

# 시민주도형 스마트도시 조성을 위한 정책 방향 연구

Policy Directions for the Building of Citizen-led Smart Cities

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SUMMARY

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This study is intended to suggest policy support to lay the foundation for citizen-led smart city development by analyzing the state of civil participation in the smart city. The major research findings are as follows: First, the author classified the phases of smart city projects and summarized civil support required for each phase. The function of civil participation and role of citizens in the process of implementing smart city projects were examined by delving into domestic and overseas cases of civil participation in smart cities, and the project phases were classified from the civil participation perspective. A project consists of four phases – preparation, planning, operation and management, and evaluation and dissemination. The author also summarized matters relating to civil participation in each phase. For each phase, a pool of civil support elements was established based on literature review, and the civil support required in the implementation of a smart city project was summarized through in-depth interviews with expert groups and working-level personnel.

Second, the author examined cases of smart challenge projects by project type and identified their implications for project implementation. The status of civil participation in smart challenge projects was examined for each smart city project

phase. In the preparation phase, participating citizens were recruited and relevant training was provided. In the planning phase, the smart city service was reviewed by listening to the voices of the participating citizens through the living lab. In the operation and management phase, they evaluated the smart city services and played their role as an operator. The evaluation and dissemination phase involves the dissemination of the technology and services based on the stable operation of the smart city services. This phase has yet to be done.

From the civil participation perspective, the author classified the smart city service types into smart city service sophistication, the use of smart city services by citizens, and smart city services provided by citizens. The author also categorized the smart city services of the smart challenge project.

Third, a survey of civil participation program operators and participating citizens in smart challenge projects was conducted to identify things to be done to achieve citizen-led smart city development. The civil participation program operators mentioned “difficulties in coordination with other departments,” “participating citizens’ lack of understanding of smart city services,” and “difficulties in comprehensive management over the progress of the project” as the major problems they faced in the operating phase of civil participation. They also pointed out that support is necessary for platform operation such as “an evaluation and dissemination phase,” “urban information collection and disclosure platforms,” and “smart city operation status disclosure platforms.” It was found that the reasons for civil participation in smart city projects were “interest in smart cities,” and “interest in urban and social issues.” The operation of the training program and people in charge of smart city projects were well received. Citizens who participated in the planning stage stated that they wanted to continue participating in smart city projects and that civil participation would be necessary for the improvement of the smart city services and synergies with job creation.

Fourth, overseas cases of civil participation in smart cities were analyzed to identify types of support for civil participation and operation systems and examine the programs for citizens. The results of the analysis on the overseas cases showed that the foundation for continuous and stable civil participation was established. Given the historical and cultural differences in civil participation, governance was established based on close cooperation between the public,

corporations and citizens, and citizens were actively participating through the support from intermediate support organizations. To support civil participation and training, they used various programs on online and offline platforms.

Fifth, the author proposed ways to improve legal and institutional systems to build a citizen-led smart city. The current state of legal and institutional systems relating to civil participation in the smart city was summarized and recommendations for the improvement to lay the foundation for a citizen-led smart city were presented. The ways to establish an intermediate support organization for civil participation in smart city projects was explored for "the sustainability of participation," "continued and systematic training for citizens." Also, measures to improve the smart city act were presented to establish "ways to ensure the effectiveness of civil participation." To establish the citizen-led smart city data platform, directions for the platform to support civil participation were identified and ways to improve laws to improve administrative systems for effective project implementation were presented. Ways to encourage companies to participate in technology development and projects through local information and urban issue sharing were presented. Finally, the need for a new type of smart challenge projects led by citizens was presented and the major elements of a citizen-led smart challenge project were proposed.

**Keywords :**

Smart City, Smart Challenge Project, Support for Citizen Participation, Intermediate Organizations Supporting, Citizen-led Participation