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Consistency of business service rules in digital government —a cross-city comparison of public service guides

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Abstract. This study compares sixteen public service guides for the establishment of domestic limited liability companies and changes of registered address within the same registration jurisdiction. The core sample consists of fourteen guides sharing a basic service code across seven districts in Beijing and Shanghai. Two establishment guides from Wuhan and Ningguo provide additional cases. Across forty-two district pairs formed within each transaction, the published statutory limit and visit count agree in every pair. Exact agreement in headline commitments occurs in eight pairs. Pooling zero working days and on-the-spot completion raises agreement to twenty pairs. All six Beijing guides restrict the zero-day commitment to review and decision. All four Shanghai change guides label address-use evidence as nonessential in the general list and require it when the address changes. Under Shanghai's address rules, the number of external address documents is two for an ordinary lease, one when a filed lease is submitted, and zero when the premises qualify for the database-based waiver. The results distinguish agreement in headline fields from agreement in timing scope and evidence requirements.

Keywords: digital government, business registration, public service guides, rule consistency, administrative burden

1. Introduction

A company renting office space needs to know which documents establish its right to use the address and when the registration authority will make a decision. Both questions arise when a company is formed or moves to new premises. A guide may state a single deadline at the top of the page and give separate times for receipt, review, decision and delivery further down. A comparison of the headline fields establishes whether the published values agree. The procedure and materials sections show what the values mean for a particular application.

The State Council's 2024 guidance on integrated service delivery calls for aligning the application conditions, documents, procedures and statutory deadlines for the same public service. *Article 11 of the Regulations on the Administration of Registration of Market Entities* allows local measures on address registration. A company registration guide therefore combines common service fields with conditions that may be specified locally.

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The comparison asks which headline fields agree across jurisdictions, which stages the published commitments cover, and what evidence a company must provide for rented premises. Matching establishment and address-change guides within each district makes it possible to distinguish between-city, within-city and within-district variation.

2. Literature review and analytical framework

2.1. Common service standards and local implementation

Xu and Kong examine how the allocation of responsibilities across provincial, municipal and district authorities shapes cooperation in service standardization [1]. A common standard is implemented through service lists that specify the responsible authority and the details of each transaction. Kang et al. describe the standards supporting Shanghai's integrated government services. Wang and Feng study local rules that assign responsibility for collecting, sharing and using data in integrated services [2, 3]. These strands point to two different aspects of implementation: which attributes can be specified in a common list and which procedures depend on access to particular data.

Address registration contains both aspects. The national standards identify evidence of the right to use an address as a material category. Local rules and instructions specify which documents can serve as evidence and when the authority can verify the information. A common service code provides an entry point for matching transactions. Reading the matched guides and their source rules together makes it possible to compare how each jurisdiction applies the common category to the same kind of premises.

2.2. Service capacity and the work of applying

Bi and Xu examine the provision of approval services and processing time in their study of automated service terminals. Xu et al. use firm survey data to examine the cost channel between government service capacity and the business environment. Fang et al. document simplified verification, presumptions of eligibility and integrated delivery in Suzhou [4-6]. In company registration, the difference between two service arrangements can be traced to a particular step, such as obtaining a document, passing a verification check or qualifying for a waiver.

Baekgaard et al. vary the organization and language of written instructions while holding the underlying rules constant. The way the rules are conveyed affects the effort required to understand them [7]. Hegemann and Ritz distinguish technical, organizational and individual sources of administrative burden in digital services. Kalucza and Sievert examine how process redesign affects the burden experienced by applicants. Buyannemekh et al. distinguish searching for information from preparing and submitting a form [8-10]. The distinction is pertinent to a registration guide. The firm first identifies a requirement and its conditions, then obtains, prepares or submits the evidence specified for its case.

2.3. Observable rules and their presentation

The comparison records three layers. The first consists of standard headline fields such as time limits and visits. The second captures the conditions under which a field applies, including the stages covered by a time commitment and the transaction that triggers an address document. The third identifies the means of satisfying a requirement, such as a property title certificate, a filed lease, a verification check or a declaration of commitment.

The framework yields three comparisons. Statutory limits should be more uniform than commitments because the matched transactions share a national regulatory basis. Identical headline commitments can be attached to different procedure descriptions. Finally, a material label in a list used for several transactions can give a different answer from the accompanying text when the applicant's transaction is specified. The analysis evaluates these patterns using pairwise counts, procedure descriptions and scenarios for rented premises.

3. Data and research design

3.1. Construction of the sample

The guides were retrieved on 5 November 2026 from the Beijing and Shanghai government service platforms and the Xinzhou District and Ningguo municipal government websites. Inclusion in the core sample required two accessible official guides for the same district, one for establishment and one for company changes. The title, implementing authority and basic code were checked. Shijingshan, Xicheng and Dongcheng in Beijing and Huangpu, Fengxian, Jing'an and Xuhui in Shanghai all use basic code 000131127003. The transaction codes end in 01 for establishment and 02 for changes. Address changes are identified by the relevant clauses within the general change guide.

The establishment guides for Xinzhou, Wuhan, and Ningguo, Anhui, carry basic codes 420131001W00 and 000131003000. They provide comparable establishment scenarios for examining fields and evidence routes. The agreement denominator is defined by the matched Beijing–Shanghai sample. Table 1 identifies every source and its published values.

Table 1. Sample guides and published time commitments

Jurisdiction	Statutory limit	Establishment	Change	Guide IDs
Beijing, Shijingshan	6	0	0	S1 / S2
Beijing, Xicheng	6	0	0	S3 / S4
Beijing, Dongcheng	6	0	0	S5 / S6
Shanghai, Huangpu	6	On the spot	On the spot	S7 / S8
Shanghai, Fengxian	6	3	3	S9 / S10
Shanghai, Jing'an	6	1	6	S11 / S12
Shanghai, Xuhui	6	On the spot	On the spot	S13 / S14
Wuhan, Xinzhou	3	1	—	S15
Ningguo, Anhui	6	1	—	S16

Note: Numeric values are in working days. "On the spot" retains the source category. Xinzhou and Ningguo contribute establishment guides. All fourteen core guides display zero required visits. S1–S16 link to the official pages.

3.2. Common application scenarios

The establishment case is a domestic limited liability company formed by resident natural persons making cash contributions. It leases ordinary nonresidential office space, holds a lawful right to use it and undertakes general business activities. In the change case, the same type of firm moves into equivalent premises within the original authority's jurisdiction and changes its registered address alone. Materials are assumed complete and in the required form for the main comparison. The coding separately retains instructions for complex cases and cases requiring verification.

The address comparison varies whether the lease has been filed, whether the premises meet local verification conditions and whether the declaration route applies. The company and premises characteristics are held fixed across these readings. Where a guide displays both a master list and a district-specific list, the relevant district row is used. Repeated rows serving the same evidentiary purpose are counted once per guide.

4. Measures and calculation

The codebook follows the service attributes defined in GB/T 39554.2-2020. Statutory limits, commitments and visit counts are taken from the headline or basic information section. Numeric time values are recorded in working days and verbal commitments are retained as categories. The commitment explanation and procedure table are then read for the stages covered, the start event, exceptional procedures and any separate delivery time. Each value is retained with its source section. The 2026 national standards for registration materials identify the address-use material category. The coding records the necessity label, the condition in the row text and the evidence routes available under the applicable local rules.

For transaction t and field k, let x_i and x_j be the standardized field values in districts i and j. A pair agrees when $x_i = x_j$. The agreement rate is the number of agreements divided by the number of unordered district pairs within the same transaction. Each transaction supplies $7 \times 6 \div 2 = 21$ pairs, for 42 in total. The within-Beijing, within-Shanghai and cross-city subsets contain 6, 12 and 24 pairs, respectively. A separate comparison pairs establishment with change within each district, giving seven pairs.

The primary specification distinguishes zero working days from on-the-spot completion. The alternative pools them into a single immediate category and recomputes agreement over the same pairs. This isolates the effect of recoding the headline field. For address evidence, document counts refer to categories of external evidence, such as a property title certificate or lease. Entering an address or a contract number and signing a declaration are recorded as applicant actions.

5. Empirical results

5.1. Agreement in headline fields

Table 2. Agreement in headline fields within each transaction

Comparison	Statutory	Visits	Exact promise	Pooled immediate
Within Beijing	6/6	6/6	6/6	6/6
Within Shanghai	12/12	12/12	2/12	2/12
Beijing–Shanghai	24/24	24/24	0/24	12/24
All pairs	42/42	42/42	8/42	20/42

Note: Each cell shows matching pairs divided by the number of pairs in the comparison. "Pooled immediate" combines zero working days and on-the-spot completion.

As shown in Table 2, the statutory and visit fields agree in all pairs. Exact commitment agreement is 8/42, or 19.0%, with 4/21 matches in each transaction. All six within-Beijing pairs match. In Shanghai, Huangpu and Xuhui are the sole exact match in each transaction. Among the fourteen core guides, six display zero working days, four display on-the-spot completion, two display three working days, one displays one working day and one displays six.

The cross-city subset accounts for 24 of the 42 pairs and contains zero exact matches. The eighteen within-city pairs contain eight matches, or 44.4%. Beijing's three sampled districts use a single commitment value per transaction, while Shanghai's four districts use three values per transaction. These are descriptive rates for the matched guides. Pairs can share a guide or a common policy. The pooled denominator sums the pair counts for the two transactions.

6. Timing stages and procedure types

All fourteen core guides display a six-working-day statutory limit. Article 19 of the national registration regulation specifies on-the-spot registration for complete and formally compliant materials, three working days when immediate registration is unavailable, and an additional three working days for complex cases with approval. The headline in the core guides reflects the upper total. The Xinzhou establishment guide displays a statutory limit of three working days and the Ningguo guide displays six. Both post one working day as their commitment.

Table 3. Headline commitments and their procedural context

Guides	Headline	Timing in the procedure or explanatory text	Delivery
Beijing S1–S6	Zero	The explanation limits timing to review and decision.	—
Huangpu S7–S8	On the spot	Both guides list immediate review and decision. The change explanation refers complex cases to the registration rules.	10 / 10
Fengxian S9–S10	3 / 3	Establishment lists two days for review and one for decision. Ordinary changes are handled within one day of receipt. Verification cases follow the statutory limit.	10 / 10
Jing'an S11–S12	1 / 6	Establishment lists zero days for review and one for decision. The change guide lists three days for each stage.	10 / 10
Xuhui S13–S14	On the spot	Establishment lists zero days for review and decision. The change guide lists both stages as immediate.	0 / 0

Note: Values are in working days and ordered establishment / change. Fengxian's ordinary change explanation uses "one day" as written. The dash indicates that the Beijing comparison here uses the commitment explanation.

Table 3 shows that Beijing's six zero-day commitments share the same stage qualifier. Shanghai's on-the-spot label comes with separate flow information. For example, the Xuhui change guide lists immediate review and decision and a separate zero-day delivery stage. Pooling the headline categories aligns the expressions used on the portals. The underlying stage descriptions are needed for a like-for-like reading of the commitment.

Huangpu and Xuhui match on the headline for both transactions. Their delivery fields differ, with ten working days in Huangpu and zero in Xuhui. Requiring equality in both headline and delivery reduces the Shanghai count from 2/12 to 0/12. The two fields refer to registration processing and delivery of the outcome, respectively.

Within districts, six of seven establishment–change pairs share the same headline commitment. Jing'an posts one working day for establishment and six for changes. Fengxian posts three for both, with a stage breakdown in the establishment guide and a distinction between ordinary and verification cases in the change guide. Its equal headline values are compatible with two different procedure descriptions.

The visit field has a channel qualification of its own. Xinzhou displays zero visits and describes mail delivery as well as collection in person. The visit field records the availability of a route without a required visit. The instructions for collecting the licence specify what the firm does under that option.

7. Address evidence and conditions for submission

All four Shanghai establishment guides mark address-use evidence as necessary. They specify a paper format in the materials table and identify the service as fully online in the basic information section. All four change guides mark the address row as nonessential and specify within the row that the applicant submits evidence for the new premises when the address changes. Reading the label alone gives four necessary rows for establishment and zero for changes. Reading the condition gives a submission requirement in all four address-change cases before applying any waiver.

The national materials standard identifies the category of address-use evidence for establishment and address changes. Table 4 summarizes the local conditions and evidence routes. The counts cover address evidence. The application form, articles of association and other registration materials belong to their respective entries in the guides.

Table 4. Evidence routes for rented premises

Public source	Condition	Evidence or action
Beijing, Arts. 6 and 12	Ordinary route or successful standardized address verification	Provide valid evidence of address use. Successful verification waives the document.
Shanghai, Art. 9	Ordinary lease or submission of a filed lease	Provide the title certificate and lease. With a filed lease, the title certificate is waived.
Shanghai, Art. 15	Premises in the address database and lawful right of use	Address evidence may be waived. The online establishment instructions describe address selection and the relevant contract number fields.
Wuhan, Arts. 5 and 6	Declaration route applies, or a specified exception applies	Submit a signed declaration with address details when eligible. Exceptions require relevant title and lease evidence.
Ningguo guide	Address satisfies the local negative list and the commitment procedure is used	The list includes address evidence. The commitment route requires an address registration declaration.

Note: Beijing, Shanghai and Wuhan conditions come from local regulations. The Ningguo entry follows the instructions in guide S16.

The Shanghai scenarios yield two, one and zero categories of external address evidence. A filed lease replaces the need to obtain a title certificate for the application. A qualifying database entry enables a waiver of the address evidence. Beijing attaches its waiver to successful standardized verification. Wuhan requires a declaration when the route applies and uses conventional evidence when, for example, the address is disputed or belongs to a hosting agency. Recording the declaration separately retains the action the applicant must take.

8. Sensitivity analysis and discussion

8.1. Category definitions and sample composition

Pooling zero working days and on-the-spot completion raises agreement from 8/42 to 20/42, or from 19.0% to 47.6%. The twelve new matches all occur across cities. In each transaction, the three Beijing districts form six additional matches with Huangpu and Xuhui. Agreement stays at 6/6 within Beijing and 2/12 within Shanghai. Under the pooled definition, twenty-two pairs still differ. The gain in measured agreement reflects the mapping of the two portal labels into one category.

Removing each district and both of its guides in turn gives thirty pairs per recalculation. Exact agreement ranges from 13.3% to 26.7% and pooled agreement from 40.0% to 66.7% (Table 5). For each transaction, exact agreement is 4/21 and pooled agreement is 10/21. Jing'an has different values across its two guides, each occurring only once in the corresponding transaction. The two transaction-level agreement counts are therefore equal.

Table 5. Commitment agreement after removing one district at a time

District omitted	Exact	Pooled
Shijingshan, Xicheng or Dongcheng	4/30	12/30
Huangpu or Xuhui	6/30	12/30
Fengxian or Jing'an	8/30	20/30

Note: One listed district is removed at a time. The statutory limit and visit count agree in all thirty pairs after each removal.

The reading of a material row is sensitive to the scenario. Using the necessity label alone codes every Shanghai change guide as allowing omission of address evidence. Reading the row for an address change identifies a submission condition in all four guides. Applying the city rule then identifies whether the evidence may be waived for a given address. The change in coding can be traced to the material row and the clause governing the exception.

8.2. Where differences enter the application

The shared service code accompanies uniform statutory and visit fields in the sample. Published commitments are more variable and are tied to distinct procedures. Fengxian illustrates why even identical values can have different implications for planning a move. The establishment guide describes a review stage and a decision stage, with delivery listed separately. The change guide gives one time for an ordinary case and refers verification cases to the statutory limit. Timing comparisons require the stage, the trigger and the procedure type alongside the value.

The address results distinguish determining which requirement applies from assembling evidence. Reading the Shanghai change guide requires locating the address clause within the general list. A filed lease, a successful verification check or a declaration changes what the applicant provides. Research on administrative burden distinguishes information search from the work of preparing and submitting evidence [7, 10]. The examples give these activities a concrete form in company registration. The document counts describe evidence bundles under specified conditions.

District guides and municipal address rules therefore play different roles in the comparison. The four Shanghai change guides use the same address label and condition while their time commitments vary. The three Beijing districts publish the same stage-specific commitment, and the municipal address rules specify

when verification can replace a submission. Retaining district, transaction and scenario identifiers preserves these differences when the data are summarized.

9. Conclusion

Among the fourteen matched Beijing and Shanghai guides, statutory time limits and visit counts agree in all forty-two district pairs. Headline commitments agree in 19.0% of pairs under the original categories and 47.6% when the two immediate categories are pooled. The explanations attach those values to different stages and procedures. All four Shanghai change guides label address evidence as nonessential in the general list and require it when a firm changes its address. Local rules further specify the evidence route for a filed lease, an address eligible for verification or a declaration.

The service code identifies comparable transactions. The procedure and explanatory text specify the timing scope. The materials row identifies when submission is triggered, and the applicable address rule determines which evidence can satisfy that requirement. Reading these sources together links each observed difference to the application it affects.

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