

E-Rulemaking: Needs from ICT Perspectives

Kincho H. Law
Professor of Civil and Env. Engr.
Stanford University
Stanford, CA 94305-4020
law@stanford.edu

Gloria T. Lau
Research Scientist
Thomson Findlaw
Sunnyvale, CA 94086
glau@stanford.edu

ABSTRACT

E-Rulemaking aims to increase public participation and to improve governmental processes in creating rules. A central Federal docket system has been established for posting of proposed rules and facilitating the submission of public comments. While the Federal docket system is an important first step, other rulemaking activities, including legislation/rule drafting, public participation, processing and management of public comments, validating consistencies of rules, compliance assistance and rule enforcement, need further developments in order to fully realize the benefits of e-Rulemaking.

Categories and Subject Descriptors

H.3.3 [Information Storage and Retrieval]: Information Search and Retrieval – *retrieval models*, I.7.1 [Document and Text Processing]: Document and Text Editing – *Document management*, K.4.1 [Public Policy Issues]: Regulation.

General Terms

Management, Legal Aspects

Keywords

E-rulemaking, Comments, Drafting, Compliance, Enforcement.

1. INTRODUCTION

As one of the key E-Government initiatives by the Executive Office, e-Rulemaking has drawn significant interests from both government agencies and academic research community. The e-Rulemaking initiative aims to transform the Federal rulemaking process by enhancing the public's ability to participate in regulatory decision-making, with the expectation that "businesses [and public citizens] will no longer need the assistance of a lawyer or lobbyist to participate in the regulatory process [4]". Currently, a Federal docket system is in place to provide some infrastructure support for e-rulemaking. However, further advances in the use of information and communication technology (ICT) are needed to realize the benefits of e-Rulemaking.

2. CURRENT EFFORTS

During the notice-and-comment process of rulemaking, government agencies are required to inform and to invite the public to review proposed rules. Interested and affected parties then submit comments accordingly. Electronic media, such as the Internet, provide an environment for the public to comment on proposed rules and regulations. Currently, the most noticeable effort is the establishment of a one-stop Federal e-Rulemaking docket system *Regulations.gov*. The web portal system provides

supports for posting proposed rules and submission of public comments. The docket system will eventually allow users to access and search all publicly available regulatory material, such as Federal Register notices and rules, supporting analyses, and comments submitted by the public.

One immediate issue is that electronic submission can draw a large number of public comments that need to be reviewed and analyzed along with the drafted rules. An "effortless" electronic comment submission process can easily turn into a huge data processing problem for a government agency [13]. As noted by Eisner [3], government e-Rulemaking needs better tools to

- Organize, assess and respond to public comments
- Track and interact with commenters
- Summarize huge documents
- Detect duplications or contradictions with other proposals or existing requirements.

Various digital government research activities are now working towards supporting comment processing activities. Methodology is being investigated to compare drafted rules with public comments, with the objective to better organize public comments with proposed provisions and rules [7]. Language processing technologies are being developed to enable information retrieval, detecting near-duplicate comments, text summarization, and other tasks [11].

3. FURTHER APPLICATIONS OF ICT

The current web portal supports the basic notice-and-comment rulemaking process. In reality, however, the rulemaking process is more complex [2]. Rulemaking process involves "transforming legislation into specific, legally binding rules which are to be enforced by agencies [3]", where notice-and-comment is one, though important, step of the process. A holistic view of e-Rulemaking activities would include the drafting of legislation/rules, public notice and comment, rule validation, rule publication, and rule compliance assistance and enforcement. These activities need to be better coordinated in order to streamline the overall rulemaking process.

1. Rule Drafting: Properly designed tools can enhance the production of regulatory documents that can be read and interpreted by computer, and support advanced information retrieval services. Theories, models, and systems have been developed to support drafting of legal text [8]. Formal representations which include not only the rules but also useful information such as definitions, references and background information, related rules and exceptions, need to be developed and possibly standardized. With that, a drafting system can be

developed to automatically build formal representations from the "semi-structured" rule documents.

2. **Public Participation:** Engaging public participation is one of the stated objectives of the e-Rulemaking initiative. To this end, user-friendly interfaces are needed to assist in the commenting process. Commenters should be able to submit comments on a per provision basis, in addition to a per draft basis. Doing so will not only save participants time to paraphrase or cite their concerned provision but also will help rulemakers to locate related comments. Since cross references are often embedded in the rule, the system should also provide assistance to help searching and accessing multiple sources of regulations citing each other as references. Tools that encourage continued participation and support public deliberations will be beneficial [9].
3. **Rule Validation:** Regulations are frequently updated by agencies to reflect environmental changes and new policies. Tools that can detect ambiguity, consistency and contradiction are needed. Ambiguity could be difficult to deal with since it may arise in regulation texts intentionally and unintentionally. Inconsistencies and contradictions sometimes result from various regulations being issued by different governing bodies, each with different missions, authorities, stakeholders and modes of operation. Previous works have developed a semi-automated reference extraction parser, which can potentially be extended to locate cross citations and check for consistency of rules issued by different agencies [5,6].
4. **Rule Publication:** Governmental regulations should ideally be understandable and retrievable with ease by the general public. Meta information should be included to aid retrieval by identifying context, roles, and cross referencing. Tools should be developed to facilitate search and retrieval of rules according to needs. Facilitations for rule retrieval can also enhance research of applicable rules by the public and policy makers.
5. **Rule Compliance and Enforcement:** Deciphering and complying with regulations is a legal and paperwork nightmare for many businesses. As noted by Spence, "...a growing percentage of ... violations result from a misunderstanding of regulatory requirements or are otherwise unintended [12]." Complex rules can be detrimental to small businesses. Specific drafting tools should be developed to help policy writers in orchestrating clean and comprehensive rules. Having rules expressible in some suitable computational forms will also allow for automatic and quantitative processing [10]. Computable rules will promote performance-oriented standards versus overly detailed rules that often constrain business innovation.

4. DISCUSSION

While current Federal docket system represents an important first step, further advances and deployment of ICT can play a key role to enhance the e-Rulemaking process, from rule creation to rule management and compliance assistance. Regulations are increasingly recognized to be an important part of business

planning and strategy [1]. It is fundamentally important that rulemaking process becomes more citizen-centric and promote business innovation. E-Rulemaking provides a rich, multi-disciplinary research platform involving government agencies, social scientists, legal scholars, computer scientists, engineers and businesses as well as interested and affected citizens. Improvements and innovations of an integrated e-Rulemaking framework are much needed to help various parties to create, locate, retrieve, review, validate and comply with regulations.

5. REFERENCES

- [1] S.C. Beardsley, D. Bugrov and L. Enriquez, "The Role of Regulation in Strategy," *The McKinsey Quarterly*, November 15, 2005.
- [2] C. Coglianese, "E-Rulemaking: Information Technology and Regulatory Policy," Regulatory Policy Program Report No. RPP-05, Harvard University, John F. Kennedy School of Government, 2004.
- [3] N. Eisner, "In the Real World of Digital Government: Successes and Challenges of E-Rulemaking," *IEEE Computer*, pg 29, December, 2005.
- [4] Executive Office of the President of the United States, *E-Government Strategy, Implementing the President's Management Agenda for E-Government*, 2003, (available http://www.whitehouse.gov/omb/egov/2003egov_strat.pdf).
- [5] S. Kerrigan, *A Software Infrastructure for Regulatory Information Management and Compliance Assistance*, Ph.D. Thesis, Stanford University, 2003.
- [6] G. Lau, *A Comparative Analysis Framework for Semi-Structured Documents, with Applications to Government Regulations*, Ph.D. Thesis, Stanford University, 2004.
- [7] G.T. Lau, K.H. Law and G. Wiederhold, "A Relatedness Analysis Tool for Comparing Drafted Regulations and Associated Comments," *A Journal of Law and Policy for the Information Society*, 1(1):95-110, 2004/2005.
- [8] M.F. Moens, "Improving Access to Legal Information: How Drafting Systems Help," in A. Oskamp & A. Lodder (Eds.), *Information Technology and Lawyers*, Springer Publishers, pp. 119-136, 2006.
- [9] B.S. Noveck, "The Future of Citizen Participation in the Electronic State," *A Journal of Law and Policy for the Information Society*, 1(1):1-32, 2004/2005.
- [10] M.J. Sergot, F. Sadri, R. A. Kowalski, F. Kriwaczek, P. Hammond, and H.T. Cory, "The British Nationality Act as a Logic Program," *Communications of the ACM*, 29(5):370-386, 1986.
- [11] S. Shulman, J. Callan, E. Hovy, and S. Zavestovski, "Language Processing Technology for Electronic Rulemaking: A Project Highlight," *5th National Conf. on Digital Government Research*, Atlanta, GA, May, 2005.
- [12] D.B. Spence, "Paradox Lost: Logic, Morality, and the Foundations of Environmental Law in the 21st Century," *Columbia Journal of Environmental Law*, 20(1):145-182, 1995.
- [13] US Alcohol and Tobacco Tax and Trade Bureau (TTB). "Flavored Malt Beverages and Related Proposals; Posting of Comments Received on the TTB Internet Web Site." *Federal Register*, 68(231), 67388-67389, 2003.