

Theorizing Fact-Based Policy Development at ICANN

EXECUTIVE SUMMARY

The Internet Corporation for Assigned Names and Numbers (ICANN) is critical for Internet governance because of its authority as the overall technical manager and coordinator for the global domain name system (DNS). ICANN policy drives the institutional relationships and technical operations that form the Internet as we know it. But at the heart of ICANN's policy making power is a theoretical gap. ICANN has a fundamental commitment to fact-based policy that is poorly understood.

This paper responds to that perceived gap by constructing an interdisciplinary model of evidence based policy and exploring how that model could be translated into the context of ICANN policy making. That model would guide ICANN's policy makers through the application of several principles:

- ◆ Policy decisions based on the best available evidence should be preferred to decisions based on mere opinion, ideology, conventional wisdom, or conjecture. What qualifies as “best available evidence” depends on the policy question, the relevant professional discipline, and the institutional setting.
- ◆ Policy decisions should stand on an agreement of the best available evidence with professional expertise (both subject matter and institutional).
- ◆ High quality data in areas of strategic concern, especially benchmarking institutional performance, should be routinely acquired.
- ◆ Expertise in relevant subject matters, especially evaluation and data analysis, and in relevant institutions should be acquired.
- ◆ Routine forms of communication should be established, for the purpose of communicating evidence to and from policy makers.
- ◆ Policy decisions should be made transparent by disclosing the data, assumptions, and methodologies that produced it in sufficient detail to be replicated.
- ◆ Policy proposals and assertions should be evaluated using these principles as rules of discourse: they are intended to condition the credibility and persuasiveness of a policy proposal or assertion without excluding expressions of opinion from consideration altogether.

The case studies described below suggest that ICANN falls short of its commitment to fact-based policy because it does not rely on the best available evidence and because it

fails to disclose sufficient information about its decision making processes to evaluate the evidence it does rely on. More positively, the interdisciplinary model of evidence based policy offers promising avenues for further research in Internet governance.

INTRODUCTION

ICANN is critical for Internet governance because of its authority as the overall technical manager and coordinator for the global DNS.¹ ICANN's policies shape how registries, registrars, and ccTLD operators carry out their responsibilities over the Internet's unique identifiers, how DNS-related disputes are resolved, and how changes to the DNS will unfold. In short, ICANN policy drives the institutional relationships and technical operations that form the Internet as we know it.

But at the heart of ICANN's policy making power is a theoretical gap. ICANN has a fundamental commitment to fact-based policy that is poorly understood. This paper responds to that perceived gap by constructing an interdisciplinary model of evidence based policy and exploring how that model could be translated into the context of ICANN policy making. The aim is to advance understanding of how to ground ICANN policy more effectively in fact rather than opinion. This theoretical approach holds significance for Internet governance as a discipline. Beyond its capacity to identify what strategies are available for improving ICANN's policymaking, it offers a new approach for further research into Internet governance. But it should be stressed that this is not the occasion for limning ICANN's complex policy making structure in detail or for prescribing changes to ICANN's bylaws to strengthen its performance of fact-based policy. Its narrow aims are to articulate a plausible interdisciplinary model of evidence based policy and to explore how that model illuminates ICANN's commitment to conduct fact-based policy.

The paper consists of six parts. First, ICANN's commitments to fact-based policy and its failure to keep those commitments are rehearsed. Second, a brief word on the theoretical underpinnings of this project is offered. Third, the original model of evidence based medicine is sketched, along with a description of the model as it has been applied in some other disciplines. Fourth, certain criticisms of evidence based policy are raised and resolved. Fifth, an interdisciplinary model of evidence based policy is presented, constructed from the common elements of evidence based policy as it has been applied across various disciplines and responding to the cautions and objections. And sixth, this interdisciplinary model will be applied to ICANN using case studies, in light of its unique institutional structure and complex policy making apparatus.

ICANN’S COMMITMENT TO FACT-BASED POLICY

ICANN’s commitments to fact-based policy making are fundamental to its institutional identity. Among its stated missions are to coordinate “policy development reasonably and appropriately related to [its] technical functions.”² Such policy coordination has characterized ICANN from its beginnings. It was conceived as a “not-for-profit corporation formed by private sector Internet stakeholders to administer policy for the Internet name and address system.”³ In carrying out its responsibility “to administer policy,”⁴ ICANN has always been obliged to “reflect the bottom-up governance that has characterized development of the Internet to date.”⁵

ICANN’s obligation to develop and administer DNS policy through a bottom-up process has accumulated additional features, intended as improvements. ICANN’s Board of Directors committed under the Joint Project Agreement to “further the effectiveness of the bottom-up policy development processes.”⁶ Specific requirements were added with the *Affirmation of Commitments*, when ICANN agreed “to adhere to ... fact-based policy development” and “to provide a thorough and reasoned explanation of decisions taken, the rationale thereof and the sources of data and information on which [it] relied.”⁷ What these obligations mean, what they may require of policy-makers, is exactly the point of this inquiry.

Given these commitments, one would expect ICANN to maintain a tight connection between policies and facts, but it too often enacts policies without a sound evidentiary basis. The Accountability and Transparency Review Team (ATRT), commissioned under the *Affirmation’s* authority,⁸ said as much when it recommended that the ICANN Board provide a “thorough and reasoned explanation of decisions taken, the rationale for them, and the sources of data and information on which ICANN relied.”⁹ No such recommendation would have been necessary if ICANN were adhering to its commitments under the *Affirmation*. The United States government sharpened this sense of policy failure by charging that “[i]n the context of the new gTLD program, ICANN is failing to meet this commitment.”¹⁰ Invoking its status as “a signatory to the *Affirmation*,” the United States reminded ICANN of its expectation that it “would make significant improvements in its operations to meet the obligations identified in the *Affirmation*” while noting its disappointment that “[o]ver a year later ... those improvements have yet to be seen.”¹¹

Certain decisions illustrate ICANN’s tendency to fall short of its commitments under the Affirmation “to adhere to ... fact-based policy development.”¹² They include the decisions to charge a \$185,000 application fee for new gTLDs (a figure developed by staff with no apparent community input that did not change at all throughout the course of the multi-year policy development process) and to permit the cross-ownership of registries and registrars in the new gTLD market. Each of these policies may be advisable or inadvisable in other respects, but each was issued without a defensible basis in fact. In a later section they will serve as case studies to test an interdisciplinary model of evidence based policy.

THEORETICAL UNDERPINNINGS

The theoretical model of fact-based policy offered here is founded on a hypothesis and a method.

The hypothesis is that ICANN’s commitment to fact-based policy can be usefully informed by analogous theoretical work in other disciplines. Fortunately, research bore out this hypothesis by uncovering a large literature that has grown up around the methodological model of evidence based policy. This model is intensely generative, having prompted broad interdisciplinary discussions, criticisms, and adaptations.

The method consists of a targeted literature review and analysis. Research for materials discussing “evidence based policy,” “evidence based practice,” and cognate terms was conducted on the Internet using widely available databases, Academic Search Premier and GoogleScholar. Resulting hits from both databases numbered over 1.5 million, of which 63 articles and papers were selected based on the number of references and the apparent relevance to the application of evidence based policy by various disciplines and the theoretical challenges that evidence based policy must face. Endnote references record the extent to which the selected materials came to be included in the analysis.

THE ORIGIN AND SPREAD OF EVIDENCE-BASED POLICY

Evidence-based policy as a separate methodological concept originated with David Sackett in the field of medicine. As he and his colleagues defined it, “Evidence based medicine is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients.”¹³ They explained further that “[t]he practice of evidence based medicine means integrating individual clinical expertise with the

best available external clinical evidence from systematic research.”¹⁴ By “clinical expertise” they meant “the proficiency and judgment that individual clinicians acquire through clinical experience and clinical practice.”¹⁵ By “the best available external clinical evidence” they meant “clinically relevant research, often from the basis sciences of medicine.”¹⁶ Both expertise and evidence are necessary. “Without clinical expertise, practice risks becoming tyrannised by evidence, for even excellent external evidence may be inapplicable to or inappropriate for an individual patient. Without current best evidence, practice risks becoming rapidly out of date, to the detriment of patients.”¹⁷ In calling for a union of expertise and evidence, Sackett denied that evidence based medicine is “cookbook’ medicine.”¹⁸

Because it requires a bottom up approach that integrates the best external evidence with individual clinical expertise and patients’ choice, it cannot result in slavish, cookbook approaches to individual patient care. External evidence can inform, but can never replace, individual clinical expertise, and it is this expertise that decides whether the external evidence applies to the individual patient at all and, if so, how it should be integrated into a clinical decision.¹⁹

Sackett’s model of evidence based medicine has three leading features. It (1) strives for “the conscientious, explicit, and judicious use of current best evidence in making decisions”; (2) “requires a bottom up approach that integrates the best external evidence with individual clinical expertise and patients’ choice”; (3) rejects extreme methodological positions, both decisions made obsolete by the lack of “current best evidence” or “slavish cookbook approaches” that purport to displace individual expertise.²⁰

Evidence based medicine has spread beyond its roots in clinical medical practice to influence other disciplines.

The field of business management has adopted the model. Evidence based management has been defined as “translating principles based on best evidence into organizational practices.”²¹ Borrowing directly from Sackett, evidence based practice is broadly characterized as “a paradigm for making decisions that integrate the best available research evidence with decision maker expertise and client/customer preferences to guide practice toward more desirable results.”²² Specifically, evidence based management requires “learning about *cause-effect* connections in professional practices”; “isolating the variations that measurably affect desired outcomes”; “creating a culture of evidence-based

decision making and research participation”; “using information-sharing communities to reduce overuse, underuse, and misuse of specific practices”; “building decision supports to promote practices the evidence validates, along with techniques and artifacts that make the decision easier to execute or perform ...”; and “having individual, organizational, and institutional factors promote access to knowledge and its use.”²³

Behind the application of the evidence based paradigm to management is the judgment that “managers (like doctors) can practice their craft more effectively if they are routinely guided by the best logic and evidence—and if they relentlessly seek new knowledge and insight, from both inside and outside their companies, to keep updating their assumptions, knowledge, and skills.”²⁴

International development and related programs have also adopted and adapted evidence based practice. United States Agency for International Development (USAID) “bases policy and investment decisions on the best available empirical evidence, and uses the opportunities afforded by project implementation to generate new knowledge for the wider community,” as well as committing to “measuring and documenting project achievements and shortcomings so that the Agency’s multiple stakeholders gain an understanding of the return on investment in development activities.”²⁵ Selecting evaluation methods concentrates on those that “generate the highest quality and most credible evidence that corresponds to the questions being asked, taking into consideration time, budget and other practical considerations.”²⁶ Methodological choices emphasize “facts, evidence and data” and shun “relying exclusively upon anecdotes, hearsay and unverified opinions.”²⁷ Findings must be delivered in a useable form: “specific, concise and supported by quantitative and qualitative information that is reliable, valid and generablizable.”²⁸ International institutions like the United Nations University, the World Bank, the European Union, and the Organisation for Economic Co-operation and Development (OECD) have implemented similar evidence based approaches.²⁹

Perhaps the best known application of evidence based practice outside of medicine is the British government’s embrace of it under the leadership of Prime Minister Tony Blair. A leading government white paper stated that “[g]overnment should regard policy making as a continuous, learning process, not as a series of one-off initiatives. We will improve our use of evidence and research so that we understand better the problems we are trying to

address.”³⁰ Philip Davies, a researcher then affiliated with the Prime Minister’s office, explained that Britain’s evidence-based approach to public policy “stands in contrast to opinion-based policy, which relies heavily on either the selective use of evidence (e.g. on single studies irrespective of quality) or on the untested views of individuals or groups, often inspired by ideological standpoints, prejudices, or speculative conjecture.”³¹ He also noted that “[t]he driving force for evidence in government tends to be the type of question being asked, rather than any particular research method or design” and that “[m]ost governments require sound evidence on both the effectiveness of outcomes and the effectiveness of implementation and delivery of policies, programmes and projects.”³² Davies acknowledged that factors besides evidence influenced policy, including “the experience, expertise and judgement of policy officials and Ministers, values and ideology, available resources, habits and tradition, lobbyists, pressure groups and the media, and the pragmatics and contingencies of everyday political life.”³³ He called for these “realities of government” to be fully appreciated, to avoid “the principles of evidence-based policy and practice being used less often and with less seriousness than they deserve.”³⁴

Australia has followed Britain’s example. Elaborating a conception of evidence based policy in public service, the chairman of Australia’s Productivity Commission has explained what he takes to be its essential ingredients. They include sound methodology, data, transparency, expertise, and a receptiveness to evidence. Sound methodology requires that “whatever analytical approach is chosen, it allows for a proper consideration of the nature of the issue or problem, and of different options for policy action.”³⁵ Data is critical, “the data needed [for governments] to evaluate their own programs,” especially “the baseline data essential for before-and-after comparisons.”³⁶ Transparency requires “opening the books’ in terms of data, assumptions and methodologies, such that the analysis could be replicated.”³⁷ Expertise is important because “[y]ou can’t have good evidence, you can’t have good research, without good *people*. People skilled in quantitative methods and other analysis are especially valuable.”³⁸ Receptiveness to evidence requires “a process that begins with a question rather than an answer, and that has institutions to support such inquiry.”³⁹

In the view of this leading Australian official, making policy without these ingredients leads to familiar problems:

Without evidence, policy makers must fall back on intuition, ideology, or conventional wisdom—or, at best, theory alone. And many policy decisions have indeed been made in those ways. But the resulting policies can go seriously astray, given the complexities and interdependencies in our society and economy, and the unpredictability of people’s reactions to change.⁴⁰

The United States, under President Obama, also has made evidence based policy a central priority.⁴¹

Other disciplines have discussed incorporating evidence based practice, including information systems,⁴² education,⁴³ and criminology.⁴⁴ Each has been guided by the vision of a professional discipline enhanced by the best available evidence.⁴⁵

CRITICISMS AND RESPONSES

Evidence based policy has attracted substantial criticisms, including charges that it smacks of scientism and runs contrary to democratic values. Each of these criticisms needs to be engaged and resolved, at least tolerably, if evidence based policy is to stand on a firm theoretical foundation.

Scientism

Scientism was famously defined by Hayek as the “slavish imitation of the method and language of Science.”⁴⁶ At bottom, it reflects “an attitude which is decidedly unscientific in the true sense of the word, since it involves a mechanical and uncritical application of habits of thought to fields different from those in which they have been formed.”⁴⁷ Its most basic error is to treat the subjective data of social relations as if it were the objective data of the natural world.⁴⁸ In doing so, scientism often conflates fact with opinion.⁴⁹

Evidence based policy—or at least certain claims made on its behalf—has been said to smack of scientism.⁵⁰ Its conclusions are allegedly “misleading because they are based on too sharp a distinction between practitioner opinion and research evidence” and in so doing leads the supporters of evidence based policy “to make excessive claims for the role that research can play in guiding policymaking and practice.”⁵¹

In particular, evidence based policy is often said to require policy to be supported by “*research* evidence presented in the form of *systematic reviews*, in other words syntheses of the findings from all relevant studies meeting some threshold of methodological rigour.”⁵² The turn to systematic reviews is motivated by the reality that “[e]valuation research is

tortured by time constraints. The policy cycle revolves quicker than the research cycle, with the result that ‘real time’ evaluations often have little influence on policy making.”⁵³

Reliance on systematic reviews raises methodological questions of its own, because such reviews were “developed in the context of judging the effectiveness of medical interventions and tend[] to focus on the synthesis of quantitative (particularly experimental) data.”⁵⁴ Scholars have questioned “the extent to which such an approach can or should be transferred to other areas of public policy.”⁵⁵ The rigor required of systematic reviews “assumes a conception of research methodology that is broadly positivist in character,” an assumption that is said to raise “fundamental issues for many social scientists” about the relations between research evidence and policy making.⁵⁶

Scientism appears to be a fair charge against evidence based policy only if its epistemic claims are pressed too far, rather than a fault intrinsic to the model itself. Insisting on “the synthesis of quantitative (particularly experimental) data”⁵⁷ as the *sine qua non* of valid evidence and then claiming the transferability of that epistemic model to every area of public policy would smack of scientism. But it would also be unfaithful to Sackett’s original vision of a union of evidence and expertise, a vision that expressly rejected “slavish, cookbook approaches to individual patient care.”⁵⁸ If “it is the mark of an educated man to ask for precision in each class of things just so far as the nature of the subject admits,”⁵⁹ the standards of evidence must fit the character of the subject under review.

Ray Pawson has made important theoretical contributions by revising the classic question of evidence based policy—“What works?”—to be “what works for whom in what circumstances”?⁶⁰ And he approaches the problem of theoretical transferability by avoiding the promise of a one-to-one transfer of a theory from one context to another, offering instead a more nuanced explanation that “this programme theory works in these respects, for these subjects, in these kinds of situations.”⁶¹ By making the standard of evidence more dependent on context, Pawson’s realist synthesis of evidence based policy affirms that “there is no one ‘gold standard’ method for evaluating single social programmes”⁶² and that the model should incorporate “a variety of methodological strategies.”⁶³

A modest conception of evidence based policy can avoid entanglement in scientism. Not all studies must be double-blind and not all reviews must be systematic. What counts

as the “best available” evidence is a term of art whose meaning depends on the question asked, the particular discipline, and the institutional context.

Democracy

Critics have also questioned whether evidence based policy is consistent with democratic values.⁶⁴ Some have suggested that the growing influence of evidence based policy may “signal the devaluing of democratic debate about the ethical and moral issues raised by policy choices.”⁶⁵ Others have cast doubt on whether evidence based policy is consistent with the essential democratic principle of political equality.

If political equality is the foundational element of democracy, then, to the extent that any activity conflicts with the realization and preservation of political equality, said activity can legitimately be considered incompatible with democracy. In turn, insofar as [evidence based policy] promotes or requires the privileging of evidence over other considerations, it also provides to certain individuals a degree of political influence that exceeds that available to all citizens. In particular, under an [evidence based policy] regime those who are responsible for the production and interpretation of ‘evidence’ will necessarily be more intimately involved (directly or indirectly) in the shaping of public policy than will others who are unable to engage in such activities. Hence, *prima facie*, the pursuit of [evidence based policy] could be understood to be incompatible with democracy.⁶⁶

This charge that evidence based policy conflicts with the principle of political equality presents a serious challenge for ICANN. Representation is one of ICANN’s founding principles, along with “stability, competition, private bottom-up coordination.”⁶⁷ It was thought that giving priority to “global representativeness” would “ensure that DNS management proceeds in the interest of the Internet community as a whole.”⁶⁸ Global representation remains an important institutional feature of ICANN, as illustrated by its bylaws mandating geographic diversity for its board of directors.⁶⁹ Evidence based policy might have to be abandoned as a theoretical model relevant to ICANN unless it can be reconciled with the principle of representation.

The conflict centers, according to Young, on the fact that “those who are responsible for the production and interpretation of ‘evidence’ will necessarily be more intimately involved (directly or indirectly) in the shaping of public policy than will others who are unable to engage in such activities.”⁷⁰ Judging evidence based policy as “incompatible with democracy” depends on the unexamined assumption that inequalities in “the production

and interpretation of ‘evidence’” and the resulting capacity for intimate involvement “in the shaping of public policy” conflict with the principle of political equality.⁷¹ But in fact modern representative governments uniformly permit and often foster such diversity to preserve individual liberty. Inequalities of intelligence and information are as much a part of the human condition as inequalities of wealth,⁷² and representative governments tend to take advantage of these inequalities rather than wishing them away or seeking to eliminate them. Political equality includes the rights of every member of the community to vote or to speak freely;⁷³ it does not entitle every member to achieve his policy preferences on exactly the same terms. Discrepancies in the capacity of different citizens to achieve their policy outcomes are not widely considered “incompatible” with the principle of political equality. Because democracy requires *political* equality and not equality in the capacity to achieve policy outcomes, it is not inconsistent with evidence based policy.

Evidence based policy might be said to stand in some tension with the principle of representation on the ground that a well-ordered regime will endeavor to maximize its members’ access to the processes of policy making. Even that tension may be resolved by conceiving of evidence based policy as a modest rule of discourse. “Discourse encompasses the concepts and ideas relevant for policy, and the interactive processes of communication and policy formulation that serve to generate and disseminate these ideas”⁷⁴ The most democratic event in ICANN’s calendar—the public forum held at its periodic international meetings—is governed by certain rules of discourse. Community members who want to speak must line up, wait their turn, limit their comments or questions to two minutes, and refrain from abusive or vulgar language. None of these rules are thought to impinge on the principle of equal respect for every community member. Evidence based policy may be seen as similar rules of discourse, conditioning the credibility and persuasiveness of a policy proposal. Evidence may be preferred over opinion. So long as evidence based policy does not exclude expressions of opinion from consideration entirely, any tension with the principle of representation would appear to be reduced if not removed.

Correctly understood, evidence based policy can withstand charges of scientism and an inconsistency with democratic values. What remains is to articulate an interdisciplinary model of evidence based policy and apply it to ICANN using case studies based on decisions where the model can illuminate more precisely where ICANN falls short of its commitment to fact-based policy.

AN INTERDISCIPLINARY MODEL OF EVIDENCE BASED POLICY

An interdisciplinary model of evidence based policy, to be thoroughly rigorous, would require an analysis of how dozens of disciplines have adopted, adapted, or rejected evidence based policy. Because time constraints make that comprehensive approach impossible, the aim here is to construct a plausible model of evidence based policy based on the common elements of evidence based medicine, management, international development, and government, as discussed above. The model, while adequate for this discussion, is certainly open to further refinement in light of research and experience.

To review, Sackett's model of evidence based medicine envisions "the conscientious, explicit, and judicious use of current best evidence in making decisions," demands "a bottom up approach that integrates the best external evidence with individual clinical expertise and patients' choice," and rejects decisions made obsolete by the lack of "current best evidence" or "slavish cookbook approaches" that purport to displace individual expertise.⁷⁵ Other disciplines have borrowed from these elements and augmented them when adapting Sackett's model. Acquiring and using high quality evidence in making policy is of course the central goal of evidence based policy, whatever the context.⁷⁶ Some pursue that goal by striving to master causal connections, isolate variables that "measurably affect desired outcomes," and build communities and institutional supports to encourage the appropriate use of evidence.⁷⁷ Others pursue it by focusing on sound methodology; acquiring good quality data; opening up research processes and results for transparent inspection; acquiring expertise in the form of well-trained people; and fostering a receptiveness to evidence, "a process that begins with a question rather than an answer, and that has institutions to support such inquiry."⁷⁸

Several reasons are advanced for adopting an evidence based approach to policy making, the most obvious of which are that policy is more relevant and durable when it is supported by the best available evidence. Opinion-based policy is generally condemned⁷⁹ if only because "[w]ithout evidence, policy makers must fall back on intuition, ideology, or conventional wisdom—or, at best, theory alone."⁸⁰

In addition to these discipline-specific elements, a cross-sector study has proposed certain elements of evidence based policy as essential to the model. They include "[a]greement as to what counts as evidence in what circumstances"; "[a] strategic approach

to the creation of evidence in priority areas, with concomitant systematic efforts to accumulate evidence in the form of robust bodies of knowledge”; “[e]ffective dissemination of evidence to where it is most needed and the development of effective means of providing wide access to knowledge”; and “[i]nitiatives to ensure the integration of evidence into policy and encourage the utilisation of evidence in practice.”⁸¹

Constructing an interdisciplinary model of evidence based policy must take into account certain cautions. Factors besides evidence influence—and at least sometimes rightly influence—the formation of policy.⁸² Maintaining consistency with the principle of representation requires evidence based policy to be framed as rules of discourse that condition the credibility and persuasiveness of evidence and not as rules that altogether exclude expressions of opinion from consideration. And the model must avoid the problem of making “excessive claims for the role that research can play in guiding policymaking and practice.”⁸³ Part of the solution lies in tailoring the type of evidence sought to the question asked, concentrating on evaluation methods that “generate the highest quality and most credible evidence that corresponds to the questions being asked, taking into consideration time, budget and other practical considerations.”⁸⁴ Another part of the solution is to recall that what qualifies as evidence of the “highest quality” differs considerably depending on the character of each professional discipline.⁸⁵ This interdisciplinary diversity suggests the need for “being more explicit about the role of research vis-à-vis other sources of information, as well as greater clarity about the relative strengths and weaknesses of different methodological stances.”⁸⁶

An interdisciplinary model of evidence based policy, distilled from these various considerations, might be couched in terms of a few principles:

- ♦ Policy decisions based on the best available evidence should be preferred to decisions based on mere opinion, ideology, conventional wisdom, or conjecture. What qualifies as “best available evidence” depends on the policy question, the relevant professional discipline, and the institutional setting.
- ♦ Policy decisions should stand on an agreement of the best available evidence with professional expertise (both subject matter and institutional).
- ♦ High quality data in areas of strategic concern, especially benchmarking institutional performance, should be routinely acquired.

- ♦ Expertise in relevant subject matters, especially evaluation and data analysis, and in relevant institutions should be acquired.
- ♦ Routine forms of communication should be established, for the purpose of communicating evidence to and from policy makers.
- ♦ Policy decisions should be made transparent by disclosing the data, assumptions, and methodologies that produced it in sufficient detail for the analysis to be replicated.
- ♦ Policy proposals and assertions should be evaluated using these principles as rules of discourse: they are intended to condition the credibility and persuasiveness of a policy proposal or assertion without excluding expressions of opinion from consideration altogether.

Implementing this model should be guided by two key questions: “what works for whom in what circumstances”⁸⁷ and does this theory work “in these respects, for these subjects, in these kinds of situations”⁸⁸

THEORIZING FACT-BASED POLICY FOR ICANN

This interdisciplinary model of evidence based policy can improve our understanding of ICANN’s commitment to fact-based policy, as the following case studies will illustrate. Before proceeding, however, it is necessary to summarize ICANN’s unique institutional character and its complex policy making apparatus. These characteristics will determine how the model should apply.

1. Policy Making in ICANN

ICANN uniquely combines a private legal form and global public power.⁸⁹ It is a private corporation “organized under the California Nonprofit Public Benefit Corporation law for charitable and public purposes.”⁹⁰ Although headquartered in California and organized under California law,⁹¹ ICANN exercises global authority over the Internet DNS. No single person or organization controls the Internet as a whole,⁹² but ICANN manages one of the most critical and globally important aspects of its global infrastructure through its responsibilities as the overall manager and technical coordinator for the Internet DNS.⁹³

ICANN relies for its policy development on a network of Supporting Organizations and Advisory Committees organized by the presumed subject matter expertise or interest of its members. Supporting Organizations include the Generic Names Supporting

Organization (GNSO),⁹⁴ the Council of the Country Code Names Supporting Organization (ccNSO),⁹⁵ and the Address Supporting Organization (ASO).⁹⁶ ICANN's Bylaws prescribe four Advisory Committees,⁹⁷ including the Governmental Advisory Committee (GAC), consisting of representatives from national governments; the Security and Stability Advisory Committee (SSAC) that advises ICANN on security and integrity matters of the Internet's naming and address allocation systems; the Root Server System Advisory Committee (RSSAC) that brings together the root name server operators to advise the Board about the operation of the root zone; and the At-Large Advisory Committee (ALAC), which advises the ICANN Board of Directors regarding the interests of individual Internet users. Furthermore, the Technical Liaison Group (TLG) connects the Board with sources of technical advice on matters persistent to ICANN's activities and the Board is also entitled to seek advice from external experts.

As this brief description of ICANN's policy making apparatus suggests, the "DNS is more than a technical system; it is also an administrative and policy system.... [P]aralleling the DNS's technical centralization is administrative and policy centralization."⁹⁸ Policy making power over the DNS is centralized in ICANN's Board of Directors,⁹⁹ which holds complete authority to conduct ICANN's affairs.¹⁰⁰ No other officer or entity has power to reverse its decisions. Policies are developed and proposed by SOs and ACs, but the Board holds the ultimate power to decide whether to adopt or reject them.

With an interdisciplinary model of evidence based policy and ICANN's unique institutional character and policy making structure in view, it is now possible to better understand ICANN's commitment to fact-based policy.

2. Preliminary Observations

Notice first that ICANN's commitment to fact-based policy appears in the *Affirmation of Commitments* but not in the ICANN bylaws. The *Affirmation* is of course a core agreement between ICANN and the United States, its contracting partner for the IANA Agreement. But there is a curious sense that ICANN has managed to keep its commitment to fact-based policy at arms' length by not incorporating that commitment into its own bylaws. Although it is a practical and not a theoretical point, amending the bylaws to incorporate its commitment to fact-based policy would be helpful, if only to reinforce for ICANN's board and other officials the importance of adhering to this standard.

Notice too that the model of evidence based policy carries certain resonances for ICANN. The terms "evidence based policy" and "fact-based policy" are nearly identical. What difference separates "evidence" from "fact" may depend on intelligent evaluation, although it does no violence to the term "fact-based policy" to treat these terms as synonyms. Not all facts should be treated alike and evaluation can sort the epistemic wheat from the chaff. Also, it was Sackett who wrote that evidence based policy "requires a *bottom up approach* that integrates the best external evidence with individual clinical expertise and patients' choice."¹⁰¹ This unusual phrase echoes the "bottom-up policy development processes"¹⁰² characteristic of ICANN's management of the DNS. In each instance, the phrase suggests a policy making process driven by the person (whether physician or stakeholder) in closest touch with the facts. And the suggestion that evidence based policy requires "'opening the books' in terms of data, assumptions and methodologies, such that the analysis could be replicated"¹⁰³ closely tracks ICANN's commitment "to provide a thorough and reasoned explanation of decisions taken, the rationale thereof and the sources of data and information on which [it] relied."¹⁰⁴

Beyond these superficial resemblances, the interdisciplinary model of evidence based policy illuminates ICANN's commitment to fact-based policy in several respects. It shows that policy decisions based on the best available evidence are preferable to opinion-based policy because they are more relevant and durable. It demonstrates that fact-based policy requires concomitant investments in data collection and the acquisition of expertise. It suggests that revealing the data, methods, and processes by which a policy is made enhances strengthens its factual basis by testing it against the acid test of analytical

replication. And it qualifies the claims and demands of evidence based policy to avoid inadvertently falling into scientism or conflicting with democratic values.

In these ways the interdisciplinary model of evidence based policy offered here can be said to improve our understanding of what ICANN's commitment to fact-based policy entails. But the model should be applied to individual policies to test its utility further. Following are brief case studies based on recent ICANN policy decisions.

3. Case Studies

ICANN's tendency to fall short of its commitment to fact-based policy is illustrated by its decision to charge a \$185,000 application fee for new gTLDs and the decision to permit the cross-ownership of registries and registrars in the new gTLD market. Each decision may be advisable or inadvisable in other respects, but both were reached without a defensible basis in fact. Evaluating them in light of the interdisciplinary model of evidence based policy is intended to show more precisely where the policy failures occurred. Suggestions for improving ICANN's policy making will be implicit in much of this discussion, but additional work will be necessary to extend the theoretical model of fact-based policy offered here into a complete set of prescriptions for improving ICANN's performance concerning its commitment to fact-based policy.

gTLD Application Fee

Perhaps the most dramatic policy decision in ICANN's history was issued on June 20, 2011, when the Board of Directors approved a plan to introduce dozens if not hundreds of new gTLDs into the root zone.¹⁰⁵ That plan includes an application fee of \$185,000 per sought-after gTLD. This fee has been challenged because of its size and the potential effects of a large amount of excess revenue on ICANN as an institution.¹⁰⁶ Relevant for this discussion, however, is the question of how ICANN arrived at this figure.

ICANN offered alternative explanations for its decision. On the one hand, it said that the \$185,000 represents an estimate of the administrative costs over ten applications for sponsored TLDs beginning in 1985.¹⁰⁷ On the other, it is said to reflect "a detailed costing methodology that includes the new gTLD program development costs and both the more-easily and less-easily predictable costs associated with evaluating new gTLD applications through to delegation in the root zone."¹⁰⁸ Coincidence could hardly explain

arriving at the same figure by both methods. Moreover, ICANN has not published its “detailed costing methodology” and there remain serious questions about some of the components of the application fee, especially the \$60,000 designated for risk management.¹⁰⁹

By applying the interdisciplinary model of evidence based policy, it becomes clear that ICANN’s decision to charge a \$185,000 application fee is defective. It was not based on the best available evidence, or ICANN could not have asserted different methods for arriving at the same figure. (Besides, a staff estimate of past costs for a different program is hardly the gold standard of evidence.) This conclusion is bolstered by ICANN’s decision not to publish its “costing methodology,” despite penetrating questions about the risk management portion. Weak transparency has fueled doubts about ICANN’s factual basis for the fee.

Cross-Ownership of Registries and Registrars in New gTLDs

For historic reasons, ICANN has observed certain restrictions on cross-ownership of registries and registrars. In the past 18 months it has reaffirmed and then reversed that policy with respect to new gTLDs. In March 2010 the Board of Directors formally resolved that “within the context of the new gTLD process, there will be strict separation of entities offering registry services and those acting as registrars. No co-ownership will be allowed.”¹¹⁰ The Board added, however, that it would consider any policy on cross-ownership from the GNSO that the Board approved before the new gTLD program was launched.¹¹¹ ICANN’s May 2010 version of the gTLD Applicant Guidebook contained a note reiterating that the Board “continue[d] to encourage the GNSO to develop a stakeholder-based policy on these [cross-ownership] issues.”¹¹² Despite its efforts, the GNSO could not overcome its internal divisions to issue a consensus policy.¹¹³

Then, in November 2010, the Board reversed course by formally directing the next version of the Applicant Guidebook to be revised to include the policy that “ICANN will not restrict cross-ownership between registries and registrars.”¹¹⁴ The reasons given for changing its policy included the imbalance of contractual treatment restricting registries but not registrars; the absence of a formal policy on cross-registration; an argument that “historical contract prohibitions on registries acquiring registrars do not provide a compelling basis for principled decision-making”; and an assurance that “the Board is

committed to making fact-based decisions, and has carefully considered available economic analysis, legal advice and advice from the community.”¹¹⁵

The United States promptly complained that the Board’s decision on cross-ownership meant that “[i]n the context of the new gTLD program, ICANN is failing to meet [its] commitment” to fact-based policy. Specifically, it pointed out that “the record of this decision fails to provide a thorough and reasoned explanation of how ICANN moved from a position in March ... to the November 5, 2010 decision allowing full cross ownership.”¹¹⁶

Applying the interdisciplinary model of evidence based policy to ICANN’s decision on cross-ownership amply supports the position of the United States. The Board’s reassurance that it “is committed to making fact-based decisions”¹¹⁷ falls flat given its failure to disclose the factual grounds for its decision. ICANN’s weak transparency (again) suggests additional questions in light of the model. Did the Board have the best available evidence to support its decision and err only by failing to disclose it? Or does its weak transparency indicate an absence of evidentiary support? Not surprisingly, weak transparency obstructs meaningful analysis of a decision using the model of evidence based policy. Questions regarding the quality of evidence or its proper use do not come up because information about what evidence was selected remains undisclosed. We can only speculate whether the Board had better facts than it communicated when it lifted all restrictions on cross-ownership. What it did communicate was a *fait accompli*, not a reasoned decision with a factual basis that can be intelligibly understood and evaluated.

4. The Model in Practice

A sound theoretical model supplies the right questions to ask. From that perspective, applying the interdisciplinary model of evidence based policy to these case studies sheds additional light on ICANN’s commitment to fact-based policy. Its decision to charge an application fee of \$185,000 is questionable, in part, because the decision lacks an adequate evidentiary basis and because ICANN’s failure to disclose its methodology for arriving at that figure undermines the credibility of that decision. Weak transparency altogether defeats meaningful analysis of the decision to lift restrictions on cross-ownership with respect to new gTLDs. So much is perhaps commonplace.

What is surprising is the extent to which the interdisciplinary model addresses questions that are relevant to ICANN policy making in general, and the case studies in particular, but that did not arise because of ICANN's weak transparency. Transparency turns out to be indispensable for carrying out ICANN's commitment to fact-based policy. Sophisticated questions about the relative value and credibility of different kinds of evidence, fine points of research methodology, and institutional supports for evidence based policy—none of these come up unless ICANN discloses enough information to see the same evidence on which decision makers relied.

Once the problem of transparency is resolved, or at least reduced, the interdisciplinary model points the way to additional research. It suggests, for instance, that ICANN's bottom-up policy development process should not be confused with the production of epistemically sound research. The former develops policy in the SOs and ACs through a roughly democratic system of proposal, counterproposal, bargaining, and special pleading. Resulting policies may reflect a tolerable compromise among competing stakeholders, but they cannot stand, except by accident, on a firm evidentiary foundation. Applying the theoretical model described here to PDPs and their affiliated processes could improve ICANN's policy making by elevating the standard of evidence on which they rely.

CONCLUSION

ICANN's commitment to fact-based policy is better understood with the help of the interdisciplinary model of evidence based policy described here. That model would guide ICANN's policy makers through the application of several principles:

- ◆ Policy decisions based on the best available evidence should be preferred to decisions based on mere opinion, ideology, conventional wisdom, or conjecture. What qualifies as “best available evidence” depends on the policy question, the relevant professional discipline, and the institutional setting.
- ◆ Policy decisions should stand on an agreement of the best available evidence with professional expertise (both subject matter and institutional).
- ◆ High quality data in areas of strategic concern, especially benchmarking institutional performance, should be routinely acquired.
- ◆ Expertise in relevant subject matters, especially evaluation and data analysis, and in relevant institutions should be acquired.

- ♦ Routine forms of communication should be established, for the purpose of communicating evidence to and from policy makers.
- ♦ Policy decisions should be made transparent by disclosing the data, assumptions, and methodologies that produced it in sufficient detail to be replicated.
- ♦ Policy proposals and assertions should be evaluated using these principles as rules of discourse: they are intended to condition the credibility and persuasiveness of a policy proposal or assertion without excluding expressions of opinion from consideration altogether.

The case studies suggest that ICANN falls short of its commitment to fact-based policy because it does not rely on the best available evidence and because it fails to disclose sufficient information about its decision making processes to evaluate the evidence it does rely on. Its weak transparency is especially problematic. Until ICANN routinely discloses sufficient information about its policy decisions for community members to replicate its analysis, the goal of improving ICANN's adherence to fact-based policy will be frustrated. More positively, the interdisciplinary model of evidence based policy offers promising avenues for further research in Internet governance.

* * *

John Adams said it best: “facts are stubborn things”¹¹⁸—stubborn enough to deserve greater attention from ICANN as it carries out its global responsibilities for the Internet DNS.

Endnotes

¹ *Affirmation of Commitments by the United States Department of Commerce and the Internet Corporation for Assigned Names and Numbers* ¶ 1 & n.1 (Sep. 30, 2009) (*Affirmation*) (memorializing “the technical coordination of the Internet’s domain name and addressing system (DNS) globally by a private sector led organization” and recognizing that “ICANN coordinates these [unique DNS] identifiers at the overall level”).

² Bylaws for Internet Corporation for Assigned Names and Numbers, art. I, § 1.3 (June 24, 2011).

³ U.S. Dep’t of Commerce, *Management of Internet Names and Addresses*, 63 Fed. Reg. 31741, 31749 (June 10, 1998) (*DNS White Paper*).

⁴ *Id.*

⁵ *Id.*

⁶ *Affirmation of Responsibilities for ICANN’s Private Sector Management*, ¶ 6 (Sep. 25, 2006), attached as Annex A to Joint Project Agreement between the U.S. Department of Commerce and the Internet Corporation for Assigned Names and Numbers (Sep. 29, 2006).

⁷ *Affirmation* at ¶ 7.

⁸ *Id.* at ¶ 9.1 (describing the requirement to form a community review team that “shall consider the extent to which the assessments and actions undertaken by ICANN have been successful in ensuring that ICANN is acting transparently, is accountable for its decision-making, and acts in the public interest.”).

⁹ See Final Recommendations of the Accountability and Transparency Review Team 3 (Dec. 31, 2010) (quoting *Affirmation* at ¶ 7).

¹⁰ Letter from Lawrence E. Strickling, Ass’t Sec’y for Commc’ns & Info., U.S. Dep’t of Commerce, to Rod Beckstrom, Chief Exec. Officer, Internet Corp. for Assigned Names & Numbers 1 (Dec. 2, 2010).

¹¹ *Id.*

¹² *Affirmation* at ¶ 7.

¹³ David L. Sackett, William M.C. Rosenberg, J.A. Muir Gray, R. Brian Haynes & W. Scott Richardson, *Evidence-Based Medicine: What It Is and What It Isn’t*, 312 *Brit. Med. J.* 71, 71 (1996).

¹⁴ *Id.*

¹⁵ *Id.*

¹⁶ *Id.* at 71-72.

¹⁷ *Id.* at 72.

¹⁸ *Id.*

¹⁹ *Id.*

²⁰ *Id.* at 71-72.

²¹ Denise M. Rousseau, *Is There Such a Thing As “Evidence-Based Management”?*, 31 *Acad. Mgmt. Rev.* 256, (2006).

²² *Id.* at 258.

²³ *Id.* at 259-60.

- ²⁴ Jeffrey Pfeffer & Robert I Sutton, *Evidence-Based Management*, Harv. Bus. Rev. 3 (Jan. 2006).
- ²⁵ United States Agency for International Development, Bureau for Policy, Planning, and Learning, *Evaluation Policy* 3 (Jan. 19, 2011).
- ²⁶ *Id.* at 9.
- ²⁷ *Id.* at 11.
- ²⁸ *Id.*
- ²⁹ See Carlos R.S. Milani, *Evidence-Based Policy Research: Critical Review of Some International Programmes on Relationships Between Social Science Research and Policy-Making* 13 (UNESCO 2005).
- ³⁰ The Prime Minister & The Cabinet Office, *Modernising Government* 17 (March 1999).
- ³¹ Philip Davies, *Is Evidence-Based Government Possible?*, Jerry Lee Lecture, Campbell Collaboration Colloquium 3 (2004).
- ³² *Id.* at 24.
- ³³ *Id.* at 25.
- ³⁴ *Id.*
- ³⁵ Gary Banks, *Evidence-Based Policy Making: What Is It? How Do We Get It?* 8 (Austl. Productivity Commission 2009).
- ³⁶ *Id.* at 11-12.
- ³⁷ *Id.* at 14.
- ³⁸ *Id.* at 15.
- ³⁹ *Id.* at 18.
- ⁴⁰ *Id.* at 4.
- ⁴¹ See Ron Haskins & Jon Baron, *The Obama Administration's Evidence-Based Social Policy Initiatives: An Overview*, in National Endowment for Science, Technology and the Arts, *Evidence for Social Policy and Practice* 28 (Apr. 2011) (“The Obama Administration has created the most expansive opportunity for rigorous evidence to influence social policy in the history of the US government.”).
- ⁴² See Briony Oates, *Evidence-Based Information Systems: A Decade Later*, ECIS [European Conference on Information Systems] 2011, Paper 222, at 9 (2011) (regretting the lack of attention to evidence-based practice by Information Systems practitioners and expressing hope that a refined model of evidence-based practice deserves more attention because it “enables a richer and more nuanced approach”).
- ⁴³ See OECD, *Evidence in Education: Linking Research and Policy* (2007); Philip Davies, *What Is Evidence-Based Education?*, 47 Brit. J. Educ. Stud. 108 (1999).
- ⁴⁴ Madeline Carter, *Evidence-Based Policy, Practice, and Decisionmaking: Implications for Paroling Authorities* (National Institute of Corrections 2011); Brandon C. Welsh & David P. Farrington, *Toward an Evidence-Based Approach to Preventing Crime*, 578 Annals Am. Acad. Pol. & Soc. Sci. 158 (2001).
- ⁴⁵ Sackett, et al., *supra* note 13, at 71-72.
- ⁴⁶ F.A. Hayek, *The Counter-Revolution of Science* 15 (1955).
- ⁴⁷ *Id.* at 16.

⁴⁸ *Id.* at 28.

⁴⁹ *See id.*

⁵⁰ *See* Milani, *supra* note 29, at 49 (criticizing the application of the evidence based practice model by international organizations by asserting that “[t]here is therefore a need to refuse to concede science to scientism, and reopen the debate on when, why and how research matters in policy-making.”).

⁵¹ Martyn Hammersley, *Is the Evidence-Based Practice Movement Doing More Good than Harm?*, 1 *Evid. & Pol’y* 94 (2005).

⁵² *Id.* at 85.

⁵³ Ray Pawson, *Evidence Based Policy: I. In Search of a Method*, ESRC UK Centre for Evidence Based Policy and Practice, Working Paper 3, at 2 (2001).

⁵⁴ Sandra Nutley, Huw Davies & Isabel Walter, *Evidence Based Policy and Practice: Cross Sector Lessons from the UK*, ESRC UK Centre for Evidence Based Policy and Practice, Working Paper 9, at 5 (2002) (references omitted).

⁵⁵ *Id.* (references omitted).

⁵⁶ Hammersley, *supra* note 51, at 86.

⁵⁷ Sandra Nutley, Huw Davies & Isabel Walter, *Evidence Based Policy and Practice: Cross Sector Lessons from the UK*, ESRC UK Centre for Evidence Based Policy and Practice, Working Paper 9, at 5 (2002) (references omitted).

⁵⁸ Sackett, et al., *supra* note 13, at 72.

⁵⁹ Aristotle, *Nicomachean Ethics*, 1730, 1094^b24-25, in 2 *The Complete Works of Aristotle* (W.D. Ross & J.O. Urmson trans. & Jonathan Barnes ed., 1984).

⁶⁰ Ray Pawson, *Evidence-Based Policy: The Promise of a Realist Synthesis*, 8 *Evaluation* 340, 342 (2002).

⁶¹ *Id.*

⁶² Pawson, *supra* note 53, at 3.

⁶³ *Id.*

⁶⁴ Gert Biesta, *Why “What Works” Won’t Work: Evidence-Based Practice and the Democratic Deficit in Educational Research*, 57 *Educ. Theory* 1, 20 (“Thus the fact that the whole discussion about evidence-based practice seems only to have technical expectations about the practical role of research is a worrisome sign from the point of view of democracy.”).

⁶⁵ Ian Sanderson, *Is It ‘What Works’ That Matters?*, 18 *Research Papers in Educ.* 331, 332 (2003) (punctuation altered).

⁶⁶ Shaun P. Young, *Evidence of Democracy? The Relationship Between Evidence-Based Policy and Democratic Government*, 3 *J. Pub. Admin. & Pol’y Research* 19, 23 (2011).

⁶⁷ *DNS White Paper*, *supra* note 3, at 31743.

⁶⁸ *Id.* at 31745, 31743.

⁶⁹ Bylaws, *supra* note 2, at art. VI, § 2.2 (June 24, 2011) (requiring the Nominating Committee to “ensure when it makes its selections that the Board includes at least one Director who is from a country in each ICANN Geographic Region”).

⁷⁰ Young, *supra* note 66, at 23.

⁷¹ *Id.*

⁷² Compare The Federalist No. 10, at 58 (Jacob E. Cooke ed., 1961) (James Madison) (“From the protection of different and unequal faculties of acquiring property, the possession of different degrees and kinds of property immediately results ...”) with John Rawls, A Theory of Justice 136 (1971) (“Somehow we must nullify the effects of specific contingencies which put men at odds and tempt them to exploit social and natural circumstances to their own advantage. Now in order to do this I assume that the parties are situated behind a veil of ignorance.”).

⁷³ See 1 ALEXIS DE TOCQUEVILLE, DEMOCRACY IN AMERICA 89 (Eduardo Nolla ed. & James T. Schleifer trans., 2010) (bilingual edition) (“Now I know only two ways to have equality rule in the political world: rights must either be given to each citizen or given to no one”).

⁷⁴ Harry Jones, *Policy-Making as Discourse: A Review of Recent Knowledge-to-Policy Literature*, ODI-IKM Working Paper No. 5, at 14 (Aug. 2009).

⁷⁵ Sackett, et al., *supra* note 13, at 71-72.

⁷⁶ See Rousseau, *supra* note 21, at 258 (characterizing evidence based policy as “a paradigm for making decisions that integrate the best available research evidence with decision maker expertise and client/customer preferences to guide practice toward more desirable results”); USAID, *supra* note 25, at 3 (asserting that evidence based policy “bases policy and investment decisions on the best available empirical evidence”); *Modernising Government*, *supra* note 30, at 17 (“We will improve our use of evidence and research so that we understand better the problems we are trying to address.”).

⁷⁷ See Rousseau, *supra* note 21, at 259-60.

⁷⁸ *Id.* at 18.

⁷⁹ See USAID, *supra* note 25, at 11 (condemning the practice of “relying exclusively upon anecdotes, hearsay and unverified opinions”); Davies, *supra* note 31, at 3 (explaining that evidence-based approach to public policy “stands in contrast to opinion-based policy, which relies heavily on either the selective use of evidence (e.g. on single studies irrespective of quality) or on the untested views of individuals or groups, often inspired by ideological standpoints, prejudices, or speculative conjecture”).

⁸⁰ Banks, *supra* note 35, at 4

⁸¹ Nutley, et al., *supra* note 55, at 2.

⁸² See Davies, *supra* note , at 25 (explaining that factors besides evidence influence policy, including “the experience, expertise and judgement of policy officials and Ministers, values and ideology, available resources, habits and tradition, lobbyists, pressure groups and the media, and the pragmatics and contingencies of everyday political life”).

⁸³ Hammersley, *supra* note 51, at 94.

⁸⁴ USAID, *supra* note 25, at 9; accord Davies, *supra* note 31, at 24 (“The driving force for evidence in government tends to be the type of question being asked, rather than any particular research method or design.”).

⁸⁵ See Nutley, et al., *supra* note 57, at 3 (“In contrast to the hierarchical approach in health care, other sectors such as education, criminal justice and social care are riven with disputes as to what constitutes appropriate evidence, there is relatively little experimentation (especially compared with health care), and divisions between qualitative and quantitative paradigms run deep ...”); Lisel O’Dwyer, *A Systematic Literature Review of Evidence-Based Policy*, AHURI Positioning Paper No. 45, at 19 (2003) (acknowledging that “there are several ways in which evidence based public policy is formulated” and that besides randomized trials and systematic reviews “other research designs are also valid depending on the context and object of study”).

⁸⁶ Nutley, et al., *supra* note 54, at 3.

⁸⁷ Pawson, *supra* note 60, at 342.

⁸⁸ *Id.* (punctuation altered).

⁸⁹ See Centre for Global Studies, *Enhancing Legitimacy in the Internet Corporation for Assigning Names and Numbers: Accountable and Transparent Governance Structures* 1 (Sep. 18, 2002) (“ICANN is a unique organization. There is no parallel for this public-private corporation, with its regulatory functions that have material consequences across a broad spectrum of interests....”).

⁹⁰ Articles of Incorporation of Internet Corporation for Assigned Names and Numbers, § 3 (rev. Nov. 21, 1998), available at <http://www.icann.org/en/general/articles.htm>.

⁹¹ See ICANN, *Accountability & Transparency: Frameworks and Principles* 17 (Jan. 2008) (ICANN is “subject to both the state laws of California, and United States federal laws”).

⁹² Rolf H. Weber, *Shaping Internet Governance: Regulatory Challenges* 154 (2009) (footnote omitted) (“There is no central governing body of the Internet.”).

⁹³ *Affirmation* at ¶ 1 n.1 (“ICANN coordinates these [unique DNS] identifiers at the overall level”).

⁹⁴ Bylaws, *supra* note 2, at art. X.

⁹⁵ *Id.* at art. IX.

⁹⁶ *Id.* at art. VIII.

⁹⁷ See *id.* at art. XI.

⁹⁸ Hans Klein, *ICANN and Internet Governance: Leveraging Technical Coordination to Realize Global Public Policy*, 18 *Info. Soc’y* 193, 196 (2002).

⁹⁹ Bylaws, *supra* note 2, at art. 2, § 1 (“the powers of ICANN shall be exercised by, and its property controlled and its business and affairs conducted by or under the direction of, the Board”).

¹⁰⁰ ICANN, *Accountability & Transparency: Frameworks and Principles* 5 (Jan. 2008) (“Under California corporate law, ICANN’s Board of Directors is charged with overall responsibility for the management of the business and affairs of the corporation.”).

¹⁰¹ Sackett, *supra* note 13, at 71 (emphasis added).

¹⁰² *Affirmation of Responsibilities*, *supra* note 6, at ¶ 6.

¹⁰³ Banks, *supra* note 35, at 14.

¹⁰⁴ *Affirmation* at ¶ 7.

¹⁰⁵ ICANN, Approved Board Resolutions, 2011.06.20.01.

¹⁰⁶ See R. Shawn Gunnarson, *When It Comes to gTLDs, Follow the Money (Part 1)*, July 30, 2009; R. Shawn Gunnarson, *When It Comes to gTLDs, Follow the Money (Part 2)*, Aug. 4, 2009.

¹⁰⁷ ICANN, *Cost Considerations of the New gTLD Program 2-3* (Oct. 24, 2008).

¹⁰⁸ *Id.* at 3.

¹⁰⁹ Joint SO/AC Working Group, *Milestone Report: Applicant Support, New Generic Top-Level Domain Program* (Nov. 11, 2011) (expressing full consensus behind a request for the ICANN board to reconsider the \$60,000 risk/contingency portion of the gTLD applicant fee and questioning “if ICANN really expects a total of US\$30,000,000 ... in unknown costs to surface”).

¹¹⁰ ICANN, Approved Resolutions, 2010.03.12.17.

¹¹¹ *Id.* at 2010.03.12.18.

¹¹² ICANN, *Draft Applicant Guidebook*, version 4, at 1-17 n.1 (May 31, 2010).

¹¹³ Vertical Integration PDP Working Group, *Revised Initial Report on Vertical Integration Between Registrars and Registries* 3 (Aug. 18, 2010) (“[T]he VI Working Group has developed a number of proposals to address vertical integration for the new gTLD program but has not reached consensus as to which one to recommend.”).

¹¹⁴ ICANN, Approved Resolutions, 2010.11.05.02.

¹¹⁵ *Id.*

¹¹⁶ Strickling letter, *supra* note 10, at 1.

¹¹⁷ *Id.*

¹¹⁸ See John Adams, Argument for the Defense, *Rex v. Weems*, in 3 Legal Papers of John Adams 242, 269 (L. Kinvin Wroth & Hiller B. Zobel eds., 1965).