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Working Paper #03-8

October 2003

ICANN/UDRP Performance - An Empirical Analysis

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ICANN/UDRP PERFORMANCE—AN EMPIRICAL ANALYSIS*

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* This work was supported by a summer research grant from The NET Institute, <http://www.netinst.org>, which we gratefully acknowledge.

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I. INTRODUCTION

The impressive growth of the Internet in the 1990s and the boom of the e-economy generated a competition for the domain names in the most coveted of the top domain names, i.e. the .com¹. Nonetheless, the other original generic top level domain names (gTLDs) open to commercial use, .org, and .net, were also under high demand from businesses². Other types of top-level domain names, especially the country code TLDs (ccTLDs), were of little commercial value yet, and registration was not as important as in the case of gTLDs³. As a result, the artificial scarcity of TLDs created by the managers of the Domain Name System (DNS) sharply increased the value of the registered and most popular domain names. Just recently a new set of gTLDs were introduced in the root system⁴.

Initially, the domain name system was delegated to Network Solutions Inc. (NSI), a private for profit firm, through a special contract with the United States government⁵. In

¹ "...[T]he "Webification" of domain names was the critical step in the endowment of the name space with economic value. It massively increased the demand for domain name registrations and gave common, or famous, or generic terms under the .com space the commercially valuable property of being able to effortlessly deliver thousands if not millions of Web site "hits"." Milton Mueller, *RULING THE ROOT. INTERNET GOVERNANCE AND THE TAMING OF CYBERSPACE*. The MIT Press Cambridge, 2002, at 109. "The e-commerce explosion of the late 20th Century has created a rush on Internet domain names. More domain names are being registered, and there are more registrars to do it than ever before. In fact, the Internet may be running out of space. In the most popular top level domain, <.com>, it seems that almost every recognizable word has been claimed." Kevin Heller, *The Young Cybersquatter's Handbook: A Comparative Analysis of the ICANN Dispute*. 2 CARDOZO ONLINE J. CONFLICT RESOL. 2, at 2.

² "Other gTLDs in existence since 1984 impose additional criteria for registration: .mil (U.S. military), .gov (U.S. government), .int (international organizations), .edu (institutions of higher education, mostly U.S. based), and .arpa. In November 2000, following a complex and convoluted process, ICANN approved in principle the creation of seven new gTLDs." A. Michael Froomkin, *ICANN's "Uniform Dispute Resolution Policy" Causes and (Partial) Cures*. 67 BROOK. L. REV. 605, at 618.

"Domain names have become the valuable intangible real estate of cyberspace. For example, the domain name sex.com was valued at \$250 million; business.com at \$7.5 million; and loan.com at \$3.0 million. The monetary value of some domain names suggests that it would be proper to classify domain names as property." Xuan-Thao N. Nguyen, *Cyberproperty and Judicial Dissonance: The Trouble with Domain Name Classification*. 10 GEO. MASON L. REV. 183, at 184-85.

³ See, Froomkin, *supra* note 2, at 618.

⁴ "Among the most significant events in the domain name world is the addition of seven new generic top level domain names ("gtlds"): .aero; .biz; .coop; .info; .museum; .name; and .pro. The .info name like .com before it, is unrestricted and anyone will be able to register and use it. The other domain names have restricted uses." Barbara Solomon, *Domain Name Disputes: New Developments and Open Issues*. 91 TRADEMARK REP. 833, at 833.

⁵ "NSI agreed to register second-level domains in .com, .net, .org and .edu and to maintain those top-level domains' master databases. These services were underwritten by the National Science Foundation and were

1995 NSI delineated a policy for conflict resolution of domain names, but there was no authority in charge of solving the disputes⁶. The management of numerical addresses in the Internet was in charge of the Internet Assigned Numbers Authority (IANA)⁷. In 1997, and because of the expansion of the Internet to the international sphere, the United States government delegated the management of numbers and names of the Internet to a non-profit corporation based in California, the Internet Corporation for Assigned Names and Numbers (ICANN)⁸. From this year on, this Corporation was in charge of the management of the names and numbers system for the Internet⁹. Even though ICANN is

free to users initially. As the number of registrations began to rise, NSI and the National Science Foundation agreed that NSF would no longer underwrite these services. Instead, NSI would charge a fifty dollars (US \$50) annual fee to each domain name registrant.” Wayde Brooks, *Wrestling Over the World Wide Web: ICANN’s Uniform Dispute Resolution Policy for Domain Names Disputes*. 22 HAMLINE J. PUB. L. & POL’Y 297, at 311-312.

⁶ “In July 1995, Network Solutions issued a “Domain Dispute Resolution Policy Statement” designed to shield itself from future trademark-related lawsuits. In this policy statement, Network Solutions declared that it “has neither the legal resources nor the legal obligation to screen requested Domain Names to determine if the use of a Domain Name by and Applicant may infringe upon the right(s) of a third party.” It then set out a series of contractual conditions that would be imposed on all registrants in the InterNIC-operated domains. The policy gave Network Solutions the right to withdraw a domain name from use if presented with a court order to arbitration panel decision transferring the name.” MUELLER, *supra* note 1, at 120-121.

“To invoke the NSI Dispute Policy, the complainant would have to give notice to the registrant that there had been an alleged trademark violation because the “creation date” of the registrant’s domain name registration followed the “effective date” of the complainant’s registration of an identical trademark. After NSI received a copy of the complaint, the registrant would have thirty days to prove that he owned a trademark in the contested name. If he could not, NSI would put the domain name on “hold” until a resolution was reached, either between the parties or through litigation.” Keith Blackman, *The Uniform Domain Name Dispute Resolution Policy: A Cheaper Way to Hijack Domain Names and Suppress Critics*. 15 HARV. J. L. & TECH. 211, at 222.

⁷ “RFC 1083 (December 1988), which defined a standards-making process for the new, extended Internet community, was also the first public document to mention and Internet Assigned Numbers Authority (IANA).” MUELLER, *supra* note 1, at 93 (describing the creation and characteristics of IANA).

⁸ See, MUELLER, *supra* note 1, Chapter 8 (describing the political process that resulted in the creation of ICANN in 1997.)

“In the White Paper that emerged from the convoluted U.S. government policy process –formally known as the U.S. Department of Commerce’s Statement of Policy on Management of Internet Names and Addresses- the government took something of a middle-of-the-road position. It agreed that trademark owners were being victimized by so-called cyberpirates who registered domain names to sell them to the corresponding trademark holder. But rather than proposing direct action, the White Paper called on WIPO to conduct a study and make recommendations for what would become ICANN.” Froomkin, *supra* note 2, at 622-623.

⁹ “In furtherance of the foregoing purposes, and in recognition of the fact that the Internet is an international network of networks, owned by no single nation, individual or organization, the Corporation shall, except as limited by Article 5 hereof, pursue the charitable and public purposes of lessening the burdens of government and promoting the global public interest in the operational stability of the Internet by (i) coordinating the assignment of Internet technical parameters as needed to maintain universal connectivity on the Internet; (ii) performing and overseeing functions related to the coordination of the Internet Protocol (“IP”) address space; (iii) performing and overseeing functions related to the coordination

the most important organization in the management of domain names, it is not the only one. There are other alternative root servers: Open NIC, ORSC, Pacific Root, New.net, Name.space and CN-NIC¹⁰. But as for size importance and relationship with the U.S. government, ICANN is the main referent in the actual structure of the Internet. Accordingly, the relevance and power of ICANN in enacting new policies for the Internet is based in two main characteristics. First, the monopoly of the main Domain Name system in the Internet and, second, the lack of technological compatibility between competing Domain Name systems, which prevented others private firms from competing with ICANN¹¹.

One of the main problems in the medium term was the creation of a system to handle the growing number of problems among users because of the -sometimes indiscriminate- registration of domain names that collided with already established trademarks in the real life markets¹². These disputes grew at the same pace than the Internet commerce boomed in the late nineties¹³. The behavior of ICANN has been questioned in this respect. Instead of decreasing the pressure over the .com top domain name by creating other kinds of top domain names, ICANN has been accused of artificially creating a scarcity in this environment and driving up the demand on the already full .com¹⁴. Furthermore, the usual mechanism to solve these kinds of disputes,

of the Internet domain name system ("DNS"), including the development of policies for determining the circumstances under which new top-level domains are added to the DNS root system; (iv) overseeing operation of the authoritative Internet DNS root server system; and (v) engaging in any other related lawful activity in furtherance of items (i) through (iv).” Articles of Incorporation of Internet Corporation for Assigned Names and Numbers, November 1998, at <http://www.icann.org/general/articles.htm>

¹⁰ See, MUELLER, *supra* note 1 at 55 (describing the other root servers of the Internet and the problems of compatibility between them.)

¹¹ *Id.*

¹² “Unfortunately for these businesses, registration of SLDs in the three existent gTLDs (.com, .org and .net) and in the ccTLDs which emulate them, is on a first-come, first-served basis. No questions are asked about the proposed use, or about possible trademark conflicts. . . . As there was no limit to the number of names a person could register, name speculators quickly understood that they could register names and seek buyers for them without risking any capital. While some speculators sought common words with multiple possible uses, a few others –who became known as cybersquatters- registered thousands of names that corresponded to the trademarks or companies that had not yet found the Internet and then sought to resell (or, some would say, ransom) the name to those companies.” Froomkin, *supra* note 2, at 620.

¹³ “Whether the actual magnitude of the overall “cyber-piracy” problem was .045% or 3.5% of new registrations, or more likely somewhere in between, and whether the problem was growing or shrinking, in absolute terms, it clearly existed.” Froomkin, *supra* note 2, at 627.

¹⁴ See, Heller, *supra* note 1 and accompanying text.

Even though there were just three gTLDs open to general public, IANA registered more than 200 applications until 1996. See, MUELLER, *supra* note 1, at 132-133.

i.e., courts, were handicapped to handle cases in which parties come from different jurisdictions and laws, and even though the Courts could establish a verdict, the enforcement was weak, if possible at all¹⁵. Furthermore, usual judicial remedies are too slow and quite expensive for the Internet domain name disputes¹⁶. Accordingly, one of the main tasks of ICANN -in concordance with the mandate received through the delegation of powers from the United States government- was to provide a system to solve the domain name disputes¹⁷. In 1999, after a series of consultations with many interest groups, ICANN created the Uniform Dispute Resolution Policy (UDRP)¹⁸. This

¹⁵ “The global reach of the Internet provides both the Internet’s appeal and many of the legal problems being encountered. Activity on the web that may be permissible where initiated may violate the law in the locale where the web site is accessed. Until recently there was no easy way to confine modifications to a web site or domain name to a particular geographic area. This, any changes that were made or imposed by a court became global in effect even when made in response to local laws or requirements.” Solomon, *supra* note 4, at 859.

“Many of these multijurisdictional disputes raise exactly the kinds of issues typically found in U.S. litigation involving citizens of more than one state, such as differences in substantive law, procedural rules, and choice of law rules. As the disputes move from interstate to international, the differences and practical difficulties increase. Difference in substantial law may be more substantial, differences in procedural rules more significant, differences in the ability to acquire jurisdiction more diverse, and differences in choice of law rules more complex. Also, multinational disputes can add a layer of enforcement difficulties.” Elizabeth Thornburg, *Fast, Cheap, and Out of Control: Lessons from the ICANN Dispute Resolution Process*. 6 J. SMALL & EMERGING BUS. L. 191, at 192-193. See, Edward Lee, *Rules and Standards for Cyberspace*, 77 NOTRE DAME L REV. 1275 (analyzing the problems of the courts in handling cases related to the Internet.)

¹⁶ “Notwithstanding the size of the individual settlements, firms managing large number of brands argued that the cumulative costs imposed an unfair burden and amounted to a windfall to the undeserving. Worse, aggrieved trademark holders in countries with dysfunctional court systems stated that their national court systems were so slow as to make the wait for meaningful relief against improper domain name registrations an eternity in Internet time, or even in ordinary time. Other trademark holders complained of the difficulty of locating cybersquatters who falsified their contact information at the time of registration, or who were located in jurisdictions where the law was uncertain, the courts unreliable, or service was difficult.” Froomkin, *supra* note 2, at 629.

¹⁷ “The U.S. Government will seek international support to call upon the World Intellectual Property Organization (WIPO) to initiate a balanced and transparent process, which includes the participation of trademark holders and members of the Internet community who are not trademark holders, to (1) develop recommendations for a uniform approach to resolving trademark/domain name disputes involving cyberpiracy (as opposed to conflicts between trademark holders with legitimate competing rights), (2) recommend a process for protecting famous trademarks in the generic top level domains, and (3) evaluate the effects, based on studies conducted by independent organizations, such as the National Research Council of the National Academy of Sciences, of adding new gTLDs and related dispute resolution procedures on trademark and intellectual property holders. These findings and recommendations could be submitted to the board of the new corporation for its consideration in conjunction with its development of registry and registrar policy and the creation and introduction of new gTLDs.” United States Department of Commerce, *Management of Internet Names and Addresses*, June 1998, at <http://www.icann.org/general/white-paper-05jun98.htm>

¹⁸ “The UDRP was adopted to provide a relatively fast and effective means of dealing with the issues of bad faith domain name registration. Currently, The UDRP applies to the .com, .net, and .org gtlds and top sixteen cctlds. Moreover, there is a push for all cctld registrars to adopt a policy modeled on the UDRP. If

system was thought as a decentralized regime for dispute resolution in which ICANN created the general rules and a series of competing private providers were authorized to manage and resolve disputes. Finally, ICANN, because of its role as the only manager of the domain name system, could exert and almost perfect enforcement of the providers' decisions¹⁹. Theoretically, the system seemed to work perfectly. Nonetheless, after a few years from its creation, the regime has been subject to hard criticism from scholars and commentators. The debate on the performance of the system has been strong, with both favorable and unfavorable comments²⁰.

all domain registrars were to adopt the same policy, a complainant could bring a consolidated action concerning objectionable domain names in both gtlds and cctlds. WIPO has received four such cases." Solomon, *supra* note 4, at 835.

¹⁹ "Under the UDRP, jurisdiction is contractual. The UDRP is incorporated into every domain name Registration Agreement. By registering a domain name with any accredited registrar, if any third party alleges cybersquatting, respondent subjects himself to the UDRP's mandatory administrative procedure which is in procedural compliance with the Rules." Heller, *supra* note 1, at 4.

²⁰ There is a wide range of critics and some support of the UDRP by ICANN. The following is an incomplete list of some papers that deal with the problems and challenges of the system: Laurence R. Helfer and Graeme B. Dinwoodie, *Designing Non-National Systems: The Case of the Uniform Domain Name Dispute Resolution Policy*. 43 WM. & MARY L. REV. 141 (October 2001), at 154-155; Elizabeth G. Thornburg, *Fast, Cheap and Out of Control: Lessons from the ICANN Dispute Resolution Process*. 6 J. SMALL & EMERGING BUS. L. 191 (Spring 2002); Patrick D. Kelley, *Emerging Patterns in Arbitration Under the Uniform Domain-Name Dispute Resolution Policy*. 17 BERKELEY TECH. L. J. 181 (2002); Adam Goldstein, *ICANNSUCKS.BIZ (And Why You Can't Say That): How Fair Use of Trademarks in Domain Names is Being Restrained*. 12 FORDHAM INTELL. PROP. MEDIA & ENT. L. J. 1151 (Spring 2002); Milton Mueller, *A New Profile of Domain Name Trademark Disputes under ICANN's UDRP*. Syracuse University School of Information Studies Working Paper, June 2002 (On file with the authors); Milton Mueller, *Ruling the Root. Internet Governance and the Taming of Cyberspace*. The MIT Press, Cambridge, Massachusetts, London, England, 2002; Scott Hejny, *Opening the Door to Controversy: How Recent ICANN Decisions Have Muddied the Waters of Domain Name Dispute Resolution*. 38 HOUS. L. REV. 1037 (Fall 2001); Keith Blackman, *The Uniform Domain Name Dispute Resolution Policy: A Cheaper Way to Hijack Domain Names and Suppress Critics*. 15 HARV. J.L. & TECH. 211 (Fall 2001); Pamela Segal, *Attempts to Solve the UDRP's Trademark Holder Bias: A Problem That Remains Unsolved Despite the Introduction of New Top Level Domain Names*. 3 CARDOZO ONLINE J. CONFLICT RESOL. 1 (December 2001); Holger P. Hestermeyer, *The Invalidity of ICANN's UDRP Under National Law*. 3 MINN. INTELL. PROP. REV. 1 (2002); Michael Geist, *Fair.com? An Examination of the allegations of systemic Unfairness in the ICANN UDRP*. 27 BROOK. J. INT'L L. 903 (2002); Michael Froomkin, *Wrong Turn in Cyberspace: Using ICANN to Route Around the APA and the Constitution*. 50 DUKE L. J. 17 (October 2000); Joe Sims and Cynthia Bauerly, *A Response to Professor Froomkin: Why ICANN Does Not Violate The APA or The Constitution*. 6 J. SMALL & EMERGING BUS. L. 65 (Spring 2002); Michael Froomkin, *Form and Substance in Cyberspace*. 6 J. SMALL & EMERGING BUS. L. 93 (Spring 2002); Joe Sims and Cynthia L. Bauerly, *A Reply to Professor Froomkin's Form and Substance in Cyberspace*. 6 J. SMALL & EMERGING BUS. L. 125 (Spring 2002); Michael Froomkin, *ICANN's "Uniform Dispute Resolution Policy" – Causes and (Partial) Cures*. 67 BROOK. L. REV. 605 (Spring 2002); David H. Bernstein, *The Alphabet Soup of domain Name Dispute Resolution: The UDRP and ACPA*. 716 PLI/PAT 251 (2002); Richard E. Speidel, *ICANN Domain Name Dispute Resolution, The Revised Uniform Arbitration Act, and the Limitations of Modern Arbitration Law*. 6 J. SMALL & EMERGING BUS. L. 167 (Spring 2002); Stephen J. Ware, *Domain Name Arbitration in the Arbitration-Law Context: Consent to, and Fairness in, the UDRP*. 6 J. SMALL & EMERGING BUS. L. 129 (Spring 2002); Joe Sims and Cynthia Bauerly, *A Response to Professor Froomkin: Why ICANN Does Not Violate the APA or the Constitution*. 6 J. SMALL & EMERGING BUS. L. 65 (Spring 2002); Jeffrey J. Look, *Law and Order on the Wild, Wild West (WWW)*. 24 U. ARK. LITTLE ROCK L. REV. 817 (Summer 2002); David E. Sorkin, *Judicial Review of ICANN Domain Name Dispute Decisions*. 18 SANTA CLARA COMPUTER & HIGH TECH. L. J. 35 (December 2001); Lisa M. Sharrock, *The Future of Domain Name Dispute Resolution: Crafting Practical International Legal Solutions From Within the UDRP Framework*.

Most of the empirical studies of the UDRP have been based on the analysis of cases handled by the providers, and the results coming from the panels' decisions²¹. The most common critiques are that the providers have incentives to favor the complainants and that the rules have been designed to favor proprietary interests in the Internet²². Some of these facts have a reason to be because of the political structure of ICANN, which we have analyzed elsewhere²³. In this paper, we present a thorough empirical study of the performance of the UDRP providers. We identify the main variables that determine the efficiency of the system. One of the key variables is the duration of the procedure to decide the cases, which has been one of the main concerns of ICANN regarding the UDRP²⁴. We analyze the decisions of the complainants in deciding to send their claim to a provider. Using multinomial logit regression model to determine if complainants select

51 DUKE L. J. 817 (November 2001); Wayne Brooks, *Wrestling Over the World Wide Web: ICANN's Uniform Dispute Resolution Policy for Domain Name Disputes*. 22 HAMLINE J. PUB. L. & POL'Y 297 (Spring 2001); Stacy King, *The "Law That It Deems Applicable": ICANN Dispute Resolution, and the Problem of Cybersquatting*. 22 HASTINGS COMM. & ENT. L. J. (Spring Summer 2000); Christopher Rains, *A Domain By Any Other Name: Forging International Solutions for the Governance of Internet Domain Names*. 14 EMORY INT'L L. REV. 355 (Spring 2000); Stephen Ware, *Domain-Name Arbitration in the Arbitration-Law Context: Consent to, and Fairness in, the UDRP*. 6 J. SMALL & EMERGING BUS. L. 129 (Spring 2002); Edward Brunet, *Defending Commerce's Contract Delegation of power to ICANN*. 6 J. SMALL & EMERGING BUS. L. 1 (Spring 2002); Kathleen Fuller, *ICANN: The Debate Over Governing the Internet*. 2001 DUKE L. & TECH. REV. 2 (February 2001); Leah Phillips Falzone, *Playing The Hollywood Name Game In Cyberspace: The Battle Over Domain Names In The Age Of Celebrity-Squatting*. 21 LOY. L. A. ENT. L. REV. 289 (2001); Jonathan Weinberg, *ICANN and the Problem Of Legitimacy*. 50 DUKE L. J. 187 (October 2001); Neil Batavia, *That Which We Call a Domain By Any Other Name Would Smell as Sweet: The Overboard Protection of Trademark Law as it Applies to Domain Names on the Internet*. 53 S. C. L. REV. 461 (Winter 2002); Jessica Litman, *The DNS Wars: Trademarks and the Internet Domain Name System*. 4 J. SMALL & EMERGING BUS. L. 149 (Spring 2000); Gregory Blasbalg, *Masters of Their Domains: Trademark Holders Now Have New Ways to Control Their Marks in Cyberspace*. 5 ROGER WILLIAMS U. L. REV. 563 (Spring 2000); Olivia Baratta and Dana Hanaman, *A Global Update on the Domain Name System and the Law: alternative Dispute Resolution for Increasing Internet Competition. Oh, the Times They Are A-Changin'!*. 8 TUL. J. INT'L & COMP. L. 325 (Spring 2000); David Post, *Of Black Holes and Decentralized Law-Making in Cyberspace*. 2 VAND. J. ENT. L. & PRAC. 70 (Winter 2000); Gillian Hadfield, *Privatizing Commercial Law: Lessons From ICANN*. 6 J. SMALL & EMERGING BUS. L. 257 (Summer 2002).

²¹ *Id.*

²² "...[T]he procedural design of ICANN's UDRP has a number of special features that resulted in an especially unjust set of outcomes. Key decisions were made by unrepresentative groups or persons who were not subject to any democratic control, and the rules went in effect because of ICANN's monopoly over technical aspect of the Internet, not because any legislature approved them." Froomkin, *supra* note 2, at 712.

See, Geist, *supra* note 20 and Thornburg, *supra* note 14 (analyzing the bias of the UDRP providers that favored complainants.)

²³ Jay Kesan and Andres Gallo, *ICANN Politics: Changes and Constituencies*. Mimeo, 2003 (in file with the authors).

²⁴ "the main advantage of using the UDRP over filing a lawsuit is that it can generally provide an inexpensive and quick resolution for domain name disputes. Because there is no discovery process and no absolute right to file endless replies and subreplies after the initial filing of the complaint and the response, the costs of a UDRP proceeding can be much less than seeking a preliminary injunction in court. However, using the UDRP effectively requires thorough advance preparation, investigation and research." Jeffrey Look, *Law and Order on the Wild, Wild West (WWW)*, 24 U. ARK. LITTLE ROCK L. REV. 817, at 824-825.

the provider based on bias or duration of the procedure, we show that duration is at least as important as bias in the selection of providers. This is a key finding, since our results show that the emphasis of theoretical and empirical work, which has been exclusively concentrated around the effects of bias, is misplaced. As we recommend, they should start paying attention to other performance and efficiency indicators, as those proposed in this paper.

From our empirical results supporting duration as an important decision variable, we use the duration of the cases as the variable to measure the general efficiency of each provider. We applied regression models based on the analysis of the duration to identify different factors that determine the performance of the system. Hence, our study goes beyond the usual empirical questions regarding the final results of the cases, by looking at their actual performance of providers. Among our main findings we claim that the UDRP providers have different duration functions, implying a different technology in treating the cases, which imply the existence of forum shopping. The existence of forum shopping based on the performance of the providers is different than the forum shopping mentioned in the literature of UDRP, which is based in the bias of the provider towards the complainant²⁵. These results are emphasized by the finding that the two most important providers are located at the extremes of the possible technological structures of the UDRP. Second, the providers have unambiguous bias for specific countries. This finding is very important because most of the literature was discussing the bias between individuals. Nonetheless, the bias towards countries of origin of the providers could be an important element to take into account for the design of a general dispute system as the UDRP. Furthermore, the evidence of such a bias delivers a hard blow to ICANN's claim that the system is intended to handle the most diverse claims in the Internet regardless the origin of the parties.²⁶ Third, we also find that some panelists have a completely different duration function in deciding cases, as compared to the rest of the cases under any private

²⁵ See, Froomkin, *supra* note 2.

²⁶ "At the UDRP's inception, ICANN had three main objectives it sought to achieve. The first goal was to create global uniformity. An example of this would be to eliminate competition among jurisdictions –forum shopping- and rules that are applied to domain name and trademark disputes. The second goal was to reduce the cost of resolving disputes. Finally, the UDRP was intended to be heavily restricted in its applicability. It was supposed to be geared toward the most flagrant types of cybersquatting, while other disputes would be left to the courts." Pamela Segal, *Attempts to Solve the UDRP's trademark Holder Bias:*

provider. Nonetheless, structural differences among providers can have an influence over the performance of the judges. An interesting conclusion is that even though some panelists can exhibit a different behavior than the rest of the panelists of a provider, that could be a good thing and providers should give these panelists more cases to handle. On the other hand, if there is a bias in these panelists favoring one party or the other, then they should not be awarded so many cases. This evidence calls into question the actual system by which the providers assign cases to the panelists, in the sense that the selection of the panelist is not innocuous in terms of efficiency. Fourth, the performance of the providers is affected by the proofs presented by complainants and respondents. This is an indication that decisions are based in the proofs presented according to the rules of the UDRP. Finally, we evaluate the differences in performance between one and three member panels. We find that three member panels are as efficient as single member panels. Accordingly, to change to a general three member panel system could be beneficial in terms of fairness without having a negative impact on efficiency.

The paper is organized as follows: First, we describe the ICANN UDRP system and the providers in charge of the dispute resolution process. Second, we present a regression model to analyze the selection process for the complainants. Subsequently, we describe the regression technique to be used for the empirical analysis and the characteristics of the database. Third, we present the general empirical analysis for the UDRP system providers. Fourth, we analyze the regression model and present the results we obtain. Fifth, we analyze the results in terms of the policy recommendations that can be derived from them. Finally, we present the conclusions.

II. ICANN UDRP CHARACTERISTICS

The Internet Corporation for Assigned Names and Numbers (ICANN) is the organization in charge of managing the IP address space allocation, protocol parameter assignment, domain name system management and root server system management functions on the Internet.²⁷ This is a non-profit organization supported by many

A Problem That Remains Unsolved Despite the Introduction of New Top Level Domain Names, 3 CARDOZO ONLINE J. CONFLICT RESOL. 1, at 23.

²⁷ See <http://www.icann.org/general/abouticann.htm>. For history and development of ICANN see, Michael

governments, but mainly the United States government, through the Department of Commerce, which promoted its creation in 1998.²⁸ Among its various activities, the management of the domain name system has proved to be a delicate area in which property and trademark rights from the real world collide with the unregulated nature of the Internet.²⁹ New domain names assigned on the Internet could have been protected by trademark and property rights laws in different countries. However, there are many problems because of which local courts cannot adequately handle Internet-based disputes.³⁰ As a result, conflicts in the rights over domain names on the Internet generated a need for an arbitration mechanism to resolve these disputes.³¹ Many private actors, with interests in the creation of such a system and with influence over ICANN, together with other organizations, like the World Intellectual Property Organization (WIPO), promoted the creation of a dispute resolution mechanism for domain names. WIPO produced a report for ICANN detailing the necessity of creating a dispute

Froomkin, *Wrong Turn in Cyberspace: Using ICANN to Route Around the APA and the Constitution*, 50 Duke L. J. 17 (2000), Michael Froomkin, *Habermas@Discourse.Net: Toward A Critical Theory Of Cyberspace*. 116 HARV. L. REV. 749 (January 2003), Edward C. Anderson and Timothy S. Cole, *The UDRP- A Model for Dispute Resolution in E-commerce?* 6 J. SMALL & EMERGING BUS. L. 235.

²⁸ “Formed in October 1998, the Internet Corporation for Assigned Names and Numbers (ICANN) is a non-profit, private-sector corporation formed by a broad coalition of the Internet’s business, technical, academic, and user communities. ICANN has been recognized by the U.S. and other governments as the global consensus entity to coordinate the technical management of the Internet’s domain name system, the allocation of IP address space, the assignment of protocol parameters, and the management of the root server system.” See, <http://www.icann.org/general/fact-sheet.htm>. “Prior to the formation of ICANN, administration of the authoritative list ultimately linking particular names and numbers (Internet Protocol (IP) addresses) to specific computers was the responsibility of various departments of the U.S. government and, later, Network Solutions Inc. (NSI), a for profit corporation operating under contract with the U.S. Department of Commerce. ... Objections to the monopoly over registration services held by NSI (and the U.S. government) led in 1998 to the creation of ICANN and in particular ICANN’s capacity to authorize multiple registrars to compete over registration services.” Gillian K. Hadfield, *Privatizing Commercial Law: Lessons From ICANN*. 6 J. SMALL & EMERGING BUS. L. 257 (Summer 2002), at 259-260.

Many critics have said that ICANN received important power from the U.S. government, which were deserved for the government instead of a private institution. See for example, Michael Froomkin, *id.*, (claiming that the ICANN creation is not consistent with both the Constitution and the Administrative Procedure Act). However this is a highly debatable topic, as can be seen in Edward Brunet, *Defending Ecommerce’s Contract Delegation of Power to ICANN*. 6 J. SMALL & EMERGING BUS. L. 1 (Spring 2002).

²⁹ See Jay Kesan and Andres Gallo, *Optimizing Internet Regulation*, Working Paper 2003. (in file with authors) (describing the problems of regulation in the Internet).

³⁰ See Edward Lee, *Rules and Standards for Cyberspace*. 77 NOTRE DAME L. REV. 1275 (October 2002) (analyzing the problems courts have in dealing with Internet related issues).

³¹ “Reconciling the competing interests of trademark owners and domain name registrants has not proved an easy task, either nationally or internationally. The territorial nature of trademark rights, the lack of a single body of rules governing trademark-domain name disputes, the difficulty of locating registrants, and the possibility that different domain name registrants own multiple iterations of a preexisting mark all make the prospect of litigating before national courts protracted, expensive and perhaps even futile. Not surprisingly, trademark owners have expressed interest in streamlined and inexpensive non-national dispute settlement alternatives, particularly for disputes with a class of domain name registrants known as cybersquatters.” Laurence R. Helfer and Graeme B. Dinwoodie, *Designing Non-National Systems: The Case of the Uniform Domain Name Dispute Resolution Policy*. 43 WM. & MARY L. REV. 141 (October 2001), at 154-155.

resolution system and proposing specific rules of such a system.³² This report was the blue print for the new regime created by ICANN afterwards³³. Consequently, in 1999, ICANN enacted the Uniform Domain-Name Dispute-Resolution Policy (UDRP).³⁴ Under this policy, ICANN authorized a number of private third-party institutions (Providers) to evaluate disputes among Internet users regarding rights over domain names.³⁵ ICANN designed a series of general rules to regulate the dispute resolution procedures, leaving the private providers to add their own complementary rules to the system.³⁶ The UDRP has been harshly criticized by some scholars and commentators, and at the same time it has received support from others.³⁷ The capacity of ICANN in enforcing and applying the UDRP regime to the registered domain names is based on the contractual relationship each user enters with ICANN at the moment of registering a new domain name³⁸. In this section, we describe the main characteristics of the UDRP system identifying the weaknesses and strengths of this regime, as well as delineating the questions to be tested with our regression model.

³² See, <http://www.icann.org/udrp/udrp-schedule.htm> (describing the timetable of creation of the UDRP with links to WIPO initiative). See, Laurence R. Helfer and Graeme B. Dinwoodie, *Designing Non-National Systems: The Case of the Uniform Domain Dispute Resolution Policy*. 43 WM. & MARY L. REV. 141 (October 2001) (describing the proposal of WIPO and the reforms introduced by ICANN when implementing the system.)

³³ See, Froomkin, *supra* note 2 (describing the differences between WIPO proposal and the final ICANN's UDRP.)

³⁴ See Helfer and Dinwoodie, *supra* note 31. (describing the creation of the UDRP). See also the ICANN timeline for development and application of the policy, <http://www.icann.org/udrp/udrp-schedule.htm>.

³⁵ The approved providers are: World Intellectual Property Organization (WIPO) December 1st 1999, The National Forum Arbitration (NAF) December 23rd 1999, eResolutions (eRes) January 1st 2000 (terminated November 30th 2001, CPR Institute for Dispute Resolution (CPR) May 22nd 2000 and Asian Domain Name Dispute Resolution Centre (ADNDRC) February 28th 2002, at <http://www.icann.org/dndr/udrp/approved-providers.htm>.

³⁶ The two main instruments that regulate the system are the Uniform Domain Name Dispute Resolution Policy (UDRP) and the Rules for the Uniform Domain Dispute Resolution Policy, both documents approved in October 24th 1999. See, <http://www.icann.org/udrp/>. Each provider can produce its own rules in those areas not regulated by the Policy. For supplemental rules, see <http://www.icann.org/dndr/udrp/approved-providers.htm>.

³⁷ See, *supra* note 20.

³⁸ “When ICANN licenses a registrar to offer a .com, .net, .org, .info, .biz, or shortly, .name second-level domains, that registrar agrees to incorporate the UDRP into its agreement with the registrant; therefore, all domain names in those TLD's are subject to its terms.” Goldstein, *supra* note 20, at 1161.

“One can see the superficial appeal of an ICANN-like process to resolve international Internet disputes. First, it applies globally.... This eliminates the tricky issue of personal jurisdiction over the domain name holder. It also manages to create a contractually mandated private system for the benefit of noncontracting parties. Second, because the process does not require (or even allow) personal appearances by the parties, it minimizes geographic distance problems. ... Third, the UDRP attempts to overcome the choice of the law problems raise by differences in national trademark laws by creating its own “law” in the ICANN Policy. Finally, because ICANN has a contract with the company that controls the root server that assigns domain

A. PROCEDURE AND ENFORCEMENT

The general procedure for considering complaints is competitive and one in which different organizations can offer dispute resolution services to users.³⁹ This is different from the usual alternative dispute resolution providers that handle privacy rights in the Internet, in which one of the parties is subject to the private provider imposed by the web site visited and, in addition, there are multiple rules created by a number of providers⁴⁰. In the UDRP system, Internet users can choose the provider knowing that the underlying set of rules is uniform and consistent among providers. However, by letting the complainant to choose the provider, ICANN has created an incentive for providers to favor complainants in their decisions⁴¹. ICANN provides a set of rules that delimits the issues to be regulated, the cases that providers should evaluate, the minimum requirements for the composition of the panel and the penalties to be applied.⁴² However, it permits providers freedom to implement further rules and to charge the corresponding fees.⁴³ As a result, we have a system where users face a common set of rules, but complainants can choose the provider they prefer. This framework has created good incentives for competition among providers of domain name dispute resolution services offered at a reasonably low cost.⁴⁴ However, it has also generated problems of bias in

names, it has the power to enforce the arbitrators' decisions without the need to ask a court to enforce the judgment." Thornburg, *supra* note 15, at 196.

³⁹ The two main instruments that regulate the system are the Uniform Domain Name Dispute Resolution Policy (UDRP) and the Rules for the Uniform Domain Dispute Resolution Policy, both documents approved in October 24th 1999. See, <http://www.icann.org/udrp/>. Each provider can produce its own rules in those areas not regulated by the Policy. For supplemental rules, *see* <http://www.icann.org/dndr/udrp/approved-providers.htm>.

⁴⁰ *See*, Kesan and Gallo, *supra* note 29 (analyzing the efficiency of top-down and bottom-up regulation for privacy rights in e-commerce.)

⁴¹ *See*, Giest, *supra* note 20, and Fromkin, *supra* note 2 (analyzing the bias of the UDRP providers with respect to complainants.)

⁴² *See* <http://www.icann.org/dndr/udrp/policy.htm> (listing the policy rules). *See* Appendix A for a list of the main requirements for the disputes to be considered valid. For an analysis of the policy *see* Michael Fromkin *supra* note 2.

⁴³ *See supra* note 20 and accompanying text.

⁴⁴ "Considering that the filing fee for a dispute involving a single domain name, heard by a single panelist, can be as low as \$1,150. The UDRP is an attractive alternative to protracted litigation. While there are several factors that contribute to the low cost of a UDRP proceeding, the primary reason is the simplicity of the process. The administrative panel is limited to considering the written submissions made by the parties. The UDRP does not provide for discovery or submission of interrogatories by the parties, elements that typically increase the cost of other processes, in both time and money." Edward C. Anderson and Timothy S. Cole, *The UDRP- A Model for Dispute Resolution in E-commerce?* 6 J. SMALL & EMERGING BUS. L. 235, at 249.

favor of complainants, who are the entities choosing the provider.⁴⁵ Therefore, in the current system, complainants have an incentive to choose the provider who is friendlier to complainants, and the providers' optimal strategy is to favor complainants in order to ensure that they continue to be chosen in the future.⁴⁶

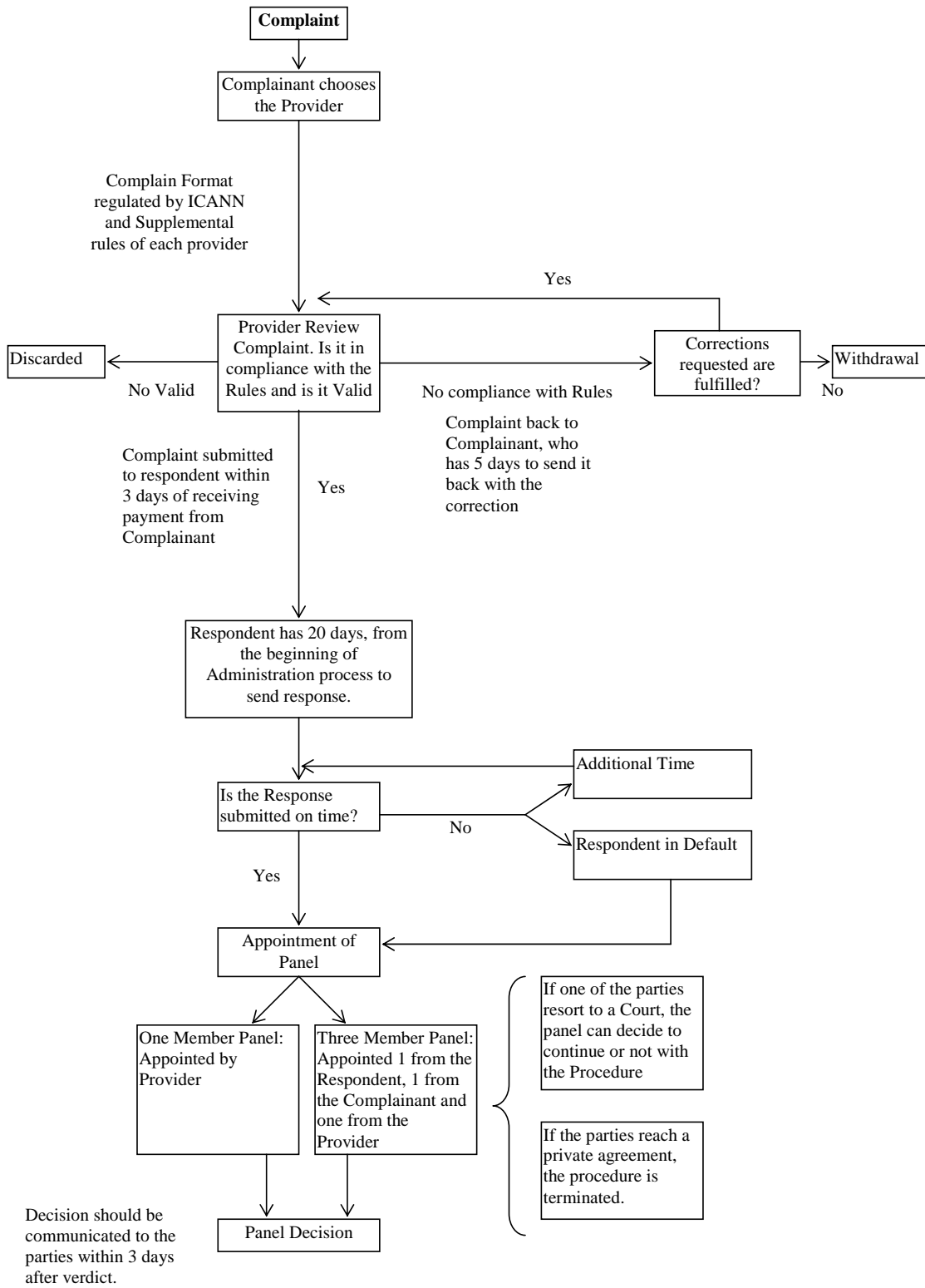
The complaints that are evaluated under this system are only those related to domain name disputes.⁴⁷ Figure 1 shows the different stages the claim goes through during the procedure. The procedure depicted in Figure 1 can vary marginally because of the different supplemental rules of the providers.

⁴⁵ “This study provides compelling evidence that forum shopping has become an integral part of the UDRP and that the system may indeed be biased in favor of trademark holders. Both WIPO and NAF, the two dominant ICANN accredited arbitration providers, feature case allocation that suggests that the panelist selection process is not random. Rather, it appears to be heavily biased toward ensuring that a majority of cases are steered toward complainant friendly panelists. Moreover, the data shows that there is a correlation between the provider panelist selection and case outcome. When providers control who decides a case, as they do for all single panel cases, complainants win just over 83% of the time. As provider influence over panelists diminishes, as occurs in three-member panel cases, the complainant winning percentage drops to 60%.” Geist, *supra* note 20, at 936

⁴⁶ It is interesting to notice that the only provider that declared bankruptcy was e-resolution, which was the one with more cases won by respondents.

⁴⁷ “All other disputes between you and any party other than us regarding your domain name registration that are not brought pursuant to the mandatory administrative proceeding provisions of Paragraph 4 shall be resolved between you and such other party through any court, arbitration or other proceeding that may be available.” UDRP part 5, at <http://www.icann.org/dndr/udrp/policy.htm>.

Figure 1: UDRP General Procedure



The complainant can file a complaint with any of the approved providers that ICANN has authorized.⁴⁸ The selection of the provider in hands of the complainant has been one of the most critical issues in the analysis of bias in the UDRP procedure⁴⁹. Once the provider receives the complaint, it has to evaluate its validity. If the complaint is not valid, then the provider could either ask for further information or discard the complaint. In case the complaint is found to be valid, we then have a case that has to be resolved by the provider. The provider asks the respondent to submit a defense responding to the complaint. Once the respondent has submitted an answer, or the legal time period for a response has expired, i.e. the respondent is declared in default, the provider forms a panel. This panel can be either a one or a three-member panel, as requested by the parties.⁵⁰ However, in contrast to other alternative dispute resolution forums that operate

⁴⁸ See Appendix A for a graphic description of complaints procedure.

⁴⁹ “Rather than both sides having equal input into who will decide the case, the complainant chooses the arbitral tribunal from a small list of approved providers maintained by ICANN. Unlike standard arbitration clauses where the provider is specified in the presumably bargained-for contract or negotiated by the parties at the time of the dispute, the respondent has no say in which provider will manage her case, and no peremptory challenges to arbitrators she may fear are biased. The respondent can, however, pick one member of a three-person panel at her own expense if the complainant opted for a single panelist and the respondent decides three are needed. Overall, the system gives dispute resolution providers an economic incentive to compete by being complainant-friendly.” Froomkin, *supra* note 2, at 671-672.

⁵⁰ According with the UDRP the panel is formed as follows: “**Appointment of the Panel and Timing of Decision**

- (a) Each Provider shall maintain and publish a publicly available list of panelists and their qualifications.
- (b) If neither the Complainant nor the Respondent has elected a three-member Panel (Paragraphs 3(b)(iv) and 5(b)(iv)), the Provider shall appoint, within five (5) calendar days following receipt of the response by the Provider, or the lapse of the time period for the submission thereof, a single Panelist from its list of panelists. The fees for a single-member Panel shall be paid entirely by the Complainant.
- (c) If either the Complainant or the Respondent elects to have the dispute decided by a three-member Panel, the Provider shall appoint three Panelists in accordance with the procedures identified in Paragraph 6(e). The fees for a three-member Panel shall be paid in their entirety by the Complainant, except where the election for a three-member Panel was made by the Respondent, in which case the applicable fees shall be shared equally between the Parties.
- (d) Unless it has already elected a three-member Panel, the Complainant shall submit to the Provider, within five (5) calendar days of communication of a response in which the Respondent elects a three-member Panel, the names and contact details of three candidates to serve as one of the Panelists. These candidates may be drawn from any ICANN-approved Provider's list of panelists.
- (e) In the event that either the Complainant or the Respondent elects a three-member Panel, the Provider shall endeavor to appoint one Panelist from the list of candidates provided by each of the Complainant and the Respondent. In the event the Provider is unable within five (5) calendar days to secure the appointment of a Panelist on its customary terms from either Party's list of candidates, the Provider shall make that appointment from its list of panelists. The third Panelist shall be appointed by the Provider from a list of five candidates submitted by the Provider to the Parties, the Provider's selection from among the five being made in a manner that reasonably balances the preferences of both Parties, as they may specify to the Provider within five (5) calendar days of the Provider's submission of the five-candidate list to the Parties.

in the privacy rights area (ADRs), here the panelists are elected from a list elaborated by the provider and in agreement with the parties, at least in the three-member panel case. As a result, even though the complainant can elect the provider, the respondent has the choice of determining the panel composition, making the panel more transparent than in the case of privacy rights forums, where the panelists are appointed directly by the provider, without the parties' intervention.⁵¹ Nonetheless, the participation of the respondents takes place just in the case of three-member panels. Otherwise, it is the provider the one in charge of appointing the panelist. This procedure has been criticized because of the bias providers have in favoring complainants⁵². Once the panel is constituted, they have to decide on the case, with the power to ask for additional information from any of the parties. In case the parties reach a private agreement, the panel terminates its process, without any further decision. If any of the parties initiate a court trial, the panel can continue with its deliberations or decide to terminate the case.⁵³ Even though according to the rules of the UDRP both parties have the same period of

(f) Once the entire Panel is appointed, the Provider shall notify the Parties of the Panelists appointed and the date by which, absent exceptional circumstances, the Panel shall forward its decision on the complaint to the Provider.

⁵¹ See previous section.

⁵² "Given these inevitable biases, the ICANN Policy fails in another important way. Each DRP lists a number of approved arbitrators, but there is no information about how particular individuals are assigned to particular cases, particularly those involving only one arbitrator. In those cases, the parties have no input into the assignment of the arbitrator. Except in cases of the most obvious and improper kind of bias, it is unlikely a party could successfully challenge a panelist. Each DRP has its own procedural rules regarding challenges. The grounds upon which a challenge can be brought also vary. For example, NAF sets forth specific grounds for disqualification. None would preclude an arbitrator with known attitudes about meaning of controversial UDRP provisions from deciding a case. Nor is there a system for allowing parties, after a proceeding is over, to register complaints about a particular decisionmaker." Thornburg, *supra* note 15, at 222.

⁵³ **"k. Availability of Court Proceedings.** The mandatory administrative proceeding requirements set forth in Paragraph 4 shall not prevent either you or the complainant from submitting the dispute to a court of competent jurisdiction for independent resolution before such mandatory administrative proceeding is commenced or after such proceeding is concluded. If an Administrative Panel decides that your domain name registration should be canceled or transferred, we will wait ten (10) business days (as observed in the location of our principal office) after we are informed by the applicable Provider of the Administrative Panel's decision before implementing that decision. We will then implement the decision unless we have received from you during that ten (10) business day period official documentation (such as a copy of a complaint, file-stamped by the clerk of the court) that you have commenced a lawsuit against the complainant in a jurisdiction to which the complainant has submitted under Paragraph 3(b)(xiii) of the Rules of Procedure. (In general, that jurisdiction is either the location of our principal office or of your address as shown in our Whois database. See Paragraphs 1 and 3(b)(xiii) of the Rules of Procedure for details.) If we receive such documentation within the ten (10) business day period, we will not implement the Administrative Panel's decision, and we will take no further action, until we receive (i) evidence satisfactory to us of a resolution between the parties; (ii) evidence satisfactory to us that your lawsuit has been dismissed or withdrawn; or (iii) a copy of an order from such court dismissing your lawsuit or ordering that you do not have the right to continue to use your domain name." UDRP part 4.k, at <http://www.icann.org/dndr/udrp/policy.htm>.

grace to take the case to a court, some scholars have mentioned that the short time available is unfavorable for respondents⁵⁴. As in the case of the privacy rights ADRs, the providers do not have jurisdiction in case of matters initiated in court, which is one of the main limitations of these types of dispute resolution regimes⁵⁵. That said, most UDRP cases have not been contested in court, and the parties have accepted the panel decisions.⁵⁶ Furthermore, one of the problems of the UDRP procedure is the absence of a review mechanism for complaints⁵⁷. This type of mechanism is in place in other private ADRs and could provide for better review and control of the panelists' decisions.⁵⁸

One of the main advantages of the UDRP regime in comparison to other private dispute resolution systems in the Internet is that ICANN has the power to enforce the panel decisions⁵⁹. The only action that the panel can enforce is the termination or transfer of the domain name in dispute, which is, of course, under the management of ICANN.⁶⁰ As a result, enforcement is almost perfect, when compared to the lack of enforcement that privacy rights dispute resolution providers, dealing with different jurisdictions and the lack of government support, have to contend with⁶¹. The enforcement ability arises from

⁵⁴ See, Froomkin, *supra* note 2 (analyzing the extent of the bias for respondents to resort to a Court action.)

⁵⁵ "Although a UDRP decision is, in some respects, self-enforcing, it is not binding. Either before or after a UDRP decision, either party can take the matter to court. Even after an adverse decision under the UDRP, a respondent could pursue de novo litigation against a successful claimant. This ability to "appeal" an unsuccessful UDRP case was recently affirmed by the First Circuit Court of Appeals." Edward Anderson and Tymothy Cole, *supra* note 44, at 250.

⁵⁶ According with UDRPLaw.net until July 2002, just 65 UDRP cases were taken to Court. This is a small number as compared with the more than 6,000 cases UDRP providers had considered since 1999. See, <http://www.udrplaw.net/>.

⁵⁷ "UDRP arbitrators have rendered decisions that are inconsistent in their interpretation of the substantive requirements and in their implementation of the procedural rules. Because the process contains no internal appeal process, there is no way to challenge any of these decisions, either to correct the result in an individual case or to reconcile splits in what is becoming the "law" of ICANN. There is no way to correct arbitrators who are creating bad "law" or those who believe that trademark holders should have broader rights than those included in the UDRP as written." Thornburg, *supra* note 15, at 224.

⁵⁸ See, Kesan and Gallo, *supra* note 29 (describing the procedure of private ADRs).

⁵⁹ See, *supra* note 18 and accompanying text.

⁶⁰ Again, the characteristic of the Root system for the Internet, which is managed and monopolized by ICANN generates a disincentive to other providers to offer other root of Domain Names. As a result, the actual design of the system provides ICANN with a well defined power of enforcement for the UDRP. See, Mueller, *supra* note 20 (describing the lack of competition and monopoly of ICANN and the incentives the organization participants have to maintain the system as it is.)

⁶¹ One of the main weaknesses in enforcement is the existence of diverse roots in the Internet. Nonetheless, because ICANN is the most important of these servers, there are just few domain names that cannot be reached by ICANN enforcement capabilities. The case of ccTLDs are special since they are can be limited to the national jurisdictions of the participant countries.

both the design of ICANN, which is an organization supported by the United States government and accepted by some other countries as the organization which manages domain names and also from the design of the root system that favors an uncompetitive market for root names.⁶² The legitimacy of its functions, at least among the groups that have direct influence on ICANN Board of Directors, provides the base for enforcement of the rules on domain name dispute resolution.⁶³ These characteristics, which are surprisingly based on governmental delegation of powers to ICANN, make the UDRP one of the most viable systems for dispute resolution on the Internet.

Nonetheless, in order to maintain its legitimacy among countries and different Internet users, i.e. beyond the groups that are currently part of the policymaking process, ICANN has to develop new ways to introduce the many constituencies of the Internet into its decision-making process⁶⁴. If we look at how ICANN is formed, we can see that some constituencies on the Internet have a high degree of control over its policymaking process, meanwhile, other groups, mainly users but also the private sector, have a low level of participation⁶⁵. The success of the UDRP, and ICANN itself, will depend upon the political pressure exerted over ICANN to involve new participants and to develop new ways of letting wide-ranging interest groups influence its decision-making.⁶⁶ In contrast to the privacy rights providers, this particular structure makes the UDRP both more subject to criticism but also more susceptible to change, while at the same time creating an opportunity to maintain the consensus around the common set of rules of the system.

B. NUMBER OF PARTICIPANTS

Under the UDRP system, every person or entity that registers a new domain name is subject to the policies created by ICANN, since the companies that manage domain name

“An important aspect of the UDRP is the enforceability of the decisions. Although trademark holders only have two remedies available to them under the UDRP, enforcement of a successful result is automatic (absent court action by the respondent).” Anderson and Cole *supra* note 44, at 250.

⁶² *Id.*

⁶³ Legitimacy of ICANN actions have been under strong debate lately. *See*, Helfer and Dinwoodie, *supra* note 20 (discussing how the problems of the UDRP undermine the legitimacy under which it is based).

⁶⁴ *See*, Froomkin, *supra* note 2 (questioning the legitimacy of ICANN to impose its policies in the Internet.)

⁶⁵ *See*, Kesan and Gallo, *supra* note 23 (discussing the political process inside ICANN).

⁶⁶ *Id.*

assignments on the Internet are subject to ICANN authorization.⁶⁷ As a result, most of the domain name owners are subject to the regulations of the UDRP.⁶⁸ This provides the system with wide coverage and uniform regulation throughout most of the Internet. This feature is another important difference with respect to other attempts to create private dispute resolution systems in which the adoption of their regulatory regime is voluntary⁶⁹. The specific design of ICANN as the only institution that manages domain names, and the support from different governments, generates a quasi-automatic jurisdiction for those who request a new domain name in any of the gTLDs.

C. INTERNATIONAL COOPERATION

In the case of the UDRP, the nature of the issue regulated permits better enforcement of the rules⁷⁰. However, international cooperation is needed to sustain the policy that is put in place throughout the Internet.⁷¹ Since ICANN relied on the support of the U.S. government, other developed countries have followed, and now support the jurisdiction of ICANN to resolve domain name disputes.⁷² Nonetheless, most ccTLDs are still out of reach from the jurisdiction of ICANN with respect to the UDRP policy⁷³. However, the technical dependency of ccTLDs from ICANN, and in the end, from the United States

⁶⁷ “**1. Purpose.** This Uniform Domain Name Dispute Resolution Policy (the "Policy") has been adopted by the Internet Corporation for Assigned Names and Numbers ("ICANN"), is incorporated by reference into your Registration Agreement, and sets forth the terms and conditions in connection with a dispute between you and any party other than us (the registrar) over the registration and use of an Internet domain name registered by you. Proceedings under Paragraph 4 of this Policy will be conducted according to the Rules for Uniform Domain Name Dispute Resolution Policy (the "Rules of Procedure"), which are available at www.icann.org/udrp/udrp-rules-24oct99.htm, and the selected administrative-dispute-resolution service provider's supplemental rules.” UDRP part 1, at <http://www.icann.org/dndr/udrp/policy.htm>.

⁶⁸ This characteristic depends on the concentrated structure of the root system and the lack of competition. *See*, Mueller, *supra* note 1.

⁶⁹ *See*, Kesan and Gallo, *supra* note 29.

⁷⁰ “ICANN has largely succeeded in solving the enforcement dilemma, although it is not a solution that could easily be replicated in a different context. Because ICANN has a contract with Network Solutions, Inc., which controls the computer that physically assigns each domain name, it can itself enforce the UDRP decision. A winning complainant will either be awarded the domain name at issue or the name will be cancelled.” Thornburg, *supra* note 15, at 207.

⁷¹ The need for international cooperation is explained by the participation of ccTLDs as one of the most active ICANN constituencies. Furthermore, it is through these international actors that ICANN can cooperate in the developing of rules that applies throughout the Internet. Recently, ccTLDs have upgraded their participation and voice in ICANN policymaking process. *See*, next section discussion.

⁷² *See*, <http://www.iana.org/cctld/cctld-whois.htm> (listing all the countries that participate in ICANN.)

⁷³ Up to nowadays only a handful of ccTLDs have signed Sponsorship Agreements with ICANN. *See*, <http://www.icann.org/cctlds/> (showing information about the ccTLDs managers that signed agreements with ICANN.)

government, hinders the real reach of the sovereignty of country code managers⁷⁴. The reforms in ICANN political structure in 2002, which gave more participation to ccTLDs could be considered a political maneuver to reach a wider international consensus about ICANN policies⁷⁵.

There are some characteristics of the ICANN structure that help explain this success in reaching international consensus. First, the management structure of ICANN has become more open to participation and, especially after last year's reforms, the international community has more say on ICANN policymaking.⁷⁶ Different constituencies from all around the globe can participate in the decision-making and shaping of ICANN policies.⁷⁷ Given the interest of ICANN in becoming an international body with jurisdiction over the Internet, it is not surprising that there have been major changes in the way Board members are elected and also regarding the participation of Country Code registries (ccTLDs).⁷⁸ These changes will permit more cooperation at the

⁷⁴ "Technically, the ccTLDs are subdomains of the "root domain" created by the U.S. government and "contained" in the root zone file. Despite the U.S. reservation of technical control over the A root, the U.S. government states that "[n]ational governments now have, and will continue to have, authority to manage or establish policy for their own ccTLDs," thereby attempting to downplay the influence that the U.S. may indirectly have over the policies of nations foreign to the U.S. At the same time, the U.S. maintained that national governments and intergovernmental organizations should not directly manage the Internet names and addresses. On this account, ICANN was intended to be a purely technical coordinating body, whereas national governments would continue to control national politics." Kim G. von Arx and Gregory R. Hagen, *A Declaration of Independence of ccTLDs from Foreign Control*, 9 RICH. J.L. & TECH. 1, at 20.

⁷⁵ See, Kesan and Gallo, *supra* note 23. (describing the creation of a ccNSO constituency to participate directly in the management of ICANN.)

⁷⁶ *Id.* (analyzing how the pressure groups inside ICANN successfully resisted changes to their political influence).

⁷⁷ See <http://www.icann.org/general/archive-bylaws/bylaws-15dec02.htm> (listing the new bylaws of ICANN with important changes in the influence of different groups on the policy process.)

⁷⁸ Until December 15th 2002 the Board of Directors of the ICANN was composed by 19 members. Five of them came from the original Board of Directors established in 1998 and the other 14 came from the following organizations: 5 from At Large Membership. Each of these directors should represent a different geographic unit: Africa, Asia-Australia-Pacific, Europe, Latin America and the Caribbean and North America. 3 Board Members came from the Domain Name Supporting Organization (DNSO). The DNSO was composed by different constituency groups: Business, Non-Commercial, ccTLD Registries, gTLD Registries, ISPs, Registrars and Intellectual Property Constituency. 3 Board Members came from the Address Supporting Organization (ASO). This group was composed by the Asian Pacific Network Information Center (APNIC), American Registry for Internet Numbers (ARIN), Latin American and Caribbean Internet Address Registry (LACNIC) and Réseaux IP Européens Network Coordination Centre (RIPENCC). Finally, 3 Board Members came from the Protocol Supporting Organizations (PSO). The PSO was composed by the Internet Engineering Task Force (IETF), the World Wide Web Consortium (W3C), International Communication Union (ITU-T) and the European Telecommunications Standard Institute (ETSI).

By the new By-Laws of the ICANN, beginning in December 15th 2002, the Board of Directors should be composed by 15 members elected as follows: 8 Directors from the Nominating Committee, 2 from ASO, 2 from Country Code Name Supporting Organization (ccNSO), 2 by Generic Name Supporting Organization (GNSO) and 1 is the President of ICANN. The Nominating Committee is composed as follows: 5 from At Large Representation, 2 from Business Constituency of GNSO, 1 from gTLD Registry, 1 from gTLD

international level, which will allow for better enforcement of dispute resolution policies.⁷⁹ Nonetheless, the inclusion of international actors will also increase the need for reform in the UDRP in order to accommodate different international perspectives. For example, the growth of the Internet in Asia and the interest of ICANN to continue being the main source of control and regulation over domain names have prompted the creation of two new offices, one in Hong Kong and the other in Beijing, to resolve disputes in the Asian region.⁸⁰ As a result, the UDRP could accommodate different views and be open to changes, even though the resistance of groups with more power inside ICANN will resist such reforms.⁸¹ Second, the constituencies that form the board of ICANN were created to permit people from different countries to be part of it and have a voice in the political process.⁸² Nonetheless, the governance of ICANN has been relegated to groups and constituencies that were introduced as initial parts of the organization.⁸³ As ICANN tries to move to a more international environment, these constituencies should accommodate other interests mainly from other countries – the private sector, internet users and the government. In this sense, we can say that ICANN is an institution in its formative stage, in which different constituencies and groups try to establish positions in the management of the institution, but without an already established procedure or representation.⁸⁴ However, the forces that shape the political characteristics of ICANN will also shape the rules of its dispute resolution policy. In the end, if ICANN succeeds in promoting and enforcing a set of dispute resolution rules for Domain Names throughout the Internet, it will be due to the capacity of its constituencies

Registrars, 1 from Council Country Code NSO, 1 from ISP constituency GNSO, 1 from Intellectual Property Constituency GNSO, 1 from ASO, 1 designated by ICANN Board to represent Academy and other similar institutions, 1 from Consumer and Civil Society Groups from the Non-commercial constituency of GNSO, 1 from IETF and 1 from ICANN Technical Liaison Group. See <http://www.icann.org/general/archive-bylaws/bylaws-15dec02.htm#VI> for a complete version of the new By-Laws of ICANN.

⁷⁹ See, <http://www.icann.org/cctlds/> (describing the objectives and activities of ccTLDs in ICANN.)

⁸⁰ See, <http://www.adndrc.org/adndrc/index.html>

⁸¹ The analysis of the next section is a good example on how stakeholders of ICANN could resist major reforms on the policymaking and retain power.

⁸² “The ICANN Bylaws provide for three Supporting Organizations (SOs) to assist, review and develop recommendations on Internet policy and structure within three specialized areas. (See Bylaws, Articles VIII, IX, and X.) The SOs help to promote the development of Internet policy and encourage diverse and international participation in the technical management of the Internet. Each SO names three Directors to the ICANN Board” <http://www.icann.org/general/support-orgs.htm> (describing the different constituencies that support ICANN).

⁸³ See, next section.

⁸⁴ The reform process initiated in 2002 and the debate about the role of ICANN and the division of power among different constituencies is a proof of ICANN as an organization in a formation stage.

to accommodate different demands and due to the political process inside the corporation that enables such a process to occur.

D. USER PARTICIPATION

In the case of the UDRP, user participation is much higher than in the previous case study of the privacy rights TPIs.⁸⁵ First, every user that registers a Domain Name on the ICANN-managed root server is automatically under the jurisdiction of the providers and is subject to the rules of the UDRP.⁸⁶ Second, ICANN has provided, in theory, numerous ways by which users can contact the organization and propose reforms to the dispute resolution system.⁸⁷ Furthermore, in ICANN, users have direct participation on the Board of Directors, through the election of representatives in the At Large Group, and in the GNSO group, under the constituency of non-commercial users.⁸⁸ However, user participation on ICANN policymaking has been scarce and the commercial private sector is the main power that is in control of ICANN. As a result, although ICANN fares better than the privacy rights TPIs, as seen from our analysis in the previous section, it is still biased towards private firms' interests regarding domain name policies.

There are many critics pointing to the lack of democratic participation in the decision-making of ICANN.⁸⁹ For example, ICANN has strictly controlled the number of top-level domain names, which has created an artificial scarcity in the market.⁹⁰ Furthermore, this scarcity has favored specific private firms with interests in controlling

⁸⁵ From the many critics mentioned in footnote 20, user participation in ICANN is far from being ideal. However, we found it more important than in the case of purely private regulation systems.

⁸⁶ "All registrars in the .aero, .biz, .com, .coop, .info, .museum, .name, .net, and .org top-level domains follow the Uniform Domain-Name Dispute-Resolution Policy (often referred to as the "UDRP")." Uniform Domain Name Dispute Resolution Policy, at <http://www.icann.org/udrp/>

⁸⁷ See <http://www.icann.org/>. (describing multiple instruments users have to reach ICANN and participate).

⁸⁸ See <http://www.icann.org/committees/alac/> (describing the tasks and composition of the At Large Group) and <http://gns0.icann.org/> (describing and informing on the different constituencies that are part of the GNSO).

⁸⁹ See *supra* note 20 and accompanying text.

⁹⁰ "ICANN's attempts to safeguard intellectual property interests in the domain name space also shaped its policies toward the introduction of new top-level domains. New TLDs were given a low priority relative to other objectives. Movement toward that goal was extremely slow. When new ones were introduced, the number was small and the approval process encouraged registries to employ practices that would privilege trademark holders in the initial assignment of names. So-called "sunrise" or "daybreak" procedures, for example, allow all the world's trademark holders the privilege of preregistering their names in a new top-level domain before the domain is opened up to anyone else. Both techniques offer preemptive forms of protection that simply do not exist in traditional trademark law." Mueller, *supra* note 1, at 193..

this resource.⁹¹ By letting private firms compete with each other to provide options in the top-level domain name arena, ICANN could improve users' welfare by providing more alternatives than what exists nowadays⁹². However, competition at this level will decrease the value of the top domain names that already exist today, hurting the profits of the firms that control them. As these firms have significant influence over ICANN's decisions, it is to be expected that they will exert pressure to avoid such competition. Nonetheless, if ICANN wants to promote cooperation and continue to advance in its governance of the Domain Name system, as it appears to want to do nowadays, it should accommodate to users' demands. For example, one of the most common criticisms of the UDRP is that the domain name rules enforced by providers are designed to protect trademark holders' interests on the Internet, at the expense of free speech interests⁹³. For example, if somebody registers a domain name called FIFAWorldCup.com, devoted to criticizing the way the Fédération Internationale de Football Association (FIFA) has designed the classification groups for the 2006 World Cup in Germany, FIFA could claim that this domain name infringes on its own trademark rights and seek to cancel this registration by initiating a complaint with a UDRP provider. These kinds of problems have arisen because of the small number of top-level domain names and the broad definitions applied for the type of content that is admissible under each top-level domain name. For example, if ICANN creates a new top-level domain name for free speech, such as .fsp, in which all domain name registrants have to be individuals or non-commercial entities and in which all names, including trademarks, can be used, together with a prohibition against undertaking commercial activities in this space, many of the free speech concerns can be accommodated. ICANN can then have a commercial set of top-level domain set of names in which trademarks are the rule for name assignment, and also a free speech section in which users can express themselves without fear of their

⁹¹ *Id.*

⁹² See Milton Mueller, *Success by Default: A New Profile of Domain Name Trademark Disputes under ICANN's UDRP*. Convergence Center working Paper, June 2002. (describing the scarcity created by ICANN in the gTLDs registry.)

⁹³ See, Blackman, *supra* note 6 (analyzing the issues of free speech in the Internet, with particular reference to the Domain Name System.)

domain names and free speech rights being suppressed. Nonetheless, under the current interests that dominate ICANN, such a simple technical change could not be expected⁹⁴.

With respect to the UDRP itself, there is better participation of Internet users employing these dispute procedures, as compared to the privacy rights forums⁹⁵. First, both parties have the opportunity to take part in the formation of the panel, guaranteeing a higher degree of impartiality and independence than in the case of panels constituted directly by the private providers with interests dominated by private businesses.⁹⁶ Nonetheless, it is clear that the ICANN system is far from being independent, given its bias towards private firms, although this bias is less than in the case of the totally private privacy rights forums.⁹⁷ Second, given that the general governing rules employed by the UDRP providers are supplied by ICANN, and users do have the opportunity –although limited- to place representatives on ICANN’s Board of Directors, these rules could be subject to review in order to insure a more fair treatment of non-commercial parties⁹⁸. Third, international users have more say in the rules and management of ICANN compared to privacy rights providers, given the attempts to construct a more international organization⁹⁹. As a result, more cooperation can be expected on the international sphere, and a broader consensus may be achieved around the UDRP¹⁰⁰. Finally, as governments participate in the process, it is more probable that consumers and other users can exert more influence over ICANN’s decisions when compared to the totally private system that regulate privacy in e-commerce¹⁰¹.

⁹⁴ See, Kesan and Gallo, *supra* note 23.

⁹⁵ See, Kesan and Gallo, *supra* note 29.

⁹⁶ See, <http://www.icann.org/dndr/udrp/uniform-rules.htm>

⁹⁷ See different points of view and critics detailed in footnote 20.

⁹⁸ The recent reform of ICANN has drastically reduced the representation of at large groups in the decision making process of ICANN, increasing the doubts about the legitimacy of the Corporation. See, Kesan and Gallo, *supra* note 23.

⁹⁹ “ICANN must be understood as a new international regime formed around a global shared resource. Its purpose is to define property rights in Internet identifiers and to regulate their consumption and supply. ... The emerging Internet governance regime is the product of an informal political agreement among national governments, and the agreement includes much more extensive role for private sector actors. That fact does make ICANN different from other international regimes, but it does not change its basic nature. It is much more accurate and analytically fruitful to define ICANN as a variant of a standard international regime than it is to think of it as something *sui generis*.” Mueller, *supra* note 1, at 217-218.

¹⁰⁰ “ICANN’s creation of its own international trademark law is inherently controversial. What right does a California nonprofit corporation have to create and impose law that differs from the law on nation-states?” Thornburg, *supra* note 15, at 208.

III. UDRP PROVIDERS

ICANN has authorized private providers to manage the complaints presented by Internet users¹⁰². These providers should follow the policy guidelines designed by ICANN, but they can complement these rules with their own¹⁰³. Initially, ICANN authorized two providers, the World Intellectual Property Organization (WIPO) and the National Arbitration Forum (NAF), approved by ICANN on December 1st and 23rd of 1999, respectively. Afterwards, in 2000, ICANN added two more providers, eResolution (eRes) in January and CPR Institute for Dispute Resolution (CPR) approved in May 2000. Of these providers, eRes ceased to operate in November 2001. Recently, in February 2002, a new provider has been approved, Asian Domain Name Dispute Resolution Centre, with two offices in Beijing and Hong Kong¹⁰⁴. In this work we will analyze the cases of the initial four providers of the UDRP.

The World Intellectual Property Organization (WIPO) is an organization dependent of the United Nations¹⁰⁵. It was created in 1994 with the aim of providing mediation services to between private parties in specific areas¹⁰⁶. Its headquarters are geographically located in Geneva, Switzerland. WIPO has been one of the main actors that influenced the creation of the UDRP regime by ICANN. In April 1999 WIPO produced a final report on the creation of a domain name resolution system, which was

¹⁰¹ See, Kesan and Gallo, *supra* note 29.

¹⁰² See, <http://www.icann.org>

¹⁰³ See, <http://www.icann.org/dndr/udrp/uniform-rules.htm>

¹⁰⁴ <http://www.adndrc.org/adndrc/index.html> (The website of the Asian provider) and <http://www.icann.org/announcements/announcement-03dec01.htm> (The announcement of ICANN creating the new Asian provider for the UDRP regime.)

¹⁰⁵ “WIPO is one of the 16 specialized agencies of the United Nations system of organizations. It administers 23 international treaties dealing with different aspects of intellectual property protection.” At <http://www.wipo.int/about-wipo/en/overview.html>

“WIPO is an organ of the United Nations with specific duties defined by a series of treaties. Signatory nations send delegates to WIPO, and meet occasionally in plenary to make decisions. Being responsible to all its members states rather than just the United States, the WIPO staff felt empowered to define its own terms of reference and proposed to make recommendations concerning: 1) disputes prevention; 2) dispute resolution; 3) a process to protect famous and well-known marks in the gTLDs; and 4) the effects on intellectual property rights of the new gTLDs.” Froomkin, *supra* note 2, at 624.

¹⁰⁶ “Developed by leading experts in cross-border dispute settlement, the procedures offered by the Center are widely recognized as particularly appropriate for technology, entertainment and other disputes involving intellectual property.”

the blueprint for ICANN own UDRP¹⁰⁷. The National Arbitration Forum (NAF) was created in 1986 in order to provide alternative dispute resolution services to different parties. The NAF is composed by judges and lawyers around the world, with the only aim of providing mediation and arbitration services¹⁰⁸. It is located in the United States, and most of the UDRP cases evaluated by NAF are from the North American region. The Center for Public Resources (CPR) was formed in 1979 by major corporations in order to provide alternative dispute resolution forums for private business¹⁰⁹. This is a nonprofit organization with more than 500 private corporations are members of it. Finally, eResolution (eRes) suspended its activities in 2001. This provider was geographically located in Quebec, Canada.

In 2002 ICANN approved the addition of an Asian dispute resolution provider, Asian Domain Name Dispute Resolution Centre (ADNDRC), with offices in Hong Kong and Beijing¹¹⁰. This new provider is composed by the China International Economic and Trade Arbitration Commission (CIETAC) and the Hong Kong International Arbitration Centre (HKIAC)¹¹¹. The CIETAC is the only dispute resolution provider for the top domain name .cn. Meanwhile, HKIAC was created in 1985 as an alternative dispute resolution system, and in 2001 it was appointed as the sole dispute resolution provider for the top domain name .hk¹¹².

A. CHARACTERISTICS OF THE PROVIDERS

As explained before, ICANN provides the rules for the administration of the UDRP. Accordingly, the authorized providers have to follow these rules in solving the cases. Nonetheless, there are some differences between the providers, because of ICANN has left some room for the providers to differ. In this section we analyze the differences

¹⁰⁷ See, *Final Report of the First WIPO Internet Domain Name Process*, at <http://wipo2.wipo.int/process1/report/index.html>. See also, Froomkin, *supra* note 2 (analyzing the characteristics of the WIPO proposal and the final outcome from ICANN policy.)

¹⁰⁸ “[T]he Forum’s only mission is to provide superior dispute resolution services to parties seeking an alternative to litigation.” At, <http://www.arbforum.com/>

¹⁰⁹ “Founded in 1979 as the Center for Public Resources, CPR’s mission is to spearhead innovation and promote excellence in public and private dispute resolution, and to serve as a primary multinational resource for avoidance, management and resolution of business-related and other disputes.” At, <http://www.cpradr.org/aboutcpr1.htm>

¹¹⁰ See, *supra* note 104 and accompanying text.

¹¹¹ See, <http://www.adndrc.org/adndrc/index.html>

between these providers in terms of supplemental rules, fees and relative representation in their panels of arbitrators.

1. Supplemental Rules

Besides the UDRP rules provided by ICANN, the private providers can add their own rules, while they do not contradict ICANN policy¹¹³. Most of these additional rules are about general procedure for the cases evaluated by the provider, and how participants should present information and proofs in terms of characteristics and time schedule. Table 1 presents the main characteristics of the supplemental rules for each provider.

¹¹² *Id.*

¹¹³ *See*, <http://www.icann.org/dndr/udrp/uniform-rules.htm>

Table 1: Supplemental Rules of UDRP Authorized Providers

	WIPO	NAF	CPR	eRes
Submission Requirements	Coversheet and copies to Registrar(s) and Respondent	Coversheet plus 3 copies (single panel) or 5 copies (Three member Panel)	5 Copies	Three parts: Complaint proper, Annexes and Cover Sheet
Compliance Review	Center has 5 days to review		Left to the Panel without specific requirement	Clerk has 10 days to review and Complainant has 5 days to correct any deficiency. Clerk's Office
Official Administrating the Case Panel Appointment	Center appoints Case Administrator Three Member Panel: Parties should provide list of 3 candidates, ordered by preference. The third panelist appointed is the president. Parties can agree on naming the president.	Single Member Panel: Appointed by the Forum Three Member Panel: Chair elected by the Provide and no part of the Parties list of candidates.	Not mentioned	Single Member Panel: Appointed by the Clerk's office Three member Panel: Appointed by Provider: One panelist from the lists of each party and the third appointed by the Provider (President).
Recusation of Panelists	Not Mentioned	Not Mentioned	Not Mentioned	Decided by the Clerk's office
Respondent Default	Panel should be appointed by the Center.	Panel appointed by the Center. Option to change to a one member panel should be provided.	Not Mentioned	Panel Appointed by Provider
Limits to Submission	Word limit: Paragraph 3(b)(ix) 5000 words 5(b)(i) 5000 words 15(e) no word limits.	Complaint and Response no longer than 10 pages total	Complaint and Response not to exceed 10 pages plus annexes and exhibits.	Not mentioned
Extension for Response	Not mentioned	Extension can be given subject to: Parties agreement, informed to the Forum, state exceptional circumstances, state extension (no more than 20 days) and pay extension fee \$100. Forum will decide on the extension.	Not Mentioned	Could be extended by the Panel
Additional Submissions	Not Mentioned.	Within 5 days of submission of the Response and it should be accompanied by a fee of \$250.	Not Mentioned	Not Mentioned

Source: Own Elaboration based in: <http://www.udrpinfo.com/eres/supprules.htm>, <http://arbitrator.wipo.int/domains/background/index.html>, <http://www.arbforum.com/domains/UDRP/rules.asp>, http://www.cpradr.org/ICANN_RulesAndFees.htm.

As we can see, even though the differences in the supplementary rules are minimal, and most of them are of form in the case of the format and timing of the submissions of information and proofs to the panel, the effects of such differences in procedure could have important consequences on the efficiency and results of the procedure¹¹⁴. Some of the providers have a more complex system of procedure, WIPO¹¹⁵ and eRes¹¹⁶, than others, NAF¹¹⁷ and CPR. For example, in the case of CPR, the rules are minimal and most of the decisions are left to the panel to decide what is best. It is worth to mention that NAF is the only provider that offers incentives to maintain the procedure at a minimum of information submissions and time, by introducing extra fees in the case of supplemental submissions or the extension in the timing of the response. However, these fees could be a problem for parties attempting to propose new proofs or information regarding the case¹¹⁸. Nonetheless, the general fee of NAF is lower than the other providers, and the extra fees are much smaller. Beyond these small differences, most of the rules are similar for all of the providers (Table 1).

2. Fees

Another of the main issues that can differentiate providers is the fees they charge for different types of cases. Differences among the fees the Providers charge can induce complainants to switch from one provider to another, given that the set of rules applied is the same. Table 2 shows the schedule of fees charged by each provider.

¹¹⁴ See Section IV.1 (analyzing the results of cases handled by the same panelists in different providers.)

¹¹⁵ “The WIPO/AMC Supplemental Rules include very few changes to ICANN’s Rules. The Supplemental Rules do, however, provide for cases to be filed through the Center’s “Internet based case filing and administration system.” Stacey King, *The “Law That It Deems Applicable”: ICANN, Dispute Resolution, and the Problem of Cybersquatting*. 22 HASTINGS COMM. & ENT. L. J. 453, at 476-477.

¹¹⁶ “eResolution’s Supplemental Rules include twenty-one definitions. These include the definitions set out in the Rules, as well as adding a number of additional definitions. None of the definitions however, significantly changes the process or procedures. They simply act to clarify certain terms.” *Id.*, at 478-479.

¹¹⁷ “Like the WIPO/AMC, the National Arbitration Forum (NAF) has adopted the definitions set forth in the Rules without supplementing them.” *Id.*, at 481.

¹¹⁸ “The NAF “sandbag” rule is one of the most pernicious examples of a provider’s attempt to distinguish itself as plaintiff-friendly. A rule that allows a party to pay to put in a surprise pleading, perhaps with new factual allegations or even a new case in chief, is not a rule calculated to achieve justice.” Froomkin, *supra* note 2, at 703.

Table 2: Fees Charged by Providers

NAF		
No. Domain Names	Single Panel	Three Member Panel
1	1,150	2,500
2	1,300	2,600
3-5	1,400	2,800
6-10	1,750	3,500
11-15	2,000	4,000
16 or more	To be Determined	To be Determined

WIPO		
No. Domain Names	Single Panel	Three Member Panel
1-5	1,500	4,000
6-10	2,000	5,000
More than 10	To be Determined	To be Determined

CPR		
No. Domain Names	Single Panel	Three Member Panel
1-2	2,000	4,500
3-5	2,500	6,000
More than 6	To be Determined	To be Determined

Source: <http://arbiter.wipo.int/domains/>, <http://www.arbforum.com/domains/>,
http://www.cpradr.org/ICANN_Menu.htm.

From this table, there are two main characteristics we can mention. First, the cost of the procedure across providers is not prohibitive and it is much lower than the expected costs of resorting to court action to solve the conflict¹¹⁹. Second, the differences in prices among providers are not big enough to promote a high substitution among providers. For example, the most popular provider is WIPO, which charges a higher fee than NAF, which is second in popularity. The fees of WIPO are 16% higher in average than NAF's for those cases in which the number of domain names is between one and five. For the cases between six and ten domain names, the difference is just 14% among these two providers. In the case of CPR, the difference in price with respect to NAF is 24% for the cases with one to five domain names. Accordingly, we can conclude that the system is providing affordable dispute resolution services without producing a high level of competition among providers.

3. Geographical Representation of Arbitrators

The third main variable the Providers can manage is the kind of panelists they offer to complainants and respondents. In most of the cases, those panelists are former judges or lawyers from different countries¹²⁰. The different background of these panelists could have an influence over the final results of their verdicts. This is a very important issue on the Internet, were people from different parts of the world are getting in contact and doing business. As a result, a common set of rules for the Internet for every user around the world should have a correlation with the diversity of the panelists offered by each Provider. Of course, we should be aware that those countries with higher levels of connectivity to the Internet should have a relative importance in the share of panelists they receive. Table 3 shows the distributions of panelists for each Provider across countries.

¹¹⁹ “even though the DRP’s fees have already increased by at least 50% in the short time the policy has been in operation, it is still regarded as a bargain by trademark holders.” Thornburg, *supra* note 15, at 204.

¹²⁰ See, <http://www.udrpinfo.com/panl.php> (providing information and profiles of the panelists of the UDRP system)

Table 3: Panelists

	Panelists (% of Total)						
	WIPO	NAF	CPR	Internet Users (% World Total)	WIPO	NAF	CPR
Argentina	4	2		0.66	1.2	1.4	
Australia	19	1	1	1.44	5.8	0.7	2.7
Austria	2	1		0.52	0.6	0.7	
Belgium	5	1		0.64	1.5	0.7	
Brazil	8	3		1.60	2.4	2.2	
Canada	21	7	1	2.69	6.4	5.0	2.7
Chile	5			0.62	1.5		
China	2	2	1	6.72	0.6	1.4	2.7
Colombia	2	3		0.23	0.6	2.2	
Croatia	1			0.05	0.3		
Cyprus	1			0.03	0.3		
Czech Republic	3			0.28	0.9		
Denmark	2	1		0.58	0.6	0.7	
Ecuador	1	1		0.07	0.3	0.7	
Egypt	3			0.12	0.9		
Finland	1			0.45	0.3		
France	17	2		3.12	5.2	1.4	
Germany	9			6.14	2.8		
Ghana	1			0.01	0.3		
Greece	2			0.28	0.6		
Hungary	2	1		0.30	0.6	0.7	
India	6	2		1.40	1.8	1.4	
Ireland	2	2		0.18	0.6	1.4	
Israel	5	2		0.36	1.5	1.4	
Italy	10	2	1	3.27	3.1	1.4	2.7
Jamaica	2			0.02	0.6		
Japan	8	1		11.15	2.4	0.7	
Liechtenstein		1		0.00		0.7	
Malaysia	2	1		1.30	0.6	0.7	
Mexico	6	2		0.72	1.8	1.4	
Netherlands	6			1.58	1.8		
New Zealand	6	1		0.22	1.8	0.7	
Nigeria	1			0.02	0.3		
Norway	4			0.54	1.2		
Pakistan	1			0.10	0.3		
Paraguay		1		0.01		0.7	
Puerto Rico		1		0.12		0.7	
Portugal	3			0.50	0.9		
Republic of Korea	9	5		4.86	2.8	3.6	
Romania	1			0.20	0.3		
Singapore	6			0.30	1.8		
South Africa	2	1		0.61	0.6	0.7	
Spain	10	3	3	1.47	3.1	2.2	8.1
Sweden	6	2		0.92	1.8	1.4	
Switzerland	14	2		0.44	4.3	1.4	
Uganda	1	1		0.01	0.3	0.7	
UK	28	2		4.79	8.6	1.4	
US	93	85	30	28.48	28.4	61.2	81.1
Vietnam		1		0.20		0.7	
Zimbabwe	1			0.02	0.3		
Total	327	139	37				

Source: <http://arbiter.wipo.int/domains/>, <http://www.arbforum.com/domains/>, http://www.cpradr.org/ICANN_Menu.htm, World Bank Country Indicators, at <http://www.worldbank.org/>

In this case there are important differences between providers. WIPO is the one that has a more diverse group of panelists from both Developed and Less-Developed countries, even though countries from the OECD represent 87% of the total panelists and account for 75% of Internet users in the World. The most favored countries in WIPO are Australia, Canada, France, Spain Switzerland and UK, which account for 33.4% of the panelists and just 13.95% of Internet users. The less represented countries, among OECD members, are Japan, Germany and Korea, which account for 8% of the panelists and 22.5% of Internet users. In the case of the United States, the representation in the group of panelists is almost equal to the share of Internet users the country has. WIPO is the most diversified of the UDRP providers, which could be because of the relationship with the United Nations and the need for having a worldwide representation. On the other hand, in both CPR and NAF, United States are heavily represented, having most of the panelists in the list of both providers. In the next section we will explore the effects panelists and specific country cases have on the performance of the providers.

One of the regions that is treated unfavorably, as compared with the number of Internet users located in this region, in the distribution of panelists is Asia, especially east Asia¹²¹. This region accounts for 26% of total Internet users, but their representation is just 10% (WIPO), 8% (NAF) and 2.4% (CPR). This bias could explain the creation of new providers for the East Asian region in 2002¹²².

IV. EMPIRICAL EVIDENCE

The development of the UDRP system has drawn the attention of many researchers since the beginning of the regime in 1999¹²³. The creation of a global dispute resolution system that covered the entire gTLDs domain names, and as a consequence most of the Internet, was an ambitious task for an environment that was mostly

¹²¹ This region includes the following countries: India, Singapore, Malaysia, Japan, China (including Hong Kong), and Republic of Korea.

¹²² See, *supra* note 104.

¹²³ See, *supra* note 20 and accompanying text.

unregulated, except for regulations through code¹²⁴. Most of the studies about ICANN UDRP are devoted to the theoretical debate of the virtues and failures of the system in providing effective regulation of Domain Names complaints¹²⁵. However, there are few works designed to evaluate performance of the UDRP with exhaustive empirical analysis. One of the first empirical attempts to understand UDRP was done by Milton Mueller at Syracuse University¹²⁶. Professor Mueller constructed a database with most of the data concerning the cases evaluated at ICANN UDRP regime¹²⁷. The first empirical work from Professor Mueller is an attempt to describe the performance of the system and explain the differences in market share that the providers had¹²⁸. This work provided useful empirical information on the characteristics of the providers and the performance of both the system as a whole and individual private providers. From the empirical analysis the author concludes that there is a bias in the system, since those providers that favored complainants are also the ones that received the higher market share¹²⁹. As it is noted in this work, WIPO and NAF received 61% and 31% of the cases respectively, having a winning rate for complainants of 67.5% and 71.5% respectively¹³⁰. On the other hand, eRes, which was more lenient with respondents, had a market share of just 7% with a winning rate percentage for complainants of just 44.2%¹³¹. However, as Professor Mueller notices, the main difference in the winning rates was in those cases in which the respondent was in default¹³². When the respondent contested the complaint the winning

¹²⁴ “All in all, about 70% of the world’s domain name registrations now fall under the jurisdiction of the UDRP. The percentage will probably increase in the future as new top-level domains are introduced by ICANN.” Milton Mueller, *Rough Justice. An Analysis of ICANN’s Uniform Dispute Resolution Policy*. Convergence Center, Syracuse University School of Information Studies.

¹²⁵ See, *supra* note 20.

¹²⁶ See, *supra* note 124, and Milton Mueller, *Success by Default, A New Profile of Domain Name Trademark Disputes under ICANN’s UDRP*. Convergence Center, Syracuse University, June 2002.

¹²⁷ To access the database see, <http://dcc.syr.edu/markle/mhome.htm>

¹²⁸ *Id.*

¹²⁹ “There is statistical evidence that selection of dispute resolution service providers by challengers leads to forum shopping that biases the results.” *Id.*, at 2.

¹³⁰ *Id.*, at 11 and 14.

¹³¹ *Id.*

¹³² “The high default rate can be interpreted in two opposing ways. Either the UDRP procedure moves too fast for ordinary domain name registrants to receive notice or to defend themselves adequately, or many of the challenged names were abandoned by registrants, who saw little point in defending them. We tend toward the latter interpretation, without ruling out the possibility that a significant minority of cases fall into the former category. We found a small number of cases with late responses, but many panelists accepted the late submissions or delayed the proceedings to obtain a response.” *Id.*, at 12.

percentage for complainant was 43% eRes, 50% NAF and 54% WIPO¹³³. This work also presents an econometric analysis of the cases concluding that the share of the market that NAF and WIPO received depended on their influence over the U.S. and rest of the world respectively, while for eRes the market share was determined by the high complainant loss rate¹³⁴. The main conclusions of this work are that the system is biased towards the complainants and that eRes low market share is due to the fact that respondents are favored by this provider¹³⁵. The author also proposed some changes in the system in order to avoid forum shopping¹³⁶. Nonetheless, the results of this research effort have been strongly criticized by an INTA report¹³⁷. This report notes major flaws in Professor Mueller's analysis like misunderstandings in the functioning of UDRP, inappropriate statistical evidence to support the claims of bias, inadequate review of UDRP cases, lack of analysis and data showing the rate of challenges to UDRP decisions, disputed domain name are a small percentage of total domain names and UDRP effect of discouraging registrations that infringe domain names¹³⁸. According to this report, Professor Mueller's analysis "distorts facts and missuses statistics to achieve a predetermined end –to show that the UDRP is somehow biased in favor of trademark owners and does harm the domain name system."¹³⁹

Professor Michael Geist provides another major piece of empirical evidence on the ICANN UDRP system¹⁴⁰. His work is based on the analysis of general data from UDRP cases. His conclusions are similar to Professor Mueller's, finding evidence of bias and forum shopping among providers. Furthermore, the author finds that panel performance is quite different if we separate them in one member and three-member

¹³³ *Id.*, at 12.

¹³⁴ *Id.*, at 18.

¹³⁵ *Id.*

¹³⁶ "To remedy the bias inherent in complainant forum shopping, ICANN should modify the UDRP to allow domain name registrars to select the dispute resolution provider(s) who will handle disputes over names they register. The incentives of registrars are more balanced because end users have a choice of which registrar to use. Registrar selection compares favorably to other possible remedies, such as random assignment of cases to dispute resolution service providers, an appeal process, or modification of the language of the policy." *Id.*, at 2.

¹³⁷ Ned Branthover, *UDRP – A Success Story: A Rebuttal to the Analysis and Conclusions of Professor Milton Mueller in "Rough Justice."* International Trademark Association (INTA) Internet Committee, May, 2002.

¹³⁸ *Id.*, at 1-2.

¹³⁹ *Id.*, at 10.

panels¹⁴¹. This work shows that in the case of panel composition, three-member panels offer a lower winning rate for complainants: 62% (WIPO), 49%(NAF) and 50% (eRes) for three-member panels versus 83% (WIPO), 86%(NAF) and 64%(eRes) in the case of single member panels¹⁴². Accordingly, the main proposal derived from this work is that simply changing to a mandatory three-member panel regime, the system bias will be reduced¹⁴³. However, this work has been strongly criticized by INTA¹⁴⁴. The critical review claimed that Professor Geist's work are based on simple statistical analysis of the cases without offering adequate measuring for fairness. Besides, it does not consider the default cases in the calculation of the winning percentage for complainants; it does not analyze other causes that could justify high winning percentage ratio; neither does it consider that forum selection can be the result of other factors such as quality and reputation, costs, etc, rather than bias¹⁴⁵. Both INTA's reports criticize the assumption of Geist and Muller that a 50% winning rate for complainants and respondents should be the norm. They assert that the UDRP was created to solve the problem of abusive registration and then a higher winning rate for complainants than for respondents should be the expected norm¹⁴⁶.

¹⁴⁰ Michael Geist, *supra* note 20 and Michael Geist, *Fundamentally Fair.com? An Update on Bias Allegations and the ICANN UDRP*. University of Ottawa, at <http://www.lawbytes.ca>

¹⁴¹ "At least three factors contribute to the greater confidence in the three-person panel. First, this panel configuration eliminates the possibility that a single panelist may simply misinterpret the UDRP and render the wrong decision. Second, the three-person panel forces panelists to more carefully consider their decision by justifying it before their counterparts on the panel. ... Third, and most importantly, the three-member panel completely alters the panelist selection process. In a single panel case, the arbitration provider is exclusively responsible for allocating the case to a panelist. Conversely, in a three member panel, the arbitration provider wields comparatively little influence over the selection process. Both the complainant and respondent are typically allowed to select one of the three panel members by submitting a list of three or five acceptable candidates of which the provider will select one. The provider selects the third member of the panel, but only after it has provided both the complainant and respondent with the opportunity to indicate which panelist they prefer." Geist, 2001, *supra* note 18, at 22.

¹⁴² *Id.*, at 19.

¹⁴³ "Rather than focusing on provider selection as a means of solving the forum shopping issue, ICANN must turn its attention to panelist selection. If providers continue to maintain exclusive and unchecked authority over the selection of panelists in 90% of all the cases, no reform of the rules nor to how a provider is selected will remove the potential for bias in panelist allocation." *Id.*, at 28.

¹⁴⁴ INTA, *The UDRP by All Accounts Works Effectively. Rebuttal to Analysis and Conclusions of Professor Michael Geist in "Fair.com?" and "Fundamentally Fair.com?"*. International Trademark Association, INTA Internet Committee, May 2002.

¹⁴⁵ *Id.*, at 2.

¹⁴⁶ "At one point in *Fair.com*, Professor Geist asserts that "only one panelist had a respondent winning percentage under 50%". The use of the word "only" and the use of 50% as a point of reference suggest that Professor Geist is treating 50% as "the norm". However, 50% is not a norm for litigation; 50% is a norm for probability." *Id.*, at 3.

Finally, the last major piece of empirical work on ICANN is the exhaustive work of Anne Kur at the Max-Planck-Institute¹⁴⁷. This paper shows an excellent empirical description of the performance of the UDRP system, taking into account the most disparate variables and characteristics of the panels' decisions. The main conclusion of the work is that “[g]enerally speaking, the survey shows that fears concerning the risk that the policy might be misused by large companies in order to freeze competition and free speech are largely unfounded. In the vast majority of the cases considered, the domain name at stake was identical with, or incorporated, or otherwise clearly resembled the trademark belonging to someone else, and whenever the respondent could make out a plausible case of bona fide business interests or fair use, chances were good that the complaint would be rejected. Only a rather small amount of cases could be identified where issues such as reverse hijacking or critical comments on the rightowner's product or business conduct, etc. were involved. On the other hand, a more detailed analysis of the cases or groups of cases reveals that several issues still need further clarification. In other words: although UDRP is functioning well as a matter of principle, there are certain points where the picture becomes somewhat unclear.”¹⁴⁸

This empirical work presents the latest addition to the analysis of ICANN UDRP. Most of the theoretical debate nowadays is based in the assumption that the main variable that matters in explaining users and provider behavior in this regime is the provider bias towards complainants¹⁴⁹. As we will show in the next sections, even though bias is important, the performance of each provider can be more important in determining the users' choice of provider. In this respect, our work offers a richer empirical analysis, looking at the different factors that explain the performance of the UDRP. Furthermore, as we demonstrate, there are other variables, like efficiency of the providers, which help to explain the process of selection better than the argued bias toward complainants. As a consequence, the aim of our work is to reevaluate the claims of the main empirical works and to provide a more accurate explanation of the performance of the UDRP.

¹⁴⁷ Annette Kur, *UDRP*. Max-Planck-Institute for Foreign and International Patent, Copyright and Competition Law, Munich and Institute for Intellectual Property Law and Market Law, University of Stockholm, Institute for Information Law, Technical University of Karlsruhe, at <http://www.intellecprop.mpg.de/Online-Publikationen/2002/UDRP-study-final-02.pdf>.

¹⁴⁸ *Id.*, at 57-58.

¹⁴⁹ *See, supra* note 20.

V. ECONOMETRIC MODEL

As we seen in the previous section, the UDRP system is strictly controlled by ICANN through the implementation of the general policy. The guidelines and rules enacted by ICANN are the ones that should be applied in each UDRP case, and every provider should abide to them. As a result, the system has a common policy that should make every private court similar to each other in terms of decisions and performance. Given that the general rules are fixed by ICANN, the other two main variables that can affect the performance of the system are the price charged in each case, and the quickness of the procedure. First, as analyzed in the previous section, prices charged by each provider are not different enough to generate a bias favoring any of the providers and then, there is no evidence of price competition in the system. Second, time duration of each case is the only variable each provider can use to differentiate from the other providers. Furthermore, the duration of the trial has been one of the main factors for the existence of the UDRP¹⁵⁰. The creation of a cheap and fast procedure for conflict resolution was one of the main objectives of ICANN. The duration of the trial will depend on the specific technology each provider is using in deciding their cases. In general, for both complainants and defendants, a faster system will be preferred to a slower one, given that both providers have a uniform and independent review system¹⁵¹. The duration of the trial will depend on the general characteristics of each provider, as well as the characteristics of the case presented. In this section we explore some regression models to determine the characteristics of the UDRP system as a whole, and of each provider.

¹⁵⁰ “The UDRP also succeeds in being a process that resolves disputes quickly. Most of the cases are disposed of within the allotted times, which are themselves very short. The ability to transmit information electronically undoubtedly adds to the speed of the process. While the process achieves speed by allowing very little input and by limiting the issues involved, it must be said that speed was the drafters’ primary goal and it was successfully accomplished. Note, however, that this speed is far more likely to benefit the complainant than the respondent.” Thornburg, *supra* note 14, at 204-205.

¹⁵¹ *See*, Froomkin, *supra* note 2, at 675 (discussing the problem of allowing short time for the case os small firms and consumer responses.)

A. ARE COMPLAINANTS SELECTING PROVIDERS BY BIAS OR EFFICIENCY?

Most empirical analysis of the UDRP has focused on the analysis of the cases for each provider and the differences among them. Some of the most complete empirical works are the presented by Geist (2001), Mueller (2001) and Kur (2002), who present evidence on the differences in treatment of private firms and individuals in the UDRP regime¹⁵². Mueller (2001) contends that the UDRP is biased in favor of the private firms, which are favored most of the time. Furthermore, the provider that had favored consumers and individuals lost market share and went bankrupt¹⁵³. Kurt's interesting study also described the performance of the UDRP in terms of the results from the cases presented. Nonetheless, these studies are showing only part of the empirical evidence, and their analysis is mostly based in descriptive statistics of the system. The use of simple statistics and the lack of qualitative analysis have been the most important critiques to Geist and Muller's works by the International Trademark Association¹⁵⁴. In short, the main critiques to these studies are the reliance in ex-post analysis, looking at the results of the UDRP and analyzing the presence of bias favoring complaints. Second, these analyses are based on simple statistics describing the results of the model, without clear model testing of the thesis of the authors. In this paper we will look at an important measure of efficiency, as we will try to understand the technology behind each of these providers. This analysis, based on econometric techniques, will provide better tools for determining the actual functioning of the UDRP system. We will look at some of the questions posed by these empirical studies but we will go further to look at productivity conditions of each provider. The performance of the providers has been overlooked in

¹⁵² See, Mueller, *supra* note 124, Geist, *supra* note 20 and Kur, Annette, *UDRP*, *supra* note 147

¹⁵³ See, Section III.

"The Fair.com study concluded by arguing that there was .compelling evidence that forum shopping has become an integral part of the UDRP and that the system may indeed be biased in favor of trademark holders..28 In the seven months since the release of that study, evidence to that effect has continued to mount, while the explanations of UDRP supporters have been proven incorrect. With eResolution now in bankruptcy court, NAF granting an ever-larger share of its caseload to a small group of panelists, and the red herring of defaults vs. non-defaults conclusively disproved, the need for ICANN UDRP reform has become increasingly urgent." Geist, *supra* note 20, at 8-9.

"Moreover, the fact that eResolutions is now in bankruptcy may have been due to a number of factors wholly unrelated to alleged forum shopping." International Trademark Association, *supra* note 137 at 7.

¹⁵⁴ INTA Internet Committee, *supra* notes 137 and 144.

most of the studies about UDRP, which are based in ex-post analysis of the results¹⁵⁵. Most studies critique the high ratio of cases in which complainants win the case as an indicator of the bias of the system. Furthermore, they assert that the higher ratio of complainants winning the cases will induce future complainants to forum shopping, selecting those providers with higher winning percentage. Nonetheless, these studies do not mention what should be a fair ratio of complainants winning the cases and, more importantly, there is no testing of the choices complainants faced at the moment of selecting the provider. In this section we would like to develop an ex-ante model, explaining complainants' behavior at the moment of selecting the provider. From our previous analysis we assume that the price variable is not significant in selecting the provider. Accordingly, there are two main motives of each complainant for choosing a provider. First, complainants can choose a provider based on the bias favoring the complainants. This has been the usual thesis on the analysis of the UDRP system. Second, complainants are also willing to choose the provider that is most efficient in handling the case, and will generate a shorter waiting time. This is an efficiency motive for choosing providers, which has been neglected in the literature about the UDRP. Accordingly, we assume that each complainant (or consumer) who has a complaint will pick a provider j from a set of J providers at time i and the utility derived from this choice is given by a random utility model,

$$U_{ij} = \beta' z_{ij} + \varepsilon_{ij} \quad (1)$$

Where U_{ij} is the utility of complainant i for choosing provider j , and $i=1, \dots, n$ and $j=1, \dots, m$;

β' is a vector of the coefficient for the vector of explanatory variables z_{ij} for each consumer; and

ε_{ij} is an error term.

¹⁵⁵ See, *supra* note 20 for a list of the studies about ICANN and UDRP.

According to equation 1 if the complainant makes the choice j, we assume that U_{ij} is the maximum among the possible utilities derived from the rest of the providers in the set J. As a result, the statistical model is driven by the probability that choice j is made, which is,

$$\text{Pr ob}(U_{ij} > U_{ik}) \quad \text{for all other } k \neq j \quad (2)$$

Accordingly, given a random variable that represents the choice made by complainants, Y_i , then the probability can be expressed as,

$$\text{Pr ob}(Y_i = j) = \frac{e^{\beta'z_{ij}}}{\sum_{j=1}^J e^{\beta'z_{ij}}} \quad (3)$$

this model is the conditional logit model. In our case, the dependent variable Y_{ij} is given by the selection each complainant had done in the UDRP system. The providers are NAF, WIPO and eRes, i.e. $J=3$. The explanatory variables that determine the probability that a given utility under a given provider is bigger than the utility of any of the other one, are the two main characteristics of each providers, the bias favoring complainants, represented by the ratio of cases that have been won by complainants in each provider, and the efficiency of each provider, measured by the average duration of the cases managed by each provider. According with this model, we are evaluating the probability of each complainant of choosing the provider based on these two measures of the performance of the providers. We find that this model is more suitable to analyze the causes of the preference for some providers with respect to others, than simply looking at the ex-post results of the system and elaborating some suitable explanation for such result.

We have calculated a complete series of different indicators for the bias and the efficiency measures. First, for the bias indicator we have the following variables:
Complaint: is the ratio of cases won by the complainants since the beginning of the

provider's operations and up to the day the complainant is presenting the case to a provider. It has been calculated in a daily basis from January 2000 to November 2002.

Monthly Complaint: is the ratio of cases won by the complainants in the current month the complaint is being presented.

Monthly Complaint Lagged: is the same measure than the previous one, but lagged one month.

All these variables have been calculated for each provider.

Duration: is the natural logarithm of the average duration of the cases for each provider since the beginning of the operations of the provider. It has been calculated daily from January 2000 to November 2003.

Monthly Duration: is the natural logarithm of the average duration of the cases for each provider in the current month the case is being presented to a provider.

Monthly Duration Lagged: is the same measure than the previous one, but lagged one month.

Accordingly, we are going to test if the probability of selecting one of the providers depended on the bias with respect to complainants or the efficiency of the provider in handling the cases. In order to be sure the relationship of the election of provider and these variables we have tested a series of similar models using the variables mentioned before¹⁵⁶. The dependent variable, Provider, represents the selection of the provider made by each claimant. Table 4 shows the results of our regression models.

¹⁵⁶ See Appendix A for the summary of the variables used in the regression analysis.

Table 4: Multinomial Regression

<i>Model 1</i>		
Variables	Coefficient	z
NAF		
Cmeresl	1.956 (0.649)	3.013 ^(***)
Cmwipol	6.879 (2.113)	3.256 ^(**)
Ldnaf	-8.014 (2.370)	-3.382 ^(***)
Ldwipol	3.953 (0.598)	6.605 ^(***)
Lderes	4.001 (0.723)	5.537 ^(***)
Constant	-6.190 (8.296)	-0.746
WIPO		
Cmeresl	2.463 (0.621)	3.968 ^(***)
Cmwipol	3.994 (2.024)	1.973 ^(**)
Ldnaf	-6.967 (2.309)	-3.017 ^(***)
Ldwipol	5.009 (0.579)	8.644 ^(***)
Lderes	3.879 (0.714)	5.433 ^(***)
Cons	-11.200 (8.081)	-1.386

Number of observations=2861
LR chi2(10)=121.78
Prob > chi2=0.0000
Log Likelihood= -2255.66
Pseudo R2= 0.0238
Coefficient tests: (***) Significant 1%
(**) Significant 5%
(*) Significant 10%

According to this model the explanatory variables we considered for the provider selection are the ratio of complainants winning the cases in each provider during the current month in which the complainant was presented (Cmnaf, Cmwipo and Cmeres) and the lagged variables (Cmnafl, Cmwipol and Cmeresl), and the natural logarithm of the average duration of the cases in each provider, also for the current month (Ldnaf, Ldwipo and Lderes), and the lagged variables (Ldnafl, Ldwipol and Lderesl). As we can see only the complainant and variables for WIPO and eRes lagged one month are significant in this model. In the case of the duration variables, the variables for NAF and eRes for the current month are significant and the lagged monthly duration for WIPO. Now, we would like to see the magnitude of the impact of each variable in the probability of selection. Table 5 shows the probabilities calculated by the model and the effects of changing each of the explanatory variables in one deviation standard.

Table 5: Probabilities Model 1

		Prob (NAF)	% Change	Prob (WIPO)	% Change	Prob (eRes)	% Change
Total Probability		0.268		0.685		0.047	
Cmeresl	Increase	0.254	-5.22%	0.716	4.5%	0.030	-36.2%
	Decrease	0.280	4.5%	0.650	-5.1%	0.071	51.1%
Cmwipol	Increase	0.304	13.4%	0.660	-3.64%	0.036	-23.4%
	Decrease	0.166	-38.1%	0.791	15.5%	0.043	-8.5%
Ldnafl	Increase	0.221	-17.5%	0.658	-3.9%	0.121	157.4%
	Decrease	0.307	14.6%	0.676	-5.5%	0.016	-66.0%
Ldwipol	Increase	0.238	-11.2%	0.741	8.1%	0.020	-57%
	Decrease	0.288	7.4%	0.608	-11.2%	0.103	120%
Lderes	Increase	0.281	4.9%	0.699	2.0%	0.019	-60.0%
	Decrease	0.246	-8.2%	0.647	-5.5%	0.108	129.8%

According with these results, there is a much higher probability of the complainants in selecting WIPO than NAF and eRes, at least for the time span of this study, which comprehends all the days in which eRes was still receiving cases. In the case of NAF – column 1 Table 5- the probability of being selected is 26.8%. An increase (decrease) in the ratio of complainants winning in eRes will slightly increase (decrease) the probability of complainants selecting NAF. Even though the impact is small, it is in the opposite direction. One should expect that if there is a bias, an increase in the winning ratio of complainants in eRes should depress the probability of receiving a case for NAF and WIPO. In this case, the findings go in the opposite direction since an increase in the bias favoring complainants by eRes will produce an increase in the number of complainants presented in NAF. The same result is found for NAF in the case of a change in the complainant winning ratio for WIPO. In this case an increase (decrease) will result in an important increase (decrease) in the probability of cases received by NAF. Again, these results are counterintuitive with respect to the thesis presented before. If we look at the effect of the duration time on the probability of NAF, we have the following results. An increase (decrease) in the duration of NAF procedure will decrease (increase) the probability of NAF receiving the next case. The effect of this variable is more important than the effect of the bias variables and more importantly, it is according to what we should expect; i.e. a worsening in the efficiency of NAF should decrease the probability of receiving the next claim. In the case of the duration in eRes, the sign of the changes are also as expected, a higher (lower) duration in eRes produces a higher (lower) probability of selection in NAF, increasing (decreasing) the probability of receiving a claim. Nonetheless, in the case of the duration variable for WIPO, the results are counterintuitive. An increase (decrease) in the duration for WIPO will produce a decrease (increase) in the probability of receiving a case in NAF. Looking at the results for WIPO, the probability of being selected is the highest, 68.5%. In this case, an increase (decrease) in the complainant ratio in eRes will produce a slightly negative (positive) effect in the probability of WIPO, which is again a result contrary to what should be expected. The same happens with the changes in the complainant ratio in WIPO, which have a negative impact in WIPO probability. Accordingly, all the results testing for bias in WIPO are against the claim of the existence of such a bias. In the case of duration, the results are the

following: both an increase and decrease in the duration of NAF will produce a negative impact in the probability of receiving cases by WIPO. Nonetheless, it is worth to mention that the negative effect is more important in the case where the duration of NAF procedure decreases, which is consistent with the efficiency argument. Nonetheless, the effect of its own duration is not consistent with what we should expect. An increase (decrease) in the duration of WIPO will increase (decrease) the probability of receiving the next case. Finally, the duration of eRes have the expected effect in the probability of WIPO. In the case of eRes, the probability of receiving a case is the lowest of the three providers studied. An increase (decrease) in the complainant bias by eRes has a negative (positive) effect in the probability of receiving the next case, which is again counterintuitive. However, in the case of the bias variable for WIPO, both an increase and decrease in this variable generates a negative effect in the probability of eRes. This effect is more importantly in the case in which the bias of WIPO increases, which is according to what we should expect. The impact of the efficiency variable in eRes is very important. An increase (decrease) in the duration of NAF generates an important increase in the probability of eRes. However, the results are not as expected in the case of the efficiency measure for WIPO. In the case of eRes own efficiency, the results are as we should expect, and the size is very important. Summarizing, Table 6 shows the expected and actual signs of the results obtained in our model.

Table 6: Expected and Actual Results

Variables		NAF		WIPO		eRes	
		Expected	Actual	Expected	Actual	Expected	Actual
Cmeresl	Increase	-	(-)	-	+	+	-
	Decrease	+	(+)	+	-	-	+
Cmwipol	Increase	-	+	+	-	-	(-)
	Decrease	+	-	-	+	+	-
Ldnafl	Increase	-	(-)	+	(-)	+	(+)
	Decrease	+	(+)	-	-	-	(-)
Ldwipol	Increase	+	-	-	+	+	-
	Decrease	-	+	+	-	-	+
Lderes	Increase	+	(+)	+	(+)	-	(-)
	Decrease	-	(-)	-	(-)	+	(+)

From the results in Table 6, we can see that the bias variables produced partial results, with just one case in which the signs are the expected ones. However, in the case of efficiency variables, the results are as expected in all the cases for NAF and eRes. The only variable that is not according to what we expected is the efficiency measure for WIPO. Summarizing, the performance of the providers can be considered a better measure in determining the selection of the providers by the complaints than the supposed bias of the system favoring complaints. Accordingly, differently from most of the empirical papers about the UDRP system, which were based on general results and supporting the bias theory, in our paper we look at the performance of the providers, and how differences among them affect the results of the UDRP. According to our results, the study of the performance should be given more attention than the supposed bias of the system, given that performance is a more important determinant of the success of the provider than bias. In the next sections we develop a comprehensive empirical study of the performance of each provider, looking at the specific particularities of the UDRP regime.

B. EMPIRICAL MODEL

According to the analysis from the previous section, each provider for the UDRP system has to evaluate and decide on each complainant that is presented to them¹⁵⁷. The two main characteristics ICANN tried to give to this alternative dispute resolution system are low cost and fast results. The low cost of presenting a complaint, as shown in the previous section, is not too different among providers. In the case of the speed of the procedure, ICANN tried to generate a simple set of rules for processing each complaint, which should generate a short lived administrative act. By providing common rules for the process, ICANN sought to avoid excessive differentiation among providers and forum shopping. Nonetheless, the providers still have different instruments for improving with respect to the other providers and then to attract more complaints: First, given that it is the complainant the one who chooses the provider, a biased favoring complainants would

¹⁵⁷ See Sections II and III.

help to deviate complaints toward this provider. This effect has been widely analyzed in the literature but, as we showed in the previous sections, it does not seem to be the main determinant of the selection of provider by the claimants. Second, Providers can increase business by shaping their supplemental rules in a more efficient way than other providers. As explained in the previous section, supplemental rules do not vary much among providers. Third, prices could be used to attract more complainants. However, prices are similar among providers. This effect is similar to other oligopolistic industries, where producers do not compete through prices but through the quality of the services offered to consumers. Most of these variables will determine the speed of the process, which in the end is one of the main characteristics of the system, and the success of the Provider in the long run. The time that takes each complaint to be evaluated and decided depends on a number of instruments the provider has at hand: First, it depends on the bias of the provider. Bias for or against some group will determine a different kind of process and also differences in timing. For example, if a given Provider favors people from a given country, then all the complaints or responses coming from this country will have different treatment and, as a consequence, different speed of resolution. Second, differences in the supplemental rules, and or internal procedure for each provider will determine the capacity of doing a fast job in reviewing the complaints. For example, if a provider has created simple rules with good incentives for both complainants and respondents for submitting accurate and on time information, then the resolutions of the cases will be faster. Third, the type of complaints and procedure will have an impact on the speed of the process. For example, if the respondent fails to send a defense for its case, then the panelist will be more able to reach a faster decision. Fourth, the panelists the Provider is appointing and their specific background and precedence will have an impact on the speed of the results. For example, a panelist from India will be more knowledgeable of property laws in India and more able to quickly handle a case involving parties from India than considering a case with parties coming from the European Union. Fifth, the geographical precedence of the parties should have an impact on the speed of the resolution of the conflict. Differences in law, language, costumes, etc., will be a barrier to generate a smooth and fast resolution in each case. This is one of the main barriers a universal system like the UDRP has to be able to overcome in order to be successful in

the long run. As a result, the duration of the procedure will be influenced by the many instruments each provider has to be more efficient than the others and be able to improve their share of cases. Accordingly, we can represent the speed of the procedure as,

$$d = D(\text{Bias}, \text{Rules}, \text{Type}, \text{Panelists}, \text{Parties}) \quad (1)$$

where: Bias is the specific preference the Provider has with respect to some specific group;

Rules, are the differences in the procedure and rules of each Provider

Type, is the type and complexity of each complaint

Panelists, represents individual characteristics of each panelist

Parties, represents the precedence of each party.

In this equation, the duration of the procedure will depend on the series of variables under control of the Provider. The analysis of this duration function will help to determine the differences between providers and the different factors that explain the performance of the UDRP system. In this aspect, our analysis departs from most of the empirical studies of the UDRP. These studies have been devoted to determine the bias of the system in favor of complainants and general characteristics of the providers. Our analysis goes a step beyond that, by looking at the determinants of the duration of the process, which, as analyzed before, is one of the main measures of efficiency of the system.

C. ECONOMETRIC ANALYSIS

According to the analysis we did with regards to the UDRP system, we use duration models to test the performance of each provider and the system as a whole. Duration models have been widely used in medicine and labor economics, to measure the expected length, measured in time, of an event. For example, in labor economics, researchers have been interested in measuring the probability of duration for a strike. As the strike goes on, there is a probability that it will end the very next day, or it will continue for an extra day. These models measure the probability that the strike will be maintained an extra day.

Accordingly we use this model in the case of the UDRP. Once a trial begins, there is a probability that it will be terminated the next day or else it will continue to be analyzed by the respective provider.

Data

We use two different databases for the cases of the four providers, WIPO, NAF, eRes and CPR, for the period January 2000 to November 2002. The first database utilized in this section was obtained from the UDRP web site and it comprehends 7148 cases from January 2000 to November 2002. The cases are separated by provider and by the duration, in days, of each case. The second database was obtained from the work of the Convergence Center¹⁵⁸. This database comprehends a series of variables for the first 3850 cases from December 1999 to July 2001¹⁵⁹. From this database we have been able to compile a series of different variables as described in Appendix B.

D. DURATION MODELS

Let's introduce the duration model and its relationship with our case of the UDRP. In our case, let's define the random variable T which is the failure time for the cases of the UDRP, i.e. T represents how many days take each case to be decided by a given provider. The distribution function of T is defined as $F(t)$ and density $f(t)$ ¹⁶⁰. Accordingly, we define the survival function of T as,

$$S(t) = 1 - F(t) = \Pr(T > t) \quad (2)$$

Equation (1) tells us that $S(t)$ is the probability of t being greater than t , i.e. the probability that the final decision of the case (failure) will occur after time t ¹⁶¹. Now, lets

¹⁵⁸ See, <http://dcc.syr.edu/projectlist.htm>

¹⁵⁹ See, <http://dcc.syr.edu/marklepage.htm>

¹⁶⁰ This section is based in the following literature of Duration Models: Dick London, SURVIVAL MODELS AND THEIR ESTIMATION. Third Edition, ACTEX Publications Winsted, Connecticut, 1997; STATA, STATA REFERENCES MANUAL RELEASE 6. Volume 3, Stata Press, College Station, Texas, 1999; William Greene, ECONOMETRIC ANALYSIS. Third Edition, Prentice Hall, New Jersey, 1997; R. G. Miller, SURVIVAL ANALYSIS, Wiley, 1981.

¹⁶¹ Observe that $F(t)=\Pr(T<t)$ and thus,

define the conditional density of failure at time t , which is the conditional instantaneous measure of failure at time t , given survival to time t . This measure is called the hazard rate, and is denoted $\lambda(t)$. The hazard rate considers the following question: given that the case has lasted under a provider revision until time t , what is the probability that it will end in the next short interval of time Δ ? Then,

$$\lambda(t) = \lim_{\Delta \rightarrow 0} \frac{\text{Pr ob}(t \leq T \leq t + \Delta | T \geq t)}{\Delta} = \lim_{\Delta \rightarrow 0} \frac{\text{Pr ob}(t + \Delta) - F(t)}{\Delta S(t)} = \frac{f(t)}{S(t)} \quad (3)$$

finally, the integrated hazard function (cumulative hazard function) is given by,

$$\Lambda(t) = \int_0^t \lambda(t) dt = -\ln S(t) \quad \text{then} \quad S(t) = e^{-\Lambda(t)} \quad (4)$$

From this theoretical background there are several definitions for the distribution of the variable T like the Constant, Exponential, Weibull, Lognormal and log-logistic distributions. These are called parametric models of survival analysis. One of the most important drawbacks of these models is the imposed structure on the data, which could distort the estimated hazard rates. Instead, we will use non-parametric and semi-parametric models, which are less restrictive over the characteristics of the data. First we use the Kaplan-Meier product limit estimator, which is a strictly empirical approach to survival and hazard function estimation. Let's assume that the observations on duration are sorted in ascending order, so that $t_1 > t_2$. Then we can represent the survival function as follows,

$$f(t) = \frac{d}{dt} F(t) = -\frac{d}{dt} S(t), \quad t \geq 0$$

then,

$$F(t) = \int_0^t f(t) dt \quad \text{and} \quad S(t) = \int_t^{\infty} f(t) dt$$

$$\begin{aligned}
S(t_k) &= P(T > t_k) \\
&= P(T > t_1)P(T > t_2 | T > t_1) \dots P(T > t_k | T > t_{k-1}) \\
&= p_1 * p_2 * \dots * p_k
\end{aligned} \tag{5}$$

as an estimate of p_i we could use

$$\hat{p}_i = \left(1 - \frac{d_i}{n_i} \right) = \left(1 - \frac{\text{No. cases solved in period } i}{\text{No. still unresolved in period } i} \right) \tag{6}$$

Then, the survival function can be estimated as,

$$\hat{S}(t_k) = \prod_{j=1}^k \hat{p}_j \tag{7}$$

the hazard function is defined as,

$$\hat{\lambda}(t_k) = \sum_{j|t_j \leq t} \frac{d_j}{n_j} \tag{8}$$

This estimator satisfies several nice requirements like it is consistent, asymptotically normal, it is generalized MLE and without censoring it is the empirical distribution function.

In the second part of our analysis we resort to the Cox semi-parametric duration model, which is called Cox's Proportional Hazard Model. This model allowed the regression with covariates to determine the hazard rate but it is not as restrictive as other parametric models. In this case we have a vector of covariates for each unit of analysis, x_i . The crucial assumption of the Cox model is,

$$\lambda(t | x) = e^{x\beta} \lambda_0(t) \tag{9}$$

the survival function is the following,

$$S(t, x) = S_0(t) e^{x\beta} \quad (10)$$

The parameter estimates β are obtained by maximizing the following partial log-likelihood function,

$$\ln L = \sum_{j=1}^D \left\{ \sum_{k \in D_j} x_k \beta - d_j \ln \left[\sum_{i \in R_j} \exp(x_i \beta) \right] \right\} \quad (11)$$

where j is the index for the ordered failure times $t_{(j)}$ ($j=1, \dots, D$), D_j is the set of d_j observations that fail at time $t_{(j)}$, d_j is the number of failures at $t_{(j)}$, and R_j is the set of observations k that are at risk at time $t_{(j)}$ (i.e. all k such that $t_{0i} < t_{(j)} < t_i$).¹⁶²

E. RESULTS

The UDRP was created in 1999 and immediately attracted the attention of Internet users, especially business. This was the first attempt of a dispute system with the global reach to comprehend most of the Internet. As a consequence, providers have been busy evaluating the most diverse complaints. The evolution of the total number of cases presented in each month is depicted in Figure 2. As we can see, there was a sharp increase in the number of complaints presented during the initial months of 2000, which could be a consequence of the implementation of the UDRP regime itself¹⁶³. Form

¹⁶² From these estimation, the baseline hazard is obtained as $h_0(t_{(j)}) = 1 - \alpha_j$ is the solution of

$$\sum_{k \in D_j} \frac{\exp(x_k \beta)}{1 - \hat{\alpha}_j^{\exp(x_k \beta)}} = \sum_{l \in R_j} \exp(x_l \beta)$$

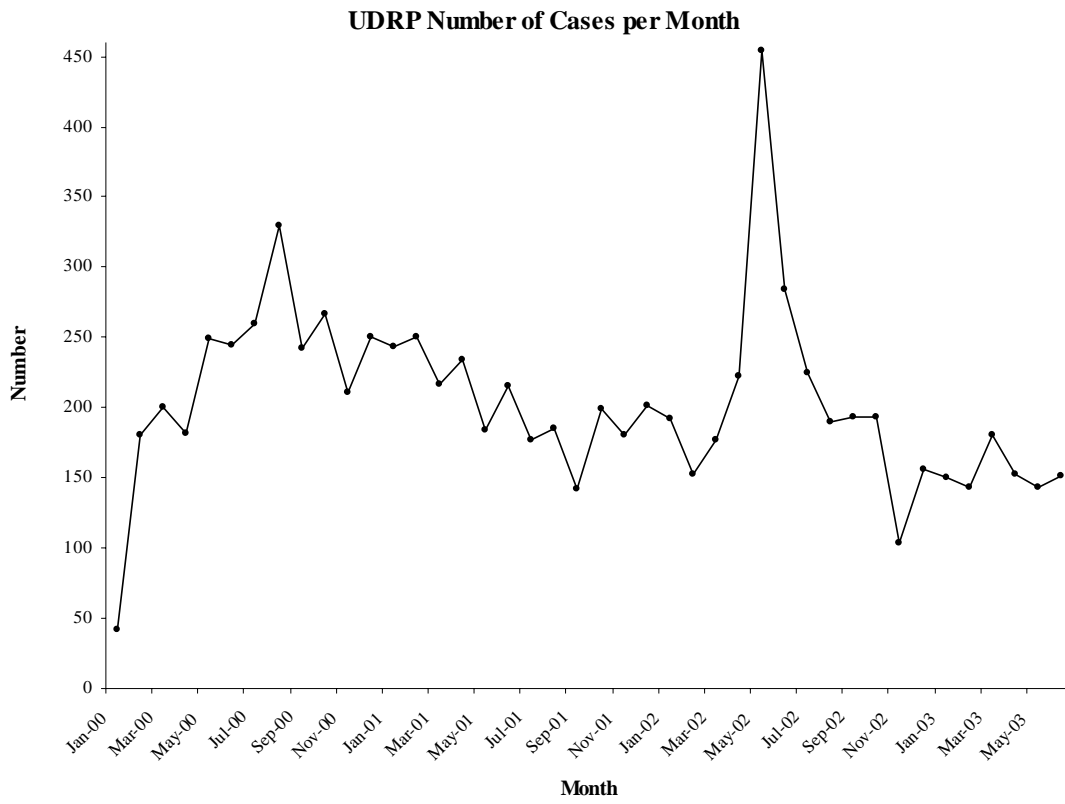
and the baseline survivor function is obtained as

$$S_0(t_{(j)}) = \prod_{h=0}^{j-1} \hat{\alpha}_h \quad \text{where } \hat{\alpha}_0 = 1$$

¹⁶³ “If we examine when the names challenged under the UDRP were registered, we find a significant concentration of challenged names in the first quarter of 2000. .. The first quarter of 2000 stands out as a huge peak. The period was too early for the UDRP to have a significant deterrent effect on cybersquatters, yet immediately followed ICANN’s introduction of registrar competition which stimulated the marketing and consumption of gTLD domains. The number of disputed names drops off precipitously in the second and third quarters of 2000.” Mueller, *supra* note 20, at 5.

August 2000 the number of cases steadily decreased throughout 2001. In 2002, there was a short jump in the number of cases from March to June, but afterwards the number of cases continued to decline. This declining tendency in the number of cases can be the consequence of two main factors: First, as most of the disputes associated with earlier domain names were already settled during 2000 and part of 2001, the incoming number of disputes is much lower. Furthermore, the existence of the UDRP system can act as a deterrence mechanism for users engaged in mass registration of names or in looking for fast profits from register already proprietary names and brands. Second, the economic downturn of the technology related economic activities, especially in what respects to e-commerce, could have an impact on the number of complaints and disputes for domain names. Nonetheless, it is expected that the number of disputes should increase in the future, as the Internet is becoming a more international environment and it becomes more popular in other countries besides the United States and the European Union.

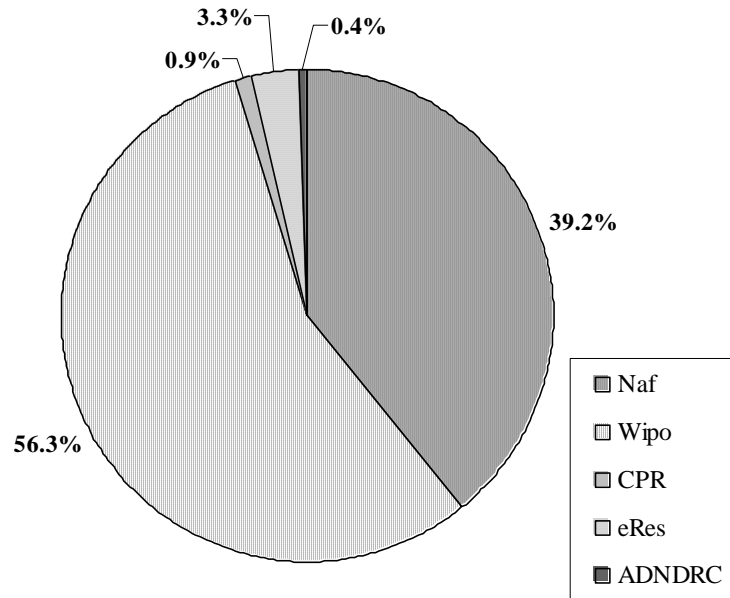
Figure 2



During the period of time between January 2000 and June 2003, the UDRP have evaluated 8,549 cases, and most of them have been divided among two main providers, NAF and WIPO (Figure 3). As Figure 3 shows, WIPO and NAF have decided 95.5% of the cases. The closest follower, with just 3.3%, eRes, is no longer a provider for UDRP regime.

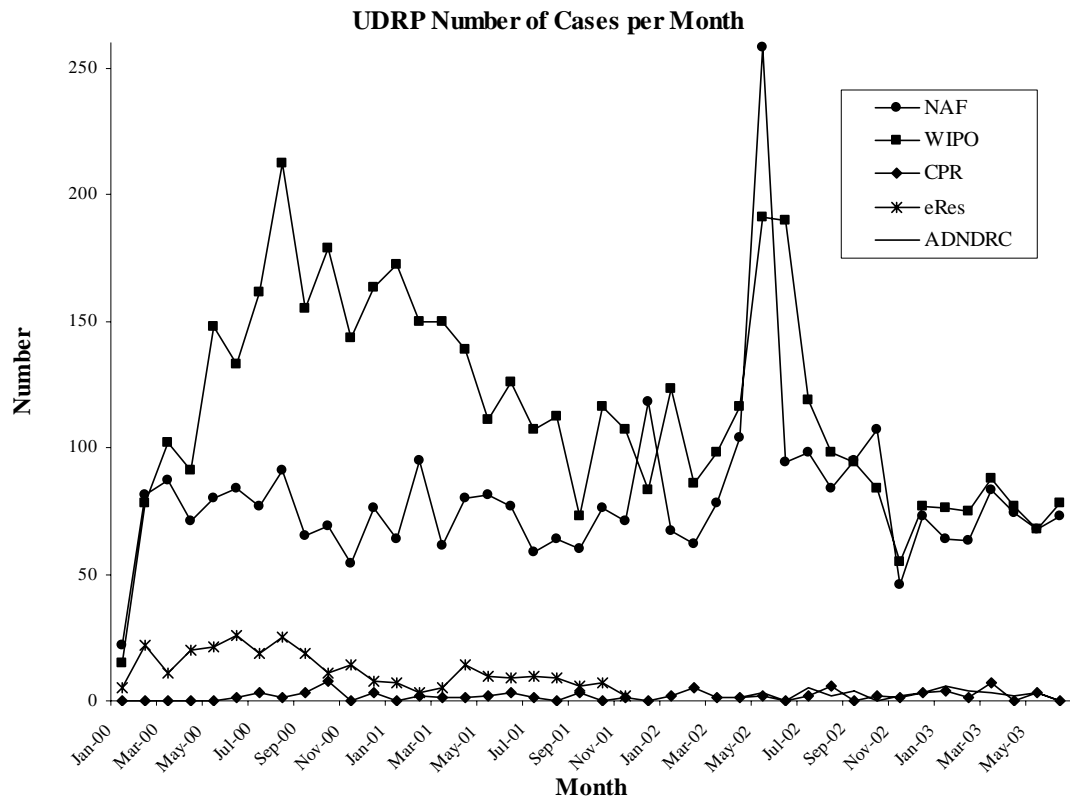
Figure 3

Total Number of Cases by Provider
(January 2000 to June 2003)



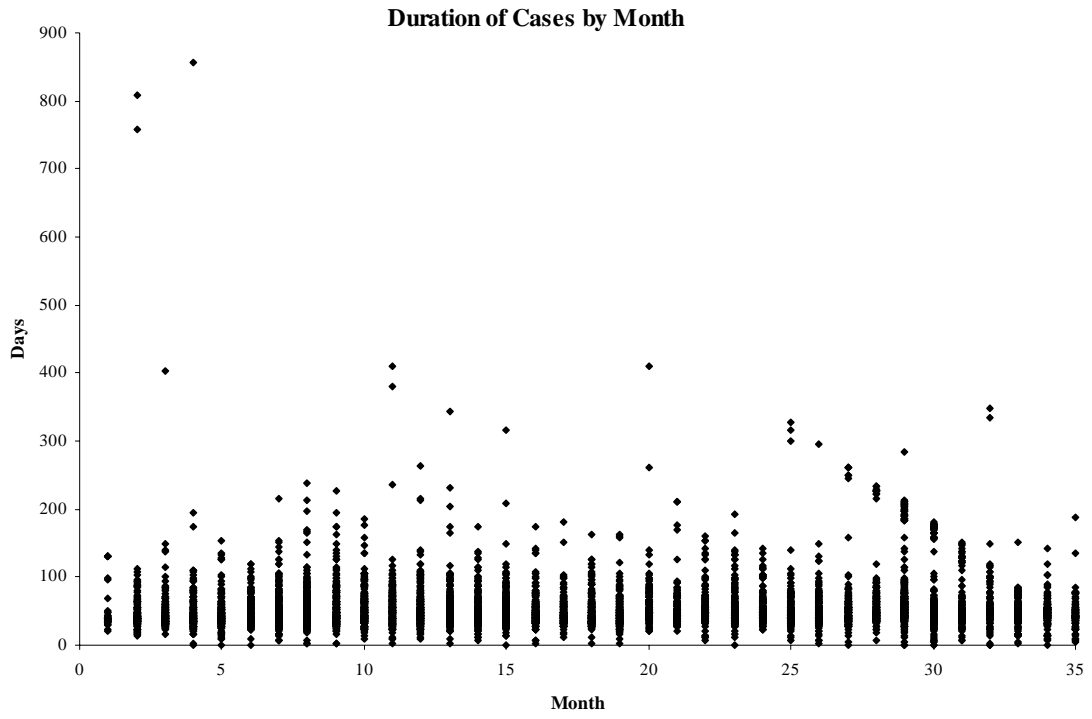
If we look at the evolution of the number of cases received by each provider through time, we can see how the system evolved around two main providers (Figure 4). During the first year we can appreciate the dominance of WIPO, which was an active participant in the process of delineating the UDRP. Accordingly, the number of cases received by WIPO (60% of the total) strongly surpassed those of NAF (32%), eRes (7.6%) and CPR (0.7%). In the second year, this tendency is maintained, with WIPO receiving 60% of the cases, but now NAF increases its participation to 37% thanks to a reduction in the number of cases of eRes to 3.4%. Meanwhile, CPR stood at 0.6%. In 2002 the tendency changed as we observe a convergence in the number of cases between NAF and WIPO. NAF increased its participation to 46% and WIPO decreased its own to 52%. At the same time eRes went out of business in the end of 2001 and CPR continued to having an insignificant share. In 2002 ADNDRC is created, but it manages just 0.8% of the total number of cases. Finally, in 2003, this tendency continues, with the two main providers polarizing the cases. Now WIPO received 50% of the cases, NAF 46%, CPR 1.6% and ADNDRC 2%. In this situation, the system seems to have reached equilibrium with two main providers receiving an almost similar quantity of cases. In the future it is expected that the new provider, ADNDRC, will increase the number of cases, as it has been granted an exclusive geographic region of operations.

Figure 4



If we look at the actual duration of cases from month to month, we can see that there were almost no differences in the duration of the cases along time (Figure 5). There were some outliers at the initial stages of the system, but then most of the months show in average similar values for the duration.

Figure 5



With this general description of the data and the evolution of the system, in the next section we present the econometric results on the performance of the UDRP system.

F. ECONOMETRIC RESULTS

As explained in the previous section, we would like to analyze the process of deciding a case under the UDRP regime. In this section we study the duration of a case, i.e. what are the factors that determine the expected number of days a case is under review. The answer this question is very important, since this is one of the main variables providers can manage to reach their objectives, i.e. to be selected by the complainants as their provider. First, we present the results obtained based on the database covering the months from January 2000 to November 2002. With this sample we would like to answer two main questions: First, which is the general duration characteristics of the system as a whole? Second, are there differences in duration among providers? The first question will help to describe the procedure and determine the expected duration times of the system as a whole. In evaluating the second question we are looking at a more interesting issue, which is forum shopping. One of the main objectives of ICANN has been to establish a system with many private providers, but a common set of rules and regulations, in order to ensure all the parties a similar treatment with any provider. Since it is the complainant the one that picks the provider, differences among them can determine a bias that could be exploited by the complainants. Accordingly, if the duration time, which depends on many factors and characteristics of each provider, results to be different for each provider, then we are in the presence of structural differences among them and, as a result, forum shopping opportunities can be exploited. Nonetheless, if we find that the duration functions are statistically the same among providers, then the system designed by ICANN would have proved to be successful in providing a homogeneous system for dispute resolution on the Internet.

In order to analyze the performance of the system Figure 6 shows the Kaplan-Meier survival function. The horizontal axis measures the duration of the cases in days, and the vertical axis shows the probability of surviving one extra day. Accordingly, the expected mean duration for the whole system is 54 days (Table 7). Furthermore, if we look at different probabilities of survival we have the following results, up to 31 days the

probability of survival is higher than 90%, up to 40 days it is higher than 70%, for a duration of 47 days the probability is higher than 50%, the probability of survival is higher than 30% for duration above 56 days, finally for duration of up to 83 days, the probability of survival is at least 10%.

Figure 6

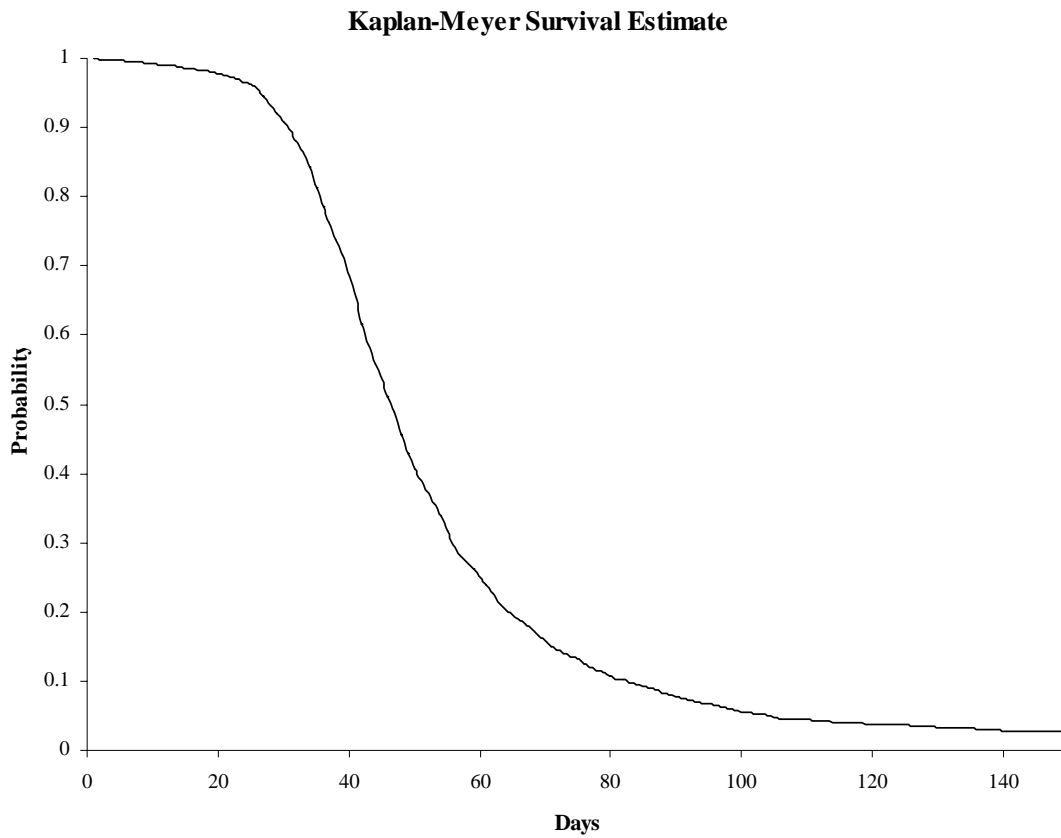


Table 7: Duration Characteristics

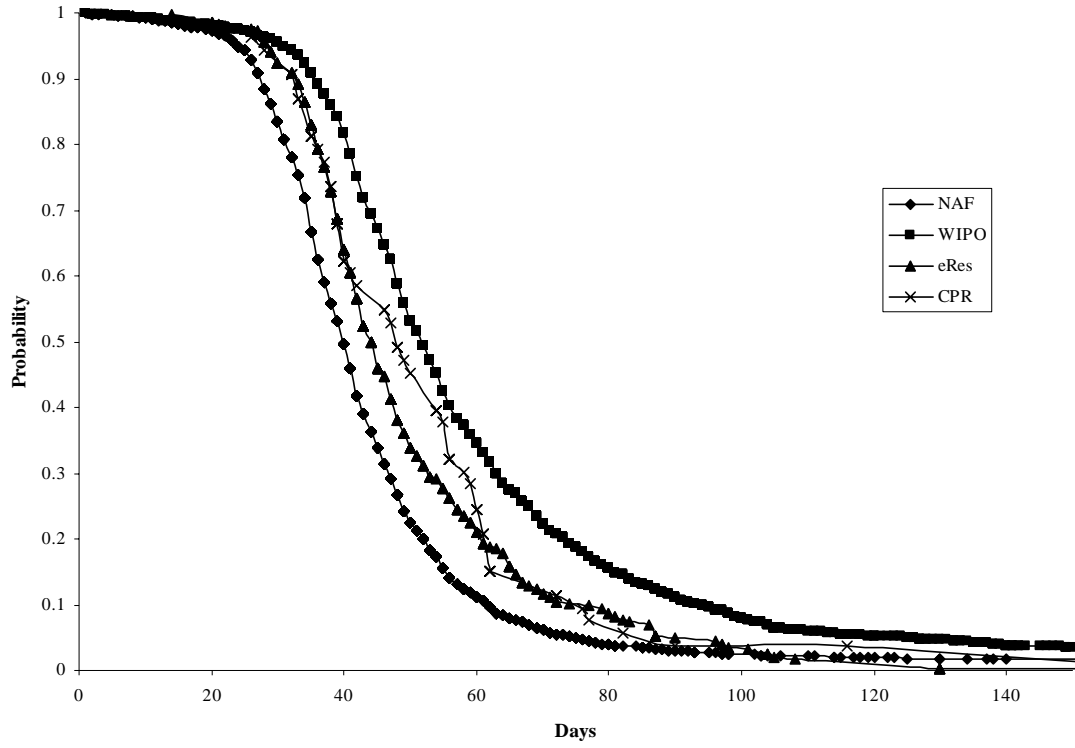
Category	total	mean	min	Median	Max
no. of subjects	7,330				
no. of records	7,330	1	1	1	1
(first) entry time		0	0	0	0
(final) exit time		54.368	1	47	856
subjects with gap	0				
time on gap if gap	0				
time at risk	398,521	54.368	1	47	856
failures	7,148	0.975	0	1	1

From these results, we can see that the system is providing a relatively fast procedure for evaluating complaints, since the median duration is just 47 days for the system as a whole.

If we look at our second question, we should now analyze the differences in duration among providers, and determine if these differences are important or not. First, let's draw a survival function for each of the providers. Figure 7 shows the results we obtain by drawing a different survival function for each provider (Figure 2). From the simple inspection of Figure 7 we can see that there are two extreme providers, NAF with the lowest duration function, and WIPO with the highest duration function. The other providers are located somewhere in between these two extremes. It is interesting to notice that the two providers located at the extremes are the ones that polarize the number of complaints of the whole system. We should evaluate if these differences are significant and important.

Figure 7

Kaplan-Meyer Survival Estimate by Provider



In order to determine the statistical differences among duration curves we use a set of tests designed to compare survival functions. The tests are the log-rank test, the Wilcoxon test and the Cox test. Table 8 shows the values for these tests, which corroborate that the duration functions between providers are statistically different. This result is very important, since we can conclude that there are differences in the structure and procedure of each of the providers in evaluating cases, which imply the possibility of forum shopping under the UDRP system.

Table 8: Tests of Equality of Survival Curves			
Cox regression-based test			
Court	Observed	Expected	Hazard
NAF	2731	1740.85	1.674
WIPO	4079	5110.42	0.830
eRes	286	246.24	1.223
CPR	52	50.48	1.081
Total	7148	7148	1.000
LR $\chi^2(4)=734.45$		Prob. $\chi^2=0.000$	
Log-rank test			
Court	Observed	Expected	
NAF	2731	1740.85	
WIPO	4079	5110.43	
eRes	286	246.24	
CPR	52	50.48	
Total	7148	7148	
$\chi^2(3)=834.61$		Prob. $\chi^2=0.0000$	
Wilcoxon Test			
Court	Observed	Expected	Sum of Ranks
NAF	2731	1740.85	5440025
WIPO	4079	5110.43	-5562113
eRes	286	246.24	126492
CPR	52	50.48	-4404
Total	7148	7148	0
$\chi^2(3)=1131.40$		Prob. $\chi^2=0.0000$	

Furthermore, we can conclude that the duration function, and consequently the technology function, is different for each court. These differences could result in different results in decisions. In the next section we will analyze the factors that determine this difference in duration among providers.

G. DURATION ANALYSIS BY COURT

In the previous section we showed that the duration functions for each court are different, and then they should be evaluated separately. In this section we will analyze the different factors behind the specific structure of each provider that determines a different duration function. Accordingly, we use a Cox semi-parametric duration model for the analysis of the cases in each court. As we showed before, this model will allow us to introduce independent variables to explain the differences in behavior in each provider, without imposing any specific structure on the hazard function.

In order to analyze the structure of each provider we utilize the database constructed by Mueller. This database contains more than 3000 cases compiled during 2000-2001. There are many characteristics that have been collected and will be used in our analysis¹⁶⁴. First, based on the different duration functions calculated in the previous section for each court, Table 9 shows the differences between each court in terms of duration based on the Kaplan-Meier estimator. As we showed before, WIPO is the provider with the most expected duration, with a mean duration of 57 days and a median of 51. The fastest provider is NAF with a mean duration of 38 days and a median of 35. This difference between the providers located at the extremes is very important, being close to twenty days, i.e. WIPO takes 48% more than the average time expected under NAF.

¹⁶⁴ See Appendix C for a complete list of the variables used in this analysis.

Table 9: Characteristics of Duration Functions for Each Provider

WIPO						CPR					
Category	Total	Mean	Min	Median	Max	Category	Total	Mean	Min	Median	Max
no. of subjects	1,999					no. of subjects	25				
no. of records	1,999	1	1	1	1	no. of records	25	1	1	1	1
(first) entry time		0	0	0	0	(first) entry time		0	0	0	0
(final) exit time		57.39	6	51	420	(final) exit time		46.32	20	43	72
subjects with gap	0					subjects with gap	0				
time on gap if gap	0					time on gap if gap	0				
time at risk	114,719	57.39	6	51	420	time at risk	1158	46.32	20	43	72
failures	1,999	1	1	1	1	Failures	25	1	1	1	1
NAF						eRes					
Category	Total	Mean	Min	Median	Max	Category	Total	Mean	Min	Median	Max
no. of subjects	1,123					no. of subjects	209				
no. of records	1,123	1	1	1	1	no. of records	209	1	1	1	1
(first) entry time		0	1	1	1	(first) entry time		0	0	0	0
(final) exit time		38.73	4	35	407	(final) exit time		47.84	20	44	130
subjects with gap	0					subjects with gap	0				
time on gap if gap	0					time on gap if gap	0				
time at risk	43,489	38.73	4	35	407	time at risk	9999	47.84	20	44	130
failures	1,123	1	1	1	1	Failures	209	1	1	1	1

In order to explain the differences among providers let's look at the results from the Cox model. We tried all of the variables listed in the appendix B, and we found that the factors that best explain the behavior of each provider are the variables presented in Table 10 that presents the results from the Cox model. First, we run a general model for each provider and tested for the fulfillment of the main assumption of the Cox model, i.e. the proportional hazard assumption¹⁶⁵. From these tests we found that the variables for some of the panelists included in our models did not pass the proportional hazard tests. This is an important result, since it implies that for those judges the structure of the duration function is different than for the rest of the cases of the provider. We will analyze this result in more detail next. First, let's look at the results for each provider presented in table 10.

¹⁶⁵ See Appendix D for the complete presentation of the results.

Table 10: Cox Semi-Parametric Duration Model

WIPO		NAF		CPR		eRes	
Variables	Coefficient	Variables	Coefficient	Variables	Coefficient	Variables	Coefficient
Default	1.238 <i>(0.05767)</i>	Default	1.411 <i>(0.09149)</i>			Default	1.914 <i>(0.29431)</i>
Split	0.530 <i>(0.08911)</i>	Respru	2.400 <i>(0.43334)</i>	Split	41.193 <i>(53.71631)</i>	Employee	2.608 <i>(0.68328)</i>
Respus	0.907 <i>(0.04657)</i>	Compde	2.069 <i>(1.0989)</i>	Ascomp	18.704 <i>(30.42342)</i>	Namecan	5.748 <i>(3.66312)</i>
Respse	1.650 <i>(0.34673)</i>	Compnac	3.908 <i>(1.76611)</i>	Asresp	4.418 <i>(2.229)</i>	Respciii	3.408 <i>(1.81084)</i>
Compus	0.882 <i>(0.04643)</i>	Complaw	1.106 <i>(0.04206)</i>			Compca	0.739 <i>(0.10688)</i>
Compse	1.468 <i>(0.32872)</i>						
Compin	0.679 <i>(0.10055)</i>						
Compca	1.518 <i>(0.24300)</i>						
Complaw	1.085 <i>(0.03865)</i>						
Buchele, J.	1	Buchele, J.	2.640 <i>(0.40042)</i>	Buchele, J.	8.763 <i>(6.425)</i>	Buchele, J.	9.317 <i>(3.21267)</i>
Carmody, J.	1	Carmody, J.	1			Carmody, J.	14.829 <i>(4.83855)</i>
Dorf, P.	2.672 <i>(0.70459)</i>						
Johnson, C.	1						
Kalina, H.	1	Kalina, H.	2.322 <i>(0.30927)</i>				
Yachnin, R.	1	Yachnin, R.	1			Yachnin, R.	22.241 <i>(6.26071)</i>
Aimbury, A.	1.779 <i>(0.38403)</i>						
Bernstein	0.684 <i>(0.08541)</i>						
Nro	1996	1119		25		209	
Observations		1119		25		209	
Nro Failures	1996	43313		1158		9999	
Time at risk	114471	156.61 (df=7)		11.46 (df=4)		154.87 (df=8)	
Wald	135.8	0.000		0.0219		0.000	
Chi2(df)	(df=12)	-6141.25		-53.40		-884.87	
Probability	0.000						
Chi2							
Log Likelihood	-12292.70						

In the case of WIPO the following variables have a positive impact on the duration function, implying a faster resolution of the cases, i.e. a lower probability of survival, are the following: Default, Respse, Compse, Compca, Complaw, Dorf, P., Limbury, A.. The variables that have a negative impact, implying longer time of resolution are, Split, Respus, Compus, Compin, Bernstein. In the case of Default and Split the explanation is straightforward. Default represents those complaints in which the respondent does not send and answer to the charges from the complainant. The positive sign implies that the panelists have less trouble in deciding fast these types of cases, which are generally decided in favor of the complainant. Split represents those cases in which the panel has a split decision concerning both parties. The negative impact on the duration is explained by the time needed by the panel to decide on the case. Usually split cases are of difficult resolution and then the panel spends more time on them. Complaw represents the number of proofs presented by the complainant in terms of the rules of the UDRP as listed by ICANN in the Article 4 of the policy. The positive sign for this variable means that as more proofs are presented by the complainant against the respondent, lower will be the time needed by the panel to decide the case. Again, in this case the explanation is straightforward. In the case of Respus and Compus, which are the variables that represent those cases in which respondent and complainant are from the United States. Because the effect of both variables is negative we can conclude that exist a negative bias with respect to claims or responses coming from the United States, in the sense that the panel takes more time in deciding those cases. Similarly the same effect is presented in the case of Compin, which represents complainants coming from India. On the other hand we have the case of Respse and Compse that represents cases in which the respondent or the claimant, or both, are from Switzerland. In this case the coefficient is positive, indicating that, in average, the panels of WIPO take less time to resolve this disputes having a positive bias toward Switzerland. It is interesting to notice that the geographical headquarters of WIPO are in Geneva, Switzerland. Hence, this effect could be related to a more comprehensive knowledge of laws and institutions of the country. Finally we observe the same effect in the case of Compca, which represents those claims in which the complainant is from Canada. The presence of these types of biases for a given country, even though they are positive or negative, are a general negative indicator for the

performance of the provider, because it implies that the provider is not up to the task of generating a universal and objective dispute resolution system for the Internet.

Furthermore, this bias could generate problems in those cases that face parties in which one of them is from one of those countries. Finally, we have the effects of the specific panelists on the duration of the cases. As we can see, all of the panelists except one have a positive impact on the duration function, implying that these panelists, who are the ones that have received the higher number of cases across providers have certain independence on the way they proceed with the cases. Furthermore, for the case of WIPO, Panelists Buchele, Carmody, Johnson, Kalina and Yachnin not only have a positive impact on the duration function, but they do not have the same proportional hazard assumes for all the cases. This implies that these panelists do not follow the general procedure than the rest of the cases evaluated by WIPO. Figure 8 shows the differences in the duration function between these panelists and the rest of the cases. Figure 9 also shows the differences in hazard functions. Even though in all cases the hazard function seems to be exponential, meaning that the cases face an increasing probability of being solved, which is a good sign for the efficiency of WIPO, and this hazard is still higher in the case of the panelists under analysis.

Figure 8

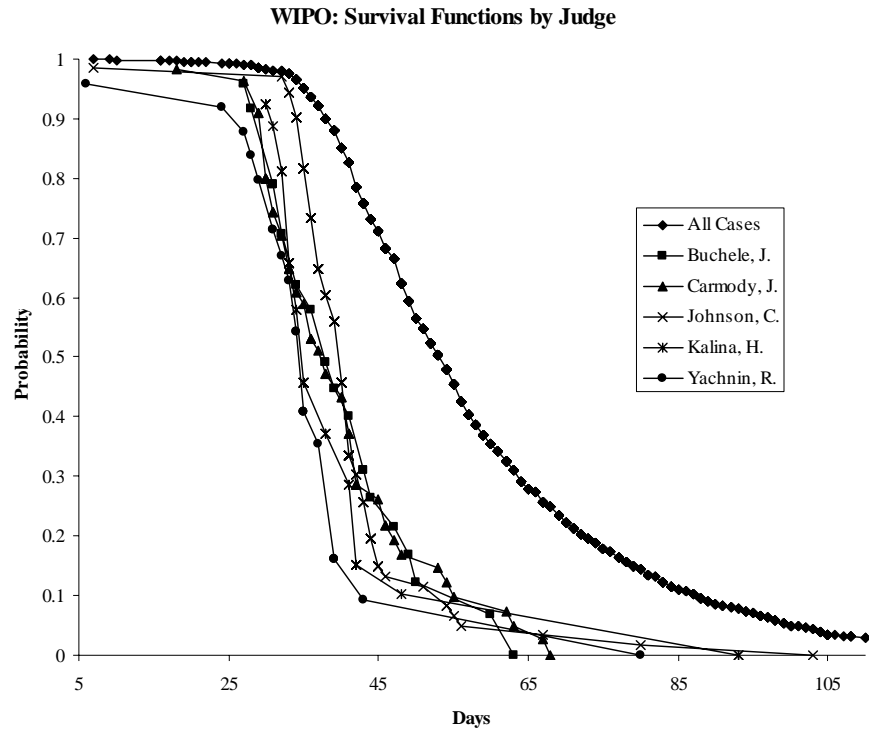
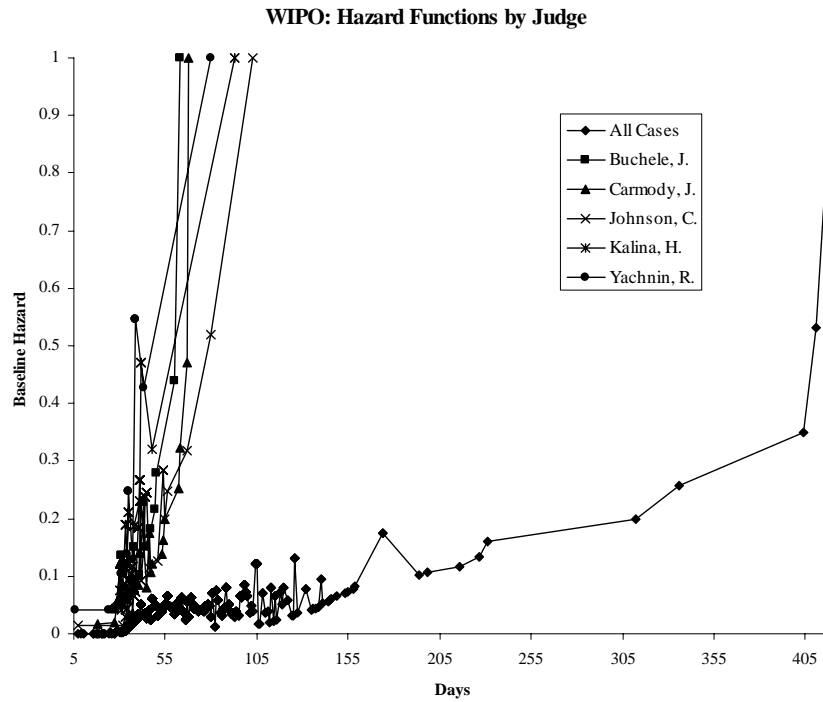


Figure 9



Finally, Table 11 shows the different duration for each panelist under different probabilities of survival. As we can see the differences of results obtained between these panelists and the system as a whole is an indicator of the importance of the effect of specific panelists can have on the system. Accordingly, the selection procedure for the panelists, which is in the hands of the parties and the provider, is not innocuous. Furthermore, because the provider is the one in selecting the president of the panel, or in the case of sole panels, the arbitrator in charge, there differences between the panelists can have important implications for the result of the cases. Then we should see if the appointments of these panelists, who have a different procedure for analyzing the cases have an effect on the results observed. Table 12 shows the differences in types of cases received and verdicts reached by the judges that are significative different, the rest of the panelists and the whole system of the provider. As the t statistics show, there is no difference in the results between these panelists and the rest of the cases. As a result, it can be optimal for WIPO to rely in these panelists, who are faster than the rest, in order to improve the performance of the provider and attract more complainants. In the next section we will explore the performance of judges across providers.

Table 11: WIPO, Duration for Each Panelist

Probability of Survival	All Cases	Buchele, J.	Carmody, J.	Johnson, C.	Kalina, H.	Yachnin, R.
0.9	38	28	29	34	30	24
0.7	45	32	32	36	33	31
0.5	53	38	37	40	35	34
0.3	64	43	42	42	41	37
0.1	87	60	55	54	48	43

Table 12: WIPO Results of Cases by Type of Judges

	Type of Respondent					
	Unaffili	Licensee	Competit	Employee	Criticor	Unknown
Bernstein	0.72	0.05	0.05	0.05	0.08	0.05
Limbury, A.	0.76	0.03	0.17	0.03		
Yachnin, R.	0.75	0.10	0.05	0.05	0.05	
Kalina, H.	0.92			0.08		
Johnson, C.	0.70	0.03	0.09	0.06	0.04	0.07
Dorf, P.	0.88				0.04	0.08
Carmody, J.	0.86		0.04	0.04		0.06
Buchele, J.	0.75		0.08		0.04	0.13
<i>Total Panelists 11</i>	<i>0.78</i>	<i>0.03</i>	<i>0.06</i>	<i>0.04</i>	<i>0.03</i>	<i>0.05</i>
Abbot, F.	0.70	0.04	0.07	0.04	0.04	0.09
Barker, L.	0.82	0.07	0.02	0.04	0.02	0.02
Donahey, M.	0.78	0.02	0.12			0.08
Samuels, J.	0.89		0.05			0.05
Page, R.	0.72		0.15		0.05	0.08
Foster, D.	0.78	0.03	0.09	0.06	0.03	
Bianchi, R.	0.69		0.14			0.17
<i>Total Panelists 2</i>	<i>0.77</i>	<i>0.03</i>	<i>0.09</i>	<i>0.02</i>	<i>0.02</i>	<i>0.07</i>
<i>Rest of Cases</i>	<i>0.66</i>	<i>0.02</i>	<i>0.07</i>	<i>0.02</i>	<i>0.02</i>	<i>0.20</i>
T-Test Panelists1 vs Panelists2	0.9870	0.4790	-0.4510	-	0.9180	-1.8000
Probability	0.3617	0.6792	0.6756		0.4557	0.2136

Table 12 (Continuation)

	Type of Response			Panel Decision			
	Default	Lateresp	Transfer	Dismiss	Termin	Namecan	Split
Bernstein	0.38		0.69	0.26	0.03		0.03
Limbury, A.	0.41		0.69	0.28		0.03	
Yachnin, R.	0.50		0.80	0.20			
Kalina, H.	0.58		0.83	0.13			0.04
Johnson, C.	0.40		0.69	0.28	0.01	0.01	
Dorf, P.	0.69		0.92	0.04			0.04
Carmody, J.	0.57	0.02	0.90	0.10			
Buchele, J.	0.50		0.83	0.08	0.08		
Total Panelists 1	0.49	0.00	0.78	0.19	0.01	0.01	0.01
Abbot, F.	0.40		0.70	0.30			
Barker, L.	0.40	0.02	0.71	0.24			0.04
Donahey, M.	0.55		0.82	0.10	0.04	0.02	0.02
Samuels, J.	0.47		0.84	0.16			
Page, R.	0.36	0.03	0.69	0.28	0.03		
Foster, D.	0.34	0.03	0.66	0.31			0.03
Bianchi, R.	0.59		0.76	0.07	0.17		
Total Panelists 2	0.44	0.01	0.74	0.22	0.03	0.00	0.01
Rest of Cases	0.43	0.01	0.67	0.15	0.17	0.00	0.01
T-Test Panelists1 vs Panelists2	1.1500	-	1.1760	-0.5440	-	-	-
Probability	0.2940		0.2843	0.6062			

In the case of NAF, all of the variables have a positive impact on the Survival function, i.e. these variables decrease the expected duration of the cases. Similarly than in the previous case, Default has a positive effect, decreasing the duration of the review process. Complay also has a positive impact on the duration of the procedure. With respect to the bias for certain complainants or responses coming from specific countries we have the following variables: Respru, Compde and Compnac. Respru is the variable that represents those respondents coming from Russia. Accordingly, for the responses coming from Russia, the provider has a lower time of resolution. Compde and Compnac are the variables for the complainants from Germany and North America. These complainants receive a faster resolution of their cases as compared with other complainants. In the case of North American complainants the bias could be the consequence of the geographical location of NAF, based in the United States, and the high proportion of panelists also from the United States. As mentioned before, this type of bias could be a problem to reach a homogeneous system of dispute resolution in the Internet. Finally, in the case of the panelists, there are fewer panelists that have specific duration functions, as compared with WIPO. Only two panelists, Carmody, J. and Yachnin, R. do not fit in the proportional hazard assumption of the general model. The survival and hazard functions for these two panelists are showed in Figures 10 and 11. As in the previous case, panelists are much faster in solving the cases than the rest of the judges for NAF.

Figure 10

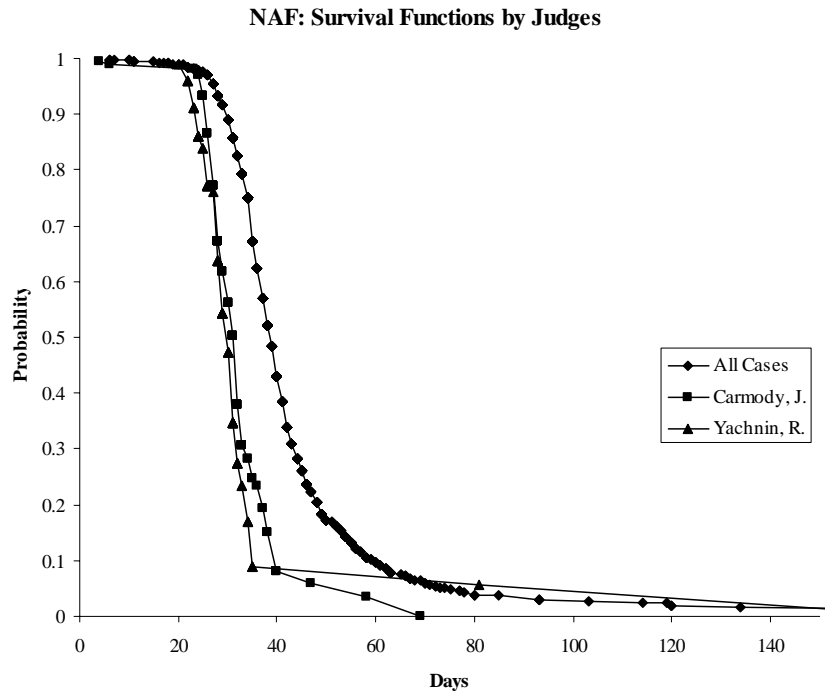
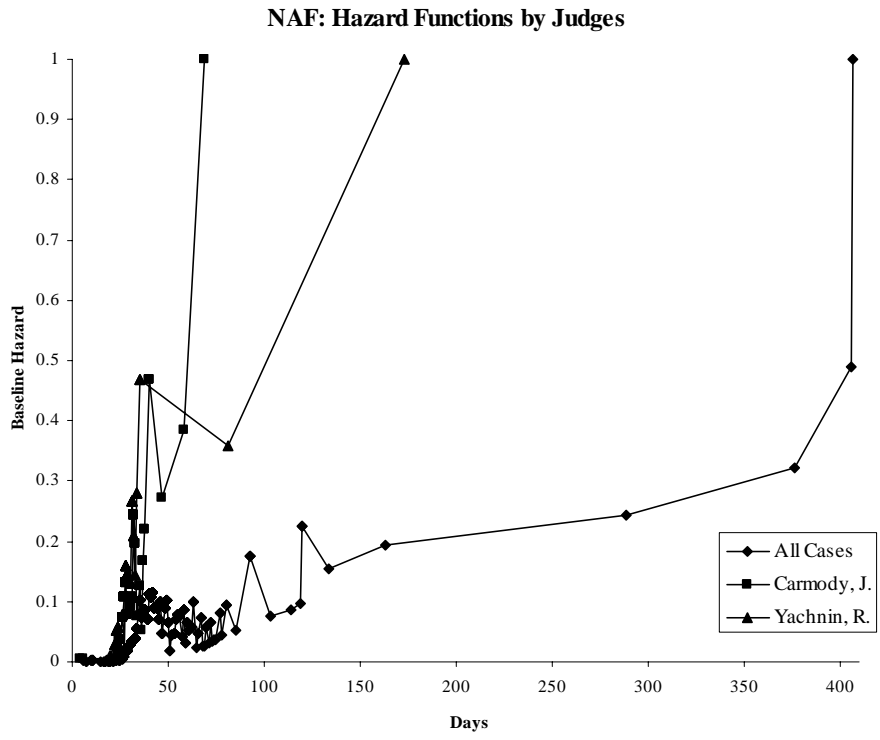


Figure 11



As we can see, the hazard functions are exponential, even though these functions are much steeper for both panelists. Table 13 shows the difference in duration for specific probabilities of failure.

Probability	All Cases	Carmody, J.	Yachnin, R.
0.9	30	25	23
0.7	35	28	27
0.5	39	31	30
0.3	43	33	32
0.1	59	40	35

As in the case of WIPO, we should analyze if the resulting verdicts of the panelists that are significant differ from other panelists and the system in general. Table 14 shows the corresponding data and the t statistics. As we can see, there is no major differences among panelists, except that in the case of the panelists that have a different hazard, received a higher number of cases in which the respondent was under default. Nonetheless, this effect has been controlled in the regression analysis. What is interesting is that all the judges that managed an important number of cases have produced a higher proportion of verdicts favoring the complainant, as the variable Transfer is much higher for the panelist selected than for the rest of the cases.

Table 14: NAF Results per Panelists

	Type of Respondent					
	Unaffili	Licensee	Competit	Employee	Criticor	Unknown
Buchele, J.	0.74	0.05	0.16	0.02	0.02	0.02
Carmody, J.	0.81	0.04	0.09	0.04		0.03
Kalina, H.	0.73	0.03	0.18	0.03		0.03
Yachnin, R.	0.86	0.03	0.06	0.01	0.01	0.03
Total Panelists 1	0.80	0.04	0.11	0.03	0.01	0.03
Bernstein	0.89		0.11			
Bianchi, R.	0.84	0.05	0.05			0.05
Foster, D.	0.65		0.29	0.06		
Limbury, A.	0.61	0.11	0.11	0.17		
Page, R.	0.90		0.10			
Samuels, J.	0.86	0.07	0.00		0.07	
Johnson, C.	0.63	0.08	0.13	0.10	0.04	0.02
Dorf, P.	0.65	0.10	0.13	0.13		
Donahey, M.	0.60	0.10	0.10	0.10		0.10
Barker, L.	0.65	0.04	0.22	0.09		
Abbot, F.	0.64	0.07	0.14	0.14		
Total Panelists 2	0.69	0.06	0.13	0.08	0.01	0.01
Rest of Cases	0.58	0.05	0.13	0.04	0.02	0.18
T test Panelists 1 and 2	0.9794	-0.9324	-0.1253	-1.4330	-0.1676	0.6169
Probability	0.3453	0.3681	0.9022	0.1755	0.8695	0.5480

Table 14 (Continuation)

	Type of Response			Type of Decision			
	Default	Lateresp	Transfer	Dismiss	Termin	Namecan	Split
Juez 36	0.60	0.00	0.86	0.14	0.00	0.00	0.00
Carmody, J.	0.73	0.00	0.93	0.06	0.01	0.00	0.00
Kalina, H.	0.52	0.03	0.76	0.24	0.00	0.00	0.00
Yachnin, R.	0.71	0.01	0.90	0.07	0.03	0.00	0.00
Total Panelists 1	0.67	0.01	0.89	0.10	0.01	0.00	0.00
Bernstein	0.44	0.00	1.00	0.00	0.00	0.00	0.00
Bianchi, R.	0.58	0.00	0.89	0.05	0.05	0.00	0.00
Foster, D.	0.47	0.00	0.82	0.18	0.00	0.00	0.00
Limbury, A.	0.50	0.00	0.83	0.17	0.00	0.00	0.00
Page, R.	0.60	0.00	0.90	0.10	0.00	0.00	0.00
Samuels, J.	0.57	0.00	0.79	0.14	0.00	0.07	0.00
Johnson, C.	0.40	0.00	0.71	0.27	0.00	0.02	0.00
Dorf, P.	0.52	0.00	0.77	0.19	0.00	0.03	0.00
Donahey, M.	0.30	0.00	0.80	0.10	0.10	0.00	0.00
Barker, L.	0.57	0.00	0.87	0.13	0.00	0.00	0.00
Abbot, F.	0.64	0.00	0.64	0.21	0.00	0.14	0.00
Total Panelists 2	0.50	0.00	0.80	0.17	0.01	0.02	0.00
Rest of Cases	0.38	0.00	0.64	0.17	0.17	0.01	0.01
T test Panelists 1 and 2	2.2583		0.7457	-2559.0000	-0.2553		
Probability	0.0418		0.4691	0.8020	0.8025		

In the CPR case all the variables have a positive impact on the duration function reducing the expected time of the cases being evaluated. It is strange that the cases in which the panel has a divided opinion, Split, the sign of the coefficient is positive, since we should expect that the cases in which a split decision is reached should be the more difficult to decide. Furthermore, this is the only factor, among the different characteristics of the cases and the proofs presented, that has an impact on the duration of the cases. Ascomp and Asresp have both positive sign, implying a faster resolution for cases in which the respondent and/or the complainant come from Asia. This is the geographical bias for this provider. Finally, there is only one panelist that has a positive impact on the duration function, Buchele, J.. Nonetheless, this panelist stays within the same proportional hazard function than the rest of the cases for the Provider. Figures 12 and 13 depict the survival and hazard functions for CPP. As we can see, the hazard function is exponential, meaning that cases face an increasing rate of being solved.

Figure 12

CPR Survival Function

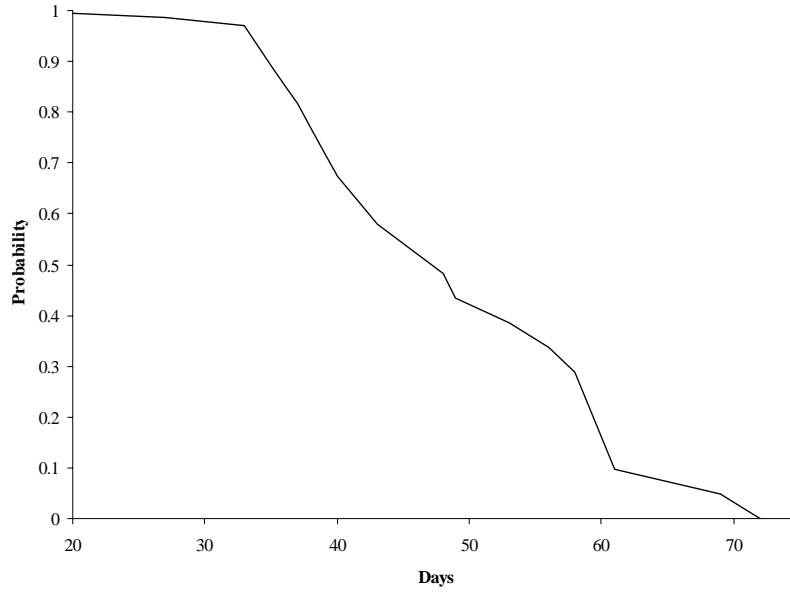
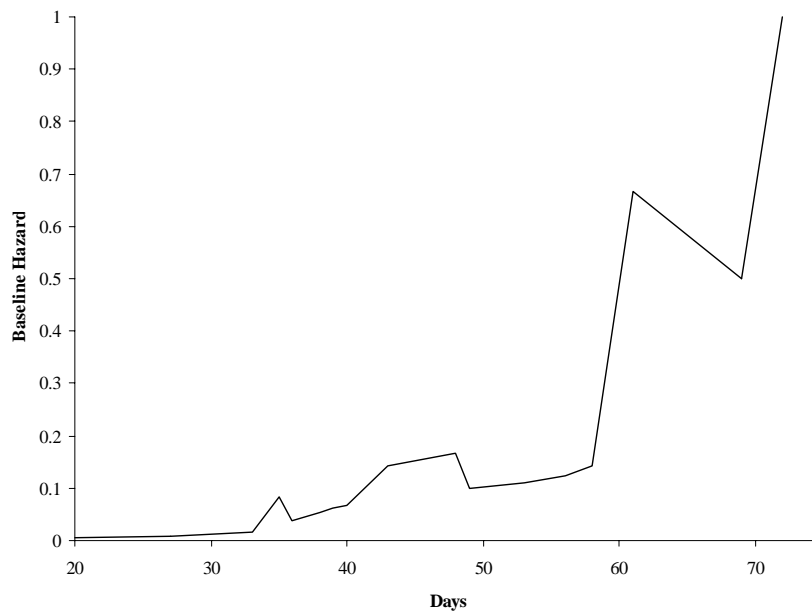


Figure 13

CPR Hazard Function



For the case of eRes all of the variables have a positive sign except for Compcan. As expected, Default has a positive effect reducing the time of duration for the cases. Employee, which represents those cases in which the respondent is an employee of the complainant, has a positive sign implying a faster rate of resolution for those cases. As for variables representing the final decision of the panel we have that those cases in which the panel decided that the name should be changed have been solved more rapidly. With respect to the proofs presented in each case, this provider was especially fast in the cases in which the respondent presented proof of its rights over the domain name, Respciii. This could be proof of a general bias of eRes in favor of respondents, as contrasted with WIPO and NAF, whose systems were more sensible to the presentation of proofs by the complainants. As for geographical bias, the variable Compca, which represents those claims in which the complainant is from Canada, has a negative sign implying a higher time of duration. This bias means that the panel of eRes devoted more time in analyzing complaints coming from Canada. Not surprisingly, eRes headquarters were geographically located in Quebec, Canada. As for the panelists, three of them had a positive sign decreasing the expected time of duration. Nonetheless, none of these variables violate the assumption of a proportional hazard function. Figures 14 and 15 shows the survival and hazard functions for eRes.

Figure 14

eRes: Survival Function

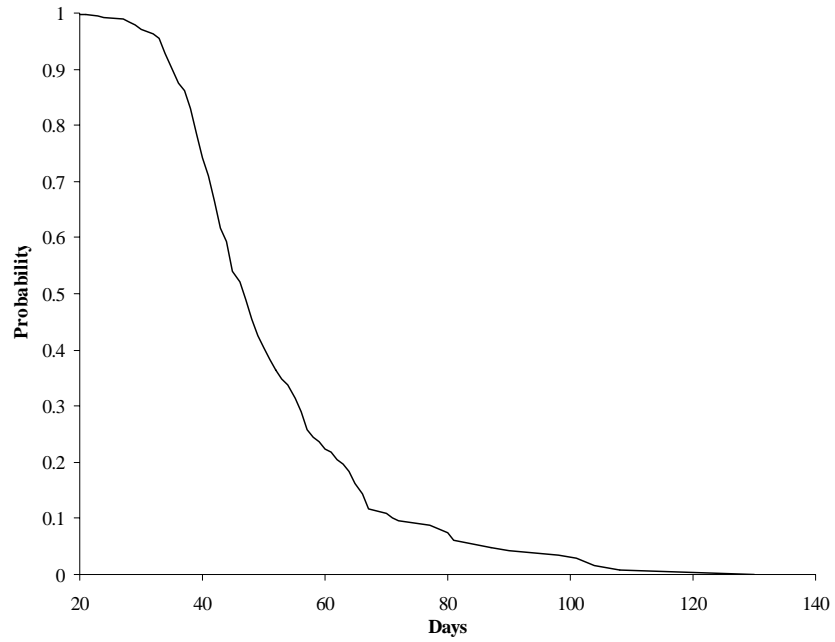
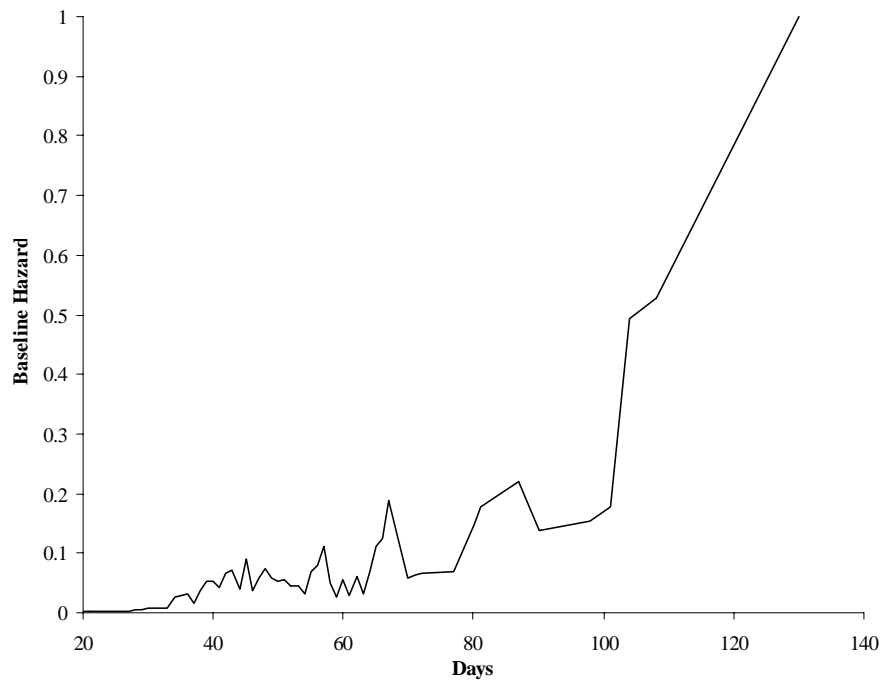


Figure 15

eRes: Hazard Function

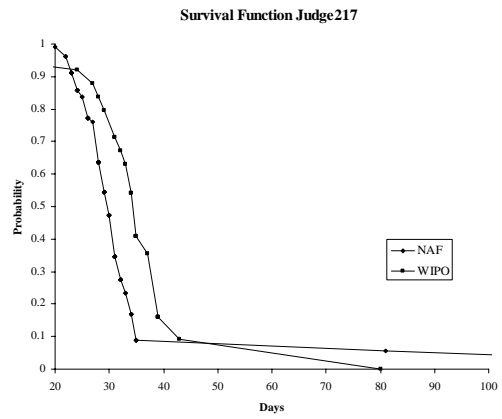
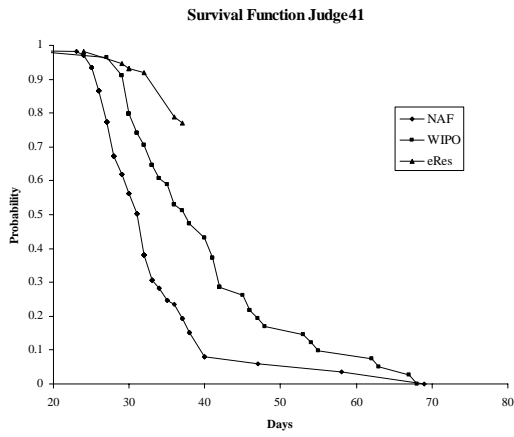
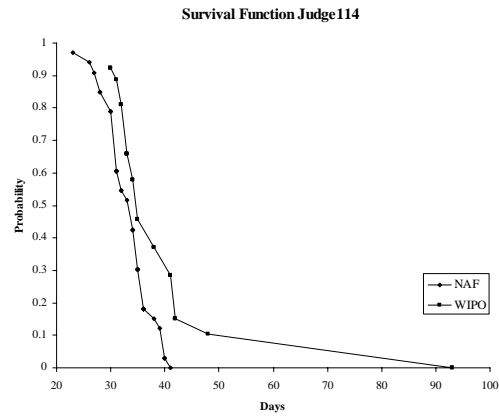
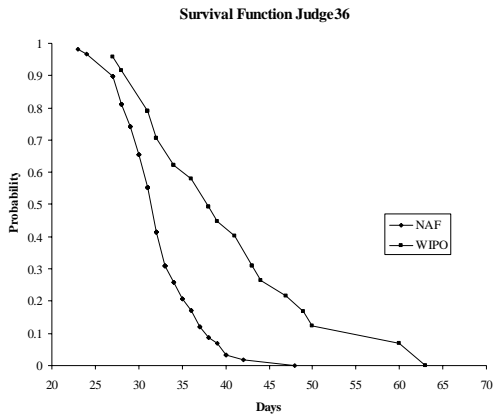


1. Panelist across Providers

According to our previous analysis, some panelists have an important influence on the performance of the providers, and even some of them perform totally independently from the other cases evaluated at the provider¹⁶⁶. In order to see if these panelists behave in similar fashion regardless the provider they are working for, in this section we evaluate the performance of these panelists across providers. If panelists have a similar duration function regardless of the provider they are working for, then they are totally independent, and the institutional structure of the provider did not influence their activities. On the other hand, if we found that these panelists act differently for different providers, then the institutional arrangement of the different providers become very important to determine the procedure and, in the end, the efficiency and speed of the system as a whole. In this case, we have that the differences among providers matter for the performance of the system. For our analysis we have four panelists that received cases from almost two providers, Buchele, J. Kalina, H., Carmody, J. and Yachnin, R. Figure 16 compares the Survival function for each of these panelists in the different providers. As we can see, in most of the cases there are notable differences in the survival functions.

¹⁶⁶ “In some UDRP cases, arbitration panelists may ignore critical aspects of the policy, define the criteria in the UDRP so broadly that they become meaningless. Some level variation among individual arbitrators based on their experience, their views of trademark laws and varying interpretations of the facts should be expected.” Brooks, *supra* note 5, at 323.

Figure 16



These differences can better be seen in Table 15, which shows the duration time for different probabilities of survival. As we can appreciate, as the case stays more in the hands of a given panelist, the duration time increases in one of the providers with respect to the other. From this table we can conclude that NAF has a better designed mechanism to handle claims fast. Accordingly, the same panelists are faster in NAF than they are in WIPO¹⁶⁷.

¹⁶⁷ If we take each panelists and run a Cox proportional model we find that one of the most important variables that explain the duration is the provider under which the panelist is analyzing the claim.

Table 15: Comparison of Panelists Across Providers

Probability	Buchele, J.			Carmody, J.			Kalina, H.			Yachnin, R.		
	WIPO	NAF	Diff.	WIPO	NAF	Diff.	WIPO	NAF	Diff.	WIPO	NAF	Diff.
0.9	28	27	1	29	25	4	30	27	3	24	23	1
0.7	32	29	3	32	28	4	33	30	3	31	28	3
0.5	38	31	7	38	31	7	35	33	2	34	30	4
0.3	43	33	10	42	33	9	41	35	6	37	32	5
0.1	50	38	12	55	40	15	48	39	9	43	35	8

2. Default

One of the main characteristics of the UDRP system is the high number of respondents that are in default, that is they do not send their response to the provider and fail to defend themselves from the claims of the complainants. As a result, in these cases it is easier for the panel to give a verdict favoring the complainant. Furthermore, the absence of documentation from the respondent challenging the complainant allegations make easier for the panelists to evaluate such cases. As a consequence, we found that the duration in these cases are much lower than for the other ones. In all of the regressions, except for CPR, the cases in default were an important explanatory factor for the duration function of the respective provider. In this section we want to analyze if the fact that a given case is in default gives different duration depending on the provider we are considering. This analysis will give us further proofs of fundamental structural differences among providers. Table 16 shows the expected duration of cases in which the respondent is in default, for the different probabilities of survival.

Table 16: Cases in Default Across Providers

Probability	WIPO (1)	NAF (2)	eRes (3)	Dif WIPO-			Percentage Difference		
				NAF (4)=(1)-(2)	Dif WIPO-eRes (5)=(1)-(3)	Dif eRes-NAF (6)=(3)-(2)	(4)/(1)	(5)/(1)	(6)/(3)
0.9	36	26	30	10	6	4	27.8	16.7	13.3
0.7	42	30	37	12	5	7	28.6	11.9	18.9
0.5	48	33	40	15	8	7	31.3	16.7	17.5
0.3	57	37	46	20	11	9	35.1	19.3	19.6
0.1	76	42	56	34	20	14	44.7	26.3	25.0

Cases that are not in Default

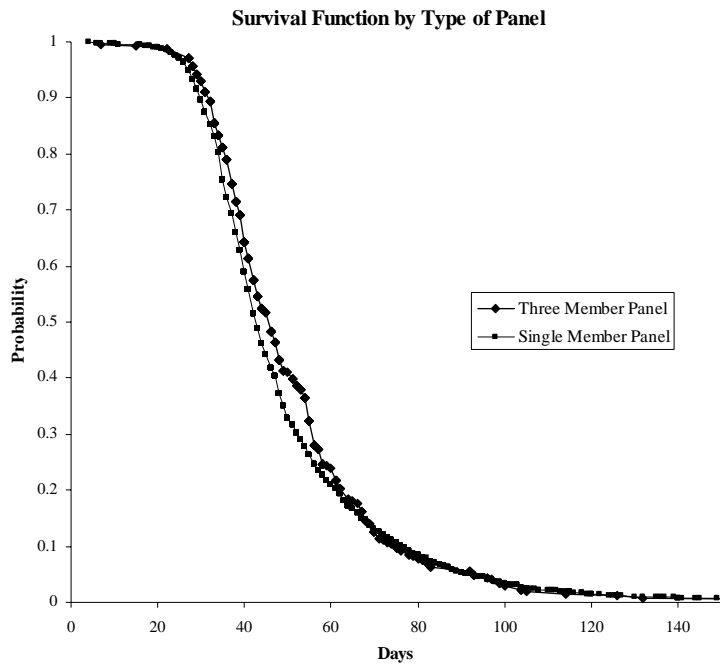
Probability	WIPO	NAF	eRes	Dif WIPO-NAF	Dif WIPO-eRes	Dif eRes-NAF	Percentage Difference		
0.9	36	27	34	9	2	7	25.0	5.6	20.6
0.7	44	34	41	10	3	7	22.7	6.8	17.1
0.5	53	37	45	16	8	8	30.2	15.1	17.8
0.3	64	42	55	22	9	13	34.4	14.1	23.6
0.1	92	55	71	37	21	16	40.2	22.8	22.5

As we can see, NAF is still faster than WIPO and eRes, and eRes is faster than WIPO. As the probability of survival decreases, the difference in expected duration increases between NAF and WIPO, NAF and eRes and eRes and WIPO. Accordingly, this result reinforces our previous analysis and conclusions that the providers have structural differences among them.

3. Type of Panels

One of the main issues that surrounds the debate about the UDRP is the type of panels that should be put in place. Currently there are two types of panels, single member panel or three member panel. According to Geist, the bias of the UDRP in favor of complainants could be solved by simply changing to a general three member panel system, abandoning the one member panel. In this section we would like to evaluate the efficiency implications of such a change, i.e. which is the impact of having three member panels in the UDRP system, with respect to the duration of the process. Accordingly, we test the duration function, using a Kaplan-Meyer estimator for those cases with three member panels as compared with those with just one member. Figure 17 shows both duration functions.

Figure 17



As we can appreciate, there is almost no change between the duration curves, and the duration time for the three member panels seems to be slightly above the one of the single member panel. Table 17 shows the log-normal and Cox tests of survival functions. According with these tests, we cannot reject the null hypothesis that both duration functions are the same.

Table 17: Log-rank test for equality of survivor functions

Type p	Events	
	Observed	Expected
0	271	293.68
1	2681	2658.32
Total	2952	2952

chi2(1) = 2.04
Pr>chi2 = 0.1527

Cox regression-based test for equality of survival curves

Type p	Events		Relative
	Observed	Expected	Hazard
0	29	293.68	0.9228
1	26	2658.32	1.0089
Total	2952	2952	1

LR chi2(1) = 2.00
Pr>chi2 = 0.1573

As a result, changing from the actual system to one in which only three member panels are allowed would not imply a decline in the duration time, and then in the efficiency of the UDRP system, having a good impact improving the fairness of the system.

VI. RESULTS AND POLICY IMPLICATIONS

From the regression analysis in the previous sections we can draw several general characteristics for the UDRP system. First, the system is not as homogeneous as ICANN has been telling everybody. Even though the Providers have the same rules for every case and they cannot depart from this general policy, our duration model shows that the providers have a totally different technology function that induce different performance in terms of expected duration for each case. Accordingly, these differences give place to the possibility of forum shopping for complainants. This possibility is reinforced by the fact that the two most popular Providers are located at the extremes of the technological diversity, polarizing the supply of dispute resolution services. Other minor providers, who get some marginal cases, are located somewhere in between. The different performance is also reinforced by the different factors and variables that determine the different behavior between these providers. As a result, given these variables that affect the general performance, complainants will chose the provider according to their idiosyncratic characteristics that can influence on the decision.

The solution of these extreme differences between providers can be solved by further standardization of the general procedure for handling and deciding the claims. For example, the extra fees that NAF provides in order to generate incentive to promote short responses and complaints and to reduce the total length of the case could be extended as a general rule for all providers in order to generate the right incentives across providers. On the other hand, if the system is let as it is before, the market demand for low duration for cases could drive down the number of cases of WIPO with respect to NAF, as it has been happening in the last year, and then to induce WIPO to improve its performance.

Furthermore, the lengthy procedure of WIPO does not generate many differences in terms of verdict, since the results of the cases presented in both providers are similar.

Second, the case characteristics that determine the performance of each provider are similar. Those cases in which the respondent is in default have a direct consequence in reducing the general duration of the case. Nonetheless, as explained before, this duration is not the same for all providers, supporting the claim that the providers are structurally different. The number and quality of the proofs presented by the complainants and respondents have an impact on the performance of the providers. It is interesting to notice that WIPO and NAF, which have been accused of favoring complainants, are the ones affected by the proofs presented by the complainants. On the other hand, eRes, which has been recognized as being more favorable to respondents, is strongly affected by the proofs presented by the respondents. The results obtained with respect to the law are important, in the sense that the providers are paying attention to the compliance of complainants and providers with the general rules established by ICANN, and that this compliance determines the performance of the providers. Finally, WIPO and CPR procedure is influenced by those cases in which the decision is split. However, the results are different for both providers, being more consistent with what is expected in those cases for CPR, i.e. the cases in which the panel could not take a definitive decision should be more difficult to solve and it should take longer to solve. In the case of eRes there are other two factors that affected the duration. First, if the respondent was an employee of the complainant the cases were solved faster. Second, in those cases in which the panel decided to change the domain name, the duration was also lower. These two effects are difficult to explain in terms of incentives of the provider, and they can obey to some idiosyncratic characteristics of the provider.

Third, even though the system has been designed for the Internet in order to avoid geographical biases, the UDRP providers are still subject to the influence of such factors. In the case of WIPO, there is a bias with respect to the United States, Canada, India and Switzerland. For NAF the bias is with respect to Germany, North America (United States principally) and Russia. CPR has a bias for Asian complainants and respondents. Finally, eRes have a bias for those cases in which the complainant is from Canada. The bias of each provider can respond to different causes. WIPO headquarters are located in

Switzerland, a fact that can explain the bias for parties from this country. NAF is located in the United States and it is biased with respect to North American complainants. CPR is taking a bias for Asian complainants and respondents. Finally, eRes headquarters were in Quebec, Canada, which explains the bias with respect to Canadian complainants. Accordingly, each of the main providers is heavily affected by the place in which it is located. This characteristic is a problem for a system that attempts to be global and ubiquitous as the Internet. Geographical biases indicate that the system could be ill equipped to handle cases coming from places in which the rules and institutions are different from the location of the provider. Furthermore, this bias could be prejudicial for complainants or respondents that are facing a case against a party coming from one of the countries in which the provider has a bias. The solution for this problem is not easy since the diversity of the panelists do not necessarily improves the situation. For example, WIPO is the provider with best diversity of panelists. However it is the provider with bias for a higher number of countries. It could be that the introduction of new regional providers, as it is the case of the new Asian provider could be a solution to this problem. Accordingly, the creation of regional providers could decrease the bias for some countries and improve the efficiency of the system. Nonetheless, some rules and procedures should be provided for cases in which parties are from diverse regions.

Fourth, some panelists depart from the general performance of the other cases managed by the provider. This could be a problem, in the case that these panelists had a behavior completely different from other panelists that received an important number of cases. Nonetheless, as analyzed in the previous section, the panelists that have a different behavior in terms of performance do not have a significative effect on the results of the system. Accordingly, the providers are improving efficiency by favoring these panelists in giving them more cases to solve. However, there are some differences of the panelists that received a high number of claims and the rest of the cases. We can see a bias favoring the complainants, which has already been noticed by other researchers and commentators. Finally, we showed that, even though some panelists have a different performance than the providers they are working for, they are affected by the structure of the providers, since their behavior is different depending on the provider they are in. In this respect the system could be improved in efficiency by identifying the characteristics

of these panelists that make them different, and faster, than the rest of the system. These characteristics could be embedded in the rules and procedures of the providers, improving the efficiency of the system as a whole.

Finally, we analyzed the differences in performance between single member and three member panels. As we show, three member panels are equally efficient than single member panel. Accordingly, to change from a single member to a general three member panel should not have a negative impact on the expected duration of the cases.

VII. CONCLUSIONS

The UDRP regime of ICANN has been subject to several analyses from scholars and commentators. Most of these studies concentrate on the general empirical results of the system. Employing different perspectives, these studies generally criticize the UDRP providers as being biased towards complainants and leaving the respondents without a fair defense of their rights. In this work, we show that the emphasis of the different empirical studies on the bias problem has been also “biased”. As we have shown, the supposed bias of the providers towards the complainants is not the main variable the complainants are looking at in order to decide the most suitable provider of domain name dispute resolution services. Instead, complainants seem to regard the performance of the providers as the main variable to be taken into account at the moment of deciding the provider. From this result, we can conclude that the literature should pay more attention to the relative performance of the providers. Accordingly, the procedural rules should be analyzed, not just in terms of bias and fairness, which has been overdone in the recent literature, but in terms of the incentives it generates for the rapid and efficient solution of the claims presented under the UDRP policy. A better understanding of the UDRP could be possible by paying more attention to efficiency and performance indicators from providers and panelists.

Based on our findings about the importance of the performance of the UDRP, we analyze the procedural structure of each provider. We identify the duration of the procedure as the main indicator of the efficiency of the system. Accordingly, we use

duration models to identify the different factors that have an influence in determining the performance of each provider. As we have shown, even though the providers are taking into account important factors, such as proofs provided by the parties, there are still remaining problems that could be solved in order to improve the global performance of the system. First, the providers have different technologies for solving cases, providing room for forum shopping. Despite the attempts by ICANN to provide uniform rules and policies, the providers still have differences among them that can be exploited. In general, we found that the NAF is the most efficient provider, while WIPO is the least efficient. The other providers rank somewhere between these two extremes. Second, panelists are important. Some panelists have totally different performance functions from the providers they are working for. However, these differences are affected by the specific rules of each provider. Accordingly, the existence of these different panelists could improve efficiency if it is demonstrated that they are faster than the rest, as we found in the case of WIPO. But it could be a bad sign, if these panelists are producing results that are biased with respect to the rest of the cases being handled by the provider, as we found in the case of NAF. Third, the UDRP is supposed to avoid geographical discrimination and biases by designing general rules for the Internet, suggesting that we should not find any discrimination favoring or disfavoring some country or region. However, we found that the UDRP providers are geographically biased. Specifically, they are more efficiently handling cases from the places where their headquarters are located. This bias could have important implications for handling inter-jurisdictional cases. As a result, the split of the UDRP into regions could be desirable if this bias is not eliminated in the medium term. Finally, we found that the election of a single or three member panel has no effects on the performance of the system.

VIII. APPENDIX A

Uniform Domain Name Dispute Resolution Policy¹⁶⁸

a. Applicable Disputes. You are required to submit to a mandatory administrative proceeding in the event that a third party (a "complainant") asserts to the applicable Provider, in compliance with the Rules of Procedure, that

- (i) your domain name is identical or confusingly similar to a trademark or service mark in which the complainant has rights; and

- (ii) you have no rights or legitimate interests in respect of the domain name; and

- (iii) your domain name has been registered and is being used in bad faith.

In the administrative proceeding, the complainant must prove that each of these three elements are present.

b. Evidence of Registration and Use in Bad Faith. For the purposes of [Paragraph 4\(a\)\(iii\)](#), the following circumstances, in particular but without limitation, if found by the Panel to be present, shall be evidence of the registration and use of a domain name in bad faith:

- (i) circumstances indicating that you have registered or you have acquired the domain name primarily for the purpose of selling, renting, or otherwise transferring the domain name registration to the complainant who is the owner of the trademark or service mark or to a competitor of that complainant, for valuable consideration in excess of your documented out-of-pocket costs directly related to the domain name; or

- (ii) you have registered the domain name in order to prevent the owner of the trademark or service mark from reflecting the mark in a corresponding domain name, provided that you have engaged in a pattern of such conduct; or

- (iii) you have registered the domain name primarily for the purpose of disrupting the business of a competitor; or

- (iv) by using the domain name, you have intentionally attempted to attract, for commercial gain, Internet users to your web site or other on-line location, by creating a likelihood of confusion with the complainant's mark as to the source, sponsorship, affiliation, or endorsement of your web site or location or of a product or service on your web site or location.

c. How to Demonstrate Your Rights to and Legitimate Interests in the Domain Name in Responding to a

Complaint. When you receive a complaint, you should refer to [Paragraph 5](#) of the Rules of Procedure in determining how your response should be prepared. Any of the following circumstances, in particular but without limitation, if found by the Panel to be proved based on its evaluation of all evidence presented, shall demonstrate your rights or legitimate interests to the domain name for purposes of [Paragraph 4\(a\)\(ii\)](#):

- (i) before any notice to you of the dispute, your use of, or demonstrable preparations to use, the domain name or a name corresponding to the domain name in connection with a bona fide offering of goods or services; or

- (ii) you (as an individual, business, or other organization) have been commonly known by the domain name, even if you have acquired no trademark or service mark rights; or

- (iii) you are making a legitimate noncommercial or fair use of the domain name, without intent for commercial gain to misleadingly divert consumers or to tarnish the trademark or service mark at issue.

¹⁶⁸ At, <http://www.icann.org/dndr/udrp/policy.htm>

IX. APPENDIX B

Variable	Obs	Mean	Std. Dev.	Min	Max
Cmwipo	6907	0.695196	0.058988	0.556604	0.78
Cmeres	3207	0.598404	0.208998	0.25	1
Ldwipo	6907	4.031995	0.16402	3.367296	4.304384
Lderes	3042	3.981898	0.230907	3.684704	4.584968

Variable	Obs	Mean	Std. Dev.	Min	Max
Cmnafl	6801	0.74789	0.070263	0.553846	0.9
Cmwipol	6801	0.692952	0.05711	0.556604	0.78
Cmeresl	3077	0.575869	0.191426	0.25	1
Ldnafl	6801	3.718587	0.14358	3.328627	4.044888
Ldwipol	6801	4.026402	0.183573	3.367296	4.304384
Lderesl	3077	3.983243	0.228455	3.684704	4.584968

Variable	Obs	Mean	Std. Dev.	Min	Max
Cwipo	6874	0.697	0.028	0.583	1.000
Ldunaf	6907.000	3.657	0.063	3.234	3.765
Lduwipo	6874.000	3.953	0.157	3.308	4.086

X. APPENDIX C

Variables Mueller Database		
Dependent Variable	Variable	Description
Duration	Duration	Duration, in days, of each case
Type of Respondent	Unaffiliated	No relationship with the complainant
	Licensee	Respondent is licensee of the Complainant
	Competitor	Respondent is competitor
	Employee	Respondent is an employee
	Critic	Respondent is a critic
	Unknown	The status of the respondent is unknown
Type of Response	Default	The respondent fails to answer to the Provider
	Lat Response	Respondent is late in his/her response
Panel Decision	Transfer	Decision favorable to complainant
	Dismiss	The complaint is dismissed, favorable to respondent
	Terminated	The complaint is terminated, without clear result (maybe there is a private agreement or a court action)
	Name Change	The panel forces one of the parties to change the name of the domain.
	Split	The decision favored the complainant in some aspects and the respondent in others.
	Judicial	Panelists have reviewed other judicial cases from other courts in the countries of the parties
Country of Respondents (Complainants)	RespUS (CompUS)	Respondent (Complainant) from the United States
	RespFR (CompFR)	Respondent (Complainant) from the United States
	ResAU (CompAU)	Respondent (Complainant) from Australia
	ResMX (CompMX)	Respondent (Complainant) from Mexico
	ResSE (CompSE)	Respondent (Complainant) from the Switzerland
	ResIN (CompIN)	Respondent (Complainant) from India
	ResCA (CompCA)	Respondent (Complainant) from Canada
	ResNZ (CompNZ)	Respondent (Complainant) from New Zealand
	ResGB (CompGB)	Respondent (Complainant) from Great Britain
	ResJP (CompJP)	Respondent (Complainant) from Japan
	ResBE (CompBE)	Respondent (Complainant) from Belgium
	ResDE (CompDE)	Respondent (Complainant) from Germany
	ResIT (CompIT)	Respondent (Complainant) from Italy
	ResES (CompES)	Respondent (Complainant) from Spain
	ResNL (CompNL)	Respondent (Complainant) from Netherlands
	ResRU (CompRU)	Respondent (Complainant) from Russia
	ResCH (CompCH)	Respondent (Complainant) from Check Republic
	ResME (CompME)	Respondent (Complainant) from Middle East
	ResNAC (CompNAC)	Respondent (Complainant) from North America
	ResSA (CompSA)	Respondent (Complainant) from South America
	ResOC (CompOC)	Respondent (Complainant) from Oceania
	ResAS (CompAS)	Respondent (Complainant) from Asia
	ResEU (CompEU)	Respondent (Complainant) from Europe
	ResAF (CompAF)	Respondent (Complainant) from Africa
ICANN Policy Articles	Rule 4a(i)	Evidence on the Articles of the ICANN policy, see appendix A.
	Rule 4a(ii)	
	Rule 4a(iii)	
	Rule 4c(i)	
	Rule 4c(ii)	
	Rule 4c(iii)	
	Rule 4b(i)	
	Rule 4b(ii)	
	Rule 4b(iii)	
	Panel Type	
Panelists	Panelist1	Abbot, F.
	Panelist 19	Barker, L.
	Panelist 36	Buchele, J.
	Panelist 41	Carmody, J.
	Panelist 63	Donahey, M
	Panelist 64	Dorf, P.
	Panelist 113	Johnson, C.
	Panelist 114	Kalina, H.
	Panelist 217	Yachnin, R.
	Panelist 180	Samuels, J.
	Panelist 162	Page, R.
	Panelist 134	Limbury, A.
	Panelist 79	Foster, D.
	Panelist 27	Bianchi, R.
	Panelist 24	Bernstein

XI. APPENDIX D

Cox Semi-Parametric Duration Model without Stratification			
WIPO		NAF	
Variables	Coefficient	Variables	Coefficient
Default	1.234 <i>(0.05748)</i>	Default	1.355 <i>(0.08893)</i>
Split	0.556 <i>(0.12954)</i>	Respru	2.565 <i>(0.78246)</i>
Respus	0.898 <i>(0.04594)</i>	Compde	2.479 <i>(1.76767)</i>
Respse	1.703 <i>(0.35442)</i>	Compnac	3.500 <i>(2.02836)</i>
Compus	0.892 <i>(0.04641)</i>	Complaw	1.117 <i>(0.04553)</i>
Compse	1.601 <i>(0.30560)</i>		
Compin	0.693 <i>(0.11144)</i>		
Compca	1.542 <i>(0.26687)</i>		
Complaw	1.076 <i>(0.04162)</i>		
Buchele, J.	3.523 <i>(0.76310)</i>	Buchele, J.	2.640 <i>(0.40042)</i>
Carmody, J.	3.666 <i>(0.53735)</i>	Carmody, J.	2.970 <i>(0.313959)</i>
Dorf, P.	2.583 <i>(0.51499)</i>		
Johnson, C.	3.310 <i>(0.41969)</i>		
Kalina, H.	3.068 <i>(0.63650)</i>	Kalina, H.	2.135 <i>(0.38243)</i>
Yachnin, R.	4.829 <i>(1.10124)</i>	Yachnin, R.	3.124 <i>(0.417072)</i>
Limbury, A.	1.756 <i>(0.33117)</i>		
Bernstein	0.690 <i>(0.11368)</i>		
Nro Observations	1996	1119	
Nro Failures	1996	1119	
Time at risk	114471	43313	
Wald Chi2(df)	135.8 (df=12)	156.61 (df=7)	
Probability Chi2	0.000	0.000	
Log Likelihood	-12292.70	-6141.25	

Test of Proportional Hazards Assumption

WIPO				NAF			eRes			CPR					
Rho	Chi ²	Prob		Rho	Chi ²	Prob	Rho	Chi ²	Prob	Rho	Chi ²	Prob			
Default	0.038	2.97	0.088	Default	-0.013	0.20	0.652	Default	0.005	0.00	0.946	Split	0.071	0.32	0.574
Split	0.014	0.40	0.527	Respru	0.012	0.17	0.682	Employee	-0.080	1.49	0.223	Ascomp	0.059	0.19	0.661
Respus	0.001	0.00	0.955	Compde	0.018	0.37	0.541	Namecan	-0.015	0.04	0.846	Asresp	0.096	0.30	0.582
Respse	0.017	0.51	0.474	Compnac	-0.006	0.04	0.842	Respciii	-0.022	0.11	0.744				
Compus	-0.004	0.04	0.842	Complaw	-0.027	0.88	0.348	Compca	0.079	1.09	0.296				
Compse	-0.020	0.74	0.389												
Compin	0.014	0.39	0.533	Buchele, J.	-0.017	0.31	0.577	Buchele, J.	-0.002	0.00	0.987	Buchele, J.	0.089	0.36	0.549
Compca	-0.007	0.08	0.772	Carmody, J.	-0.134	19.28	0.000	Carmody, J.	-0.001	0.00	0.993				
Complaw	-0.007	0.12	0.732												
Buchele, J.	-0.037	2.71	0.099												
Carmody, J.	-0.064	8.12	0.004												
Dorf, P.	-0.031	1.96	0.161	Kalina, H.	0.016	0.30	0.582	Yachnin, R.	-0.028	0.07	0.793				
Johnson, C.	-0.062	7.64	0.006	Yachnin, R.	-0.232	62.48	0.000								
Kalina, H.	-0.116	27.17	0.000												
Yachnin, R.	-0.101	20.41	0.000												
Limbury, A.	-0.017	0.58	0.447												
Bernstein	0.027	1.47	0.225												
Global test	68.32	0.000			83.24	0.000			2.45	0.964			0.40		0.983

Test of Proportional Hazards Assumption, Stratified Models

WIPO				NAF			
Rho	Chi ²	Prob		Rho	Chi ²	Prob	
Default	0.032	2.10	0.147	Default	-0.010	0.10	0.747
Split	0.025	0.73	0.394	Respru	0.015	0.09	0.771
Respus	-0.001	0.00	0.948	Compde	0.011	0.07	0.794
Respse	0.018	0.65	0.419	Compnac	0.001	0.00	0.980
Compus	-0.002	0.01	0.937	Complaw	-0.025	0.63	0.429
Compse	-0.024	1.49	0.222				
Compin	0.017	0.48	0.488	Buchele, J.	-0.009	0.11	0.743
Compca	-0.005	0.04	0.839	Carmody, J.			
Complaw	-0.005	0.04	0.839				
Buchele, J.							
Carmody, J.							
Dorf, P.	-0.030	3.19	0.074				
Johnson, C.							
Kalina, H.				Kalina, H.	0.027	0.44	0.507
Yachnin, R.				Yachnin, R.			
Limbury, A.	-0.016	0.69	0.406				
Bernstein	0.029	0.98	0.321				
Global test		9.06	0.939		1.69	0.996	

