


CASE STUDY

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Innovative exploration of spatial collaborative governance in the Shanghai Metropolitan Area

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Abstract

Under the requirements of modernized spatial governance and the national strategy for the integrated development of the Yangtze River Delta, the Shanghai Metropolitan Area has taken the lead in exploring collaborative governance in regional spatial planning, which aims to promote spatially coordinated governance and high-quality integrated development in metropolitan areas. This exploration focuses on the preparation and organizational innovation in regional planning, the combination of top and bottom organizational approaches, the importance of equal consultation during the planning process, the establishment of an open platform in the positioning of the planning, and the need for joint determination in planning approval. This exploration also discusses the innovative implementation of spatial planning cooperation through eight systematic actions and five space sector actions and defines the implementation focus through the immediate plan of action at the implementation level. The exploration of the “Spatial Cooperative Plan of the Greater Shanghai Metropolitan Area” demonstrates that the process and result of planning are equally important. Achieving consensus through plan making and fostering synergies through plan implementation are feasible paths for efficient collaborative governance in the Shanghai Metropolitan Area and other metropolitan areas in China.

Keywords Regional coordination, Cooperative governance, Spatial cooperation, The Shanghai Metropolitan Area, Spatial planning cooperation, Cooperative planning

1 Introduction

Coordinated regional development has been substantially promoted as China’s national strategy. In the new development stage, China proposes to gradually establish a

new development paradigm characterized by “dual circulation,” in which domestic and overseas markets reinforce each other, with the domestic market as the mainstay. Following the spatial organization of the global urban area, the metropolitan area has become the basic unit participating in the dual circulation and an important carrier participating in global competition (2023). At the same time, the main body of world competition and cooperation is increasingly moving from a single city to an urban area with the global city as the core (2016). As an open global urban area with a relatively balanced industrial structure among cities, a good foundation for innovation and interaction, and joint cooperation in social governance, the Shanghai Metropolitan Area undertakes the key strategic functions of opening up competition and connecting internal and external systems.

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The modernization of spatial governance has become an important goal of regional spatial planning. Space serves as the basis and object of governance. The modernization of spatial governance requires a profound change in the subject, content, and mode of space governance. The subject of space governance has changed from government led to multiple subjects, its object has shifted from local single elements to global total elements, its contents have shifted from the material space to the connotative space, and its mode has changed from extensional to refined (2023). However, in actual situations, spatial development is generally uncoordinated, unbalanced, and even conflicting. Spatial governance can achieve an effective, fair, and sustainable utilization of land space and a relatively balanced development of multiple regions through resource allocation. The rapid flow of population and capital contributes to the continuous spatial development of central cities and surrounding areas. The coordination of cross-border areas, such as urban agglomerations and metropolitan areas, has become a realistic topic in regional governance research (2023).

The planning of the Shanghai Metropolitan Area is not only a shared expectation of collaborative development within the circle but also serves as a modern exploration of regional spatial collaborative governance. The “Spatial Cooperative Plan of the Greater Shanghai Metropolitan Area” is an important measure for implementing China’s national requirements and responsibilities. In 2019, the “Outline of the Regional Integration Development Planning of the Yangtze River Delta” clearly stated that “Relevant governments of Shanghai and surrounding cities should work together to promote coordinated development and jointly build the Greater Shanghai Metropolitan Area.” Meanwhile, the “Spatial Cooperative Plan of the Greater Shanghai Metropolitan Area” responds to the urgent call for a coordinated development of various entities in the circle. The nine cities in the Shanghai Metropolitan Area have profound historical origins. They are geographically close and culturally connected and demonstrate a strong desire for coordinated development. Throughout the planning of this area, the most extensive forces are integrated, and a multi-level cooperation and consultation mechanism among cities is established by combining top-down and bottom-up approaches to achieve a joint declaration of regional coordinated development.

The exploration of the “Spatial Cooperative Plan of the Greater Shanghai Metropolitan Area” has exemplary significance. This project represents not only the first cross provincial land spatial planning in China in the new era but also the first metropolitan area land spatial planning in the country. This paper systematically summarizes and

discusses the reasons and experiences for this initiative. First, this paper comprehensively reviews regional spatial collaborative governance and discusses the necessity of and trends in metropolitan area planning. Second, this paper refines the innovative exploration of the “Spatial Cooperative Plan of the Greater Shanghai Metropolitan Area” in the organizational, technical, and other aspects and gives full play to its demonstration effect for other similar regions.

2 Literature review of regional spatial co-governance

2.1 Theoretical and conceptual reviews

Introduced in the 1960s, the institutional concept of “governance” balances the relationship between the government and the market. Since then, this concept has been gradually applied in the multi-party power balance at international, national, regional, and other levels. Governance is different from management. In the modern western context, governance emphasizes the continuous process of reconciling the conflicting interests of different subjects, such as individuals, institutions, and public and private sectors, and taking joint action (1995). Western public management studies are more advocative of “more governance, less management.” Although governance is an imported product from the west, this concept fits the cultural gene of “harmony is precious” in Chinese civilization and is similar to the “seeking common ground while reserving differences” principle being emphasized in traditional Chinese culture. Therefore, governance is gradually being widely applied in many academic and practical fields in China.

The term “spatial governance” refers to a systematic and complicated process of resource management that optimizes resource and elements spatially and emphasizes cooperation and consultation. The political nature of space practice determines that space governance is not a purely engineering and technical category. Lefebvre (1992) argued that the essence of space governance is to control and manage the explosion of time and space in order to control and manage people’s daily lives with a high degree of difference. According to Castells (1978), space governance presents a way through which various conflicting forces negotiate and coordinate with one another. Wright and Rabinow pointed out that similar to buildings and designs, spatial governance serves as the best illustration of how power (politics) works (1982). Therefore, space governance is a complex system that prompts us to reflect on the contradiction “once strictly controlled, it will die, and once released, it will be chaotic.” Space governance also highlights the need to focus on the localization of the policy design in the context of

China to promote a benign interaction between space and policy.

2.2 Academic exploration of collaborative regional spatial governance

After its introduction in 1977 by German physics professor Haken in “Introduction to Synergetics,” the concept of “collaborative governance” was initially applied to the fields of natural and technical sciences (1997). In 1995, the Global Governance Committee released its research report, “Our Global Partnership,” where they emphasized the consultative and collaborative nature of governance and promoted the application of collaborative governance in the field of social sciences (1995). Chris and Alison defined collaborative governance as a process in which one or more public institutions involve non-state stakeholders in formal, consensus-oriented, and negotiation-oriented collective decision making when formulating or implementing public policies or managing public plans or assets (2008). By contrast, China’s conceptual interpretation and practical application of collaborative governance are much broader and range from government and rural governance to collaborative governance of bicycle sharing. Regional collaborative governance refers to the joint action taken by multiple subjects in a region to seek a win–win situation in specific areas. This type of governance not only represents an objective response of various stakeholders to the regional development problems they face in the process of globalization and urbanization but also reflects their subjective action to seek additional development resources and reduce transaction costs (2024).

Regional spatial collaborative governance is not only an important trend but also a weak link in China. Co-governance is a governance model that emphasizes effective collaboration among multiple actors based on openness and diversity (2017). With the development of regional social and economic integration, the continuous spatial expansion and contiguous areas in central cities and surrounding areas have gradually become a new type of regional spatial organization and main competitive unit, thereby making regional spatial collaborative governance an important trend (2019). However, under the current government management framework of China dominated by administrative divisions, the adjacent areas across administrative divisions have become weak areas for coordinated development in the spatial layout. Although China has carried out regional collaborative planning in Beijing–Tianjin–Hebei, Yangtze River Delta, and Guangdong–Hong Kong–Macao, regional planning cannot easily guide the implementation of projects and cannot directly solve the governance problems encountered in cross-border areas (2005). Therefore,

China should focus on achieving a regional coordinated development and solve space conflicts through space governance.

The modernization of spatial governance is a major goal of collaborative regional governance in China. Regional collaborative governance has two definitions. First, this governance approach emphasizes the achievement of regional collaborative development (2020). Second, this concept emphasizes the goal of conducting governance through regional collaboration. While the essence of regional spatial development is coordinated spatial governance (2000), a common problem in planning and governing regions lies in the uncoordinated and unbalanced distribution of power and conflicting interests (2019). In response to these problems, space governance can be applied to achieve an effective, fair, and sustainable use of land and a relatively balanced development among regions through resource allocation (2014). Some Chinese scholars underscored the need to strengthen spatial governance and proposed that China should promote the Main Functional Area Strategy with classified regulation and focus at its core to promote spatial overall planning and coordinated development (2018). They also called for further improvements in the modern land spatial planning and governance system through the Main Functional Area Strategy to achieve an orderly regulation and continuous optimization of the land spatial development pattern (2019).

Cross-border collaborative governance has become a new direction in regional spatial collaborative development. Cross-border collaborative governance has increasingly become the main form of regional collaborative governance in China. Domestic scholars have classified cross-domain collaborative governance into vertical and horizontal governance. Vertical governance is a top–down governance mode in which the superior government mainly controls the subordinate government. The main modes in this type of governance include administrative orders, law enforcement, and formal processes. Meanwhile, horizontal governance is a governance mode that involves local governments, governments and enterprises, and non-governmental organizations that do not have a subordinate relationship. The main modes in this type of governance include joint meetings, partnerships, administrative contracts, and third-party coordination. The existing spatial governance system in China adopts a vertical governance structure, where the higher-level government controls the construction of the lower-level government by controlling the supply of land use and the conversion of land use types, while regional collaborative development emphasizes the spatial coordination among horizontal governments. Therefore, the new direction of regional collaborative governance warrants

further exploration. Zhang and Zhuang (2000) argued that regional collaborative governance differs from the top-down approach under the traditional unitary structure. Governance involves a parallel power operation that is based not on domination and control but on equal consultation and cooperation.

Under the "dual circulation" development pattern in which domestic economic cycle plays a leading role while international economic cycle remains its extension and supplement, the linkage among cities, regions, and cross-border spatial governance has become a key issue that needs to be solved to enhance global competitiveness and modernize governance capacity.

2.3 Exploration of regional spatial co-governance in metropolitan areas

Metropolitan areas have been planned and explored internationally for nearly 100 years. The planning orientation for these areas is a collaborative effort and advocates for non-statutory planning. For example, the planning of the New York Metropolitan Area was organized and prepared by the New York Regional Planning Association (RPA) and supervised by the public (2013). This planning attached importance to goal guidance and action implementation to achieve equity, health, prosperity, and sustainability and focused on institutional reform, climate change, transportation, and affordable housing. Meanwhile, the planning of the Tokyo Metropolitan Area in 2016 aimed to build a diversified convective metropolitan area and, on the basis of this goal, established a set of 114 actions and projects to be implemented and supervised (2016).

In recent years, China has started to plan the construction of metropolitan areas. Planning orientation in China takes two forms, namely, development planning and spatial planning. Development planning focuses on economic and social development and is generally prepared by the National Development and Reform Commission. For example, the "Nanjing Metropolitan Area Development Plan" released in 2021 aimed to strengthen the coordination between science and technology innovation and industry and to explore policy innovation. Meanwhile, spatial planning focuses on the spatial layout of resources and other contents and is generally organized by the Department of Planning and Construction. For example, in 2015, the governments of relevant cities in the Nanjing Metropolitan Area jointly issued the "Urban and Rural Spatial Collaborative Planning of the Nanjing Metropolitan Area," which focused on optimizing the spatial pattern, coordinating cross-regional areas, and defining infrastructure layouts.

By comparison, domestic metropolitan area planning is mainly organized and implemented through a top-down

administrative leading mode, but two key deficiencies should be noted. First, the social level is not enough to mobilize and influence, and the participation of multiple subjects remains in the embryonic stage. Second, the planning content mainly focuses on goals, functions, and strategies and does not pay much attention to spatial coordination, action projects, and the coordination mechanism of normalized operations. With the comprehensive development of metropolitan area planning, the core issues, such as the planning direction, technical ideas, and content focus, should be clarified. Therefore, under the background of the regional coordinated development strategy and the modernization of spatial governance, how to achieve a land spatial planning of metropolitan areas and innovate such practice warrants urgent discussion. Based on the planning of existing metropolitan areas, the "Spatial Cooperative Plan of the Greater Shanghai Metropolitan Area" intends to generate a new path for multiple administrative entities to jointly prepare, determine, and implement in China's context.

3 Innovative attempts of spatial co-governance in the shanghai metropolitan area

Since 2018, Shanghai has proactively reached out to the governments of Jiangsu Province, Zhejiang Province, and eight surrounding cities and proposed the "Spatial Cooperative Plan of the Greater Shanghai Metropolitan Area" with an aim to collaboratively explore a cross-provincial collaborative governance path for the metropolitan area. Guided by the Ministry of Natural Resources of the People's Republic of China and through the joint efforts of city governments within the Shanghai Metropolitan Area, this plan was jointly issued by the people's governments of Jiangsu Province, Zhejiang Province, and Shanghai in January 2022. In September 2022, the plan was officially released and implemented as a guiding spatial framework and common action program for the future development of the Shanghai Metropolitan Area. This plan is also the first cross-regional and consultative land space plan that was jointly prepared by local provincial and municipal governments in China with the consent and guidance of the Ministry of Natural Resources.

The following sections describe the innovative strategies implemented by the relevant provincial and municipal governments in the Shanghai Metropolitan Area to achieve spatial co-governance.

3.1 Vertically integrated organizational mechanism

The development of the Shanghai Metropolitan Area, which involves the administrative units of Shanghai, Jiangsu, and Zhejiang, serves as an important measure for implementing China's regional coordinated development strategy. Development strategies, such as unified

goals and vision, spatial layout, and specific actions, naturally trigger disputes across provinces and cities. These disputes cannot be easily resolved through negotiation at the level of parallel administrative units and need to be coordinated and determined by the superior government. At the same time, common development demands and policy barriers should be addressed during the planning and fed back to the Chinese government to reach a consensus on development.

The planning of the Shanghai Metropolitan Area involves not only the governments of the “1 + 8” cities but also those of districts, counties, and even townships. In other words, the “Spatial Cooperative Plan of the Greater Shanghai Metropolitan Area” was organized in a top-down manner, where the Shanghai Municipal Bureau of Planning and Natural Resources and the Development and Reform Commission are jointly responsible for the overall planning. The other eight committees and bureaus in Shanghai are each assigned a special research topic, while the governments of the eight cities outside Shanghai are responsible for implementing the corresponding space actions. The planning process focuses on integrating the opinions and suggestions of all parties involved. Six expert consultation meetings were held during the process, and many suggestions on planning techniques and methods were received through a discussion on technical issues. Five provincial and municipal comprehensive seminars were also organized to continuously eliminate differences and reach a consensus through consultation. More than 40 city and department matchmaking meetings were held to focus on the specific content of the planning for communication. Based on the principle of “listen comprehensively, absorb reasonably, and adopt scientifically,” the draft plan was improved, and the results of the plan were released.

3.2 Valuing equal discussions and negotiations

Metropolitan area planning involves several parallel administrative entities that may show certain differences or conflicts, thereby requiring constant discussions and negotiations to balance their interests. International metropolitan area plans increasingly emphasize the importance of equal consultation to reach a consensus on core issues. For example, the Tokyo Metropolitan Area plan was initially prepared by the central government for the first five editions, and all subsequent editions were collaboratively prepared by local governments. Through equal negotiation, collaborative discussion, and joint implementation, consensus at the metropolitan area level can be reached, hence contributing to a win-win cooperation.

To prepare the Shanghai Metropolitan Area plan effectively, the governments of two provinces (Jiangsu and

Zhejiang) and one city (Shanghai) jointly formed the Shanghai Metropolitan Area Spatial Planning Synergy Leading Group to jointly participate in the preparation, review, implementation, and decision-making process of major projects. After the completion of the “Spatial Cooperative Plan of the Greater Shanghai Metropolitan Area,” this group was transformed into the Leading Group of Spatial Synergistic Planning to guide the implementation. The office of the Planning Synergy Working Group is subordinate to the Shanghai Municipal Bureau of Planning and Resources and is responsible for the organization and coordination of the planning preparation. When the Leading Group is not in session, this office acts as an agent that promotes the organization and implementation of the plan. The Steering Committee for Spatial Planning Synergy of the Shanghai Metropolitan Area was established to guide and support the spatial planning synergy of the Shanghai Metropolitan Area and to offer advice on key cooperation projects. The Expert Advisory Committee of the Shanghai Metropolitan Area was also formed to offer consultation and discussion services (Fig. 1).

3.3 Building an open platform

Unlike conventional planning that usually involves a single party, cross-border cooperative planning involves diversified parties as reflected in the participation of horizontal and vertical governments, including those at the province, city, county, street, and town levels. Therefore, cross-border coordinated planning aims to build a platform for equal dialogue that will ultimately promote active coordination and joint development.

The “Spatial Cooperative Plan of the Greater Shanghai Metropolitan Area” is an example of cross-regional, cross-field, and cross-disciplinary comprehensive planning. Given that this planning is complex and involves multiple systems, building an open technical platform is necessary to strengthen multidisciplinary collaborations and bring together the wisdom of multiple parties to generate scientific and complete planning content. To balance the interests of multiple parties, an interest negotiation platform should be constructed. Through adequate public participation (involving diverse governments, residents, enterprises, and social organizations), everyone’s voices can be heard, and more people can work together to set the development goals and content. Such openness is also reflected in the content of the planning. Based on its relatively consistent technical framework, the planning of the Shanghai Metropolitan Area insists on seeking a common ground while reserving differences regarding content. After all participants agree on the content, the plan shall be submitted to the superior and shall be implemented as soon as possible. The



Fig. 1 Working structure of the Shanghai Metropolitan Area

content that has not yet reached a consensus among the participants shall be shelved for the time being and considered in future improvements to the planning.

3.4 Insisting on “Shared Recognition”

The Shanghai Metropolitan Area is an inter-provincial metropolitan area with a good foundation of cooperation in the context of the integrated development of the Yangtze River Delta. Under the leadership of Shanghai City, a “1+8” cities all-agreed planning path is established through equal communications. The implementation of this plan also requires the active cooperation and mutual assistance of the “1+8” cities and the continuous improvement of the cooperation-guaranteed policies. Therefore, a joint determination mechanism is proposed. The planning results will be submitted to the leading group for collaborative work on spatial planning for consideration, and the final decisions will be jointly issued by the two provincial and municipal governments.

Under the leadership of the “Spatial Cooperative Plan of the Greater Shanghai Metropolitan Area,” a long-term dialogue mechanism among the cities involved will be established. Each city government will further implement the plan, each region will carry out further statutory planning and projects, and their respective plans will be subject to the approval of each local government following the regular process. Multi-level governments are encouraged to engage in a bottom-up active participation and explore the cross-border preparation of operational rules, technical guidelines, cooperation agreements, and other cooperative working measures. These governments are also encouraged to continuously cultivate the participation of expert think tanks, market entities, public organizations, citizens, and other parties.

3.5 Forming a series of outcomes based on multi-agent governance: “1 + 8 + 5”

In “1+8+5,” “1” represents the general report of the “Spatial Cooperative Plan of the Greater Shanghai Metropolitan Area,” which is jointly signed by 9 cities, while “8” and “5” represent the systematic actions in 8 key areas and the 5 space sector actions, respectively, which offer key support for relevant special work and cross-border regional coordination (Fig. 2).

The “Spatial Cooperative Plan of the Greater Shanghai Metropolitan Area” serves as the overall policy framework that brings together all the parties involved in the planning. The main report presents the shared blueprint for the development of the Shanghai Metropolitan Area in the next 30 years and the main cooperation paths of the 9 cities. Combined with the national strategic requirements and existing practical work, this plan insists on goal orientation, action orientation, space orientation, and the principle of limited solution and clarifies the technical framework to balance the bottom line and to coordinate the planning of the metropolitan area. For goal orientation, consensus goals are set to clarify the responsibilities of core cities and the functions of neighboring cities. For action orientation, a multifaceted cooperation framework that involves a spatial bottom line and a specified spatial cooperation is constructed. For spatial orientation, cooperation priorities at different spatial levels are proposed, and a polycentric, networked, open, and intensive spatial pattern is built. The cooperation priorities of metropolitan areas, sub-regional areas, districts, counties, and townships are clarified at different levels.

The actions in the eight key areas are used to build the framework, which defines the development goals, coordinates the major projects, and clarifies

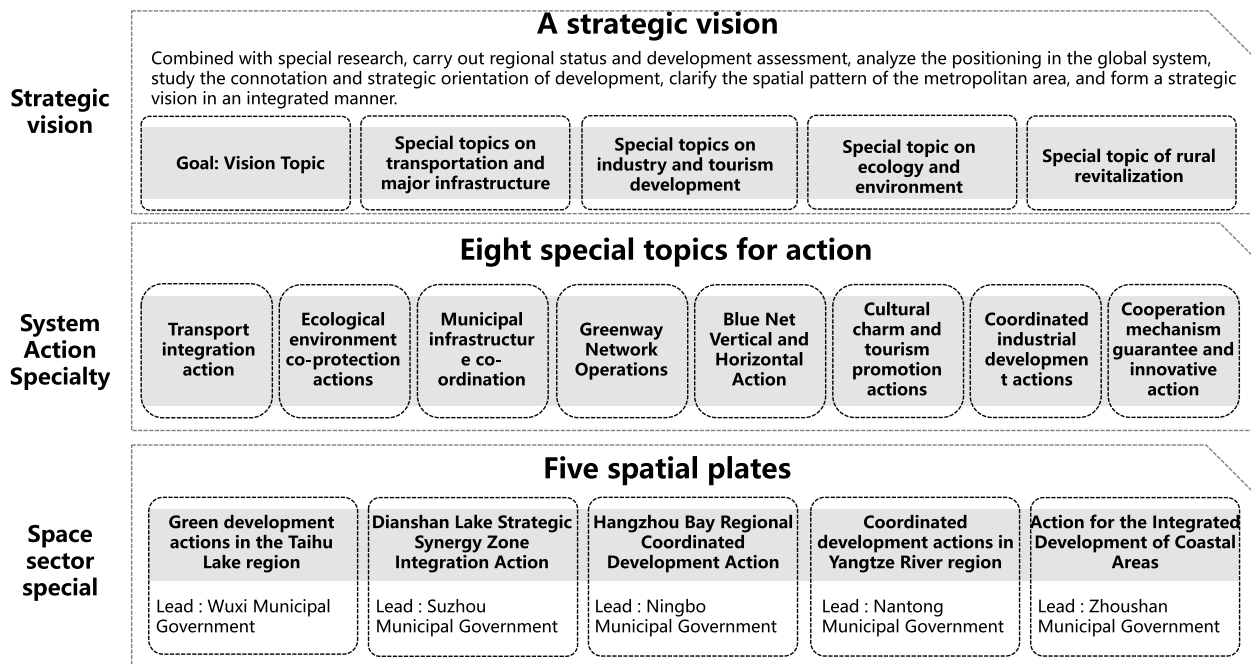


Fig. 2 The “1 + 8 + 5” collaborative planning system in the Shanghai Metropolitan Area

the action priorities and mechanism guarantee from the system dimension. The technical route of “strategic vision → action strategy → project library” is also formed. The content framework of each system action is defined from the aspects of trend orientation, action objectives, and key actions and projects.

The five space sector actions are important carriers of spatial coordination in the Shanghai Metropolitan Area that guide the coordinated development and planning of cross-border areas in cities. The five spatial districts highlight the openness and diversity of spatial collaborative planning in the Shanghai Metropolitan Area that is led by relevant cities. This framework not only pays attention to the implementation of the key collaborative elements of the strategic vision general report but also focuses on the characteristics and problems faced by each sector. The respective goal directions and action priorities of each sector are then defined before constructing a complete “goal–strategy–action” outcome framework.

The planning outcomes are also incorporated into the new round of the “Three-Year Action Plan for Integrated Development of the Yangtze River Delta Region” and the “14th Five-Year Plan and Territorial Spatial Planning” of each city. The “Greater Shanghai Metropolitan Area Collaborative Spatial Planning” was eventually released and incorporated into the “2022 Annual Work Plan for Integrated Development of the Yangtze River Delta Region.”

3.6 Constructing a regional collaborative platform and a guaranteed mechanism

In terms of governance, instead of following the traditional top–down management model, the collaborative participation of multiple governments is emphasized. During the planning process, local governments offered several suggestions on the draft plan and organized joint consultation meetings. Their reasonable demands were fully approached, and a consensus on the plan was reached through continuous discussion. The governance mechanism encourages the participation of multiple parties, such as the government, enterprises, and the public. The regional cooperation mechanism was improved through regular cooperation, and immediate tasks were implemented through action plans.

In addition to organizations, such as the Leading Group for Spatial Synergy Planning, other open platforms for regional cooperation were established. First, in 2020, the Shanghai Municipal Planning Institute, the Shanghai Branch of China Academy of Planning, and the Shanghai Academy of Social Sciences collaboratively established the Shanghai Metropolitan Area Planning Research Center and invited relevant planning research institutions to build the Shanghai Metropolitan Area Planning Research Alliance. This alliance released the Shanghai Metropolitan Area City Index and Blue Book, organized two annual forums on the topic of the Shanghai Metropolitan Area, and created an official WeChat account for Shanghai Metropolitan Area Planning. These

measures all generated influence in the Yangtze River Delta region and provided references for the construction of think tanks in other metropolitan areas. Second, multi-level collaborative platforms and mechanisms were established. For instance, the Yangtze River Delta Integration and Development Demonstration Zone adopted a management structure of “council–executive committee–development corporation,” and three cross-border collaboration zones in Shanghai, Jiangsu, and Zhejiang organized bilateral and multilateral joint meetings to achieve planning synergy in neighboring areas (2019).

The results of this planning process were released to the public in a rolling approach. The Shanghai Metropolitan Area City Index was developed based on 40 regions, and an evaluation system with 18 indicators covering 5 dimensions, namely, productive services, shipping and trade, science and technology innovation, intelligent manufacturing, and cultural exchange, was constructed. The Shanghai Metropolitan Area Blue Book adheres to the principle of “faithfully recording the process and exchanging development ideas” and tracks the economic, cultural, governance, social, ecological, and spatial development of the metropolitan area. Meanwhile, the “Spatial Cooperative Plan of the Greater Shanghai Metropolitan Area Recent Action Plan” focuses on the overall spatial cooperation goals and defines the specific tasks and work objects in a project- and list-oriented approach.

4 Conclusions

The “Spatial Cooperative Plan of the Greater Shanghai Metropolitan Area” is the first metropolitan area cooperation plan in China that was prepared by Shanghai City and its eight neighboring cities. This plan also offers an innovative governance exploration focusing on regional cooperation, and the planning process is as important as its results. This plan emphasizes the importance of equal negotiation, building an open platform, reflecting on the local conditions, and gradually reaching a consensus to jointly solve regional problems. The plan preparation shifted from a city-government-led initiative to a multi-agent one and from a top–down preparation to a cross-regional equal collaborative preparation. The implementation mechanism emphasizes the participation of multiple agents, and the follow-up mechanism focuses on technical support and social participation by applying a continuous monitoring system and establishing many organizations.

The effectiveness of the spatial coordination in the Shanghai Metropolitan Area gradually emerged after four years of planning exploration and promotion. Such effectiveness was not only reflected in the planning itself but also in its governance path, governance

mechanism, and governance effectiveness. First, on the governance path, the planning explores a new model of regional co-governance with multiple participation and common consultation. During the planning process, the reasonable demands of each city and local government are respected, and all parties are given the opportunity to propose their demands and discuss them together until they reach a consensus on the goals, space, strategies, actions, and other aspects of the planning. Second, in terms of governance mechanism, the plan proposes the creation of a diversified and open regional coordination platform and mechanism. Third, in terms of governance effectiveness, the planning promotes an in-depth exchange of “circle of friends” and a more diversified synergy. The integrated development of the Shanghai Metropolitan Area is no longer limited to the administrative level but has a broader market identity and social public foundation. Cities are willing to develop in solidarity with Shanghai to form a metropolitan area with global competitiveness.

This study has several limitations. First, the research object is the first edition of the regional collaborative plan in the Greater Shanghai Metropolitan Area. Due to time constraints, this plan does not include public services, housing, and other research support. The planning also has a large space for improving the overall spatial layout scheme. Second, this study has a limited promotion scope given that China is a vast country whose regions significantly differ in terms of conditions. Cities are at the development level, development stage, and coordination foundation levels (2022). Therefore, the experiences from Shanghai Metropolitan Area planning can be used as reference for the joint governance of metropolitan areas, but further innovative attempts at organization mechanisms and planning focuses should be conducted to find out the path that adapts to its efficiency and characteristics.

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Authors' contributions

Juan Sun was responsible for thesis conception and manuscript revision; Xuan Ma was responsible for manuscript writing and revision; Zhenguang Zhang was responsible for manuscript writing, data and literature analysis.

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Availability of data and materials

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Declarations

Ethics approval and consent to participate

Not applicable.

Competing interests

On behalf of all authors, the corresponding author states that there is no conflict of interest.]

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