

**EVALUATING E-RULEMAKING THROUGH THREE-LEVEL  
ONLINE INFORMATION STRUCTURE:  
AN EMPIRICAL STUDY ON SHANGHAI’S PUBLIC  
PARTICIPATION PRACTICE**

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China’s legislative system is complex. The administrative rules alone include administrative regulations (*Xingzheng Fagui*), government rules (*Zhengfu Guizhang*), and other normative documents (*Guifanxing Wenjian*). Procedural requirements for formulating administrative rules<sup>1</sup> are regulated by the Legislation Law of the People’s Republic of China (or Legislation Law)<sup>2</sup> and related laws<sup>3</sup> because there is no unified Administrative Procedure

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<sup>1</sup> In China, the concept of “administrative rulemaking” (*Xingzheng Guize Zhiding*) is close to “administrative legislation” (*Xingzheng Lifa*). Strictly speaking, it is different from “policy making” (*Xingzheng Juece*) and “decision making” (*Xingzheng Jueding*). XINGZHENG GUOCHENG ZHONG GONGZHONG CANYU DE ZHIDU SHIJIAN (行政过程中公众参与的制度实践) [THE SYSTEM PRACTICE OF PUBLIC PARTICIPATION IN THE ADMINISTRATIVE PROCESS] 3 (Wang Xixin (王锡铎) ed., 2008).

<sup>2</sup> *Lifa Fa* (立法法) [Law on Legislation] (promulgated by the Standing Comm. Nat’l People’s Cong., Mar. 15, 2000, effective July 1, 2000, amended Mar. 15, 2015). art. 4 (“Legislation shall be conducted according to the statutory power and procedures, on the basis of the overall interests of the State, and to maintain the unity and dignity of the socialist legal system.”); art. 80, 82 (Discussing that government rules are divided into departmental rules and local government rules: the former are formulated by the specific functional departments of the State Council; the latter are formulated by the municipal governments of the cities with districts.)

<sup>3</sup> See, e.g., *Xingzheng Fagui Zhiding Chengxu Tiaoli* (行政法规制定程序条例) [The Regulation on the Procedures for the Formulation of Administrative Regulations] (promulgated by the State Council, Nov. 16, 2001, effective Jan. 1, 2002, amended May 1, 2018), art. 13 (“To draft an administrative regulation, the drafting department shall disclose the draft of the administrative regulation and the explanation thereof to the public, and request comments”); *Guizhang Zhiding Chengxu Tiaoli* (规章制定程序条例) [The Regulations on the Procedures for the Formulation of Rules] (promulgated by the State Council, effective Jan. 1, 2002, amended May 1, 2018), art. 16 (Discussing that the drafting entity shall hold a

Law in China. Different administrative rules are guided by different procedural requirements, based on different legal hierarchies.<sup>4</sup>

Public participation is a procedural requirement that has been commonly recognized as a necessary component of rule development for the past several decades. The Legislation Law emphasizes the democratic principles of the legislative process. Article 5 presents one of its general principles that “legislation shall represent the will of the people, carry forward socialist democracy, and in adherence to openness in legislation, ensure the people’s participation in legislative activities through various channels.” In addition, Article 67 states that “in drafting administrative regulations, the opinions of the relevant authorities, organizations, deputies to the people’s congresses, and the general public shall be extensively solicited in multiple forms such as forums, discussion meetings, and hearings.” Such procedural requirements also apply to the formation of government rules. Furthermore, both The Regulation on the Procedures for the Formulation of Administrative Regulations<sup>5</sup> and The Regulations on the Procedures for the Formulation of Rules,<sup>6</sup> which are based on the Legislation Law, have established specific procedural requirements for public participation during the draft and review stage of the rule.<sup>7</sup> Many provinces and municipalities have set procedural requirements for public participation at the local level, either through the local administrative procedures ordinance or through special provisions for rulemaking. It can be concluded from this evidence that public participation is recognized as an important

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hearing to request comments if the drafted rules have a significant impact on the rights and obligations of citizens, legal persons, or other organizations.)

<sup>4</sup> For example, when drafting administrative regulations, agencies are mandatorily required to seek public opinions. However, when drafting government rules, agencies are only required to request comments through hearings if the drafted rules have a significant impact on certain parties. *See id.*

<sup>5</sup> Xingzheng Fagui Zhiding Chengxu Tiaoli (行政法规制定程序条例) [The Regulation on the Procedures for the Formulation of Administrative Regulations] (promulgated by the State Council, Nov. 16, 2001, effective Jan. 1, 2002, amended May 1, 2018).

<sup>6</sup> Guizhang Zhiding Chengxu Tiaoli (规章制定程序条例) [The Regulations on the Procedures for the Formulation of Rules] (promulgated by the State Council, effective Jan. 1, 2002, amended May 1, 2018).

<sup>7</sup> Lifa Fa (立法法) [Law on Legislation] (promulgated by the Standing Comm. Nat’l People’s Cong., Mar. 15, 2000, effective July 1, 2000, amended Mar. 15, 2015), arts. 5, 67, & 83.

factor in the process of government rulemaking by both top decision-making authorities and the academic community in China.<sup>8</sup>

The rapid advancement of electronic technology has provided both opportunities and challenges for processing public participation in rulemaking. China is one of many countries globally that have set goals to develop an effective process for ensuring public participation in government decision-making through electronic means, especially through the use of Internet resources.<sup>9</sup> So-called e-rulemaking enhances the democracy and transparency of administrative rulemaking. The elements of the e-rulemaking mechanism are

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<sup>8</sup> Taking Hunan Province as an example, as the earliest local administrative procedure legislation, Article 6 of the Hunan Provincial Administrative Procedures Regulations stipulates the basic principle of public participation in administrative management. It then states the relevant requirements for public participation shall be stipulated in the administrative decision-making procedures. Hunansheng Xingzheng Chengxu Guiding (湖南省行政程序规定) [Hunan Provincial Administrative Procedures Regulations] (promulgated by Hunan Provincial People's Gov't, Apr. 9, 2008, effective Oct. 1, 2008). As special legislation for local regulations and rules, Article 13 and 24 of the Measures for the Drafting of Local Regulations and Rules of Hunan Province respectively sets up provisions on public participation in the draft and review stages of the document. Hunansheng Renmin Zhengfu Zhiding Difangxing Fagui Caoan he Guizhang Banfa (湖南省人民政府制定地方性法规草案和规章办法) [Measures for the Drafting of Local Regulations and Rules of Hunan Province] (promulgated by Hunan Provincial People's Gov't, Nov. 7, 2003, effective Jan. 1, 2004).

The Communist Party of China also emphasized in its report on the 19th National Congress of the Communist Party that "We will carry out lawmaking in a well-conceived and democratic way and in accordance with law, so that good laws are made to promote development and ensure good governance." XI JINPING'S REPORT AT THE 19<sup>TH</sup> NATIONAL CONGRESS OF THE COMMUNIST PARTY ON OCT. 18, 2017, at 34, available at <http://eg.china-embassy.org/eng/rdwt/20171015/t1508844.htm> [<https://perma.cc/JE84-NGUE>].

For discussions from the academic community, see, e.g., Wang Xixin & Zhang Yongle, *The Rise of Participatory Governance in China: Empirical Models, Theoretical Framework, and Institutional Analysis*, 13 U. PA. ASIAN L. REV. 24 (2018) (finding that "public participation in administrative process is widening and deepening"); Jiang Ming'an (姜明安), *Gongzhong Canyu yu Xingzheng Fazhi* (公众参与与行政法治) [Public Participation and Administrative Rule of Law], 2 CHINESE LEGAL SCI. 26 (2004) (stating that public participation is an important part of democratic political processes).

<sup>9</sup> See, e.g., Fazhi Zhengfu Jianshe Shishi Gangyao (法治政府建设实施纲要 (2015 - 2020 年)) [The Implementation Outline for Building a Government Ruled by Law (2015-2020)] (promulgated by the State Council, Dec. 23, 2015, effective Dec. 23, 2015). (Discussing that the government legislation should be "open to the public through the Internet, newspapers and other media to strengthen communication with the public.")

reflected at the normative level.<sup>10</sup> Institutionally they are also accompanied by the improvement of government websites at all levels. Although the institutional design of e-rulemaking differs in application among government and other relevant bodies, the core feature of seeking public opinion on draft government rules through an online platform remains a common thread.<sup>11</sup>

One American scholar in good company asserted “the most powerful technological vehicle for disseminating government information and increasing public participation in government decision-making available today is the Internet.”<sup>12</sup> Similarly, Chinese scholars have also observed that “the electronic age will bring revolution to rulemaking.” After nearly two decades of practical exploration, it is essential to examine how China has applied technology to rulemaking procedures to strengthen public participation.<sup>13</sup> In other words, do e-rulemaking practices in China

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<sup>10</sup> For example, among the 24 proposals that the United States government issued in its e-government planning, one is e-rulemaking. Cynthia Farina et al., *Rulemaking vs. Democracy: Judging and Nudging Public Participation that Courts*, 2 MICH. J. ENV'T. & ADMIN. L. 123, 126 (2012).

Measures of Guangzhou Municipality on Public Participation in Rule Making clearly requires that “the municipal government legal affairs office should establish a uniformed information platform in the website for seeking public opinions while formulating the rules.” Guangzhoushi Guizhang Zhiding Gongzhong Canyu Banfa (广州市规章制定公众参与办法) [Measures of Guangzhou Municipality on Public Participation in Rule Making] (promulgated by Guangzhou Municipal People’s Gov’t, Oct. 26, 2010, effective Dec. 1, 2010), art. 26.

<sup>11</sup> Beijing Municipal Government has set up the online system for rulemaking processes through a government website since September 2002. The website is available at <http://www.beijing.gov.cn/zhengce/> [<https://perma.cc/SE9X-8F2U>]. Similar online systems can also be found on the websites of the Shanghai Municipal Government and Shenzhen Municipal Government, <http://sso.sz.gov.cn/pub/fzb/gzcy/myzj/> [<https://perma.cc/9MGM-Y5GW>] and <http://www.shanghai.gov.cn/fzb/index.html> [<https://perma.cc/5Z4B-J7YS>].

<sup>12</sup> Stephen M. Johnson, *The Internet Changes Everything: Revolutionizing Public Participation and Access to Government Information Through the Internet*, 50 ADMIN. L. REV. 277, 295 (1998).

<sup>13</sup> Wang Guisong (王贵松), *Lun Lifa Zhong de Dianzi Geming* (论立法中的电子革命) [The Electronic Revolution in Legislation], 5 JURISTS REV. 128, 128 (2005). But in general, there are few academic discussions of e-rulemaking in China. For the limited research, see *id.*; Zhang Xin (张欣), *Woguo Lifa Dianzi Canyu Youxiaodu de Tisheng* (我国立法电子参与有效度的提升) [Improvement of the Effectiveness of China’s Legislative Electronic Participation], 2 STUD. L. & BUS. 71 (2018) (studying public participation in e-rulemaking through analyzing empirical evidence related to the public opinion portal on National People’s Congress’ website); Zhan Dongli, (詹栋立), *Xingzheng Lifa Guocheng zhong*

provide for the full and effective participation of the public in formulating administrative rules? This article seeks to answer that question by examining the operational effectiveness of the online “Public Opinion Seeking Platform for Drafts of Government Rules” (hereinafter referred to as “Shanghai Public Participation Website”) during the 18-year period from 2003 to 2020 on the basis of Shanghai’s local e-rulemaking practice.<sup>14</sup>

This study is guided by three objectives: first, to empirically describe the historical stages of the platform development; second, to decompose the rights and obligations structure of e-rulemaking reflected in the Shanghai Public Participation Website from both the procedural and institutional perspectives; third, to examine the relationship between presupposed functions and practical effects of electronic information flow, and subsequently provide suggestions for future development. Considering that online information embodies the essence of electronic technology in rulemaking, this study examines e-rulemaking based on the three-step online information chain—government information supply, public information participation, government feedback—as an analytical framework.<sup>15</sup>

## I. OBJECT FOR EMPIRICAL STUDY: BACKGROUND AND SAMPLES

### A. *The Development of the Online Platform for E-rulemaking*

Since 2003, China’s government has required rules to be announced on the government website, “Shanghai China,” in order to

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*Gongzhong Wangluo Canyu Zhidu Yanjiu* (行政立法过程中公众网络参与制度研究) [Study on the System of Public Participation in the Administrative Legislation via the Network] (May 5, 2012) (unpublished Master’s thesis) (examining the characteristics, status quo, and issues, and possible procedural improvements regarding public participation in e-rulemaking).

<sup>14</sup> E-rulemaking can be defined as all use of digital technologies in the rulemaking process. This article uses the term to describe public awareness of and participation in regulatory proceedings through online technologies. For the analysis of the concept of e-rulemaking, see Bridget CE Dooling, *Legal Issues in E-rulemaking*, 63 ADMIN. L. REV. 893 (2011).

<sup>15</sup> Some scholars also call it the “three segments of online process.” See Li Qin (李芹): *Meiguo Dianzihua Xingzheng Guize Zhiding Chengxu* (美国电子化行政规则制定程序) [E-rulemaking Procedures in the United States] 1–2 (2014) (Master’s Thesis, Nankai Univ.).

seek public opinion.<sup>16</sup> In the sixteen years that followed, the Shanghai Public Participation Website for Shanghai's e-rulemaking developed in three phases, described in the following sections.

### 1. Initiation (2003-2007): Affiliated to Government Website<sup>17</sup>

“Since 2003, the full text of the draft of Shanghai's government rules have been required to be published on the government website to seek public opinion during the drafting process.” According to this requirement, the Interim Measures for the Administration of Environmental Safety of Microbial Inoculants in Shanghai (Draft)<sup>18</sup> was published on the government website “Shanghai China” on April 30, 2004, which is the earliest draft of government rules seeking public opinion online included in this study.<sup>19</sup> The announcement was promulgated by the former Legal Affairs Office of the Shanghai Municipal People's Government, which indicated that the government intended to listen to the opinions

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<sup>16</sup> Shangaishi Guanche Shishi Guowuyuan “Quanmian Tuijin Yifa Xingzheng Shishi Gangyao” de Yijian (上海市贯彻实施国务院<全面推进依法行政实施纲要>的意见) [The Opinions of Shanghai Municipality on Implementing the State Council's “Comprehensive Implementation of the Implementation Outline of Administration by Law”] (Discussing that “drafts of government rules shall be publicized on the website of ‘Shanghai, China’ to seek public opinions”).

<sup>17</sup> SHANGHAI MUNICIPAL PEOPLE'S GOVERNMENT, <http://www.shanghai.gov.cn/> [<https://perma.cc/8TM9-S4K8>].

<sup>18</sup> Considering the characteristics of the names of the drafts of rules and their relevance to the corresponding public opinion announcements, the titles of the drafts and their announcements are simplified in this article. Take the Guanyu <Shangaishi Weishengwu Junji Yingyong Huanjing Anquan Guanli Zaxing Banfa (Caoan)> Zhengxun Gongzhong Yijian (关于<上海市微生物菌剂应用环境安全管理暂行办法(草案)>征询公众意见) [Interim Measures for the Administration of Environmental Safety of Microbial Inoculants in Shanghai (Draft) Consultation on the Public Opinions] (2004) (China) as an example: the name of the draft will be referred to as the Weishengwu Banfa (微生物办法) [Measures of Microbiology], and the public opinion announcement will be referred to as the Weishengwu Banfa Gonggao (微生物办法公告) [Announcement of the Measures of Microbiology] (2004) (China).

<sup>19</sup> Tigao Shehui Gongzhong Zhixiaodu he Canyudu, Zhengfu Guizhang Caoan Doujiang Shangwang Zhengqiu Minyi (提高社会公众知晓度和参与度, 政府规章草案都将上网征求民意) [Improve Public Awareness and Participation, the Draft of All Government Regulations Will Be Online for Public Opinion], <http://ld.eastday.com/1/20070911/u1a350726.html> [<https://perma.cc/XQ8X-YDJW>] (last visited Jan. 15, 2019) [hereinafter Improve Public Awareness and Participation].

of the general public and other bodies during the drafting stage of the Measure.<sup>20</sup> The Office provided the text of the draft, as well as the address and deadline for providing both written and online input. Before the Shanghai Public Participation Website was established in 2007, 44 drafts of government rules were presented in this manner.<sup>21</sup>

The initial stage of Shanghai e-rulemaking faced challenges including inadequacy of online information, irregularity of operation, and lack of participation. First, the information provided on the website was inadequate, offering only the announcement seeking public opinion and the draft text. With the exception of the Measures of Parking Lots,<sup>22</sup> the drafts do not contain information on legislative background, public participation, or government feedback. Second, the process was riddled with irregularities. Some drafts did not include a deadline for submitting public input.<sup>23</sup> For drafts that indicate the period of seeking public opinions, the maximum period was longer than one month, while the shortest period is just over one week.<sup>24</sup> Third, drafts published at this initial stage seeking public opinion seldom contained information about public participation at

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<sup>20</sup> China promulgated a massive cabinet restructuring plan during the 13th National People's Congress in March 2018. The plan abolished the National Legal Affairs Office and merged its duties into the Ministry of Justice. Accordingly, Shanghai Municipal Government announced the integration of Shanghai Legal Affairs Office and Shanghai Municipal Bureau of Justice in December 2018. Since then, it has been the Bureau of Justice that takes charge of the local rulemaking affairs. See Mengjie, *State Council to abolish legislative affairs office*, XINHUA NET, [http://www.xinhuanet.com/english/2018-03/13/c\\_137035598.htm](http://www.xinhuanet.com/english/2018-03/13/c_137035598.htm) [<https://perma.cc/T2GV-ZD5S>].

<sup>21</sup> From the No. 1 Weishengwu Banfa (微生物办法) [Measures of Microbiology] (2004) (China) in 2004 to the No. 44 Fangkong Jingbao Banfa (防空警报办法) [Measures of the Air Defense Warning] (2007) (China) in 2007.

<sup>22</sup> Even for the Tingchechang(ku) Guan Banfa (停车场(库)管办法) [Measures of Parking Lots] (2004) (China), its background information is not placed in the background introduction section, but in the full draft text section.

<sup>23</sup> For example, the Chukou Jiagongqu Banfa (出口加工区办法) [Measures of Export Processing Zones] (2004) (China) and Linshixing Xingzheng Xuke Sheding Chengxu Guiding (临时性行政许可设定程序规定) [Provisions on Procedures for Establishing Temporary Administrative Licensing] (2004) (China).

<sup>24</sup> See Chengshi Shenghuo Laji Chuli Banfa (城市生活垃圾处理办法) [Measures for Urban Domestic Garbage Disposal] (2007) (China) (with a period of 37 days); Jianshe Gongcheng Cailiao Tiaoli (建设工程材料条例) [Provisions for Construction Materials] (2004) (China) (with a period of 8 days).

all. Officials acknowledged that due to insufficient public notice, few people were aware of the platform, and thus few submitted input.<sup>25</sup>

## 2. Development (2007–2009): Establish the Shanghai Public Participation Website<sup>26</sup>

In 2007, “in order to further facilitate the public participation in the government legislative process and raise public awareness of government rules, the government decided to expand the publication of the draft rules and improve the way of seeking public opinions. Shanghai government website [opened] a Shanghai Public Participation Website to facilitate the public to make comments directly online.”<sup>27</sup> The establishment of the Shanghai Public Participation Website marked a new stage in Shanghai’s development of an effective e-rulemaking process.

This period introduced three significant changes. First, the amount of information significantly increased. In addition to announcements requesting input and full text of drafts, more relevant information, such as background, public opinion, and government feedback, became publicly available. Second, the modeling of information supply and feedback mechanisms improved. The technology platform hosted a variety of functional sections that were typed and modeled; in addition, the time allowed for public input to become more stable and standardized.<sup>28</sup> Third, the results of the public participation were published online. Those opinions in turn inform draft legislation. For example, according to the data

<sup>25</sup> See *Shanghaishi Zhengfu Wangzhan Kaitong Zhengfu Guizhang Caoan Minyi Zhengxun Pingtai* (上海市人民政府网站开通政府规章草案民意征询平台) [The Website of Shanghai Municipal Government Opens the Public Opinion Seeking Platform for Drafts of Government Rules], [http://www.gov.cn/fwxx/sh/2007-09/18/content\\_752593.htm](http://www.gov.cn/fwxx/sh/2007-09/18/content_752593.htm) [<https://perma.cc/3WSU-C2N4>] (last visited Nov. 3, 2015).

<sup>26</sup> SHANGHAI PUBLIC PARTICIPATION WEBSITE, <http://zhuanti.shanghai.gov.cn/suggestion/lawlist.aspx> [<https://perma.cc/KUC8-8YDJ>].

<sup>27</sup> Improve Public Awareness and Participation, *supra* note 19.

<sup>28</sup> Generally, the time period is no less than 20 days. *See, e.g.*, GUANYU SHANGHAISHI LVGUANYE GUANLI BANFA (CAOAN) ZHENGXUN GONGZHONG YIJIAN DE GONGGAO (关于上海市旅馆业管理办法(草案)征询公众意见的公告) [Notice to Seek Public Opinions on the Procedures on Hotel Industry Management of Shanghai Municipal Government], <http://hd.sh.gov.cn/inter/#/draft/view?id=61> [<https://perma.cc/5SKR-8NB6>] (indicating that the draft rule has a 23-day-period for public opinoins).

displayed under the column of Shanghai Public Participation Website, the Procedures on Hotel Industry Management draft absorbed 17 opinions from public participation.<sup>29</sup>

3. Adjustment (2009–2019): Cooperation with the Former Legal Affairs Office Website<sup>30</sup>

The Legal Affairs Office plays an important role in the process of local government rulemaking.<sup>31</sup> Consequently, the inception of the Website of the Legal Affairs Office (hereinafter Website of LAO) on March 18, 2009 created a significant platform for promoting local e-rulemaking.<sup>32</sup> The website also displayed the process for seeking online input for the drafting rules. The website revision in 2013 has had a substantial impact on e-rulemaking. By linking functional sections, such as “Government Rules” and “Regulatory Information,” a richer body of information on drafts is available on the Website of LAO than on the Shanghai Public Participation Website.<sup>33</sup>

The cooperation of the Website of LAO was pivotal to the construction of the electronic platform of Shanghai’s e-rulemaking. In particular, the 2013 revision page included comprehensive information about rule drafts and the legislative process, reflecting

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<sup>29</sup> See SHANGHAISHI LVGUANYE GUANLI BANFA (CAOAN) GONGZHONG YIJIAN CAINA QINGKUANG FANKUI (上海市旅馆业管理办法(草案)公众意见采纳情况反馈) [Feedback on the Public Opinions on the Procedures of Shanghai Municipality on Hotel Industry Management], <http://hd.sh.gov.cn/inter/#/draft/view?id=61> [<https://perma.cc/7PUJ-8UD2>].

<sup>30</sup> FORMER LEGAL AFFAIRS OFFICE WEBSITE, <http://www.shanghailaw.gov.cn/fzb/index.html> [<https://perma.cc/5Z4B-J7YS>].

<sup>31</sup> See GLOSSARY: LEGISLATIVE AFFAIRS OFFICE OF STATE COUNCIL (LAOSC) (国务院法制办公室), [https://uk.practicallaw.thomsonreuters.com/6-618-2326?transitionType=Default&contextData=\(sc.Default\)&firstPage=true](https://uk.practicallaw.thomsonreuters.com/6-618-2326?transitionType=Default&contextData=(sc.Default)&firstPage=true).

<sup>32</sup> The site has been revised several times since 2009. See generally SHANGHAI ZHENGFU FAZHI XINXI WANG (上海政府法制信息网) [Shanghai Government Legislative Information Website], <http://www.shanghailaw.gov.cn/fzb/index.html> [<https://perma.cc/5Z4B-J7YS>] (last visited Apr. 16, 2019).

<sup>33</sup> In general, the database provides two aspects of information: one is legislative information; the other is interpretation by media experts. Taking “Measures on Hotel Industry Management” as an example, there are nine pieces of linked information in the legislative information section and four links in the interpretation by media experts section.

new efforts by the government to collect and share rulemaking information resources with the public.

4. Refinement (2019–Present): Integrate into the “Government Online-Offline Shanghai” Website<sup>34</sup>

The Website of LAO shut down in early 2019 due to the restructuring of the Shanghai Legal Affairs Office and Shanghai Municipal Bureau of Justice. Since then, the Shanghai Public Participation Website has been refined and integrated into the “Government Online-Offline Shanghai (Yiwang Tongban)” website. Under the “Interaction between the Government and Citizens” section,<sup>35</sup> an internet user can easily identify a draft seeking public input, learn about its background and deadline for input, and submit an opinion directly online. The website also provides a detailed history of previous drafted rules, chronicling the development of Shanghai e-rulemaking.

The functional columns remain similar to previous iterations of the website, including the full text of the draft, background introduction, public opinion, and government feedback. These two touchstones—the institutional restructuring of executive agencies and the establishment of the “Government Online-Offline Shanghai” website—indicate that the government is seeking to be more efficient and service-oriented, which bodes well for the future of local e-rulemaking promotion. Unfortunately, however, the full text of public input is not accessible through this website. Currently, a user can only browse a small part of posted public opinions. Part II of this article explains the dearth of public opinions on the new platform since 2019, an indication that the public continues to lack awareness about the website and its potential.

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<sup>34</sup> GOVERNMENT ONLINE-OFFLINE SHANGHAI, <http://hd.sh.gov.cn/inter/#/draft/list?siteId=0001> [<https://perma.cc/A33A-APB4>].

<sup>35</sup> See SHANGHAI YIWANG TONGBAN ZAIXIAN ZHENGWU FUWU PINGTAI (上海“一网通办”线上政务服务平台) [Government Online-Offline Shanghai Website], <http://zwdt.sh.gov.cn/govPortals/index.do> [<https://perma.cc/DFG3-5QXX>].

*B. Samples*

Applying a broad definition of government rulemaking<sup>36</sup> to the results posted on the Shanghai Public Participation Website, a total of 176 drafts of rules were issued between 2003 and 2020.

Before 2007, in the initial phase of the platform, the drafts of rules from No. 1 to No. 44 did not contain any information on public participation and government feedback.<sup>37</sup> These draft rules do not effectively reflect e-rulemaking, characterized by online information interaction, and thus are not included in the scope of this article. Since draft No. 45, the Shanghai Public Participation Website has gradually matured. The functional sections have become more complete, and public participation has grown. By the end of 2020, there were a total of 132 drafts following draft No. 45.

These 132 drafts can be divided into three types: development type (92 drafts), amendment type (38 drafts), and repeal type (2 drafts). The years 2011 and 2019 respectively reached the highest and lowest point for total number of drafts. The development type and amendment type are routinely distributed each year, but the repeal type drafts were only released in 2007 and 2010 without continuous institutional practice in subsequent years.<sup>38</sup>

The categories and distribution years of the 132 draft rules are shown in Table 1 and Figure 1.

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<sup>36</sup> According to the second paragraph of Article 2 of the Legislative Law, “The rules of the departments of the State Council and the rules of local governments shall be developed, amended, and repealed in accordance with the relevant provisions of this Law.” Therefore, the broad definition of government rulemaking includes development, amendment, and repeal. Lifa Fa (立法法) [Law on Legislation]

<sup>37</sup> Among the 44 drafts, 34 development types and 9 amendment types are involved. Another one is involved to seek opinions on legislation at the national level: the No. 42 Guanyu <Zhonghua Renmin Gongheguo Kexue Jishu Jinbufa (Xiuding Caoan) (Zhengqiu Yijiangao) (关于《中华人民共和国科学技术进步法（修订草案）（征求意见稿）》征询公众意见的公告) [Announcement on the “Law of the PRC on Scientific and Technological Progress (Revised Draft) (Draft for Comment)” for Public Opinion] (2007) (China).

<sup>38</sup> See SHANGHAISHI RENMIN ZHENGFU ZUIXIN ZHENGFU GUIZHANG CAOAN (上海市人民政府最新政府规章草案) [Latest Government Rule Drafts of Shanghai Municipal Government], <http://hd.sh.gov.cn/inter/#/draft/list?siteId=0001> [<https://perma.cc/ZK67-B6PE>].

Table 1. The Categories and Distribution Years of Draft Rules

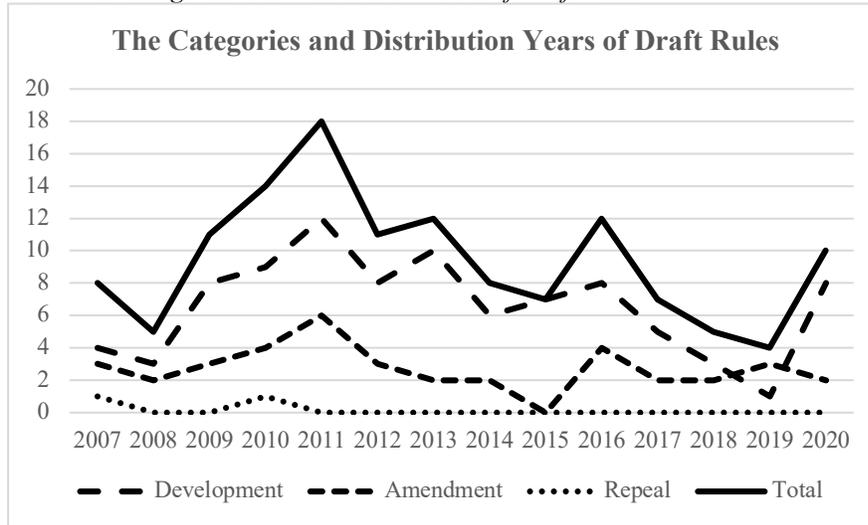


Figure 1. The Categories and Distribution Years of Draft Rules

Year	07	08	09	10	11	12	13	14	15	16	17	18	19	20
<b>Development</b>	4	3	8	9	12	8	10	6	7	8	5	3	1	8
<b>Amendment</b>	3	2	3	4	6	3	2	2	0	4	2	2	3	2
<b>Repeal</b>	1	0	0	1	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>8</b>	<b>5</b>	<b>11</b>	<b>14</b>	<b>18</b>	<b>11</b>	<b>12</b>	<b>8</b>	<b>7</b>	<b>12</b>	<b>7</b>	<b>5</b>	<b>4</b>	<b>10</b>

## II. THE STRUCTURE OF E-RULEMAKING THROUGH THE PLATFORM: THREE-LEVELED INFORMATION FLOW

The design of the Shanghai Public Participation Website incorporates a three-level information structure of e-rulemaking that corresponds to the rights and obligations of the involved parties: (A) government information supply for the start of the e-rulemaking process, (B) public participation in the e-rulemaking process, and (C) government feedback on public participation.<sup>39</sup>

<sup>39</sup> *Id.*

### A. Government Information Supply

Government information supply includes three primary sections: announcement content, full draft text, and background introduction.<sup>40</sup> Each of these components is described below.

#### 1. The Announcement to Seek Public Opinion

The announcement to seek public opinion is posted in the announcement content section, which generally involves four parts: title, heading, notification, and payment. The title is usually in the form of “draft name + seeking the public opinion,” and sometimes with brackets indicating the deadline for opinion. Generally, the development type and the amendment type can be distinguished by the title labels “Draft” or “Revised Draft.” The heading often outlines the purpose for creating or revising the legislation. Some headings also indicate the desired focus of requested public opinion.<sup>41</sup> Notifications consist of two core elements: the physical and e-mail addresses to which written input should be submitted, and the deadline for submitting that input. Finally, the inscription information includes the specific date, and the mention of “Shanghai Municipal People’s Government Legal Affairs Office,” “Shanghai Municipal Bureau of Justice,” or other executive agencies responsible for the drafting rule.<sup>42</sup>

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<sup>40</sup> *Id.*

<sup>41</sup> For example, the heading of Draft No. 130 is shown as the Fangzhi Chuanbo Wuran Shuiyu Huanjing Banfa (Xiuding Caoan) (防治船舶污染水域环境办法(修订草案)) [Measures for the Prevention and Control of Environmental Pollution in Ships (Revised Draft)] for public opinion] (2014) (China), until Sept. 26, 2014. Unless the draft being labeled as “Revision Draft” belongs to the amendment type, most of the drafts not labeled are development drafts. However, there are also drafts of amendment types shown in other forms, such as the No. 126, <Guanyu Xiugai <Shanghaishi Juzhu Fangwu Zulin Guanli Banfa> de Jueding (Caoan)> Zhengxun Gongzhong Yijian (关于修改《上海市居住房屋租赁合同管理办法》的决定(草案)) 征询公众意见 [Seeking Public Opinion on the Decision on Amending the Measures of Residential Tenancy (Draft)] (2014) (China).

<sup>42</sup> See No. 52, *Shanghaishi Nongyao Jingying Shiyong Guiding* (上海市农药经营使用规定) [Provisions over the Operation and Use of Pesticides] (2007) (China).

## 2. The Full Draft Text and the Form of Publication

The publication of drafts is an important product of the government information supply.<sup>43</sup> The public is able to access thorough information and in turn provide meaningful input only when full draft text is available. Publishing drafts in the development category is relatively simple because the full text is shared. However, amendment type drafts can be presented in one of five ways. Form (I) indicates only the draft section to be amended, and the amended content of the original rules.<sup>44</sup> Since the full text of the draft amendment is not provided, interested parties have to check the original texts themselves to fully understand the amended material. Form (II) presents the section of the draft to be amended and the amended content of the original rules, with the key parts marked in bold. Form (II) improves upon Form (I) in that the key part of the amendment appears in bold to indicate its importance. However, without the full text of the draft rules, there is still a lack of overall understanding of the entire rule.<sup>45</sup> Form (III) publishes the full text of the draft amendment. Its advantage is that it helps the public grasp the overall draft rules; though its disadvantage is the lack of refinement of the information to compare before and after versions quickly and effectively.<sup>46</sup> Form (IV) provides the draft amendment in full with the key parts marked in bold. This publication form highlights the key terms or amendments, but the disadvantage is that it cannot quickly and effectively refine the information comparison before and after the amendment.<sup>47</sup> Form (V) indicates the object to be amended by the original rules and the amended content, and then attaches the full text of the amendment. This form of publication is

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<sup>43</sup> See Neal D. Woods, *Promoting participation? An examination of rulemaking notification and access procedures*, 69 PUBLIC ADMINISTRATION REVIEW 518, 525 (2009).

<sup>44</sup> See No. 60, *Qiye Qianxin Baozhangjin Chouji he Dianfu de Ruogan Guiding* (企业欠薪保障金新一垫付规定企业欠薪保障金筹集和垫付的若干规定企业欠薪保障金新一垫付规定) [Provisions on Raising Enterprises' Back-pay Security Funds and Advancing Payment] (2009) (China).

<sup>45</sup> See No. 51, *Chengshi Daolu Jiakongxian Banfa* (城市道路架空线管理办法) [Measures of Overhead Lines of Urban Roads] (2007) (China).

<sup>46</sup> See No. 52, *Nongyao Jingying Shiyong Guiding* (农药经营使用规定) [Measures over the Operation and Use of Pesticides] (2007) (China).

<sup>47</sup> See No. 92, *Shanghai Shi Shebei Jianli Banfa* (上海市设备监理办法) [Measures of equipment supervision] (2011) (China).

most conducive to enhancing accuracy and efficiency of comparison and understanding of the draft amendments.<sup>48</sup>

### 3. Background Introduction

Background introduction is the final part of the government information supply. Compared with announcement content and draft text, background is more flexible and mainly explains the legislative purpose of the draft. The background introduction in development type drafts, generally covers two areas: (1) the necessity of the legislation, or the legislative background, and (2) the introduction of its main content. The legislative background includes the resolutions of the new Party and Government, the introduction of the upper-level law, the actual needs of local affairs, and even references to comparative law.<sup>49</sup> The main content for development drafts includes the subject of responsibility and related rights and obligations; while amendment drafts focus more on the object, reason, revised content, and terms.<sup>50</sup>

#### *B. Public Information Participation*

Online public participation is a key part of the e-rulemaking process. Normatively and institutionally, administrative legislation acts as a democratic proxy.<sup>51</sup> In addition to mechanisms for online public participation, the participation period and the technical path also affect the substantive quality of public participation.

#### 1. The Public Participation Period

Among the 132 drafts of rules considered in this study, the participation period of nine drafts cannot be calculated because the announcement date was not stated. The remaining participation

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<sup>48</sup> See No. 83, Lüguanye Zhian Guanli Shishi Xize (旅馆业治安实施细则) [Implementation Rules on Security Management in Hotel Industry] (2011) (China).

<sup>49</sup> See No. 128, Shipin Anquan Xinxi Zhuisu Guanli Banfa (食品安全信息追溯管理办法) [Measures of Tracing Information on Food Safety] (2014) (China).

<sup>50</sup> See No. 56, Shanghaishi Menlonghao Guanli Banfa (上海市门弄号管理办法) [Measures for Names and Numbers of the Neighborhood] (2008) (China).

<sup>51</sup> Wang Xixin (王锡锌), *Dangdai Xingzheng de "Minzhu Chizi" jiqi Kefu* (当代行政民主赤字及其克服) [The Democratic Deficit of Contemporary Administration and Its Conquer], 1 *STUD. L. & BUS.* 42 (2009).

periods can be inferred from the time between the announcement date and the deadline for receiving public opinion. The shortest public participation period is seven days, and the longest is 35 days. Early on, public participation periods were set somewhat arbitrarily; however, as of 2017, all drafts are published under a one-month public participation period, indicating the standardization of the system.<sup>52</sup>

## 2. The Technical Path of Public Information Participation

Different educational backgrounds, age levels, social classes, and other factors of participating groups affect the level of participation.<sup>53</sup> However, the technical path provided by the online platform also affects outcomes.<sup>54</sup> In the functional section of the Shanghai Public Participation Website, the hyperlink to “I want to express my opinion” is the core technology path. In order to provide input, the public must first register an account. The information requested for registration includes username, password, confirmation password, name, city of residence, contact number, and email address. After clicking “I want to express my opinion,” a dialogue box labeled “express your opinion” appears with a notice in red: “Your opinions and suggestions will be made public.”<sup>55</sup> After typing and confirming input, the submission is published. The process does not require authentication of personal information, and the published submission does not show the author’s details when it appears on the “Public Opinions and Suggestions” page.<sup>56</sup>

<sup>52</sup> *Shanghaishi Renmin Zhengfu Guizhang Zhiding Chengxu Guiding* (上海市人民政府规章制定程序规定) [Provisions of Shanghai on Procedures of Government Rule Making] (promulgated by Shanghai People’s Government, May 7, 2018, effective July 1, 2018), art. 19 (China) [hereinafter *Shanghai Provisions on Rulemaking Procedures*].

<sup>53</sup> Wang Liping & Fang Ran (王丽萍 & 方然), *Canyu Haishi Bucanyu: Zhongguo Gongmin Zhengzhi Canyu de Shehui Xinli Fenxi* (参与还是不参与: 中国公民参与的社会心里分析) [Participation or Non-Participation: A Social Analysis of Chinese Citizens’ Political Participation], 2 *ZHENGZHIXUE YANJIU* (政治学研究) [CASS J. POL. SCI.] 98 – 99 (2010).

<sup>54</sup> See Woods, *supra* note 43.

<sup>55</sup> The blanks are required to be filled in except for the name and city of residence.

<sup>56</sup> On the platform, only the username and publication date of 12 characters (randomly composed of numbers and English) are displayed. See, e.g., SHANGHAISHI LVGUANYE GUANLI BANFA (CAOAN) GONGZHONG YIJIAN YU

### 3. Public Opinions and Suggestions

As depicted in Table 2, among the 132 draft rules, 35 drafts (or 26.52% drafts reviewed) received no input. The most input submitted is 891 opinions. A total of 78 drafts received 1–19 comment(s); nine drafts received 20–39 opinions; four drafts received 40–59; no drafts received within 60–79 opinions; one draft received 80–99 opinions.<sup>57</sup> Only five drafts received over 100 public opinion submissions.

<b>The Number of Opinion</b>	<b>0</b>	<b>1–19</b>	<b>20–39</b>	<b>40–59</b>	<b>60–79</b>	<b>80–99</b>	<b>Above 100</b>
<b>The Number of Draft</b>	35	78	9	4	0	1	5
<b>Proportion</b>	26.52%	59.09%	6.82%	3.03%	0	0.76%	3.79%

*Table 2 : The Number and Proportion of Public Opinion Participation*

In terms of content, the form of public opinions and suggestions are diverse. Some reflect simple and emotional venting and irrelevant remarks; others express inquiries and appeals regarding unclear factual descriptions and situations. Some of the input serves only to raise doubts and questions, while other opinions provide constructive criticisms on the legislation. Some authors even submit legislative proposals calling for refined and amended clauses or new legislation and clauses altogether.<sup>58</sup>

JIAN YI (上海市旅馆业管理办法 (草案) 公众意见与建议) [Public Opinions on the Procedures of Shanghai Municipality on Hotel Industry Management], <http://hd.sh.gov.cn/inter/#!/draft/view?id=61> [<https://perma.cc/3Y42-NPER>].

<sup>57</sup> See No. 63, Shanghai Shiyou Renkou Fuwu he Guanli Ruogan Guiding (上海市实有人口服务和管理若干规定) [Provisions on Services and Management of the Actual Population] (2009) (China).

<sup>58</sup> Take No. 94, Shanghai Shehui Shenghuo Zaosheng Wuran Fangzhi Banfa (社会生活噪声污染防治办法) [Provisions on Prevention and Control of Pollution by Noise of Social Activities] (2011) (China) as an example, the draft rule receives altogether 116 public opinions. The opinions include four types:

Type (1) Reflecting facts: the public explain facts from real life related to the draft. For example, “The dancing corner of the residential community is deafening, with really long long time, regardless of the hot or cold, weekdays or holidays... nothing has changed throughout the years. Women and children just watch others chatting. The community carport has become a chess room. When people playing cards, they debate on win or lose every minute. Gossips, jokes, the

It is worth noting that among the 14 drafts published in 2019 and 2020, only two of them received public input visible on the website.<sup>59</sup> It is unusual for drafts related to the daily life of citizens to receive no public input.<sup>60</sup> There is no clear explanation for why public input significantly declined after 2019. However, several factors put this phenomenon in context. First, the government likely removed records of public input once the draft rule was promulgated in order to preclude critical voices that might undermine the implementation of rule. Second, as mentioned above, the public may remain unfamiliar with the new website after the Website of LAO was abolished. Third, the authorities might only regard seeking public opinion as a short-term “political task.” Given that the Shanghai Public Participation Website has been in operation since 2007, the authorities may lack continuous incentives to strengthen its development. Fourth, citizens may lack incentives to express their

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unfamiliar...gather with each other. Even if the property and the neighborhood committee have been making efforts for years, the problem is still there.”;

Type (2) Calling for legislations: the public express their legislative proposals for specific issues. For example, “It shall be legislated that entertainment activities are strictly forbidden to be carried out in the residential building (especially in old houses) in the name of doing good things for the residents...”;

Type (3) Raising doubts: the public inquiry for the clauses or drafts that they are confused with. For example, “Article 15 (Supervision and Inspection) states that the regulation agency has the right to conduct on-site inspections...what is the use of the inspection for KTV merchants opened downstairs in the residents? If you check them during the day, they will operate at night; the volume becomes loud again. These businesses are always closed during the day and operate at night, when the agency is also off work.”;

Type (4) Refining the regulation: the public directly give suggestions on the specific provisions of the draft for the terminology specification or content adjustment. For example, “I recommend such a change to the first paragraph of Article 7: ...”.

<sup>59</sup> Respectively, No. 170, Yiliao Weisheng Renyuan Quanyi Bozhang Banfa (医疗卫生人员权益保障办法) [Measures on Protecting Rights and Interests of Health and Medical Practitioners] (2020) (China), and No. 172, Nongyao Guanli Guiding (农药管理规定) [Provisions on Pesticide Administration] (2020) (China).

<sup>60</sup> See, e.g., No. 165, Gonggong Shuju Kaifang Guanli Banfa (公共数据开放管理办法) [Measures on the Opening of Public Data] (2019) (China); No. 175, Guidao Jiaotong Yunying Anquan Guanli Banfa (轨道交通运营安全管理办法) [Measures on the Safety Management of Rail Transport Operation] (2020) (China).

opinions if the quality of government feedback is unsatisfactory. This final factor is expounded in the next section.

### *C. Government Feedback*

#### 1. An Overview

Among the 132 drafts reviewed in this study, 86 drafts included government feedback, while the remaining 46 did not. That is to say, nearly one-third of drafts did not have government feedback publicly available online. This proportion is even lower in 2019 and 2020 altogether (three out of 14, approximately one-fifth, drafts with feedback).

The number of drafts with and without government feedback are delineated by type in Table 3. Similar to public input, the absence of government feedback has several possible explanations. The government may remove public input records after the drafted rule is promulgated. But they may also lack incentive to take public input seriously at all. As a result, when feedback is lackluster or below expectation, the public is less likely to continue providing high-quality advice. The relationship between public information participation and government feedback will be further discussed in Part III of this article.

	<b>Classification</b>	<b>Number of Drafts by Type</b>		
1	WITH government feedback	86	Development type	60
			Amendment type	26
			Repeal type	0
2	WITHOUT government feedback	46	Development type	32
			Amendment type	12
			Repeal type	2

*Table 3 : Overview of Government Feedback*

#### 2. The Categories of Government Feedback

Government feedback can be divided into five categories. Category (I) is the processing result, which simply denotes whether public opinions and suggestions have been adopted. Specifically, feedback in this category includes opinions adopted, opinions not adopted, opinions partially adopted, and opinions transferred to other

departments.<sup>61</sup> Category (II) is subject generalization. Feedback in this category generalizes topics covered by public opinions, lists the key opinions under each topic, and explains whether these opinions are adopted or not.<sup>62</sup> Category (III) constitutes a descriptive response in which the government lists the main opinions received through public input channels and explains reasons for adoption and non-adoption. In Category (IV),<sup>63</sup> the feedback directly copies relevant public opinions and suggestions, and then attaches the results of adoption or non-adoption.<sup>64</sup> Category (V) feedback simply summarizes the situation. This feedback is uncommon because it only occurs if no public input is received.<sup>65</sup>

### III. BETWEEN PRESUPPOSED FUNCTIONS AND ACTUAL EFFECTS: REVIEW OF THE INTERACTIONS

On a theoretical level, administrative procedures can be classified into “administrative procedure as an institution” and “administrative procedure as a process.”<sup>66</sup> Each of the three

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<sup>61</sup> No. 94, Shanghai Shi Shehui Shenghuo Zaosheng Wuran Fangzhi Banfa (上海市社会生活噪声污染防治办法) [Provisions on Prevention and Control of Pollution by Noise of Social Activities] (2011) (China).

No. 97, Shanghai Shi Zaisheng Ziyuan Huishou Guanli Banfa (再生资源回收管理办法) [Measures on the Administration of Renewable Resource Recovery] (2011) (China).

No. 117, Shanghai Shi Huoqin Jiaoyi Guanli Banfa (上海市活禽交易管理办法) [Measures on the Transaction of Living Poultry] (2013) (China)

<sup>62</sup> See No. 121, Shanghai Shi Cujin Shenghuo Laji Fenlei Jianliang Banfa (上海市促进生活垃圾分类减量办法) [Measures on Advancing the Sorting and Reduction of household Waste] (2013) (China).

<sup>63</sup> For example, No. 83, Shanghai Shi Lvguanye Zhian Guanli Shishi Xize (上海市旅馆业治安管理实施细则) [Implementation Rules on Security Management in Hotel Industry] (2011) (China).

<sup>64</sup> No. 120, Gonggong Changsuo Waiwen Shiyong Guiding (公共场所外文使用规定) [Provisions on the Using Foreign Languages in Public Places] (2013) (China).

<sup>65</sup> No. 48, Chengshi Jichu Sheshi Texu Jingying Banfa (城市基础设施特许经营管理办法) [Measures on Urban Infrastructure Concession] (2007) (China).

<sup>66</sup> The former refers to a specific institution, such as hearings and explanations of reasons; the latter does not focus on a specific institution, but focuses on the overall process of administrative activities. Zhu Mang (朱芒), *Xingzheng Lifa Chengxu Tiaozheng Duixiang Chongkao* (行政立法程序调整对象重考) [Re-examination of the Regulating Object of Administrative Legislation Procedures], 6 CHINA LEGAL SCI. 49 (2008).

information levels embodied in the Shanghai Public Participation Website (government information supply, public participation, and government feedback) constitutes an individual institution that carries relatively independent institutional functions. Collectively they constitute a process. The links among the three information levels form the review process in government rulemaking. Meanwhile, the three information levels embodied in the Shanghai Public Participation Website also represent an e-rulemaking operation, which is different from traditional procedures. The e-rulemaking process itself has been met with initial expectations that exceed those of general administrative rules.<sup>67</sup> Public participation is indispensable to the evaluation dimension of e-participation, from both an institutional and procedural perspective.<sup>68</sup>

From the procedural perspective, with respect to the presupposed function of e-participation, the institutional design of three information levels is integrated with public participation as the core. Public participation justifiably is framed as the foundation of e-rulemaking.<sup>69</sup> Firstly, government information supply is a necessary step to initiate e-rulemaking, and its specific institutional design and the quality of information provided will affect the breadth and depth of subsequent public participation. Secondly, by linking government information supply and government feedback, public participation not only shapes the degree of government feedback, but also affects the quality of administrative rules and regulatory alternatives. Finally, the impact of government feedback extends beyond the public input at hand to the willingness of the public to

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Respectively corresponding to the three key devices established in the general government rulemaking: publication of the draft, participation of the stakeholder, and explanation of the reason.

<sup>67</sup> For example, Prof. Cary Coglianese values e-rulemaking to increase democratic legitimacy, improve policy decisions, decrease administrative costs, and increase regulatory compliance. Cary Coglianese, *E-Rulemaking: Information Technology and the Regulatory Process*, 56 ADMIN. L. REV. 353, 363–366 (2004). Chinese scholar Wang Guisong summarizes the value of e-rulemaking as the establishment of citizen user status, the emergence of electronic democracy, the organic coordination of democracy and efficiency, and the enhancement of legitimacy. Wang, *supra* note 13.

<sup>68</sup> Public participation is regarded as the core evaluation element in the expectations of e-rulemaking system. Stuart Minor Benjamin, *Evaluating E-rulemaking: Public Participation and Political Institutions*, 55 DUKE L. J. 893, 894–895 (2006).

<sup>69</sup> See Johnson, *supra* note 12, at 289.

participate in the future. The quality of each phase affects that of the next.

*A. The Relationship between Government Information Supply and Public Information Participation*

1. Empirical Observation

The impact of government information supply on public participation in e-rulemaking is directly reflected in the degree and quality of public participation.<sup>70</sup> In addition to the popularity of network facilities and familiarity with information technology, which may be related to the external factors of the initial year, the following factors of government information supply may influence public participation.

a) Effect of the Length of the Public Participation Period

Generally, the longer the public participation period, the longer the public will delve into relevant information and provide comments, and the higher the public participation will be. However, both Provisions on Prevention and Control of Radioactive Pollution and Rules on Implementing House Expropriation and Compensation on State-owned Lands had seven days of public participation, but the former received only 13 public opinions,<sup>71</sup> while the latter received 349.<sup>72</sup> The length of the public participation period informs the institutional design of e-rulemaking, but it does not constitute a core influence factor of public participation outcomes.

b) Effect of the Type of Amendment Text Released

The type of draft text publication is a formal element of government information supply. Development drafts do not involve

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<sup>70</sup> See Woods, *supra* note 43.

<sup>71</sup> See No. 57, Fangshexing Wuran Fangzhi Ruogan Guiding (放射性污染防治若干规定) [Provisions on Prevention and Control of Radioactive Pollution] (2008) (China).

<sup>72</sup> See No. 93, Guoyou Tudi shang Fangwu Zhengshou yu Buchang Shishi Xize (国有土地上房屋征收与补偿实施细则) [Rules on Implementing House Expropriation and Compensation on State-owned Lands] (2011) (China).

a comparison of texts (before and after revision), and do not significantly affect public participation. However, the effect of the type of text in amendment drafts on public participation is meaningful to institutional construction. Among the 38 drafts of amendment type, there are five forms of text publication, as explained previously in Part II “The Full Draft Text and the Form of Publication.”

	<b>Form of the Publication of Drafts</b>	<b>Number of Drafts</b>	<b>Number of Opinion(s)</b>	<b>Average</b>
<b>1</b>	Indicate only the place to be amended and the amended content of the original rules.	9	46	5.11
<b>2</b>	Indicate the place to be amended and the amended content of the original rules with the key part marked in bold.	3	39	13
<b>3</b>	Publish the full text of the draft amendment	22	183	8.32
<b>4</b>	Publish the draft amendment in full with key parts marked in bold.	2	25	12.5
<b>5</b>	Indicate the object to be amended by the original rules and the amended content, then attach the full text of the amendment.	2	1	0.5

*Table 4 : The Form of Publication and Public Participation of Drafts of Amendment Type*

Generally speaking, these five forms reflect varying degrees of government information supply—from weak to strong, and from simple to complex. General reasoning would suggest the weaker and simpler the government information supply, the lower the resulting public participation level will be, and vice versa. However, based on public participation response averages, no conclusion can be drawn about the connection between text form and participation level. To take an individual example, only one public opinion was submitted

for Announcement No. 86 Provisions on the Security Administration of Tourism Administration which belongs to Form 5, the strongest form of government information supply, and was expected to result in higher public participation according to general reasoning. Announcement No. 125 Measures on Residential Tenancies and Leases belongs to Form I, which should theoretically receive a lower level of participation, but it received 16 public opinions.

### c) Effect of the Introduction of Related Substantial Content

Generally speaking, the more detailed background information provided by the government, the stronger the public participation.<sup>73</sup> If the public lacks adequate information to form an opinion on a given draft, public participation will decrease. Government information supply takes place between the section for announcements seeking public opinion and the background section. The former emphasizes the content the government wants to receive through public participation, and the latter expresses the legislative and amendment intention of the drafts. While beefing up the government information supply enhances transparency, the effect on public participation is not necessarily significant. For example, the introduction in both the “Announcement of Seeking Public Opinion” section and the “Background Introduction” section of No. 110 “Measures Residence Certificate,” which have the highest public participation, is relatively simple.<sup>74</sup>

## 2. Remarks

The factors related to public participation reflected on the Shanghai Public Participation Website do not appear to have a direct impact on the effectiveness of e-rulemaking. The key element shaping public participation remains the issue of the draft itself. Five drafts with the highest public participation on the platform actually contain two types of rules. The first involves issues of general concern to the public, including administration of residence certificate, house expropriation and compensation, social life noise

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<sup>73</sup> See Woods, *supra* note 43.

<sup>74</sup> See No. 110, *Juzhuzheng Guanli Banfa* (居住证管理办法) [Measures of Residence Certificate] (2012) (China).

problems, and population management. The second involves issues pertinent to regulatory industry areas,<sup>75</sup> such as the administration of construction project supervision,<sup>76</sup> and thus attracts heightened attention from the directly interested parties.

*B. The Relationship between Public Information Participation and Government Feedback*

1. Empirical Observation

The relationship between public participation and government feedback is key to examining the e-rulemaking system. The Shanghai Public Participation Website showcases four relationship types, which are depicted in Table 5.

	<b>Types of Relationship</b>	<b>Number of Drafts</b>	<b>Proportion</b>
1	WITH BOTH public information participation AND government feedback	61	46.21%
2	WITH public information participation but NO government feedback	36	27.27%
3	WITH government feedback but NO public information participation	12	9.09%
4	WITH NEITHER public information participation NOR government feedback	23	17.42%

<sup>75</sup> See, e.g., No. 110, Juzhuzheng Guanli Banfa (居住证管理办法) [Measures of Residence Certificate] (2012) (891 opinions); No. 93, Guoyou Tudi shang Fangwu Zhengshou yu Buchang Shishi Xize (国有土地上房屋征收与补偿实施细则) [Rules on Implementing House Expropriation and Compensation on State-owned Lands] (2011) (349 opinions); No. 94, Shehui Shenghuo Zaosheng Wuran Fangzhi Banfa (社会生活噪声污染防治办法) [Provisions on the Prevention and Control of Noise Pollution in Social Life] (2011) (116 opinions); No. 63, Shiyou Renkou Fuwu he Guanli Ruogan Guiding (实有人口服务和管理若干规定) [Provisions on Services and Management of the Actual Population] (2009) (97 opinions).

<sup>76</sup> E.g., No. 86, Jianshe Gongcheng Jianli Guanli Banfa (建设工程监理管理办法) [Provisions on the Administration of Construction Project Supervision] (2011) (China) (115 opinions).

*Table 5: Types of Relationship between Public Participation and Government Feedback*

Surprisingly, there are drafts with public participation but without government feedback, and drafts without public participation but with government feedback. The lack of government feedback is displayed in two ways: the first is displayed as “the situation of public opinion adoption will be reported in this section after the formal release of this rule,”<sup>77</sup> and the second contains no information at all. For the former, comparing the information on the effective rules<sup>78</sup> promulgated later, there are actually cases where the rules have been published, but the adoption of public opinions has not been revealed.<sup>79</sup> For the latter, the government simply ignores the public input, diminishing the overall public participation and e-rulemaking mechanism at large. Therefore, from the perspective of optimizing both institution and process, these two situations need to change.

For drafts with government feedback but no public participation, it is important to distinguish the types of the government feedback. One type is non-substantial, providing only a summary of the situation. The other type does not respond to public participation received through the Shanghai Public Participation Website, but instead relates to information obtained through other means.<sup>80</sup>

#### a) The Sources and Preferences of Government Feedback

The Shanghai Public Participation Website reserves a section for feedback on public opinion adoption, which is not solely reserved for responding to public opinions received through the website, but

<sup>77</sup> *E.g.*, No. 158, Xingzheng Shenpi Gaozhi Chengnuo Guanli Banfa (行政审批告知承诺管理办法) [Measures for Notification and Undertaking in Administrative Approval] (2018) (China).

<sup>78</sup> *E.g.*, No. 109, Xingzheng Jigou Shezhi he Bianzhi Guanli Banfa (行政机构设置和编制管理办法) [Measures on the Establishment and Staffing of the Administrative Agencies] (2012) (China).

<sup>79</sup> *E.g.*, No. 50, Zhengfu Xinxì Gongkai Guiing (政府信息公开规定) [Provisions on the Disclosure of Government Information] (2007) (China).

<sup>80</sup> *E.g.*, No. 48, Chengshi Jichu Sheshi Texu Jingying Guanli Banfa (城市基础设施特许经营管理办法) [Measures on the Administration of Urban Infrastructure Concession] (2007) (China); No. 104, Xingzheng Zhifazheng Guanli Banfa (行政执法证管理办法) [Measures of Enforcement Certificate] (2012) (China).

also includes opinions and suggestions related to the drafts received through other channels. This means that the government feedback comprises a multi-channel system responding to public comments and expert opinions, opinions submitted electronically and through traditional communication methods, consultations, and opinions provided in person.<sup>81</sup> In addition, it seems that more attention is paid to feedback on opinions collected from the courts, the procuratorate, the administrative organs, the Chinese People's Political Consultative Conference, the National People's Congress, and similar bodies, as well as the feedback on opinions from hearing representatives reflected by the legislative hearing procedure.<sup>82</sup> Little distinction is made between information obtained through the website public participation sections verses through other written or e-mailed channels.

#### b) Coverage and Limitations for Online Feedback

Government feedback towards online public input is worthy of further discussion. Of course, not all public participation online will receive government feedback, which presents a challenge for the e-rulemaking process. However, the effectiveness of public online participation in generating government feedback should be examined further. Otherwise e-rulemaking may slip into formalism: the government can choose whether or not to respond and whether to respond with more or less feedback, which will negatively impact the e-rulemaking system in terms of both institution and process.<sup>83</sup> From

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<sup>81</sup> See, e.g., *Shanghaishi Lvguanye Guanli Banfa (Caoan) Gongzhong Yijian Caina Qingkuang Fankui* (上海市旅馆业管理办法(草案)公众意见采纳情况反馈) [Feedback on the Public Opinions on the Procedures of Shanghai Municipality on Hotel Industry Management], SHANGHAI PEOPLE'S GOVERNMENT (July 18, 2008), <http://hd.sh.gov.cn/inter/#/draft/view?id=61> [<https://perma.cc/VU9V-MX7Z>].

<sup>82</sup> See, e.g., *Shanghaishi Shipin Anquan Xinxu Zhuisu Guanli Banfa (Caoan) Gongzhong Yijian Caina Qingkuang Fankui* (上海市食品安全信息追溯管理办法(草案)公众意见采纳情况反馈) [Feedback on the Public Opinions on the Procedures of Shanghai Municipality on Food Safety Information Traceability Management], SHANGHAI PEOPLE'S GOVERNMENT (July 8, 2014), <http://hd.sh.gov.cn/inter/#/draft/view?id=149> [<https://perma.cc/C5WE-BBLP>]. (Negotiations with other government agencies seems to be prerequisites of adopting public opinions).

<sup>83</sup> For example, from the perspective of efficiency alone, the government cannot substantially cover all of the 891 opinions in response to the No. 110

a technical standpoint, if the public cannot effectively check whether their opinions submitted online have been read, they may have less willingness to participate, weakening the core of the e-rulemaking structure. Finally, given the strong relationship between government feedback and the final rule, if public input does not elicit government feedback, public participation has no bearing on the final rule outcome.<sup>84</sup>

## 2. Remarks

Overall, the relationship between public participation and government feedback in the e-rulemaking process manifested on the Shanghai Public Participation Website is weak. Public online participation should be the focus of the e-rulemaking system, but in reality, it is marginalized. Although government rulemaking is slowly meeting the requirements of “a unified platform for publishing and publicly seeking public opinions,” the mechanisms remain underdeveloped and even misunderstood. In particular, the government feedback system explains the administrative process, but the boundaries of rights and obligations remain unclear. In addition, the electronic technology path, which may have contributed to the spike in the number of participating subjects and the amount of participating information, also presents great challenges to the traditional administrative process, in which feedback is only provided to certain private entities, at which the government historically has been effective.

## IV. SUGGESTIONS FOR E-RULEMAKING PRACTICE WHILE PROMOTING PUBLIC PARTICIPATION

The Shanghai Public Participation Website provides a useful example of the interdependence of information levels, from government information supply to public participation to government feedback. Although public participation in Shanghai’s e-rulemaking process is supported by the initial government information supply, its

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Juzhuzheng Guanli Banfa (上海市居住证办法) [Measures of Residence Certificate] (2012) (China).

<sup>84</sup> See Benjamin, *supra* note 68, at 896–897.

influence is independent of it.<sup>85</sup> The effectiveness of public participation is subject to the limitations of government feedback, which should be provided more thoroughly and consistently. While electronic public participation is technologically significant, the platform alone will not yield strong public participation without other factors aligning, including the general environment, institutional design, and technical path.<sup>86</sup> In this regard, the institutional construction of public participation in e-rulemaking needs to break through the internal perspective of the existing platform and to adjust itself by combining with the functional positioning of the online platform and e-rulemaking.<sup>87</sup>

#### A. Enlarge Online Public Participation

Although the evaluation of public participation cannot rely on simple ratings of “sufficient” or “insufficient,” the opportunity that has been provided by the information technology revolution to promote public participation in rulemaking still needs to be pursued. In academic circles, e-rulemaking remains contentious as a system to effectively facilitate public participation.<sup>88</sup> In practice, as exemplified by the Shanghai system, e-rulemaking can yield both high and low public participation. Information technology development has impacted e-rulemaking, resulting in participation numbers that are difficult to achieve through traditional rulemaking procedures.

However, the current driving force behind public participation is the emergence of issues that play into growing self-interest, and the public may be more passive around the public welfare issues, such as standardizing government construction and promoting basic livelihood. Knowledge complexity may also influence participation, as it determines the extent to which the public can understand the disputed points of draft rules in combination with their own preferences in order to express targeted opinions. In addition, this empirical study shows that the passive or indifferent

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<sup>85</sup> See Woods, *supra* note 43.

<sup>86</sup> See Cary Coglianese, Heather Kilmartin & Evan Mendelson, *Transparency and Public Participation in the Federal Rulemaking Process: Recommendations for the New Administration*, 77 *Geo. WASH. L. REV.* 924, (2009).

<sup>87</sup> See Zhang, *supra* note 13, at 2–4.

<sup>88</sup> Benjamin, *supra* note 68, at 939–941.

nature of participation is a result of a lack of confidence in internal or external political efficacy.<sup>89</sup> A sense of poor internal political efficacy diminishes the public's evaluation of their ability to participate, and poor external political efficacy leads the public to believe that decision-makers disregard their participation.<sup>90</sup> In sum, the interest embeddedness, knowledge complexity, and perception of political efficacy may all be factors that affect public participation.

E-rulemaking may not be able to respond effectively to all the factors referenced in this study. For example, changing the level of public interest in the rulemaking process may require long-term cultivation of civic consciousness among citizens and their role in public policy. Yet there are some initiatives worthy of pursuit. Online platforms offer low-cost exchange of information, which can be leveraged to address the lack of basic information in the traditional administrative rulemaking.<sup>91</sup> Reference materials should be prepared and published to assist the public in understanding draft rules and making judgments accordingly. Information on the drafting process, feasibility evaluation, and preliminary research on the drafts—at one time available online—includes the public in the policymaking process, which has immediate and long-term benefits.

E-rulemaking does not solve the challenge of engaging the public in draft rules that cover a wide range of interests and knowledge areas. Therefore, public participation methods need to address the characteristics of individual participants in order to promote the classification and refinement of the assessment of public participation. Shanghai's smart government construction advocates for a user-oriented governance that provides intelligent, high-quality, and personalized public goods and services.<sup>92</sup> In this regard, future institutions will become equipped to use the deep learning function of information technology to improve public participation and assess issues.

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<sup>89</sup> Zhang, *supra* note 13, at 2–4.

<sup>90</sup> See Wang & Fang, *supra* note 53, at 95 (analyzing the correlations between Chinese citizens' political participation and psychological factors such as self-evaluation of one's ability to participate and degree of confidence about different levels of the government).

<sup>91</sup> See Coglianese, *supra* note 67, at 376.

<sup>92</sup> See, e.g., Du Qiongfang, *Shanghai leads China's open data use in smart city development*, GLOBAL TIMES, Nov 11, 2020.

### *B. Improve Online Government Feedback*

Government feedback responding to online participation does not singlehandedly determine the success of the platform construction, but it does reflect the e-rulemaking's functional positioning in the existing platform construction.<sup>93</sup> Electronic public participation is a double-edged sword: on one hand, it expands participation opportunities that are limited in traditional legislative procedures; on the other hand, it may also introduce new costs of information screening and government feedback.<sup>94</sup> It would be a cumbersome task for the government to reply to hundreds of public opinion submissions.

The key is finding the appropriate government feedback mechanism. To be sure, the Shanghai Public Participation Website shows progress. But how to use the existing platform to rationally integrate online and offline public participation mechanisms requires precisely defining the platform's functional role in overall e-rulemaking. For example, when the government publishes an announcement seeking public opinion, it may be optimal to combine electronic and written forms to create a more comprehensive process. This article concludes, however, information about targeted consultations and legislative hearings should not be part of the e-rulemaking procedure. These processes are not initiated by electronic announcements, and public participation is not based on the electronic platform. Therefore, even if it is useful to display the feedback online, targeted consultations and legislative hearings call for a separate online platform. The current online information feedback mechanism should be reserved solely for online public participation. When internet users comply with the technical requirements of the Shanghai Public Participation Website, they should be able to comment on previous public input already read by the government, streamlining the process and decreasing administrative cost. Keywords for public input would allow for quick

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<sup>93</sup> Benjamin, *supra* note 68, at 896–897.

<sup>94</sup> In the United States, e-rulemaking also brings the burden of administrative organs to handle opinions. See Stuart W. Shulman, *The Case Against Mass E-mails: Perverse Incentives and Low-Quality Public Participation in U.S. Federal Rulemaking*, 1 POL'Y & INTERNET 23 (2009) (stating that large-scale e-mail campaigns directed to agency decision-makers prevents citizens from pursuing a more substantial and efficacious role in public participation).

and searchable summaries of the information collection. As much feedback as possible should be provided on topics of concern to the general public in order to enhance the recognition, utilization, and effectiveness of public participation. In addition, the key data should be processed to understand and quantify the results of participation, which can improve the quality of legislation. E-rulemaking in its ideal form enhances the rulemaking process by informing and responding to government regulation.<sup>95</sup>

### *C. Legally Binding Effect of Public Participation*

The government's responsiveness to public participation is not enough to evaluate the entire information feedback mechanism, but public participation is not without teeth. In some cases, public participation may have a legally binding effect on the government response. This article reveals the amount of public input on the Shanghai Public Participation Website did not have a substantive binding effect on government feedback. The feedback does not necessarily respond to the public opinion expressed on the online platform. This situation creates an institutional dilemma for online participation, which is crucial in e-rulemaking. On the one hand, this problem arises from information technology itself; on the other hand, it is worsened by the shortcomings of the current system construction.<sup>96</sup>

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<sup>95</sup> This method used to exist in the Website of LAO, <http://www.shanghai.gov.cn/fzb/index.html> [<https://perma.cc/5Z4B-J7YS>] (last visited Apr. 24, 2019). There was a special "Government Rules Legislative Hearing" section before the revision in 2013 that recorded in detail the hearing information of 13 drafts in the process of rulemaking in Shanghai from 2008 to 2013.

The State Council's "Legal Regulations Draft Opinion Seeking System" requires individual registration to obtain information about other public participation. See <http://zqyj.chinalaw.gov.cn/index> [<https://perma.cc/M2A8-VP9R>]. In contrast, the Shanghai Public Participation Website has greater convenience and affinity for public participation, <http://hd.sh.gov.cn/inter/#!/draft/list?siteId=0001> [<https://perma.cc/P9U2-NZ6V>].

<sup>96</sup> The Hunan Provincial Administrative Procedures Regulations requires that "if the opinions are not adopted, the reasons should be explained. The public opinions and adoption should be announced to the public." But it does not clearly specify government feedback mechanisms. Hunansheng Xingzheng Chengxu Guiding (湖南省行政程序规定) [Hunan Provincial Administrative Procedures Regulations] (promulgated by the Provincial People's Government, Apr. 9, 2008, effective Oct. 1, 2008) (China).

In order to strengthen the binding force of online information participation, the union of information technology and the online platform in collecting information should form the basis for connecting subsequent procedures. In fact, e-rulemaking is not the only way of public participation in the current rulemaking in China. Relevant regulations propose to establish an advisory mechanism in the government's rulemaking process in addition to mechanisms such as symposiums, argumentation meetings, and hearings.<sup>97</sup> For example, hearings are often applied when a situation "involves major interest adjustments or major differences of opinions, has a significant impact on the rights and obligations of citizens, legal persons or other organizations, and attracts wide public attention."<sup>98</sup> The argumentation consultation mechanism applies to a situation that "attracts wide public attention or any prominent conflict encountered in economic and social development, causes significant impact on the public, and involves other major interest adjustment matters."<sup>99</sup> However, the mechanisms to define the existence of major differences in opinions, to confirm the significant impact on the rights and obligations of private parties, and to judge the extent of public attention, are left to the government's discretion. From this point of view, how can we apply public participation information from the online platform to provide proper methods of explanation for the above-mentioned uncertain legal concepts? Similarly, how can we enable public participation information to determine the implementation of subsequent rulemaking procedures? If these tools are effectively extended, the legislative process can become more predictable, and the entire public participation system more effective.

## V. CONCLUSION

E-rulemaking is not yet a widespread normative concept in China. However, the mechanisms at its core have become highly valued in China's rulemaking practice. From the perspective of government "self-regulation,"<sup>100</sup> after the Outline of Promoting Law-

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<sup>97</sup> Shanghai Provisions on Rulemaking Procedures, *supra* note 52, at arts. 21.

<sup>98</sup> *Id.* at arts. 22.

<sup>99</sup> *Id.* at arts. 28.

<sup>100</sup> See Shen Kui, *Administrative "Self-regulation" and the Rule of Administrative Law in China*, 13 U. PA. ASIAN L. REV. 72, 82–84 (2018) (stating

based Administration in an All-round Way was issued in 2004, The Implementation Outline for Building a Government Ruled by Law (2015-2020) has stated that “to increase public participation in government legislation, and to expand the ways and means for all sectors of society to participate in government legislation in an orderly manner,” the government should “establish consultation mechanism[s] . . . take extensive opinions in the form of symposiums, argumentation meetings, hearings, questionnaires, etc.” and be “open to the public through the Internet, newspapers and other media, and the term should be generally no less than 30 days to strengthen communication with the public, improve the feedback mechanism for public opinion adoption, and broaden the social consensus.”<sup>101</sup> The Plan to Build the Rule of Law in China (2020–2025) again emphasizes that the needs “to improve the public opinion seeking mechanism in rule-making process, to expand the coverage and representativeness of public participation, and to enhance rule-making transparency,” and “to accelerate the promotion of ‘internet plus government services’ and to fully realize the ‘government online-offline’ construction.”<sup>102</sup> This article finds that pluralistic public participation and the mechanism for adopting public input—exemplified by the improvement of the construction of the Shanghai Public Participation Website—are moving towards the ideal set by the Chinese government.

It is necessary to remember that the institutional construction and implementation of e-rulemaking in China is still in its infancy. The groundbreaking legislative plan for an E-Government Law was frozen, delaying the construction of e-government as a top-level design. However, without a unified system and normative restraints, online platforms and information provide opportunities for innovation and local experiments at the provincial and city level. As

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that internal control within the Chinese administration plays an important role in enforcing Chinese administrative law).

<sup>101</sup> Fazhi Zhengfu Jianshe Shishi Gangyao (法治政府建设实施纲要(2015—2020年)) [The Implementation Outline for Building a Government Ruled by Law (2015-2020)] (promulgated by the State Council, Dec.23, 2015, effective Dec.23, 2015).

<sup>102</sup> ZHONGGONG ZHONGYANG YINFA <FAZHI ZHONGGUO JIANSHE GUIHUA (2020-2025NIAN)> (中共中央印发《法治中国建设规划(2020—2025年)》) [The Plan to Build the Rule of Law in China (2020–2025)], [http://www.gov.cn/zhengce/2021-01/10/content\\_5578659.htm](http://www.gov.cn/zhengce/2021-01/10/content_5578659.htm).

for Shanghai, as a model city for information technology and smart city construction, there remains substantial room for innovation and development in e-rulemaking based on the Shanghai Public Participation Website. In addition to the public participation dimension, it is also necessary to explore the e-rulemaking mechanism from other perspectives, such as the value of the internet and big data, the administration and efficacy of information regulation, the social media features and special crowd design, and the administrative cost and efficiency.<sup>103</sup>

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<sup>103</sup> See Bo Fan & Hongzhen Jiang, *Legislative Policies for the Dominant Tasks of E-government Push in the Chinese Context*, 32 INFO. DEV. 953, 955(2016) (analyzing legislative barriers of the push for e-government); He Renlong (贺仁龙), *Shanghai cong “Zhihui Chengshi” dao “Zhihui Shehui” de Guanjian Jianshe Lujing* (上海从“智慧城市”到“智慧社会”的关键建设路径) [*Shanghai’s Key Construction Path from “Smart City” to “Smart Society”*], BESTICITY (MAY 17, 2018, 9:28 PM), <http://www.besticity.com/dynamic/211872.html> [<https://perma.cc/N2YC-PNYP>] (exploring policy changes necessary to Shanghai’s transition from “smart city” to “smart society”).