mechanisms should be obliged to answer to anyone,[263] only the US government has been in a position formally to scrutinise and sanction ICANN until the AoC, which transferred responsibility to monitor ICANN from the US government to a global review process. Although the US may play a less direct role in supervising ICANN in future as a result of the AoC, the US Congress may still call on ICANN to respond because it is a private body incorporated in the US and its headquarters will continue to remain in the US.[264] Therefore, the problem of accountability is not solved.[265]

In addition to governments, ccTLD managers also criticized ICANN for its lack of openness, accountability, and representation[266] and questioned ICANN's authority for implementing ccTLD policy.[267] In 2002 some reforms were made in ICANN's structure to respond those criticisms. Under the new structure, so-called "ICANN 2.0" by some, a new Country Code Domain Name Supporting Organization (ccNSO) was established to facilitate the interests of ccTLD managers and national governments.[268] Supporting organizations (SOs) are the primary actors making recommendations for the management of core Internet resources and related policy issues.[269] By adding ccNSO, ICANN tried to protect itself from sensitive national sovereignty issues.[270] However, this reform did not resolve the main issue, which is the ICANN's assumed ultimate authority over domain delegation and re-delegation.[271]

Also, ICANN's review and appeal procedures are criticised for being weak because only a non-binding request for the board to reconsider a decision can be submitted.[272]

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[261] *Supra* n.5, p.107
[262] *Supra* n.88, p.275
[263] *Supra* n.5, p.100
[264] *Supra* n.88, p. 270, 271, 275, 283
[265] *Supra* n.6, p.251
[266] *Supra* n.40, p.399
[267] *Supra* n.59, p.79
[268] *Supra* n.40, p.400
[269] *Supra* n.88, p.271
[270] *Supra* n.40, p.400
[271] *Supra* n.59, p.79
[272] *Supra* n.6, p.248

This means that if an objection against delegation or re-delegation decision for a ccTLD is to be made, there are no clear rules for appeal.

3.4. Nation-States' Actions to Assert Their Claimed Rights

3.4.1. The Governmental Advisory Committee (GAC)

The GAC is the only direct means by which non-US governments can influence ICANN.[273] It was constituted in 1999[274] as an advisory organ, consisting of one representative of each participating national government, and selected international governmental organizations such as the ITU.[275] To preserve ICANN's independence from government interference the GAC was designed as an independent unit, outside the ICANN structure, while other advisory committees were integrated into the ICANN process. GAC liaisons were not allowed into SOs for domain names and addresses or into advisory committees. The ICANN Board had a high level of independence by making GAC recommendations non-binding on itself. The Board could reject a GAC recommendation without explanation.[276]

However, more direct and greater participation in the ICANN regime has been claimed by countries.[277] For example, according to government of India, one way to address sovereignty concerns would be to give the GAC representatives an affirmative vote in the ICANN Board on ccTLD delegation or re-delegation matters.[278] During the 2002 reforms, the GAC was given further representation in "ICANN 2.0".[279] By a modification made in ICANN's bylaws it was acknowledged that governments are 'responsible for public policy' and the ICANN Board is required to provide an explanation whenever it does not follow a GAC advice on public policy matters and to seek a mutually acceptable resolution.[280] Also, according to new bylaws the GAC is allowed to send a nonvoting liaison to the Board.[281] While the ICANN Board can

[273] *Supra* n.39, p.28
[274] *Supra* n.42, p.206
[275] *Supra* n.30, p.195
[276] *Supra* n.103, p.1104
[277] *Supra* n.94, p.514
[278] *Supra* n.64, p.176
[279] *Supra* n.30, p.196
[280] *Supra* n.6, p.242
[281] *Supra* n.159, p.197

remove non-voting liaisons from other advisory committees, it does not have such a right with the GAC liaison.[282]

Moreover, after the AoC the GAC's status has been elevated by allowing it, together with the ICANN Board chair or president, to appoint review panels which will conduct a review of ICANN every three years in four areas of concern; accountability, security, competition and Whois policy.[283]

Since its inception, the ccTLD question was a focus of the GAC's work.[284] According to Mueller, national governments attempted to project their geographic jurisdictions into cyberspace by trying to gain control over their ccTLDs through the GAC. At its first meeting, the GAC declared that 'the Internet naming system is a public resource.'[285] However, according to Bygrave and Bing, '[b]ecause the notion of a 'public resource' is not defined, it is difficult to discern what this statement means.'[286] Also, Froomkin argues that the DNS must be seen as a fundamentally private network unless it is reclassified as a 'public resource'.[287]

In the first GAC Operating Principles it was recited that '[ccTLDs] 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...'[288] In the latest version of the GAC Operating Principles these provisions are still kept.[289] According to Froomkin, the assertion of the right of governments at least to veto and arguably to determine the fate of their ccTLDs by this GAC document is:

> uncontroversial as a matter of domestic law because most governments can probably make such a rule domestically; it is probably reasonable as a matter of contract law, although it requires interpreting the oral agreements by which Postel delegated

[282] *Supra* n.103, p.1121
[283] *Supra* n.6, p.249, 250
[284] *Supra* n.103, p.1117
[285] *Supra* n.42, p.205, 206
[286] *Supra* n.1, p.79
[287] *Supra* n.31, p.868
[288] *Supra* n.31, p.864
[289] ICANN, GAC, Operating Principles, https://gacweb.icann.org/display/gacweb/GAC+Operating+Principles, [Accessed 2 September 2013]

> ccTLDs to willing private administrators. But, as a statement of public international law, it was novel.[290]

As a result of the reforms made in ICANN's structure and procedures, the GAC has become a significant player in defining ICANN's delegation policies.[291] According to Uerpmann-Wittzack, despite being an ICANN's organ, GAC comes close to an international organization in reality.[292] However, according to Mueller, the institutional arrangement made for GAC 'neither fully integrates governmental actors into an equal-status, multistakeholder governance regime, nor does it formally grant states a distinctive role with clearly defined and limited authority.' He also criticizes the current GAC-ICANN relationship by claiming that GAC would tend to seek more power for states at the expense of non-state actors, as seen in GAC's most important communiqués and policy advice statements which have demanded special powers over the delegation of ccTLDs.[293] Moreover, Scholte argues that the recent developments in favour of governments need to be counterbalanced by a significant influx of civil society participation in ICANN policy processes to reinforce accountability.[294]

3.4.2. World Summit on the Information Society (WSIS)

ICANN has been the focus of criticism from national governments. Many developing countries argued that governments should have authority over public policy issues pertaining to the Internet that is increasingly central to their economies and societies.[295] Some governments pushed for more reform in ICANN, while others argued that the ICANN should transfer its responsibilities to an international organization. The ITU was seen as an appropriate candidate by some since it is an international organization having expertise in communications.[296]

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[290] *Supra* n.31, p.864
[291] *Supra* n.159, p.197
[292] Robert Uerpmann-Wittzack, *Principles of International Internet Law*, 11 German L.J. 1245 2010, p.1257
[293] *Supra* n.6, p.243, 244
[294] *Supra* n.88, p.287
[295] *Supra* n.237, p.46
[296] *Supra* n.159, p.198

These issues were revisited during the UN's WSIS[297], which was held in two parts; the 2002-2003 Geneva phase and the 2004-2005 Tunis phase. It was developed and organized by the ITU under the aegis of the UN.[298] Although the original main mandate of the WSIS was bridging the digital divide[299], it morphed into the World Summit on Internet Governance.[300]

During the WSIS, ICANN's nature and performance was criticized by both the EU and a broad coalition of developing countries. The complaints of developing countries were related to legitimacy of a private corporation subject to US laws making key decisions about the Internet and governments' limited advisory role in this private corporation.[301] For example, China, India, Brazil and South Africa argued that 'the principle of private sector leadership was good for an internet with one million users, but an internet with one billion users would need a stronger involvement from governments.'[302] Some governments desired to replace US authority over both the root server and ICANN with some kind of intergovernmental framework, under the ITU or a new-built entity.[303]

The private sector, civil society, the academic community and a number of mainly western governments strongly rejected the proposals regarding the governmental leadership instead of private sector leadership since they thought that a stronger governmental involvement could restrict individual rights and freedoms, decelerate technical and commercial innovations and increase bureaucracy that would not be flexible enough to react to a fast-changing technology.[304]

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[297] *Supra* n.237, p.46
[298] Wolfgang Kleinwachter, *Multistakeholderism, Civil Society, and Global Diplomacy: The Case of the World Summit on the Information Society*, Chp.15 in Governing Global Electronic Networks: International Perspectives on Policy and Power, eds. William J. Drake, Ernest J. Wilson III, (USA: MIT Press, 2008), p.539, 545
[299] Wolfgang Kleinwachter, *Internet governance and governments: enhanced cooperation or enhanced confrontation?*, Comms. L. 2007, 12(4), 111-118, p.113
[300] *Supra* n.6, p.10
[301] *Supra* n.237, p.46
[302] *Supra* n.299, p.113
[303] *Supra* n.237, p.46
[304] *Supra* n.299, p.113

Global coordination of ccTLD delegation was also one of the main debates among state actors during the WSIS process.[305] For example, the Chinese government gave highest priority to the recognition of national sovereignty over the management of its ccTLD.[306] After the first phase of the WSIS, governments were invited to manage or supervise their respective ccTLDs according to the Plan of Action of December 2003.[307]

On the way to second part of the WSIS, the US DoC published a statement, where it was made clear that the US government would not consider giving away its historically grown specific role and responsibility regarding the Internet, while the legitimate interests of governments over their ccTLDs were recognised by the US Government.[308] However, this statement did not include a legally binding declaration that the US would never interfere in the administration of a ccTLD, and would not use its power over the root to prevent the delegation or re-delegation of a ccTLD.[309]

In the final negotiations the sovereignty question was not a significant controversy. According to Paragraph 63 of the Tunis Agenda, which is the final product of WSIS process, governments agreed that:

> countries should not be involved in decisions regarding another country's ccTLD. Their legitimate interests, as expressed and defined by each country, in diverse ways, regarding decisions affecting their ccTLDs, need to be respected, upheld and addressed via flexible and improved frameworks and mechanisms.[310]

The need for countries to manage their ccTLDs via the ICANN regime, which is under US dominance, was rejected by this paragraph.[311] Also, Uerpmann-Wittzack asserts that the underlying idea in the WSIS documents may be generalized as follows: 'there is a genuine link between a ccTLD and the respective state'; hence, he

[305] *Supra* n.37, p.203
[306] *Supra* n.298, p.572
[307] The WSIS Plan of Action, December 2003, Art.13(c)(ii)
[308] *Supra* n.299, p.114
[309] *Supra* n.298, p.572
[310] *Supra* n.298, p.572
[311] *Supra* n.6, p.77

claims that '[t]he ccTLD becomes a state's territory in cyberspace'.[312] After the WSIS, governments emerged as the political authority for ccTLDs and in turn the power of the GAC in the ICANN decision-making process has increased.[313]

According to Paragraph 68 of the Tunis Agenda, the responsibility for the root and Internet public policy oversight should belong to all governments equally, not only to the US government.[314] A process of "enhanced cooperation" was proposed, as defined in Paragraph 69:

> to enable governments, on an equal footing, to carry out their roles and responsibilities, in international public policy issues pertaining to the Internet, but not in the day-to-day technical and operational matters, that do not impact on international public policy issues.[315]

However, Kleinwachter notes that 'what the public policy dimension of a technical issue is if it comes to concrete questions with regard to root servers, domain names and IP addresses' was not clear from the language of the Paragraph 69.[316] Also, Mueller argues that in Internet governance it is impossible to separate 'public policy' from 'technical and operational matters' because technical management processes have important economic, political, and cultural consequences for users worldwide, and so they are deeply intertwined. Moreover, he criticizes the Tunis Agenda for reasserting the old system of national sovereignty by dividing the Internet governance into two parts: the domain of "technical management", which should be left to the private sector and civil society, and the domain of "public policy making," which is supposed to be ruled by governments. He argues that the Internet, by creating transnational communities challenges the assumption that only national governments can establish public policy for communication and information.[317]

The Tunis Agenda did not include any implementation mechanism, procedures or a timetable in the formulation of the process of "enhanced cooperation", while the only

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[312] *Supra* n.292, p.1258
[313] *Supra* n.37, p.192
[314] *Supra* n.6, p.77
[315] *Supra* n.2, p.375
[316] *Supra* n.299, p.115
[317] *Supra* n.6, p.78, 240, 241

concrete element involved was that such cooperation between governments should take place on an "equal footing".[318] It must be noted that this process of "enhanced cooperation" is not only an intergovernmental process but also the private sector and civil society are included; as stated in Paragraph 71 of the Tunis Agenda, the UN Secretary General, tasked with starting such a process, is obliged 'to involve all stakeholders in their respective roles.'[319]

Another outcome of the WSIS process was the creation of the IGF, as a 'new forum for a multi-stakeholder policy dialogue', as set forth by the mandate in Paragraph 72 of the Tunis Agenda.[320] IGF has been held every year since 2006.[321] The challenge of global ccTLD coordination was implicitly transferred to the IGF in a multistakeholder environment.[322]

Nevertheless, in most respects WSIS was not a powerful process because no treaties or conventions were passed.[323] Hence, the essential legal character of Internet governance was unaltered.[324] The Tunis Agenda confirmed ICANN's authority over Internet governance and this outcome prevented the realization of some proposals for moving ICANN's functions to a new or existing intergovernmental forum such as the ITU.[325]

The WSIS process has demonstrated that not only governments but also other main stakeholder groups, which are private sector and civil society, has a specific role and responsibility to meet the challenges of the Internet governance, which can be summarized as the principle of multistakeholderism.[326] Uerpmann-Wittzack argues that 'the concept of multistakeholder cooperation is so strong that it takes the form of a well established [legal] principle' in international Internet law.[327] Weber notes that

[318] *Supra* n.299, p.115
[319] *Supra* n.298, p.574
[320] *Supra* n.2, p.375
[321] IGF, www.intgovforum.org, [Accessed 30 August 2013]
[322] *Supra* n.37, p.203
[323] *Supra* n.6, p.59
[324] *Supra* n.9, p.32
[325] *Supra* n.6, p.77
[326] *Supra* n.298, p.576, 577
[327] *Supra* n.292, p.1262

the realization of the concept of multistakeholderism developed in the context of the WSIS influences the notion of legitimacy.[328]

However, some countries perceive multistakeholderism as a cover for the US dominance and the IGF as a placebo for the status quo. Recently, the ITU has overtly started to work on the issue.[329] For example, during the Fifth World Telecommunication/Information and Communication Technology Policy Forum (WTPF), that took place in Geneva in May 2013,[330] the ITU has offered countries a place to discuss and make resolutions on global internet policy issues.[331]

In order to review the progress made in the implementation of the WSIS outcomes and to take stock of achievements in the last 10 years, the WSIS+10 High-Level Event is planned to be held in April 2014.[332] Moreover, a working group on enhanced cooperation in internet governance was set up by the UN Commission on Science and Technology for Development in 2013, which is expected to report to the Commission in 2014. During the first WSIS +10 Review Event in February 2013, participants said that the UN working group should be used to close "gaps" in enhanced cooperation over Internet governance that remain eight years after the WSIS.[333]

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[328] *Supra* n.5, p.99, 100
[329] Milton Mueller, *Has the USA run out of ideas about Internet governance?*, June 2013, http://www.internetgovernance.org/2013/06/18/has-the-usa-run-out-of-ideas-about-internet-governance-part-2, [Accessed 30 August 2013]
[330] ITU, WTPF, http://www.itu.int/en/wtpf-13/Pages/default.aspx, [Accessed 30 August 2013]
[331] *Supra* n.329
[332] ITU, WSIS+10: WSIS Review Process, http://www.itu.int/wsis/review/2013.html, [Accessed 30 August 2013]
[333] Rick Mitchell, *Planned UN Group Should Address "Gaps" in Enhanced Cooperation Over Internet Governance*, 8 WCRR 41, p.41

4. THE CASE OF THE TURKISH ccTLD

4.1. Overview of the '.tr'

According to ISO 3166-1 list, the ccTLD for Turkey is '.tr'. It was delegated in 1990 to an academic institution, which is Department of Computer Engineering in Middle East Technical University,[334] and since then no re-delegation proceedings took place.[335] In 1991 the first internet connection to Turkey was provided and also the registration of domain names under '.tr' started in the same year.[336]

4.1.1. The '.tr' Administration Policies and Procedures

According to the '.tr Domain Names Policies, Rules and Procedures'; the .tr domain name space is defined as 'the Turkish Republic's common public good'. Besides, it is stated that domain names registered under .tr cannot be sold or rented.[337]

The .tr registry adopted second-level domains which are English abbreviations like '.com', '.gov', '.k12', and Turkish abbreviations like '.av', '.kep', '.tsk'. So, domain names without SLDs, so-called flat names, are not allowed.[338] The largest registration number belongs to the '.com.tr' with over 70 percent share in total domain names registered under .tr.[339]

No documents are required as a prerequisite to the registration under some SLDs such as '.gen' and '.web', while for registrations under other SLDs like '.com' and '.org' there exist some requirements before registration. For example, only Turkish citizens

[334] IANA, Delegation Record for .TR, http://www.iana.org/domains/root/db/tr.html, [Accessed 30 August 2013]
[335] IANA Reports, http://www.iana.org/reports, [Accessed 30 August 2013]
[336] Nic.tr, History, https://www.nic.tr/index.php?PHPSESSID=137902582217640168123856817&USRACTN=STATICHTML&PAGE=about_history, [Accessed 30 August 2013]
[337] Nic.tr, ".tr" Domain Names Policies, Rules and Procedures, V.5.1.0, 2008, p.5, https://www.nic.tr/index.php?PHPSESSID=137902582217640168123856817&USRACTN=SMGD, [Accessed 30 August 2013]
[338] Nic.tr, Required Documents, https://www.nic.tr/index.php?lang=TR_LANG&PHPSESSID=137829189914412225229341733, [Accessed 30 August 2013]
[339] Nic.tr, Statistics, https://www.nic.tr/index.php?USRACTN=STATISTICS&PHPSESSID=137829189914412225229341733, [Accessed 4 September 2013]

and foreigners living in Turkey can register a domain name under '.name.tr'. The rules for registrations under the SLD '.com' are the most restrictive.[340] Foreign applicants are required to prove their business activity in Turkey or to have a business relation with a company domiciled in Turkey.[341] While generating a less potential for conflicts after the registration, the restrictive registration policy is criticised for causing a huge economic loss due to increasing preference of gTLDs over .tr.[342]

Prices of domain names depend on the SLDs. Domain names under some SLDs such as '.gov' and '.edu' are registered for free, while registrations under SLDs intended for commercial purposes such as '.com', '.net' and '.kep' are the most expensive ones with around 10 US Dollars per year.[343] It is not known if the registry seeks profit maximization or not since no financial information is made publicly available.

Domain names with .tr suffix have only been registered directly via the registry until 2008,[344] but then ten registrars signed an agreement with the registry and now they are allowed to register domain names in addition to the registry.[345] Since no information is made publicly available about the market share of registrars and the registry, it is not known if the registry is still a dominant actor or if there is an effective competition in the .tr domain name registration market.

While it is declared that the works to establish a domain name dispute resolution mechanism are still carried out by the registry,[346] in a meeting in 2011 the DNS

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[340] *Supra* n.337, p.6, 14
[341] *Supra* n.338
[342] Gokhan Ahi, Domain Name Administration (in Turkish only), September 2003, http://gokhanahi.com/2003/09/29/alan-adi-dikta-yonetimi/, [Accessed 4 September 2013]
[343] Nic.tr, Domain Name Fees https://www.nic.tr/index.php?PHPSESSID=13790258221764016812385681 7&USRACTN=PRICELST, [Accessed 4 September 2013]
[344] *Supra* n.336
[345] Nic.tr, Our Registrars, https://www.nic.tr/index.php?PHPSESSID=13790258221764016812385681 7&USRACTN=STATICHTML&PAGE=about_registrars, [Accessed 4 September 2013]
[346] Nic.tr, Corporate Identity, https://www.nic.tr/index.php?PHPSESSID=13790258221764016812385681 7&USRACTN=STATICHTML&PAGE=about_corpident, [Accessed 4 September 2013]

Working Group is represented as the organ operating a dispute resolution mechanism, which has dealt with 1,445 disputes from 2000 to 2010.[347]

There are some restrictions of the semantic content of the domain names under .tr. For example, the domain names are required to be compliant with national traditions, cultural values and general moral values. Also, domain names including 'turkiye', 'ataturk' and 'turk' can only be registered by Turkish governmental agencies.[348] In 2006, the registration of domain names including Turkish characters was started[349]. In contrary to the most ccTLD registries in Western countries, the DNSSEC has not been deployed,[350] and there is no declared plan to deploy it.

4.1.2. Usage of the '.tr'

In terms of the number of Internet users, Turkey is ranked as the fifteenth largest country in the world and the fourth largest country in the Europe after Germany, UK and France.[351] However, while the domain name registrations under Germany's .de and UK's .uk are the second and the fifth largest among all TLDs with registration numbers over 10 million as of the end of 2012,[352] the number of domain names registered under .tr was only 338,059 as of 2 September 2013.[353] In 2010, the gTLD share of total domain names registrations in Turkey was over 80 percent. This high gTLD share makes Turkey the second among the countries in the Organisation for Economic Co-Operation and Development (OECD).[354]

Unlike commercial or private entities which are free to choose their domain names under any TLD, public organizations choose to register their domain names under.tr. Many e-government services related to education, health, military service,

[347] Attila Özgit, Delegation and Re-Delegation of .tr, 16 March 2011, p.5, http://svsf40.icann.org/meetings/siliconvalley2011/presentation-drd-tr-16mar11-en.pdf, [Accessed 2 September 2013]
[348] *Supra* n.337, p.6
[349] *Supra* n.336
[350] ccTLD DNSSEC Adoption, 7 July 2013, http://dnssec-deployment.org/wp-content/uploads/2013/07/cctlddnssec-2013-07-30.pdf, [Accessed 30 August 2013]
[351] Internet World Stats, http://www.internetworldstats.com/top20.htm, [Accessed 30 June 2013]
[352] *Supra* n.127, p.2
[353] CENTR, http://www.centr.org/member/nictr, [Accessed 2 September 2013]
[354] OECD, ICCP, The Economic and Social Role of Internet Intermediaries, December 2010, Italy, p.13, www.oecd.org/sti/ieconomy/48730817.pdf, [Accessed 4 September 2013]

communication and citizenship are offered through web sites having domain names registered under .tr.[355]

Also, the use of .tr gained significant importance in the field of commerce after the enactment of the new Turkish Commercial Code in January 2011. In Article 18(3) of this new law it was stated that notifications pertaining to non-performance or termination of agreements among traders must be made through public notary, registered mail, telegram or the registered e-mail system incorporating use of secure electronic signature. By Article 1525(2) of this law, the Information and Communications Technology Authority (ICTA) was given the duty of publishing secondary regulations regarding the registered e-mail (REM) system.[356]

Then, ICTA published a by-law and few communiqués on the operation of REM system in 2011 and 2012. In Article 4(1)(l) of the 'By-law on the Procedures and Principles Pertaining to the [REM] System', REM is defined as enhanced form of e-mail which provides evidence relating to the handling of an e-mail including proof of submission and delivery.[357] According to Article 11(10) of the 'Communiqué on [REM] Directory and [REM] Account Addresses', the e-mail addresses to be used by traders must have domain names with '.kep.tr' suffix to comply with their obligations as set in the Turkish Commercial Code.[358]

4.2. The Administrative Model for the '.tr'

The administrative model of the '.tr' registry is between the two extreme models run by the registries that are firmly placed within the public sector and by the purely private-sector registries. While being a public institution, the registry has the relative autonomy and independence offered by a university.

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[355] Turkish Republic, E-Government Portal, www.turkiye.gov.tr, [Accessed 2 September 2013]
[356] Turkish Commercial Code, Law No: 6102, 13 January 2011, Official Journal: 27846, 14 February 2011
[357] By-law on the Procedures and Principles Pertaining to the REM System, Art. 4(1)(l), http://eng.btk.gov.tr/mevzuat/yonetmelikler/dosyalar/By-law_on_Registered_EMail.pdf, [Accessed 2 September 2013]
[358] Communiqué on REM Directory and REM Account Addresses, Art.11(10) http://eng.btk.gov.tr/mevzuat/tebligler/dosyalar/communique-2-REM-10%2008%202012.pdf, [Accessed 2 September 2013]

Despite the current IANA records where the sponsoring organization is seen as the Department of Computer Engineering, the registry calls itself as 'Nic.tr (".tr" Domain Names) Administration' formed as an individual department of Middle East Technical University since 1998 because of the increasing work load.[359] The technical contact of the .tr registry, who is also an academic in the Computer Engineering Department, is called as the 'project' manager of the Nic.tr administration[360], arguably reflecting the legacy of the Postel's delegation during a 'research project', which is called the Internet now. After the establishment of ICANN, the registry did not choose to formalize its relationship with the corporation by signing an agreement or by exchanging letters.[361] It is a member of the CENTR[362] and the ccNSO.[363]

The registry refers to the DNS Working Group as the 'legislative power' determining the policies, rules and procedures for the administration of .tr. It is emphasized that the registry is only responsible from technical operations. The DNS Working Group, consisting of eleven representatives from non-governmental organizations, private and public sector, was formed in 2000 under the Internet Committee of the Ministry of Transport. In its policy-making duty, the group is required to ensure that the public opinion and any suggestions are taken into account so that the domain name administration could be improved in a democratic way.[364]

There exists no legal framework defining the legal basis of the administrative model chosen by the .tr registry. Instead of a formal framework, the existence of the DNS Working Group could be seen as a solution to the lack of legitimacy. However, there exist two problems with this approach. While the DNS Working Group was structured as a policy-making organ, the Internet Committee, under which the group was established, was just an advisory body to the Ministry of Transport.[365] Besides, the

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[359] *Supra* n.346
[360] Nic.tr, Organizational Chart, https://www.nic.tr/index.php?PHPSESSID=137902582217640168123856817&USRACTN=STATICHTML&PAGE=about_organization, [Accessed 2 September 2013]
[361] *Supra* n.92
[362] *Supra* n.336
[363] ICANN, ccNSO Members, http://ccnso.icann.org/about/members.htm , [Accessed 30 August 2013]
[364] *Supra* n.346
[365] *Supra* n.342

Internet Committee was restructured in 2007 by a law[366] and re-named in 2011 by another legislation,[367] but the DNS Working Group was not mentioned as a working group under any of these new committees; therefore, the group cannot be categorized as a formal establishment any more. It would not be wrong to conclude that DNS Working Group continues to work for the Nic.tr on a voluntary basis.

4.3. Anticipated Re-Delegation of the '.tr'

Administration of the .tr was not a subject of any legislation until 2008 in Turkey. When a new law on electronic communications was enacted, the management of domain names was mentioned for the first time in a legal text. According to Article 35 (1) of this new law, which is the Electronic Communications Law, the Ministry of Transport, Maritime Affairs and Communications ('the Ministry') shall determine the procedures and principles regarding the management of domain names and determine which organization would allocate domain names. Also, in Article 5(1)(a) of the law, it is stated that the Ministry shall set the 'strategies and policies regarding electronic communications services which are based on scarce resources such as numbering, internet domain names, satellite position and frequency allotment.'[368]

Then, the Ministry published a secondary regulation called 'By-Law on Internet Domain Names' ('the By-law') in November 2010. According to this by-law, the new .tr registry shall be the ICTA. The new .tr administration model separates technical functions from administrative functions. According to Article 3(1)(n) of the By-law, a system called '.tr Network Information System (TRABIS),' where technical operations of the registry are run, will be set-up. As stated in Article 14(1)(a) of the By-law, ICTA can set up and operate the TRABIS by itself or subcontract the operation and set-up to a third party. Administrative functions of the registry such as designating dispute resolution service providers and registrars, determining the prices

[366] The Turkish Law Regarding the Regulation of Publications on the Internet and Suppression of Crimes Committed via Such Publications, Law No.5651, OJ: 26530, 23 May 2007, Art.10(5)
[367] The Turkish Statutory Decree on the Organization and Functions of the Ministry of Transport, Maritime Affairs and Communications, Decree No:655, OJ: 28102, 1 November 2011, Art.29
[368] The Turkish Electronic Communications Law, Law No: 5809, OJ:27050,10 November 2008, Art.35 (1), Art.5(1)(a)

of domain names, determining SLDs and determining documents to be requested before registration of domain names shall be the responsibility of ICTA.[369]

In August 2012 ICTA chose to subcontract the set-up and operation of TRABIS to the Turkish Academic Network and Information Centre (ULAKBIM) by signing an agreement with them.[370] ULAKBIM is a research and development institute of the Scientific and Technological Research Council of Turkey (TUBITAK). While being financially and administratively autonomous, TUBITAK is a governmental organization, defined as 'related to' the Ministry of Science, Commerce and Technology.[371]

There has not been any official explanation for the reasons of the anticipated re-delegation of the .tr to a new registry by the Ministry. However, the By-law was advertised for making the .tr registry operations legitimate by defining a legal basis; bringing more competition to the domain name market by strictly separating registry and registrar functions; making domain name registrations for '.com.tr' on 'first-come-first-served' basis instead of current restrictive rules, which have caused preference of gTLD '.com' over '.com.tr'; allowing the registration of flat names; and establishing a legal dispute resolution mechanism adapted from ICANN's Domain-Name Dispute Resolution Policy (UDRP).[372]

As of September 2013, it is stated that the works on establishment of TRABIS are still going on without giving any further detail.[373] So, it is not certain whether any re-delegation request for the .tr by the Turkish government is made to ICANN. Meanwhile, the incumbent registry did not want to give up its .tr registry role. Thus, in January 2011 the Middle East Technical University asked for the annulment of the By-law on the grounds that their rights were violated. They claimed entitlement to the registry function by the appointment of Postel. Also, they complained about that

[369] The Turkish By-Law on Internet Domain Names, 07 November 2010, Official Journal: 27752, Art.3(1)(n), Art.14(1)(a), http://www.trabis.gov.tr/en/ordinance.htm, [Accessed 2 September 2013]
[370] ULAKBIM, Annual Report (in Turkish only), 2012, p.3, http://www.ulakbim.gov.tr/hakkimizda/faaliyet, [Accessed 2 September 2013]
[371] TUBITAK, About, http://www.tubitak.gov.tr/tr/kurumsal/hakkimizda/icerik-organizasyon-semasi
[372] M. Salim Ketevanlioglu, *Role of Government in terms of delegation and re-delegation*, IGF, Workshop No:204, The Governance Issues of Country Code Top Level Domains, 16 November 2009
[373] ICTA, TRABIS, http://www.trabis.gov.tr/en/indexen.htmlweb-trabis, [2 September 2013]

during the preparatory stages of the By-law, the incumbent registry's concerns and suggestions were not taken into account.[374] At time of writing, the lawsuit is still pending.

4.4. Assessment of National Sovereignty Claims for the '.tr'

The controversy on the .tr is not about "public versus private" administration of a ccTLD, instead, it is about "direct government control on the basis of a legal framework versus relatively autonomous public administration on the basis of Postel's legacy". As can be inferred from the Electronic Communications Law explained above, the Turkish government's claims are that; there must be a legal basis for the administration of .tr, and only the government shall set the policies and procedures for the .tr and decide who can be the registry for the .tr. Also, the enactment of a law for these claims means that the Turkish government views the delegation of its ccTLD as a matter of national sovereignty, and neither Postel's informal delegation nor the authority of ICANN or the US government over the root zone file is recognized.

Claim-1: There must be a legal basis for the administration of '.tr'

The rationale behind this claim has not been officially declared. However, the source of the regulation may be searched in the provision stating that internet domain names are 'scarce resources' such as 'numbering,...satellite position and frequency allotment.'[375] In traditional telecommunications regulation, optimization of scarce resources such the radio spectrum is one of the widely accepted regulatory objectives.[376] However, domain name space cannot be considered as a scarce resource, since the Internet domain names are 'practically inexhaustible.'[377]

Nevertheless, there are issues arising from the governance of .tr which should reflect national policies and priorities because they directly affect the national users. For example, the current restrictive .tr registration policy is blamed for causing a huge

[374] *Supra* n.347, p.10, 13
[375] *Supra* n.368, Art.5(1)(a)
[376] Hank Intven, McCarthy Tetrault, *Overview of Telecommunications Regulation, Module-1*, (Washington DC: The World Bank, 2000), p.2
[377] *Supra* n.42, p.256

economic loss due to the preference of gTLDs over .tr. An economic loss as a result of the way a ccTLD is administered would be a problem for the nation-state and its people, especially in developing economies like Turkey. Thus, prevention of such an economic loss could legitimately be a part of the national economy policies.

Another example is about the categorisation of SLDs. For instance, '.k12' is chosen as the SLD for the use of primary and secondary schools in Turkey. However, if those schools and local Internet users interested in receiving education services could not utilize the full benefits provided by a domain name due to a SLD which has no meaning in Turkish, they can be negatively affected. Similarly, if security of e-commerce and e-government services cannot be provided as a result of the decision for not deploying the DNSSEC by the .tr registry, it would be the national users who suffer the most. Then, the protection of the interests of national users through determining the SLDs that they would benefit most or through pressing the implementation of the DNSSEC could be a legitimate part of the national information society policy.

Besides, the registry has the power to restrict free speech by requiring domain names registered under .tr to be compliant with national traditions, cultural values and general moral values. When there is no legitimacy of the decision-making body, such restrictions become more questionable. That is not to say that governments, by depending on their laws, do not restrict free speech, but at least in democratic governments there are some mechanisms which make law-makers accountable and thus legitimate. In sum, it would not be wrong to conclude that the claim for a legal basis for the administration of '.tr' is correct.

Claim-2: Only the government shall set the policies and procedures for '.tr'

During the WSIS, the Turkish government has stated that the 'full involvement of governments, the private sector, civil society and the international organizations has vital importance for the success of international Internet governance.'[378] In other words, the Turkish government views the principle of multistakeholderism as vital for

[378] Turkish Republic, The Comments of the Government of Turkey On the Report of the Working Group on Internet Governance, Document WSIS-II/PC-3/CONTR/56-E, 15 August 2005, p.1

successful 'international' Internet governance, while it chose a top-down ruling approach anticipating a direct governmental control over its ccTLD. This may mean that the .tr administration is seen as an issue which needs to be resolved at the local level without multistakeholder cooperation.

Whereas it is true that the issues arising from the administration of .tr affect local users more than global users, it is also true that domain names registered under ccTLDs are globally accessible from any computer on the Internet, which means that administration of ccTLDs cannot be a purely local matter. Hence, the same legal principles for the 'international' Internet governance must be applied to the ccTLD governance.

Nonetheless, while multistakeholderism is claimed to be emerging as a principle for Internet governance, it is not certain how governments can apply this in practice. In other words, they are required to change their law-making procedures for the Internet related issues, however it would be unrealistic to expect them to employ two different law-making avenues simultaneously; one is for the Internet, the other is for the rest of the policy issues.

In short, it can be concluded that the claim that only the government shall set the policies and procedures for '.tr' is wrong, but then, by whom and how the policies must be determined is not that certain yet.

Claim-3: The government shall decide who can be the registry for '.tr'

Governments derive their asserted right to appoint the registries to their ccTLDs from the semantic relationship between their country names and their ccTLDs. For Turkish case, there is no such claim explicitly expressed by the government that the .tr stands for Turkey. Indeed, it is no matter what the Turkish government's position about this semantic relationship is, because another association between Turkey and the .tr is already established through the use and administration of the ccTLD. For example, especially after the enactment of the new Turkish Commercial Code, .tr became a significant element in commerce because Turkish traders have to depend on it to fulfil their legal obligations. Also, for Turkish citizens there is a direct relationship between

the e-government services provided to them and the domain names with 'gov.tr' suffix.

In sum, while it may be true that the national sovereignty claims based on the semantic relationship between a country and its ccTLD is artificial, the .tr case makes it clear that there could be other relationships between them which are not artificial, but implications of which are real for a nation. Therefore, not ICANN and not the US government, but the Turkish nation must have the ability to appoint the registry for their ccTLDs. However, who should choose the ccTLD registry on behalf of the nation is a complicated issue. The governments may see themselves as the legitimate representatives of their nations. A decision made by the civil society, private and public sector in line with the principle of multistakeholderism sounds as the ideal one, however, it depends on the political environment of a country. For example, in many countries civil society did not develop independently as in the Western countries and private sector is relatively weak as compared to strong government administration.[379] Thus, how the decision on the appointment of the registry of a ccTLD should be made is a question with no single answer for all ccTLDs.

[379] *Supra* n.94, p.521, 527

5. CONCLUSION

The ccTLDs were initially delegated to encourage all parts of the world to connect to the Internet. Along with the increasing importance of the Internet, the ccTLDs' social, economical, political and symbolic importance for the countries has also grown over time. Thus, many governments, who were not paying attention to the governance of the ccTLDs in the early days of the Internet, started to claim that the administration of the ccTLDs, which were delegated to other parties without formal agreements, is a matter of national sovereignty. They demanded greater involvement in their ccTLDs by establishing a legal basis for ccTLDs or determining who operates the registry.

Although TLDs which have no specific meaning for a country could be created, the two-letter country codes listed in ISO 3166-1 was chosen as the basis for the creation of the TLDs to be delegated to other countries. This choice forms the source of the national sovereignty claims since the ccTLDs, according to the governments, represent their countries. However, some scholars argue that there is no sound basis for such claims because the semantic relationship between the country and the ccTLD is arbitrary and those two-character abbreviations, which are chosen as naming conventions, have gained importance as a result of the private actions of foreign parties, not because of the country's or its people's actions.

On the contrary, some other scholars argue that the original intentions for creating ccTLDs are no more relevant because ccTLDs evolved into more than a technological convention through their unexpected use and governance and now they are considered as a part of the national identity online. Moreover, a relationship other than the semantic one between a country and its ccTLD could be established by tying the use of ccTLD to national policies.

The input from the assessment of the Turkish ccTLD seems to support this second argument; after the enactment of the new Turkish Commercial Code, '.tr' became a significant element in commerce because Turkish traders have to depend on it to fulfil their legal obligations. Besides, as a result of the registration rules requiring local presence for some SLDs under .tr, a relationship between Turkey and the domain names with .tr suffix has been created.

Especially after the WSIS, governments started to claim that they have the right to decide on the public policy matters related to the Internet since they are the legitimate representatives of their people. But, some scholars argue that the Internet challenges this traditional view by its transnational nature that blurs the distinction between local communities on behalf of which the governments are setting the policy and the global community which are also subject to the results of such policies. However, the assessment of the Turkish ccTLD shows that there are matters arising from the operation of a ccTLD which affect local community more than global community. For example, an economic loss due to strict domain name registration rules would be a problem for the nation-state and its people rather than for the global community, especially in developing economies like Turkey. Thus, prevention of such an economic loss could legitimately be a part of the public policy of a nation-state.

Also, some note that there are risks of strong government involvement in ccTLD governance such as the restriction of free speech and privacy. However, the Turkish ccTLD case, which is managed by an academic entity without an official basis, shows that there can be some restrictions on free speech even when there is no direct government control. When a ccTLD is managed on a legal basis, at least there is legitimacy and accountability. Besides, there is no guarantee that the risk of abuse of power by a non-state actor is less than the risk of abuse of government power.

The place of national sovereignty claims for ccTLDs in the current global ccTLD regime is ambiguous. Although the US government recognised the legitimate interests of the other governments regarding their ccTLDs in 2005, ICANN and ultimately the US government still have the authority to approve or disapprove the delegation or re-delegation of the ccTLDs. The need for coordination of domain names and numbers for a global, secure and stable Internet may explain the existence of ICANN's authority for technical matters to some extent; but, there is no justification for the US government's unilateral power over the ccTLD delegations or re-delegations both from technical and administrative point of views.

Thus, it is concluded that the delegation and re-delegation of ccTLDs should be affected by national sovereignty claims of nation-states if there is a relationship established between a country and its ccTLD. The Internet governance is still an

evolving field, and the tension between the national sovereignty and the Internet governance seems to continue to shape this field.[380] During this process in progress new legal principles or governance frameworks to incorporate national sovereignty claims into the ccTLD governance could be searched or created.

Meanwhile, the current delegation and re-delegation procedure could be improved before a consensus on the right place of national sovereignty claims in the governance of ccTLDs is reached. The re-delegation procedure of ICANN requires the consent of the current registry to the transfer, and when there is no such consent; the outcome of the re-delegation process becomes uncertain. For example, if the .tr re-delegation cannot be accomplished or takes too long as a result of the controversy between the government and the incumbent registry, the Turkish nation will arguably continue to be negatively affected from the claimed economic loss or from the lack of competition in the registrar market as a result of the dominant position of the registry, or from the decisions on categorization of SLDs made by an unaccountable body.

ICANN's passive attitude in case of a controversy gives harm to the local users. When Postel made the ccTLD delegations, whose responsibility the administration of a ccTLD should be was not known, or was not even a consideration. However, by seeking for the consent of the incumbent, ICANN still seems to support the Internet's early days' view on ccTLD delegation, when it was just a technical matter.

The ICANN has not publicly announced whether any re-delegation request for '.tr' was made or not. Thus, it is not certain how global or local internet community can independently channel their views about the re-delegation. Besides, ICANN seeks the consent of local community, but there is an English language barrier as a pre-requisite for the participation, which is a big obstacle for a country like Turkey where English is not as common as in most Western countries.

[380] *Supra* n.9, p.44

Hence, it is proposed that ICANN should review its delegation and re-delegation procedure;

- to include effective mechanisms when there is no consent of the incumbent operator to a re-delegation request in order to remove uncertainty in the process; and
- to provide effective participation of local and global community in the process of a decision-making on a delegation or re-delegation request.

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