Abstract—To meet the requirement of “explore and establish the united space planning system and promote the reform of planning system” proposed on the central urbanization working conference, the practice of “Multiple Plans United” has been implemented in many cities nationwide. The key points of space planning in foreign countries and the implementation situation of the practice of “Multiple Plans United” are introduced. According to the plan of “Multiple Plans United” of Pingdu City, the pilot city for the reform of small and medium-sized cities in China, this paper thinks and explores the practice to establish the system of space planning in county (city), construct and plan the platform of information management, implement system reform and promote the governance capacity of cities.

Keywords—space planning; multiple plans united; Pingdu City; space planning system in country (city)

I. INTRODUCTION

Space planning dated from Germany at the early 20th century. After the regional planning was compiled in Ruhr of Germany, European and American countries such as France and American began to carry out various practice of space planning in order to promote the overall regional coordinated development. At the meantime, a series of corresponding laws and regulations had been made to guarantee the implementation of plans. In the space planning, western countries pay attention to the overall and coordinated space development and return to the planning system that takes material space as the major content as well as value economic objectives, environmental objectives and social objectives. It is called space planning, which is comprehensive, coordinated and strategic (Wang Kai, 2010). The space planning of Germany is the hierarchical, integral and comprehensive planning system that contains the country, regions and towns (Wang Fang et al., 2008). The space planning of Britain has become the comprehensive process that contains planning reform, policy integration and strategic governance (Jones et al., 2010). In our country, the space planning and its system consist of various space planning and have mutual independence and interrelation (He Zizhang, 2006). Horizontally, it contains multiple levels including the national level, provincial level, prefecture (city) level and county level, but the united and ordered layout has not formed yet (Lin Jian et al., 2011). Meanwhile, the horizontal and vertical operating characteristics have brought about contradictions of various kinds, different standards, and different systems in different departments, unclear hierarchical relation and absence of connection in the system of space planning in our country.

II. POLICY BACKGROUND OF “MULTIPLE PLANS UNITED” OF OUR COUNTRY

The “Multiple Plans United” refers to the important measure to implement the strategic deployment of comprehensively deepening reform of the central government and the important spirit of the speech of General Secretary Xi Jinping and establish the system of space planning. In 2013, the central urbanization working conference emphasized “establish the system of space planning, promote the reform of planning system and accelerate the planning legislation; realize one plan and one blueprint for one county (city) through exploring “Three Plans United” or “Multiple Plans United” for the economic and social development, urban and rural and land use planning, and implement it with perseverance”. In August 2014, four ministries and commissions of the National Development and Reform Commission, Ministry of Land and Resources, Ministry and Environmental Protection and Ministry of Housing and Urban-Rural Development jointly issued the Notice of Implementing the Pilot Work of “Multiple Plans United” in Cities (Counties) and put forward carrying out the pilot of “Multiple Plans United” in 28 cities and counties nationwide. It requires exploring “one plan for one city (county)” in the space unit of city (county) and the experience to establish the unified system of space planning. At the close of 2015, the Central Economic Working Conference required “accelerate the reform of planning system, improve the space planning system and actively promote “Multiple Plans United” in city (county)”. The 5th Plenary Session of the 18th CPC Central Committee and the Central City Working Conference propose “realize overall space...
planning based on the planning of main functional areas and promote “Multiple Plans United”.

In January 2017, on the basis of the pilot work of “Multiple Plans United” in city (county), the Central Office of the CPC Central Committee and the General Office of the State Council printed and issued the Pilot Scheme for Provincial Space Planning. The Scheme defines the implementation of provincial space planning pilot shall carry out the strategic deployment of the 5th Plenary Session of the 18th CPC Central Committee in overall space planning based on the planning of main functional areas and promoting “Multiple Plans United”. In the Scheme, on the basis of pilots in Hainan and Ningxia, the current local work foundation and related conditions are considered comprehensively to bring seven provinces of Jilin, Zhejiang, Fujian, Jiangxi, Henan, Guangxi and Guizhou into the scope of pilot. At the meantime, the pilot areas should combine local reality, strengthen the system reform and the scope of pilot practice at provincial and city (county) levels. The Scheme defines the implementation of pilot work on exploring the control system of space planning and promoting the smooth implementation of the system reform of space planning management. According to the requirements of strategic deployment that bases on the planning of main functional areas, integrates space planning and promotes “Multiple Plans United”, the scheme planning of Ningxia compiles the “one plan, one blueprint” that covers the whole autonomous region and constructs the space planning system with unification, mutual connection and level-to-level administration.

On Aug.30, 2017, the 38th meeting of the Central Leading Group for Comprehensively Deepening Reforms passed the Report on the Pilot Work in the Ningxia Hui Autonomous Region on the Space Planning (Multiple Plans United). Since the implementation of pilot work on “Multiple Plans United”, the Ningxia Hui Autonomous Region has explored experience that can be copied and promoted in compiling the space planning, defining the protection and exploitation layout, constructing the information platform of planning management, exploring the control system of space planning and promoting the system reform of space planning management. According to the requirements of strategic deployment that bases on the planning of main functional areas, integrates space planning and promotes “Multiple Plans United”, the space planning of Ningxia compiles the “one plan, one blueprint” that covers the whole autonomous region and constructs the space planning system with unification, mutual connection and level-to-level administration.

III. LOCAL PRACTICE OF “MULTIPLE PLANS UNITED” IN CHINA

Under the requirement of “explore and establish the united system of space planning and promote the reform of planning system” proposed on the central urbanization working conference, the practice of “Multiple Plans United” has been implemented in many cities of Shandong Province. Generally speaking, it has experienced the early exploration period (before 2012) and the policy support period (after 2013) and contains the pilot practice at provincial and city (county) levels.

A. Provincial Level

In June 2015, the 13th meeting of the Central Leading Group for Comprehensively Deepening Reforms agreed Hainan Province to implement the reform pilot of “Multiple Plans United” at provincial level on the plans of economic and social development, urban and rural planning and land use planning. Hainan becomes the first province that carry out the exploration of space planning (Multiple Plans United) in the whole province. Under the guidance of the Ministry of Housing and Urban-Rural Development, Hainan Province has compiled the Overall Planning of Hainan Province (2015-2030) for urban and rural planning and roundly coordinated various plans, explored and established the unified and efficient plan-making systems, unified and linked space planning system, unified and cohesive space planning layout, unified and standardized technical norms for planning as well as unified and smooth mechanism for plan implementation. In June 2017, Hainan Planning Commission was founded with the approval of the State Commission Office of Public Sectors Reform according to the deployment of “Multiple Plans United” pilot reform in Hainan Province and became a department of the provincial government responsible for the compilation and supervision of space planning of the whole province. The following are canceled correspondingly: ① the responsibility of the Hainan Development and Reform Commission in organizing and compiling the plans for main functional areas; ② the responsibility of the Department of Ecology and Environment Protection of Hainan Province in delimiting the ecological red line; ③ the responsibility of the Hainan Provincial Department of Housing and Urban-Rural Development in urban-rural planning management; ④ the responsibility of the Department of Land and Resources in Hainan Province in organizing and compiling the provincial land planning, overall planning of land use and guiding and checking the overall plans of land use in city (count); ⑤ the responsibility of the Forestry Department of Hainan Province in organizing and compiling the plans for forest land conservation and use; ⑥ the responsibility of the Department of Ocean and Fisheries of Hainan Province in organizing and compiling the provincial plans for marine functional areas, marine ecological red line, island conservation and use.

B. City (County) Level

Xiamen City implements “Multiple Plans United” under the guidance of the Strategic Planning for Beautiful Xiamen. Upwardly, it continues the master plans at national and provincial level; downwardly, it integrates special plans of departments at city level. The construction model of space planning system of “one plan and one access” has been formed. The planning results of “four ones” namely “one blueprint, one platform, one table and one operation mechanism” have promoted the smooth implementation of “Multiple Plans United”. Specifically speaking, the operational efficiency of the city has been greatly improved through launching the reform of examination and approval system by “one blueprint” and “one information platform”, carrying out the acceptance and approval of “one table” and recreating the approval process; it has explored and established the system to guaranteeing the work of “multiple Plans United” and has provided policy support and standard guidance to create conditions for the approval of “one table”. In April 2016, Xiamen City introduced the Provisions on the Management of Multiple Plans United in Xiamen Special Economic Zone. It is the first local statute regarding “Multiple Plans United” at home and defines “the competent departments of urban and rural planning are responsible for the specific compilation of
space strategic planning and the specific review involving space planning”.

After establishing the planning system of “1+3+X”, under the guidance of national economic and social development plan, Kaihua County has systematically integrated urban and rural planning, land use planning and eco-environmental protection planning and has formed the Overall Planning for the Development of Kaihua County. Meanwhile, it has realized one plan and one blueprint for one city (county) to solve problems of separate systems for planning, content conflict and lack of linkage and to solve the hard problem that the economic, social and ecological constructions constrain each other in the city development. It is a successful exploration that bases on the local reality and realizes the urban-rural integration.

C. Enlightenment

The nature of “Multiple Plans United” is to streamline administration and delegate power to lower levels: to streamline administration is the orderly and coordinated functions of departments to avoid conflicts of plans; to delegate power to lower levels means after a blueprint is finished, enterprises as main market players conduct according to the plan without the approval at all levels; to supervise means the government functions embody in and after the process. The core content of “Multiple Plans United” is to coordinate various plans on space, explore and establish unified space planning system to promote the reform of space planning system of our country. For the perspective of practices in some areas, under the current administrative system, the contradictions of multiple plans still exist if the system structure at national and provincial levels remains unchanged, and it is difficult for a city to solve tremendous problems. The rapid completion of “Multiple Plans United” work and the innovation of space planning system in Hainan and Xiamen have a close relationship with the high attention paid by municipal leaders, simple administrative structures, high centralized planning and mechanism guarantee.

The operation of space planning system is determined by the government administration management system. Therefore, it is necessary to combine “planning integration” with “mechanism integration” to form the generalized “Multiple Plans United” with the adaptability between space planning and urban governance system. It is the fundamental to ensure the reform of space planning system. The practices regarding the exploration and reform on “mechanism” integration exist widely. For example, Hainan Province sets up Hainan Planning Commission; Yunfu City in Guangdong Province takes the lead in pursuing the working mechanism that the municipal planning committee integrates the planning formulation; cities such as Shanghai, Wuhan and Guangzhou merge urban planning department and land department.

IV. EXPLORATION AND PRACTICE OF “MULTIPLE PLANS UNITED” PLAN OF PINGDU CITY

Located in the west of Jiaodong Peninsula, Pingdu City is subordinate to Qingdao City, Shandong Province and covers an area of 3,176 square meters, with the population of 1.479 million, 5 sub-district offices and 12 towns. In March 2015, Pingdu City received approval of the only pilot for the national comprehensive reform of small and medium-sized cities in Shandong Province. According to the Implementation Plan of Pilot for the National Comprehensive Reform of Small and Medium-sized Cities of Pingdu City, the “Multiple Plans United” plan is the key project promoted in the reform.

A. Overall Conception of the Project

In the “Multiple Plans United” plan, on the basis of referring to pilot experience at national and provincial levels, Pingdu City has deeply researched the establishment of space planning system in county (city), the construction of information platform for planning management, the implementation of system reform and the promotion of modernization for urban governance capacity. It realizes “one blueprint”, information storage and mechanism integration and is the “Multiple Plans United” of 3.0 edition in the process of ceaselessly promoting the reform of space planning system. The plan adopts the technical route “with question target as the orientation, urban and rural planning as leadership, planning and coordination as means, implementation guarantee as fundamental”. We realize differences and problems of the current “multiple plans” through concluding its results, with the objective of “constructing a space planning system”, propose the coordinated policy with “twelve words” of “set goals, restrain the scale, keep the bottom line and eliminate differences” and integrate plans; strengthen the protection and the control of development from two aspects of space control and delimitation of control line; formulate measures for implementation guarantee and realize “Multiple Plans United” through “one space planning, one indicator for performance check, one blueprint, one coordination mechanism and one information platform”.

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B. Overall Innovation Characteristics of the Project

1) Departments jointly promote “Multiple Plans United” via coordination and shared governance

Since the “Multiple Plans United” work has the characteristics of various involved departments, overlapped contents of powers and difficult coordination and treatment, high standard leading groups should be established. Meanwhile, it is also essential to strengthen the planning coordination of departments, respect the requirements of departments for power space management and systematically and roundly involve in the planning process via communication and coordination of multiple departments and multi-field technology integration to realize common formulation, consensus and common management. The “Multiple Plans United” is roundly and effectively promoted through five stages of data collection, preliminary connection, first review of technology, department coordination and final review. In the stage of preliminary connection, the project group and departments form the technical group for specific responsibility and establish temporary work office to coordinate technical standards, control limit and different map spots in about two months and reach preliminary consensus; in the stage of first review of technology, the leading group of “Multiple Plans United” reviews the preliminary scheme and defines major issues of urban development strategy and layout and makes overall arrangements of land usage index and space layout; in the stage of department coordination, departments of planning, land, environmental protection, forestry and sub-district offices in towns reach the final consensus through three-round formulation and discussion.

2) Build an overall space planning system through innovation path and index integration

On the basis of fully connecting and integrating the national economic and social development planning, urban-rural planning, land use planning and eco-environmental protection planning, this plan proposes the establishment of “1+(N-1)” space planning system at city (county) level. “1” means taking the urban-rural planning as the guidance; “N-1” means integrating the major space planning and defining the structural layout and structure of urban development. According to the coordination policy of “twelve words”, with the principle of “first arrange the chessboard and then place chess pieces” and under the premise of unified work foundation and on the basis of evaluating the bearing capacity of resources and environment and the suitability for the development of national land space, it integrates core indexes of departments of development and reform, planning, land and environmental protection, scientifically delimits “three areas and three lines” and realize the ultimate horizontal and vertical space control.
3) **Form overall “one blueprint” of space through overall planning and integrated elements**

Integrate space planning of planning, land, development and reform, environmental protection, water conservation and forestry under the same coordinate system, coordinate the differences and contradictions of the construction lands for towns, villages, independent industries and mining, transportation and water conservation and the non-construction lands of cultivated land, garden plot, forest, river and lake and define the boundaries and rules for space control of departments and integrate all the construction and non-construction elements to form “one blueprint” of overall space. The space planning of overall urban-rural planning and overall land use planning is distinctly important. On the basis of space overlap of urban construction land, specific adjustment proposals for 8,044 different map spots are put forward to form the result of special report.

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**Fig. 2. Schematic diagram of space planning system.**

**Fig. 3. Schematic diagram of three kinds of space**

**Fig. 4. One blueprint for municipal planning.**
4) Ensure the effective implementation of elements via bottom line control and elaborate planning

The planning brings natural boundary, reserve boundary and corridor boundary into ecological space. The natural boundary includes the areas that consist of “mountain, field, river, lake and forest” with ecological conservation values and an area of 2,165 square meters; the reserve boundary includes the areas that consist of forest parks and natural reserves controlled by people and have an area of 189 square meters; the corridor boundary includes the areas that are controlled by traffic corridor and infrastructure corridor and have an area of 313 square meters. Each ecological space is positioned specifically to firmly fix the ecological protection area on “one blueprint”.

The plan brings land for urban and independent industries into urban space and carries out elaborate planning within the scope of urban space. Meanwhile, it reasonably arranges functions, integrates major infrastructure layout, protects historical and cultural elements and improves equipment and the quality of towns.

5) Go the whole figure of “one blueprint” through overall planning and integrated mechanism

Based on the goal orientation of implementation management, the space planning system coincides with urban administration system. This planning proposes the transformation of implementation path with overall planning and integrated mechanism and further strengthens the power management. In terms of the overall planning: base on “one blueprint for overall planning”, realize index-based and space-based planning goal and propose guidance on core contents related to land use planning, major infrastructure layout and transportation planning to direct the compilation of planning for different departments. In terms of mechanism guarantee: suggest establishing a data information center recently that is subordinate to the planning bureau and is mainly responsible for the maintenance management of “Multiple Plans United” database and information platform; establish comprehensive and efficient organizations of approval service in combination with the information platform and realize sharp compression of approval period; adjust according to relevant national administrative organizations in the future, integrate department and planning system and coordinate the compilation and approval of planning.
6) One platform and digital management to promote the modernization of urban governance capacity

The information linkage platform is established through basic data loading and results of electronic vector data to realize the electronic data interchange with departments of planning, development and reform, land, environmental protection, transportation and forestry, the information sharing and policy coordination and promote the transformation from management-oriented government to service-oriented government and effectively improve the operational efficiency of cities. The “Multiple Plans United” plan collects the current situation and planning information of nearly 20 projects in four major kinds through summarizing the basic data of departments and planning, and finally unifies into one database to achieve the information-based and digital planning implementation and dynamic maintenance, promote the openness of the compilation, review and supervision of planning and the modernization of urban administration system and governance capacity.

Fig. 7. Database construction.

C. Practice Effects

Promote the planning amendment of departments and improve the urban-rural planning compilation system on the basis of “one blueprint for overall planning”. In terms of planning: In June 2017, the achievements of new round outline plan, the Overall Urban Planning for Pingdu City (2016-2030) had been reported to the provincial department of housing and urban-rural development; the full coverage of regulatory plan in four districts of economic and technological development zone, old city, ecology business district and high tech industrial park finishes preliminary technological demonstration; the compilation of 23 specialized planning including the specialized planning for urban basic education, the specialized planning for urban cultural facilities and the immediate construction planning forms preliminary results. In terms of land: In September 2017, Pingdu City completed the delimitation of permanent basic farmland and the improvement and adjustment of overall land use planning. In terms of environmental protection: conduct the delimitation of ecological red line at city level in Qingdao City according to the scheme regarding the delimitation of ecological red line in “Multiple Plans United”.

Take overall planning and planning integration as principles, implement “one blueprint” and give play to the role of planning in overall guidance and improve the urban administration system. According to the proposal of “Multiple Plans United”, establish the administrative approval bureau of Pingdu City to recreate the approval process involving space of departments of development and reform, planning and land, base on one blueprint, transform series approval into parallel approval. The approval period is compressed from 80 days down to 10 days, effectively achieving the modernization of urban governance capacity.

Fig. 8. Construction of administrative approval bureau.

V. CONCLUSION

In the practice of Pingdu City, the compilation contents, system, position and function of the “Multiple Plans United” plan have been discussed, and a feasible plan-making system is proposed. Meanwhile, the beneficial exploration and bold practice are conducted for the planning implementation system. It has provided practical experience for the construction of space planning system at city (county) level. However, the improvement of urban administration system and modernization of governance capacity cannot accomplish in one action. The reform of space planning system in our country still has a long way to go. The practice and exploration of “Multiple Plans United” under the background of space planning system is of great significance for the reform of space planning system in our country.

REFERENCES

