

China's Open Government Data: A Legal Perspective

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Abstract: This article focuses on an innovative system in China's digital government construction from a legal perspective, called open government data. This system can improve government administrative efficiency and promote the use of data to expand the data factor market. However, in practice, the indiscriminate use of the concepts of open government data (OGD) and government information disclosure (GID), as well as legal problems such as the direct transplantation of existing systems, seriously hinder the effective advancement of OGD. To explore current status of OGD practices, this article selects 4,629 judicial documents of litigation related to GID and 4 types of indexes about OGD platforms as empirical analysis samples, aiming to clarify meanings and relationships between two concepts at the legal level. A deep analysis of these samples reveals litigation dilemma, platform development dilemma, and legal dilemma in the process of OGD. In response, this article proposes some measures including regulating OGD through separate law, replacing the three-tier system with the three-tier & dual system, and establishing the collaborative rights protection system. In this way, the ultimately goal that promoting the efficient and orderly advancement of OGD will be achieved.

Keywords: Open Government Data (OGD); Government Information Disclosure (GID); Concept Clarification; Regulation Improvement; Rights Protection

Introduction

In the epoch-making transformation of digital governance model, government information disclosure (GID) has shifted to open government data (OGD), which is a new requirement for the construction of digital government [1]. In this trend, countries continue to explore and improve the institutional basis, operational logic and guarantee system of OGD. In 2015, the State Council issued the *Outline of National Action for Facilitating Big Data Industry Development* under the goal of strengthening the data power, and the *Opinions on Building a Data Infrastructure System to Better Play the Role of Data Elements* (hereinafter referred to as the *Twenty Data Measures*) issued by the Central Committee of the Communist Party of China and the State Council at the end of 2022, both emphasize the promotion of effective opening up and flow of "public data," including "government data." In 2016, the State Council issued the *Outline of the 13th Five-Year Plan for National Economic and Social Development of the People's Republic of China*, also directly focus on the term "government data," and explicitly require "the formulation of government data sharing and opening up catalogs, and push forward the opening up of data resources to the community in accordance with the

law." Such significant policy documents provide directional guidance about the implementation of OGD for government departments around China. In the process of implementing OGD in full swing, Shanghai launched the first OGD platform (named the "Shanghai Government Data Portal" [2]) and issued the *Interim Procedures of Shanghai City on the Opening of Public Data* to standardize the order of public data openness, all of which provide valuable experience for OGD. If OGD operates efficiently, it can not only enhance the construction of service-oriented, digitalized, and efficient government, but also influence other subjects, such as increasing the total factor productivity of enterprises [3], the efficiency of citizens' access to administrative information, and so forth.

However, due to the lack of specific legislation on OGD in China, the specific operational rules have not yet become a unified standard. Simultaneously, in the pilot attempts of governments around China, the platforms are scattered and clearly separated. It can be also seen that all of them have different understandings of OGD, and that the concept is sometimes confused with GID. Therefore, both the regulations governing OGD, and the attempts to promote it, have significant shortcomings. How to clarify the distinction between OGD and GID, how to structure a system for implementing and

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guaranteeing OGD are crucial issues to the construction of a digital government and the flow of data elements, and should be discussed again.

Inheritance But Not Replace: The Relationship Between OGD and GID

For a long time, although there is no clear comparison and clarification of the relationship between OGD and GID in practice and legislation, there has been a general debate on this issue in academia, attempting to emulate the relatively mature system behind GID and apply it to OGD. The first step in how to operate is to clarify the two major concepts, thereby understanding their connection and links.

A review of previous academic arguments on the two concepts reveals three main theories that establish a logical connection between them, **1)** inheritance theory, which states that GID lays the legal foundation for OGD, and in the big data era, it has become a topic of data openness [4]; **2)** subordination theory, which states that data openness, in terms of concepts, laws, values, or management, is all part of information disclosure [5]; **3)** mutual exclusivity theory, which states that the two concepts are mutually exclusive because their institutional foundations and goals are fundamentally different. However, all three types of theories have shortcomings, to varying degrees, in their incomplete explanation of the relationship between the two concepts. For example, the inheritance theory merely focus on the connection between the two concepts and mentions fewer of the differences. The subordination theory is even more so. On the contrary, the mutual exclusivity theory makes the two concepts exclusive and does not seek common ground from differences. As mentioned above, the three theories are impossible to clarify relationship between OGD and GID, and they are all not reasonable enough to become the theoretical foundation of the institutional framework. Therefore, it is necessary to explore the real relationship between the two concepts from their extension and intension.

From the perspective of extension, data is the result of digitization of information, which is also applicable to the administrative field for conceptual explanation. Extraterritorial law has made a definition of government data, and in the *Open Government Data Act of the United States*, data is defined as “recorded information.” Evidently, in the context of the data-based administration, data and information do not have a strict delimitation of their extensions. In the practice of various countries, administration digitization is interpreted as the evolution from GID to OGD, with the former being the basis for the adaptation of the latter, and the latter being the future evolution of the former. For example, the United States has gradually promoted OGD within the framework of GID, and in the Memorandum of the *Transparency and Open Government*, the authorities requested the coordination among relevant departments to develop the *Open Government Directive* within the framework of the *Freedom of Information Act*. China's *2015 Key Points for Government Information Disclosure Work* specifies that OGD is one of the paths to further ex-

panding GID. Therefore, as the inheritance theory suggests, OGD is the expanded and upgraded version of GID in the big data era and there is a logic of inheritance between the two concepts. Further, although the conceptual contents of government data and government information may have minor differences, the administrative acts carried out through openness or disclosure means are all a kind of transparency in government affairs, which means they have formal correspondence and content relevance. Therefore, the two concepts are closely related and can be applied through institutional transfer.

From the perspective of intension, OGD and GID share the same macroscopic objectives of enhancing government transparency, fostering the construction of digital government and utilizing data and information resources to promote the development of the national economy. However, there is a core difference in specific application. In GID, besides the option of proactive disclosure, the government also bears the obligation of disclosure under the application-based disclosure system. In this legal context, the government is positioned as the supervisor and unilateral obligor in order to protect citizens' right to know, but the two sides are likely to have an adversarial relationship and antagonistic sentiments [6]. In OGD, the government is in a proactive position, with no passive application for openness. Meanwhile, OGD is not merely stop at the level of knowing, but further moves towards integration and utilization. For example, opening up data related to people's livelihoods, such as transportation and weather, allows for collaborative discussions with businesses and social organizations to solve problems in traffic management and agricultural governance. The relationship between the government and the public at this example is non-confrontational and mutually beneficial. It can be noted that GID tends to guarantee the people's right to know, while OGD tends to promote the combination and utilization of data, and to move towards the effective flow of data. So the above two concepts are not mutually replaceable.

In a nutshell, “inheritance but not replace” best summarizes the relationship between OGD and GID. Furthermore, GID can serve as a template and foundation for OGD, but the theoretical improvement of its shortcomings needs to focus on further practical operations.

Data Analysis on Judicial Documents and Indexes

To explore the ideal institutional framework for OGD, this article leverages data analysis as its research method. On the one hand, it focuses on judicial practice and summarizes the insights and experiences from litigation related to GID, while also revealing the necessity and urgency of improving OGD. On the other hand, it conducts an in-depth analysis of the current status of local OGD platforms, summarizing the shortcomings of existing platforms from three dimensions about time, region, and effectiveness, so as to provide feasible ideas for good laws and sound governance in the field of OGD in the future.

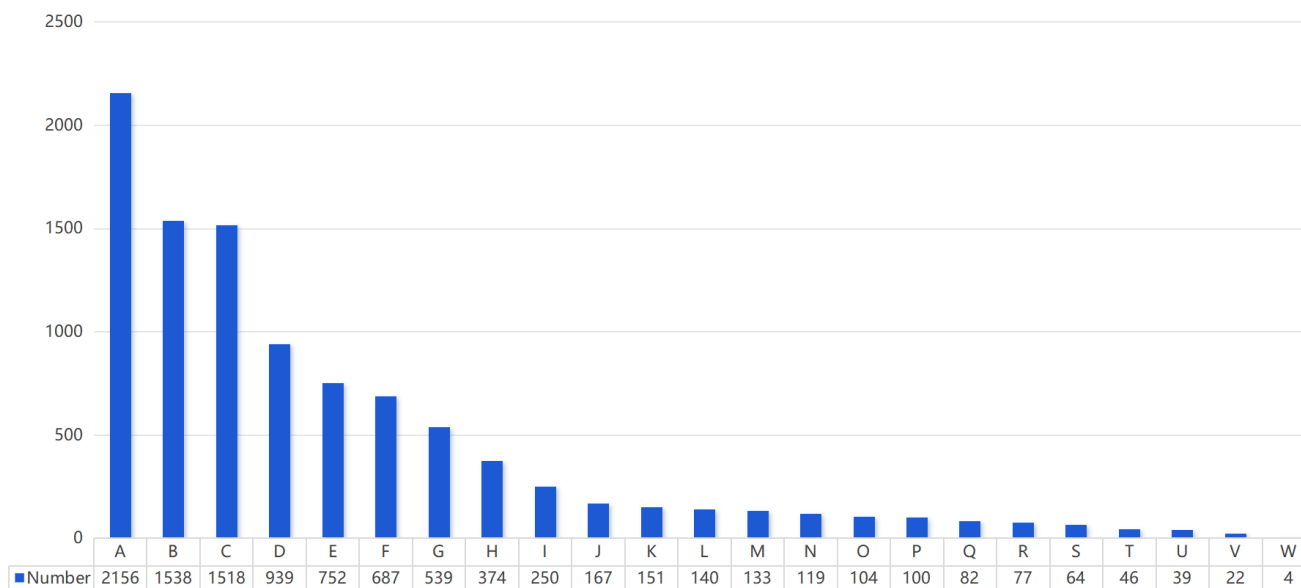


Figure 1 | Statistics on the types of information requested for disclosure in litigation related to GID

Letters from A to W represent different types of information that citizens are requesting to be disclosed in the litigation. Specifically, A: Planning and related policies; B: Land and housing expropriation and requisition; C: Housing demolition; D: Government finances; E: Archives; F: Major construction projects; G: Education; H: Social security; I: Economic and social development statistics; J: Environmental protection; K: Food, medicine, and products; L: Land bidding; M: Employment; N: Government procurement; O: Poverty alleviation; P: Work safety; Q: Public health; R: Public emergencies; S: Administrative agency office information; T: Civil service examinations; U: Real estate transactions; V: Medical care; W: Administrative and institutional fees.

Data analysis on judicial documents of litigation related to GID

This article selects judicial documents of litigation related to GID that occurred between January 1, 2012 and September 17, 2021. A total of 4,629 judicial documents were identified, including 4,045 judgments and 584 orders. The following section presents a statistical analysis of the sample from three important dimensions that reflect the substantive characteristics of litigation, including the requests for disclosure, the outcomes of litigation, and the reasons in litigation.

The requests for disclosure

Among the 4,629 judicial documents, the requests for disclosure can be categorized into 23 types (Figure 1). Data shows that the top three categories—planning and related policies, land and housing expropriation and requisition, and housing demolition—are centered around real estate and constitute the majority of the requests for disclosure. In practice, these requests often coexist. For example, in a single case, an applicant may simultaneously request disclosure of regional planning schemes, land and housing expropriation and requisition policies, and housing demolition policies.

The outcomes of litigation

Among the 4,045 judgments, in the procedure of first instance, only slightly more than half of the judgments ruled in favor of the plaintiffs in all or part of their claims (Figure 2). This indicates that while litigation related to GID, as the final channel for rights remedies, plays a role in protecting the right of natural persons, legal persons, and other organiza-

tions to know government information, its role is clearly insufficient. In the procedure of second instance, the ratio of judgments with reversed judgments to judgments with dismissed appeals is approximately 1:10 (Figure 3), indicating that the vast majority of first instance judgments in litigation related to GID are final and effective, with a low rate of reversed judgments in the procedure of second instance. Furthermore, there are only 3 judgments in the retrial of litigation related to GID, and the applicant for retrial is the same one. The result in all such judgments is that the respondent (namely government) is required to make a new response within prescription, which constitutes the relatively insignificant example.

Among the 584 orders, regardless of procedure, orders in litigation related to GID mostly ended with the rejection of the plaintiff’s, appellant’s, and applicant’s requests (Figure 4, 5 & 6). To some extent, this reflects the general tendency in China’s judicial practice to “emphasize substance over procedure,” and further reveals that administrative bodies have a certain degree of subjective resistance and negative attitude in their work on information disclosure.

The reasons in litigation

Among the 4,629 judgments and orders, the reasons for agreeing to information disclosure were relatively simple. However, a significant number of judicial documents (in total 2,867) rejected citizens’ requests or refused to file cases, which were detrimental to the administrative counterparts. In these cases, the courts’ reasons for refusal were diverse, falling into eight categories (Table 1), reflecting the complexity of information disclosure review.

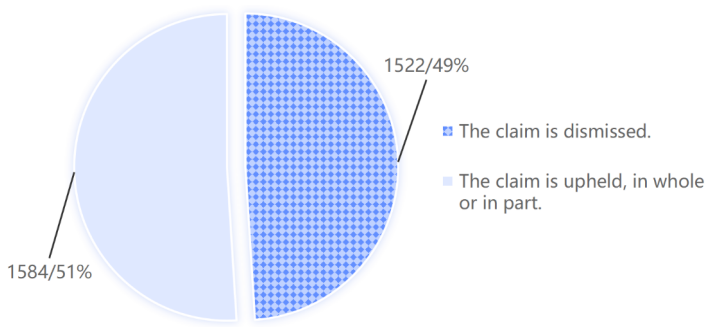


Figure 2 | The composition of the judgments in the procedure of first instance

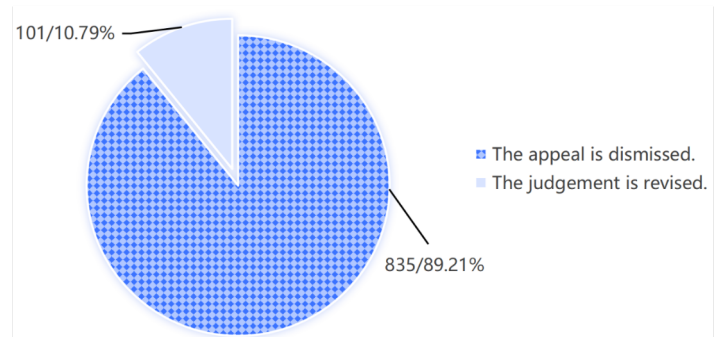


Figure 3 | The composition of the judgments in the procedure of second instance

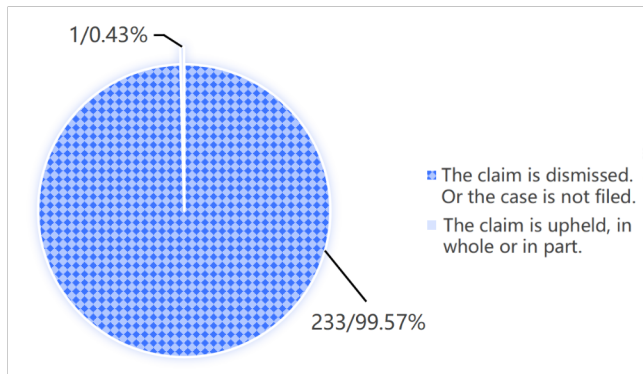


Figure 4 | The composition of the orders in the procedure of first instance

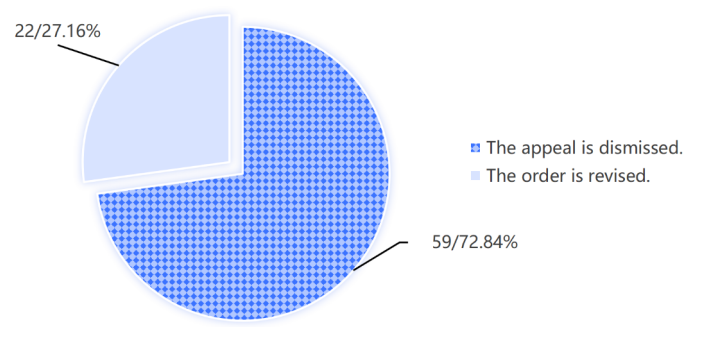


Figure 5 | The composition of the orders in the procedure of second instance

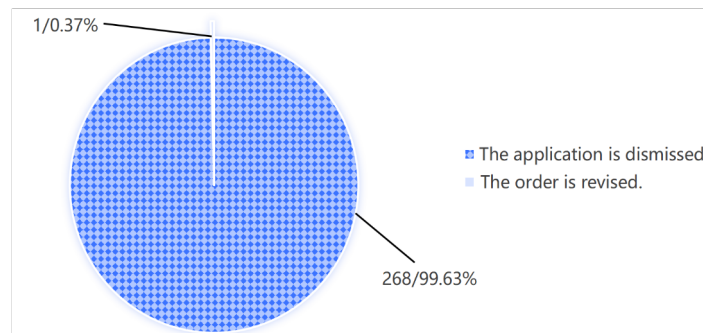


Figure 6 | The composition of the orders in the retrial

Table 1 | Reasons for refusing to disclose information

Reasons	Number	Legal Basis
Making it public could endanger national security, public safety, economic security, and social stability.	70	Article 14 of Open Government Information Regulation of the People's Republic of China
The information involves personal privacy and trade secret. Disclosure of it would harm the legitimate rights and interests of third parties.	871	Article 15 of Open Government Information Regulation of the People's Republic of China
Information that pertains to the internal affairs of administrative agencies may not be made public.	21	Article 16 of Open Government Information Regulation of the People's Republic of China
Information that pertains to process-related information and case files of administrative law enforcement may not be made public.	174	Article 16 of Open Government Information Regulation of the People's Republic of China
The government information in question does not exist.	1364	Article 36.1.4 of Open Government Information Regulation of the People's Republic of China
The administrative agency has no authority to disclose this information.	76	Article 36.1.5 of Open Government Information Regulation of the People's Republic of China
The applicant repeatedly requested for access to the same government information.	87	Article 36.1.6 of Open Government Information Regulation of the People's Republic of China
The information falls under categories such as business registration, real estate registration data, and so forth. The relevant laws and administrative regulations have specific rules regarding the acquisition of such information.	204	Article 36.1.7 of Open Government Information Regulation of the People's Republic of China

Data Source: China Judgments Online

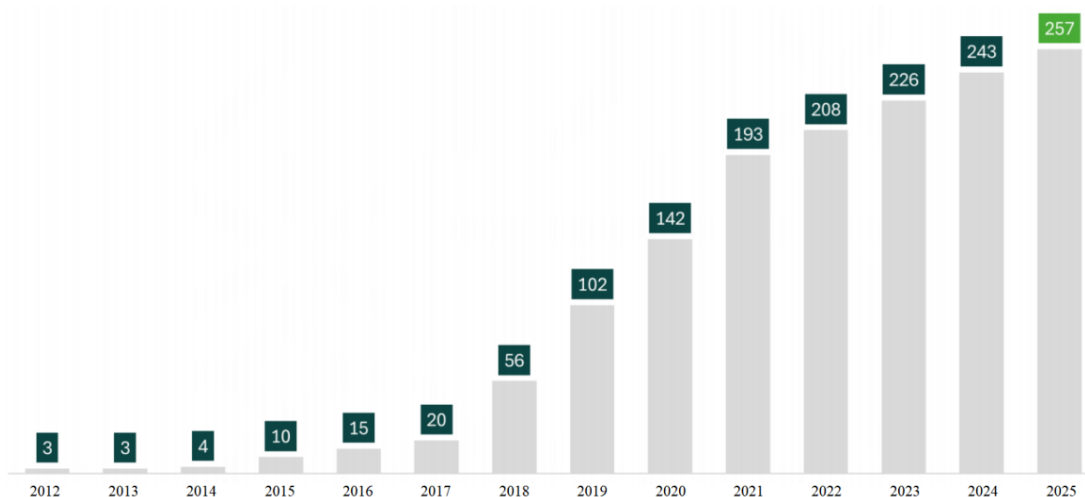


Figure 7 | Growth in the number of OGD platforms at the prefecture-level and above over the years [7]

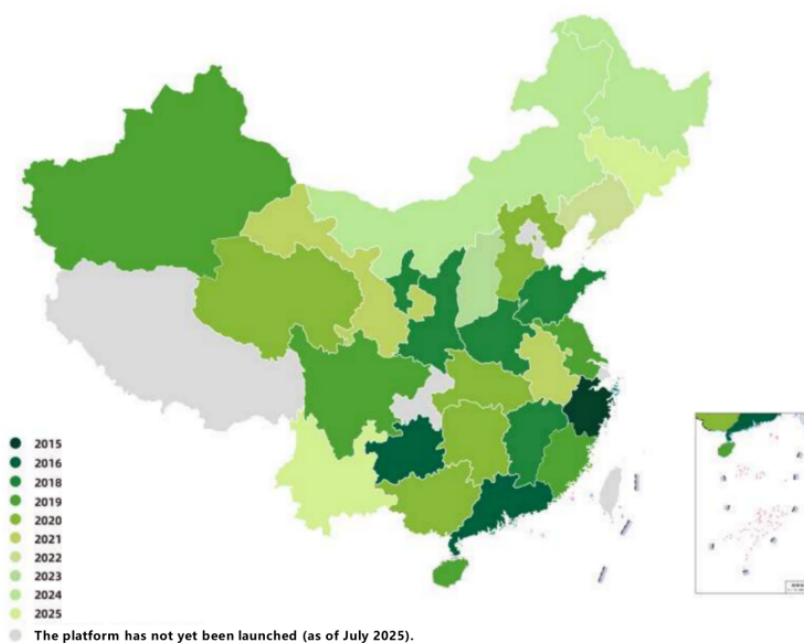


Figure 8 | Geographical distribution of the launch time of provincial-level OGD platforms [7]

Data analysis on indexes about OGD platforms

In addition to analyzing judicial documents, a comprehensive understanding of the current development of China’s OGD is necessary to gather sufficient practical evidence for its future inclusion in more laws and regulations. To this end, this section collects 4 types of indexes about OGD platforms, presenting them from three dimensions about time, space, and result, and then drawing some preliminary conclusions.

Time-based analysis: growth

According to the [Figure 7](#), the total number of OGD platforms at the prefecture-level and above in China has been increasing year by year, and entered a period of rapid construction in 2017, which slowed down after 2022. Among them, the platform construction in 2021 was particularly remark-

able, with 51 new OGD platforms added compared to 2020, reaching the highest increase in history.

Space-based analysis: distribution

According to [Figure 8](#), the development of China’s OGD platform construction project generally shows a trend of radiating from the southeast coast to the northwest. The underlying reason is that the more developed a province’s economy and the more frequent its external economic exchanges, the earlier its OGD platform is launched. However, after more than a decade of development, some provinces still haven’t launched their OGD platforms, and some platforms in other provinces have reached their limits and become inaccessible.

According to [Figure 9](#), among provinces in China, the number of prefecture-level OGD platforms is relatively small and their distribution is scattered. Taking Henan Province as

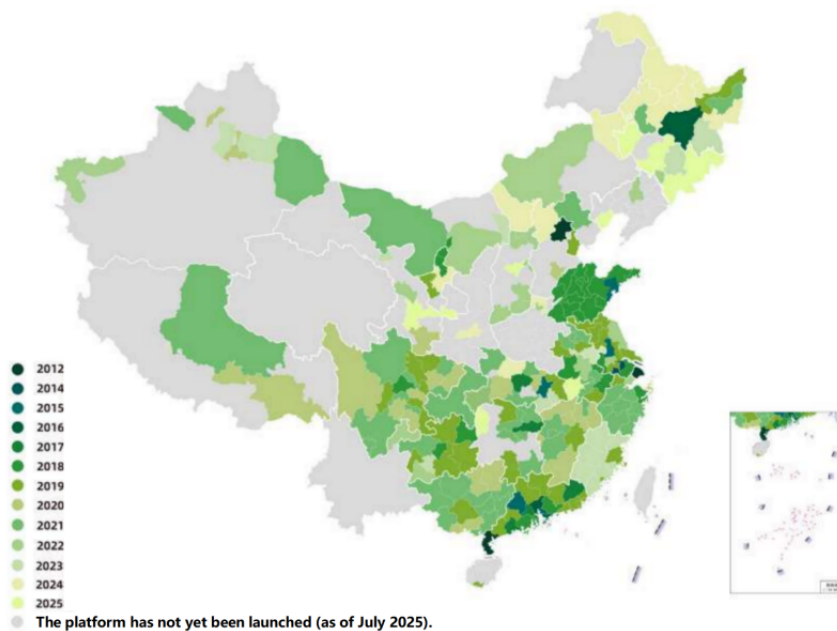


Figure 9 | Geographical distribution of the launch time of prefecture-level OGD platforms [7]

an example, although provincial-level OGD platforms started relatively early in Henan Province, only a few prefecture-level cities in northern place of Henan Province have established prefecture-level OGD platforms, while most other prefecture-level cities have not yet launched their own OGD platforms.

Results-based analysis: how effective was it?

The China Open Data Index is a statistical index used to assess the development level of OGD platforms. It evaluates platforms from four aspects about preparedness, platform layer, data layer, and utilization layer. It comprehensively and deeply reflects the objective status of OGD platforms in China. The higher the index, the better the effectiveness. According to [Figure 10](#), OGD platforms have achieved effective development nationwide, but the effectiveness varies, and many provinces still have platforms with relatively low effectiveness.

The Existing Dilemmas of OGD

Litigation dilemma: Chaotic handling caused by system confusion

One purpose of OGD is to stimulate the huge social and economic value of government information resources, enhance the national economic growth [8], and allow the source of social wealth to fully flow through the carrier of data. The legislative purpose of the *Regulations on the Disclosure of Government Information* (Article 1) is that “in order to ensure that the natural persons, legal persons and other organizations have access to government information according to the law, to improve the transparency of the work of the government and build a government under the rule of law, and to give full play to the role of government information in serving the people’s production, livelihood and economic and social

activities.” It is obvious that the common purpose of OGD and GID intersect in the economic field that to facilitate economic development and the growth of national wealth. However, this article finds, after empirical analysis on judicial documents, that the overlap of the common purpose can lead to chaotic handling in judicial practice. More notably, such overlap can actually lead to more negative impacts between two similar systems in litigation related to GID.

The negative impact of litigation related to GID on OGD

Firstly, although the purpose of OGD and GID are intertwined in the economic field, which has led to a surge in cases involving requests for access to planning and related policies, which are most closely related to the economy ([Figure 1](#)), the significant differences between other purposes of OGD and GID in other fields inevitably lead to litigation related to GID being an inefficient, imperfect, but also the only judicial remedy alternative to OGD.

Secondly, the chaotic handling has led to a certain degree of evasion and laxity by some administrative bodies in litigation related to GID, which will likewise affect the judicial fairness of cases related to OGD ([Figure 2,3,4,5,6](#) & [Table 1](#)). As a result of remedy approach of OGD in China is not yet clear, litigation related to GID is compelled to be used in some of cases related to OGD, and the administrative intervention of judicial decision-making in practice is difficult to completely eliminate in the short term. Under this impact can be predicted that part of the reasonable claims related to OGD, also failed to be supported by the court under the shell of litigation related to GID.

Thirdly, the rights and interests of private subjects will also face challenges in OGD. The cases in which the judgment of litigation related to GID rejected the claims, those involved in personal privacy, trade secret, and the legitimate rights and

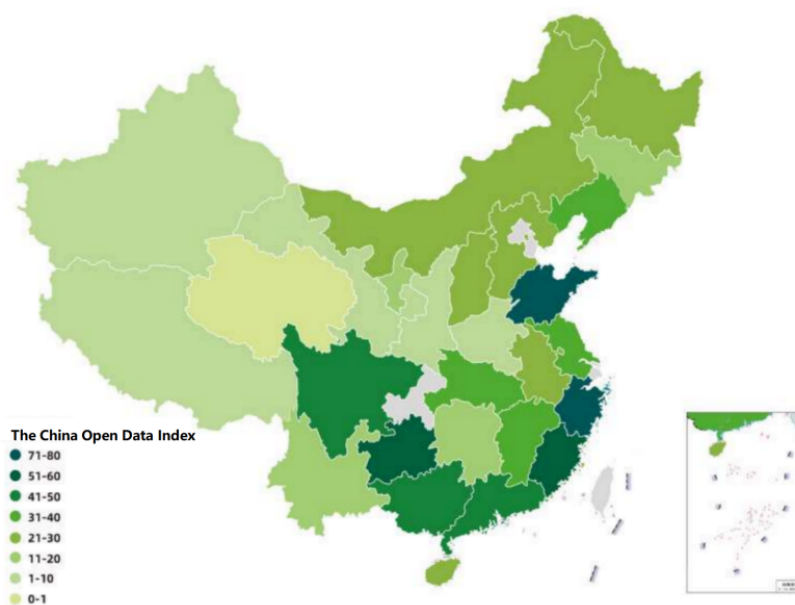


Figure 10 | The China Open Data Index [7]

interests of third parties occupied a considerable proportion (Table 1). It indicates that under the framework of GID, the civil rights and interests of the private subjects may be infringed upon in countless cases, which poses a severe challenge to the judicial defense and leads to serious challenges to the protection of the private rights of civil and commercial entities. Since both government information in GID and government data in OGD possess the same characteristics of general data, namely ease of replication and mobility, thus there is no doubt that the protection of private rights will also be a key area of focus and challenge for laws and regulations in the future field of OGD.

The negative impact of OGD on litigation related to GID

Similarly, due to the chaotic handling of the two systems, and the lack of remedy approach for OGD, the case burden that should be shared by remedy approach of OGD has instead been placed on litigation related to GID. Such phenomenon has two direct negative impacts, **1)** it will lead to the waste of unnecessary judicial resources, affecting the effectiveness of such resources; **2)** a surge in the number of cases reduces the average time and effort that judicial personnel spend on each case, leading to a decline in the quality of litigation and thus increasing the probability of mistrial.

Platform Development Dilemma: Uneven Regional Development and Insufficient Progress

Pilot projects for OGD platforms have been launched in provinces and cities across China. However, as the empirical analysis on indexes about OGD platforms shows, the development of these platforms still faces some dilemmas, hindering the further implementation of OGD.

Uneven regional development

The development of China's OGD platforms generally shows a trend of radiating from the southeast coast to the northwest inland, with progress slowing down the further away from the coastal areas (Figure 8 & 9). This generally aligns with the geographical distribution of economic development levels across China. The more developed the economy, the faster the construction of supporting OGD platform infrastructure. The two complement and promote each other, a point particularly evident in the Yangtze River Delta Urban Cluster and the Pearl River Delta Urban Cluster. This is particularly evident in the Yangtze River Delta and Pearl River Delta urban clusters. For less developed regions, effectively assisting in the construction of OGD platforms, promoting investment attraction, and achieving a positive interaction between OGD platforms and economic development presents a challenge that legislative and administrative bodies need to consider in the future.

Insufficient progress

Although the number of OGD platforms is increasing year by year, their effectiveness varies greatly, some lack maintenance, and most are at a low level (Figure 7 & 10). Improving the quality of these platforms remains a crucial issue for future development. Simultaneously, while most provinces already have OGD platforms (Figure 8), development within these provinces is noticeably hollowed out (Figure 9 & 10), exhibiting a trend of "much ado about nothing." Therefore, how to promote the establishment of prefecture-level OGD platforms within provinces and accelerate the linkage between prefecture-level and provincial-level platforms urgently needs to be addressed.

Table 2 | Status of Local Norms on OGD

Region	Number of Abstract Administrative Acts	Number of Administrative Legislation
Guangdong	62	5
Jiangsu	39	0
Shanghai	10	0
Guizhou	48	8
Sichuan	18	0
Hubei	4	0
Anhui	15	0
Xinjiang	8	0
Hebei	18	18
Heilongjiang	24	0
Fujian	22	1

Data Source: Wolters Kluwer China Law & Reference

Deeper Essence: The Dilemmas Caused by the Lack of Law

The litigation dilemma and platform development dilemma revealed by the analysis of litigation data and platform data have a deeper, undeniable cause: the lack of clear laws. This vagueness results in a lack of explicit rules to resolve disputes over OGD, and also a lack of clear rules to provide clear guidance for promoting OGD.

Difficulties in legislation: The absence of top-level design and local administrative legislation

Firstly, the absence of top-level design on OGD. At present, the only existing laws and administrative regulations related to OGD in China are the *Cybersecurity Law*, the *Data Security Law*, the *Personal Information Protection Law*, and the *Regulations on the Security Protection of Key Information Infrastructures*. However, they are not specific enough to regulate OGD, and fail to systematically and comprehensively construct provisions according to the characteristics and purposes of OGD, which is insufficient to effectively regulate and guide the development of it. What kind of legislative techniques and concepts should be used to formulate specialized departmental regulations, administrative regulations and even laws for OGD in the future is a matter of urgency.

Secondly, the absence of local administrative legislation on OGD. This article has conducted a statistical survey on the number of abstract administrative acts and administrative legislation on OGD in some provinces and autonomous regions from the northeast, central, east and west regions in China. According to [Table 2](#), due to the lack of specialized top-level design mentioned above, local administrative legislation is problematic, which is manifested in the fact that the vast majority of provinces have only stayed at the level of issuing other normative documents regarding the regulation of OGD. Such abstract administrative acts, which only scratch the surface, not only have limited scientific rigor and are unlikely to make a constructive contribution to improving the legal system, but also cause serious conflicts between local legislative ideas, resulting in a situation where “everyone has their own reasons.”

Normative vagueness: The confusion regarding the intension and extension of OGD

Through research, this article finds that few laws, regulations, rules, and other normative documents provide a clear textual interpretation of the concepts of OGD and government data. For example, the concept “government data” is defined only in the *Regulations of Guiyang City on the Sharing and Opening of Government Data*, the *Implementation Measures of Guiyang City on the Sharing and Opening of Government Data*, the *Administrative Measures of Panjin City on Co-construction and Sharing of Government Data Resource (Trial)*. Similarly, the concept OGD is only clearly explained in the *Regulations of Guizhou Province on Open Government Data* and the *Implementation Opinions of People’s Government of Guiyang City on Accelerating the Sharing and Opening of Government Data in Guiyang*. Regarding OGD, different regions offer conflicting interpretations, lacking a systematic and authoritative definition with high legal force. There is an urgent need to unify and establish important concepts such as intension, extension, subject, scope, method, and so forth of OGD nationwide.

The urgency of remedies: The practical dilemma of administrative remedies

In current practice in China, for administrative disputes arising from OGD, if natural persons, legal persons, and other organizations do not protect their rights through litigation related to OGD, their main recourse is through internal orders from higher and lower levels within administrative bodies. However, such orders are highly uncertain and lack effective supervision procedure. Because there are no laws or regulations explicitly stipulating whether administrative bodies should bear responsibility for OGD, or what kind of responsibility they should bear. The timing and type of orders issued to lower-level administrative bodies are usually entirely determined by higher-level administrative bodies. Such administrative remedy faces the predicament of being ineffective in practice, lacking guidance and guarantees for operation within the framework of the rule of law.

China's Responses to the Dilemmas of OGD

The dilemmas of OGD exists in practice and also profoundly reveals the shortcomings in the legal system. Such shortcomings can be summarized by three parts including chaotic handling, unreasonable data open system, and the lack of remedies. To address these shortcomings, the governance paradigm for OGD can be improved by formulating specific regulations, reconstructing data open system, and exploring remedies.

Regulating OGD through separate law

As of 2021, local governments in more than 50 provinces and municipalities in China have issued nearly 80 regulations related to OGD, forming three major normative systems, **1)** regarding OGD as an extension of GID; **2)** formulating regulations of OGD in accordance with GID; and **3)** formulating independent regulations of OGD [9]. However, such regulations have the weaknesses of conceptual vagueness, chaotic handling, low level of efficiency, insufficient legally binding force, and so forth. In this regard, the legal logic and legal requirements of OGD should be reviewed in order to formulate specific regulations for it.

Given the potential drawbacks of including OGD in GID, such as increasing the accountability orientation, hindering openness, creating disorder, and the framework of GID failing to meet the requirements of OGD [9], the framework of the *Regulations on the Disclosure of Government Information* should not be directly adapted as the normative framework for OGD. Instead, separate law should be enacted for OGD. To establish high-level and more unified guidelines, it may be possible to summarize the regulatory experiences of Qingdao, Weihai, Jinan, Harbin and other places regarding the OGD (Like the *Notice from the General Office of the People's Government of Qingdao City on Accelerating the Opening of Public Information Resources to the Society*, the *Implementation Opinions of the People's Government Office of Weihai City on Promoting the Opening and Utilization of Government Data Resources to the Society*, the *Notice of Jinan City on Promoting the Opening of Public Information Resources to the Society*, the *Implementation Plan of Harbin City on Promoting the Opening of Government Data to the Society*, and so forth), and for the State Council to promulgate the "Regulations on the Open Government Data".

Regarding the specific legislative framework, the first focus is on general requirements. This article suggests that the intension, extension, subject, scope, method, and other important concepts of OGD should be clearly defined. For example, in terms of the scope of OGD, the "list-based" management model can be adopted, requiring managers to regularly publish the types of open data to ensure predictability and up-to-dateness. As for the content of the types, opening up non-legally prohibited data and conditionally open data are generally included in the content. Simultaneously, as stipulated in the *Administrative Measures of Shanghai City on the Public Data and One-Netcom Office*, high-value data related to people's livelihoods and urgently needed by society should be given priority for opening up. Applying this as a guideline in

OGD, especially in the Authorize-Operate model (AO model), has its value. For another example, in terms of the method of OGD, in addition to the direct opening model initiated by administrative bodies, the rules for AO model should also be a key focus in separate law. Furthermore, regarding basic principles, it is not advisable to continue adopting the principle that "public disclosure is the rule rather than the exception" in GID. The core purposes of OGD are to integrate and innovate data elements, achieve efficient flow of data resources, and effectively leverage the value of data. Therefore, OGD should take social needs as a key consideration, and the basic principle should be described as "oriented towards social needs".

The second focus is on execution requirements. Currently, OGD platforms across China generally suffer from low data quality, limited capacity, poor timeliness, and insufficient public interaction. Therefore, the proposed "Regulations on the Open Government Data" should stipulate the construction and operation rules for a unified national OGD platform in detail, establishing unified management. Simultaneously, it should also stipulate the appropriate retention of certain content from existing local regulations of OGD, thereby efficiently building a new system on the existing foundation.

Undoubtedly, the more specific content in various chapters of the "Regulations on the Open Government Data" can draw on the regulatory experience left by foreign laws and existing domestic laws, and then be discussed and considered in detail. Furthermore, the focus should be on the ever-changing nature of administrative law, with particular attention paid to the interpretation of such regulation.

Replacing the three-tier system with the three-tier & dual system

The data open system in various provinces of China generally form a three-tier system of "unconditional openness—limited openness—prohibited openness", as can be seen from the *Interim Procedures of Zhejiang Province on the Opening and Security Management of Public Data*, and so forth. Its criteria are based on risk standard, with the underlying principle being "openness with no impact—openness with some impact—openness with significant impact" [10]. However, this system will undoubtedly fall back into the old trap of GID. Risk is a vague concept, and using it as the standard to define the types of open data will undoubtedly turn the vague concept into the vague application.

In response, this article suggests that the three-tier system can be turned into a more specific institutional arrangements to better align with the requirements of OGD. Therefore, adopting the three-tier & dual system of "fully openness—limited openness—AO model" as the improved system is a reasonable approach.

The meaning of "three-tier" in improved system

Specifically, what does "three-tier" mean in improved system? Under the system of "full openness—limited openness—AO model," the three tiers are not only includes the number of system levels, but also an explanation of the classification criteria.

At the first tier, for government data other than personal privacy, trade secret, and other legally prohibited information, full openness should be encouraged, such as environmental data, market supervision data, and so forth. However, the scope of such openness should still be limited to the domestic area to prevent interference and improper use by foreign entities.

At the second tier, limited openness can be further divided into total prohibition and conditional openness. The former refers to legally prohibited data. The latter includes data that has undergone special processing of the former data type. When legally prohibited data undergoes data cleaning, data masking, and other necessary processes, resulting in data content that is unidentifiable, unretrievable, and has no risk of leakage, it is considered to have met the attached conditions and is included in the opening process.

At the third tier, AO model places more emphasis on public-private collaboration, and should consider the extent and scope of promoting the assetization and development of government data by the public and private sectors [11]. Therefore, not all government data can be authorized for operation by others. Data at full openness with asset value should be included in this tier. This will elevate the value of data from government decision-making reference to shared social welfare, such as the environmental data and market supervision data mentioned in the first tier that contribute to environmental optimization and market stability.

In addition, each tier can make appropriate adjustments based on the actual situation during the more specific judgment process. For example, the conditions can be included based on the level of technological development, or social needs and processing capabilities can be included in the authorization considerations, so as to achieve dynamic transformation within static tiers.

The meaning of “dual” in improved system

Specifically, what does “dual” mean in improved system? It concerns the subject and the content related to the subject. The subjects of full openness and limited openness are the government and its departments, which are types of direct openness. But the subject of AO model is the public and private sectors authorized by the government, which is an indirect type of openness, intending to release the value of government data through the collaboration and interaction among various entities. Indeed, the former has its own relatively operation logic, so it will not be elaborated upon further. Therefore, the following section will expand on the latter.

In terms of subject qualification, the purpose of AO model is to realize added value of data through the reuse of government data, thereby realizing its economic and social value as a form of public infrastructure [12]. Therefore, both enterprises driven by commercial value and social organizations aiming at social value may serve as authorized entities, the focus should not rest solely on their organizational type, but rather on their capabilities. To ensure the efficient utilization of government data, while simultaneously preventing leakage and misuse, authorized entities must possess the capacity to process data, as well as the determination to leverage the

value of data for the benefit of society. The assessment indicators of such capability and determination include objective factors such as the scale of the enterprise/organization, economic and technical capabilities, social reputation, and so forth. By establishing these assessment indicators as the threshold for eligibility, government data can be efficiently leveraged to create data products, thereby realizing the ultimate purpose of “data availability and invisibility.”

In terms of implementation logic, the “promoting the mechanism for the rights to government data ownership and authorization, and safeguarding the public interest in the supply and use of government data” stipulated in the *Twenty Data Measures* highlights that public interest is the underlying foundation of the AO model. Furthermore, the evaluation of public interest includes whether the exercise of administrative power meets the dual standards including the standard of publicness and the standard of interest. According to the standard of publicness, there should be no excessive investor mentality. Abundant data and information should be provided to the public, assisting disadvantaged groups excluded during OGD to gain a dominant position [13], and preventing the monopoly of data resources. According to the standard of interest, the processing of government data should not only satisfy the target interest, namely the consideration of increasing the value of data during its flow, but also pay attention to the legitimate rights and interests of data subjects. For example, in the process of processing data involving personal data, commercial data, and so forth, it is essential to prevent data infringement. Essentially, this is to prevent the foundation of social trust from being shaken and to guard against the impact of questioning on the institutional construction of OGD.

In terms of operational mechanism, the incentive mechanism and evaluation mechanism should be established to maintain a dynamic balance between public interest and private interest. Simultaneously, the interaction mechanism between public and private sectors should also be designed to establish the communication and feedback model throughout the entire data processing cycle, form an effective linkage between real-time supervision and guidance, and improve the effective path for AO model of OGD.

Establishing collaborative rights protection system

As mentioned above, OGD is entirely a proactive action. In practice, to achieve efficient opening and flow of government data, local regulations often stipulate that the government is not responsible for data opening, or even intervene in data opening through incentive mechanisms to enhance enthusiasm for opening. However, such relatively liberal regulations will make it difficult for the public to obtain effective remedies when they encounter infringements on their right to information during the process of OGD. Therefore, establishing the collaborative rights protection system involving both the administrative and judicial bodies will provide effective remedies for disputes.

Remedies within the administrative system

Firstly, the complaint-feedback system of OGD platform should be improved. OGD primarily relies on OGD platform as

the medium for publicizing data information or displaying data products. In this regard, the platform's complaint-feedback mechanism is perhaps the most direct and feasible channel for redressing infringements on the public's rights. Specifically, OGD platforms and their authorized operating platforms should have dedicated entrance for receiving complaints. When natural persons, legal persons and other organizations believe that the acts during OGD violate their legitimate rights (mainly including information rights and derivative rights), they can file complaints through this entrance. Simultaneously, dedicated personnel should be assigned to feedback these complaints, and detailed operational rules regarding handling methods, procedures, and results should be stipulated to ensure efficient complaint processing. Furthermore, stable and systematic rules can prevent secondary infringements and achieve effective accountability. From a broader perspective, improving the platform's complaint-feedback system can fully collect public opinions and suggestions during the process of promoting OGD, providing a foundation for subsequent administrative legislation.

Secondly, the disputes related to OGD should be included in the scope of administrative reconsideration. The newly amended *Administrative Reconsideration Law* of September 1, 2023, establishes administrative reconsideration as the primary channel for resolving administrative disputes [14], and expands its scope to include administrative compensation and GID (Article 11 of the *Administrative Reconsideration Law*). OGD is a system designed with administrative bodies as operators and managers, and direct supervision of other administrative bodies by administrative bodies is an effective solution. At the same time, OGD and GID have an inherent connection in terms of remedies, and infringements during OGD inevitably involve the issue of administrative compensation. In this regard, including disputes related to OGD within the scope of administrative reconsideration has a basis for reference and feasibility. Specifically, this article suggests that disputes concerning OGD, including infringements of right to privacy, right to trade secret, data correction right, and so forth, should be included in the scope of administrative reconsideration. In this way, illegal acts can be corrected within the administrative system, making the process efficient and timely. Moreover, although disputes over OGD will inevitably be dealt with through litigation, it can learn from Article 23 of the *Administrative Reconsideration Law*, which stipulates that GID should be subject to mandatory administrative reconsideration prior to litigation, and introduce such system into OGD. This would reduce the waste of judicial resources and resolve disputes more effectively.

Remedies outside the administrative system

Firstly, the scope of administrative public interest litigation should be expanded to include disputes related to OGD. OGD constitutes a pivotal system designed to facilitate the expansion of the data factor market. The various stages in OGD, including the openness, flow, utilization of data, and so forth, will impact a wide array of stakeholders. In this context, opened government data, as well as the derivative generated through its close integration, will frequently intersect with

personal data, commercial data, and data regarding social welfare and public livelihood, thereby becoming closely linked with broader social interests. Meanwhile, although data subjects may generally resort to judicial remedies as a universal and cushioning measure whenever OGD results in an infringement of their rights, if such infringement affects thousands of data subjects simultaneously, litigation filed by each affected data subject would result in a severe waste of judicial resources and would fail to fundamentally resolve infringement. Therefore, this article suggests that the scope of administrative public interest litigation should be expanded to include disputes related to OGD. Such relief should be guided by the criterion of impact and encompass a diverse range of causes of action, including the protection of personal data, commercial data, and so forth. Concurrently, by establishing the complementary safeguard system that structured around a framework comprising pre-litigation prosecutorial recommendations, mid-litigation prosecutorial investigation and verification [15], and post-litigation prosecutorial trial supervision, it becomes possible to effectively resolve disputes regarding OGD that are closely linked to the social interest.

Secondly, the scope of administrative contracts litigation should be expanded to include disputes related to OGD. In practice, the Chinese license for open government data (CLOD) is employed to regulate data utilization activities. Under this type of license, the data-opening body and the user explicitly define their legal relationship, thereby clarifying the rights and obligations of both parties [16]. It is thus evident that CLOD is a kind of typical administrative contracts. And according to the *Administrative Procedure Law*, it is also within the scope of administrative litigation. However, CLOD has not been fully emphasized in China's local practice of OGD, and only the Zhejiang Province leverages the similar license to set out the use of rights, obligations, and liability for breach of contract, whereas other OGD platforms in other provinces do not accord this matter adequate importance [16]. Consequently, given the current reality where administrative contracts constitute an essential component of OGD yet their practical application often receives insufficient attention, resorting to administrative contracts litigation as a remedy for disputes arising from such agreements (including disputes caused by unclear agreements, infringements upon rights, and so forth) may well become the norm in the future. Therefore, based on the broad flow and high mobility characteristics of government data, it is necessary to explore and improve the operational mechanisms for administrative contracts litigation concerning CLOD. In particular, the operational mechanisms should be established to review the standardization of contractual language, review the neutrality of standard terms, facilitate provisional evidence deposit and online litigation. The aim is to standardize administrative contracts, resolve disputes efficiently, safeguard data openness, and facilitate flow of data.

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