

auri research brief

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Measures to Improve the Building Use Classification System in Response to Changes in the Construction Environment

Due to a low birth rate in recent years, the total population has declined while the population of the elderly has increased. Moreover, the change in the household size, from 3-4 households, which used to be the mainstay of our social structure in the past, to 1-2, has resulted in a rapid change in the building demands. The introduction of sharing economy and IT-based 4th Industrial Revolution technology even expanded the scope of building market, introducing new types of building uses such as shared houses, joint workspaces, and pop-up stores. In addition, legal permission to allow multiple purposes of a building has increased utilization of the building space. On the other hand, this change might have caused frequent changes in the business type and the space layout, resulting in management problems in such a process, and constant complaints and disputes. The deregulation on the use of buildings may be effective in promoting the vitality of the building market. However, in the context of accelerated changes in the construction environment the compliance with the current use standards must be reviewed. The study seeks alternatives to improve the institutional efficiency of the building use classification system.

Changes in the construction environment and the issues of building usage standards

Changes in the construction environment can be explained largely in connection with the consequences of changes in the demographic and social structure, the economic structure, the technology, and the climate. Due to the decrease in the working age population and the increase in the elderly population, the number of 1-2 households have led to a marked increase in demand for small homes, residential complex facilities, and welfare facilities. In addition, as the low-growth economy has become entrenched, the maintenance business of small-scale buildings, especially the use change, has increased, as well as the building utilization method incorporating the concept of 'sharing' increased. In the building industry, the introduction of new information technology and facilities for the Smart Building are increasing. Also, due to the rapid climate change and the consequent emergence of various dangers, demands for energy saving, environment-friendly and safe spaces are growing. In order to secure social value for newly emerging businesses and buildings due to changes in such construction environment, it is necessary to incorporate those facilities into the institutional system. In other words, it needs to be incorporated into the use classification system under the Building Act. Many of the complaints that can be used to identify the building market conditions are related to this. There are many inquiries about the use classification changes of existing buildings that can diversify the utilization of buildings and respond to environmental changes. Considering this, the use classification changes or multiple-purpose regulations should also be proactively updated. In addition, maintaining consistency with other laws that apply to or refer to the use standards of the Building Act is also highlighted as a major issue.

Status and Limitations of the Building Use Classification in South Korea

The Building Act defines the building use classification as a classification of the types of buildings by similar structure, purpose of use, and type, defining a total of 28 building types (Enforcement Decree, 29 attached tables). According to the definition, the current building use classification mandates structural and morphological similarities in addition to its purpose of use. Since its establishment in 1978, the building use classification system has been changed about 60 times, and the primary use classifications have been merged or separated, forming the current classification system. The scope of the building use classification can be referred to as a classification system for building use and its related laws and regulations, whose major purpose is a clear definition of the use of buildings. As mentioned earlier, the current defini-

tion of building use under the Building Act defines the type of building by similarity and does not systematically incorporate the principle of how to interpret building use. As a result, the name of the 29 use classifications in Attached Table 1 of the current Building Act and its Enforcement Decree shows inconsistent operations with the purpose of use, the object of use, or the name of facilities. Meanwhile, the building use classification is used as a measure of various activities necessary for a building permit, construction, and maintenance. In particular, the Building Act is important as a basis to regulate the fire prevention and the evacuation safety standards for buildings, and the use classification is a key factor in determining its level. In addition to the Building Act, there are matters to be considered in the planning, construction, and use of buildings such as land use, parking lots, and firefighting facilities. Due to this, the differences in the use classifications described in these laws cause confusion in applying building standards, which refer to the use classification.

Implications of the Building Use Classification in Other Countries

The use classification system of buildings in the US, UK, and Japan has implications in two main aspects. First, in the United States and the United Kingdom, buildings are grouped by the functions, purpose of use or behavior of use in principle, and the facilities included in each group are reclassified by more detailed criteria such as the user density and the risk of objects. In addition, there are examples of buildings for each use classification to clarify. This classification allows an intuitive application of the building use. In addition, the method is consistent with the original intention of introducing the “use” as a measure of architectural planning, which is advantageous to improve the performance of buildings, safety of users, fire prevention, and evacuation. Second, other countries this study reviewed explain the purpose and concept of the building use classification relatively clearly. In this regard, the case of the United States has great implications. The building use classification in the United States is specified as a means of securing safety for users and surrounding areas. This is directly linked to the criteria for the planning focused on evacuation safety, leading to operations consistent with the principles of the use classification.

[Table] Changes in the current building use classification system

Focus	Primary Use	Added detailed use	Deleted detailed use
<ul style="list-style-type: none">• Addition as a new primary use and incorporation of detailed uses, namely, business facilities, lodging facilities, and elderly people's facilities.• Addition of shared housing as detailed use.	1. House	<ul style="list-style-type: none">• Facilities used for private homes as other detached houses	
	2. Apartment house	<ul style="list-style-type: none">• Facilities used for private homes as other apartment houses	
	“Qausi-housing”	<ul style="list-style-type: none">• Officetels• Dormitory• Shared housing• Welfare Housing for the Elderly• Multi-living facility	
<ul style="list-style-type: none">• Move Multi-living facilities to the category of quasi-housing• Inclusion of remote learning and teaching due to the advancement in information and communication technology	3. The type I neighborhood living facility	<ul style="list-style-type: none">• Physical fitness center and aerobic center among living sports facilities• Welfare facilities for the elderly among residents' shared facilities• Electric vehicle charging facility among energy supply facilities• A funeral support business (formerly funeral director) among neighborhood general business facilities	
	4. The type II neighborhood living facility	<ul style="list-style-type: none">• Exhibition office for automobile and housing (expansion of automobile office)• Sales and rental businesses of guns (expansion of existing gun sales offices)• Animal protection center and animal playground among animal management facilities• Dancing academy and remote learning using the information and communication technology, which used to be excluded from the academies• Surfing fields, rock fields, screen golf courses, screen baseball stadiums, and play-type facilities among the resident sports and amusement facilities	<ul style="list-style-type: none">• Multi-living facility• Physical fitness center, aerobics center. Moved to the type I neighborhood living facility
	5. Cultural and assembly facilities	<ul style="list-style-type: none">• Gymnasium and playgrounds among the watching venues• Arboretum among animal and botanical gardens	
	6. Religious facilities		
	7. Sales facilities		
<ul style="list-style-type: none">• Changed the name of the primary purpose• Welfare housing for the elderly among the welfare facilities for the elderly is moved to semi-residential	8. Transportation facilities	<ul style="list-style-type: none">• Urban railroad facilities among railroad facilities• Marina port facility among port facilities• Transfer facility	
	9. Medical facilities	<ul style="list-style-type: none">• Infectious disease hospitals and infectious disease research hospitals among quarantine hospitals	
	10. Educational Research Facility	<ul style="list-style-type: none">• Lifelong educational institutions among educational institutes and training institutes• Vocational education and training institution	
	11. Social welfare facilities (formerly facilities for the elderly and children)	<ul style="list-style-type: none">• Victim protection facilities, rehabilitation and nursing facilities for the homeless, youth independence support center, youth treatment and rehabilitation center, and youth recovery support facilities among the welfare facilities in temporary residence• Social welfare facilities, single-parent family welfare, sexual violence, domestic violence counseling center, multicultural family support center, homeless meal facilities, homeless medical facilities, and work welfare facilities among the general welfare facilities	<ul style="list-style-type: none">• Welfare housing for the elderly among welfare facilities for the elderly. Moved to quasi-housing
	12. Training facilities	<ul style="list-style-type: none">• Children's hall ('Children's Hall' of tourist resting facilities), children's cultural facilities, and child rest accommodation among children-only facilities	

• Addition of facilities corresponding to indoor sports facilities and sports facilities business
• Officetel moved to semi-residential

• Facilities corresponding to the sports facility business (ballrooms and dance academies) moved to sports facilities.
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• Reorganization of detailed uses according to dangerous substances

• Deletion of expired facilities
• Addition of environment-friendly energy-related facilities

13. Exercise facility	<ul style="list-style-type: none">• Among living sports facilities, fishing grounds, surfing grounds, rock walls, and similar facilities; screen golf courses, screen baseball fields, and similar facilities; play-type facilities; and other similar facilities• Comprehensive sports grounds, martial arts academies, and martial arts grounds among playgrounds	
14. Business facilities	<ul style="list-style-type: none">• Government buildings of public institutions among public business facilities	• Officetels
15. Accommodations	<ul style="list-style-type: none">• Hotels and inns among general accommodation facilities• Serviced residence, pension among living accommodation facilities• Recreation pension among tourist accommodation facilities	
16. Recreational facilities		<ul style="list-style-type: none">• Dance academies and ballrooms. Moved to the type II neighborhood living facilities and sports facilities

17. Factory	<ul style="list-style-type: none">• Manufacturing plant, processing plant, and repair plant among factories	
18. Warehouse facilities	<ul style="list-style-type: none">• Distribution warehouse among warehouses	
19. Dangerous goods storage and treatment facilities	<ul style="list-style-type: none">• Charging and sales offices among liquefied petroleum gas handling offices• Manufacturing facilities, transportation facilities, and use facilities among facilities handling toxic substances• Low pollution fuel supply facilities (hydrogen fuel supply)	
20. Automobile-related facilities	<ul style="list-style-type: none">• Car dismantling and recycling facilities among junkyards and car dismantling recycling sites• Driver's license test center among driving academies and vehicle maintenance academies• Electric vehicle charging station	
22. Resource recycling-related facilities	<ul style="list-style-type: none">• Public sewage treatment facility and excrement treatment facility among sewage treatment facilities• Waste treatment facility (waste treatment facility and construction waste treatment facility)	
23. Correctional and military facilities	<ul style="list-style-type: none">• Correctional Service / Treatment Center	
24. Broadcasting and communication facilities		• Telegraph and telephone office
25. Power generation facilities	<ul style="list-style-type: none">• Nuclear, hydro, and thermal power plants among power plants• Renewable energy generation facility• Collective energy supply facility	

Improvements for the Building Use Classification

The focus of the reform plan of the use classification system can be summarized into five major points. First, as one of the primary uses, ‘quasi-housing’ was added to include office-tels(multi-purpose buildings with residential and commercial units, i.e., studio apartments or studio flats), elderly welfare houses, dormitories, multi-living facilities, and shared housing. Second, facilities for the old were renamed to social welfare facilities in consideration of the actual purpose of use. Third, the detailed use of the type II neighborhood living facility was expanded to reflect the recent life service industry in its use. Fourth, the ballroom and the dance academy were moved to the category of the sports facilities according to the Sports Facilities Act. Fifth, other new use classifications have been added, such as car dismantling and recycling facility, an electric vehicle charging station, and a driver’s license test site.

In accordance with the reorganization of the use classification system, amendments to the Building Act and other laws linked thereto were suggested. First, the contents of Article 2, Definition, of the Building Act were proposed to change according to the purpose of building use and the user behavior. The detailed use was suggested to entrust to the enforcement decree. However, the detailed use in Attached Table 1 was specified so that additional necessary uses could be announced by decrees or ordinances of the Minister of Land, Infrastructure and Transport. Second, the names of quasi-housing, ballrooms, and dance academies and their use were adjusted according to the Building Act and the provisions of other laws. Third, it was proposed to revise in accordance with the provisions of the Building Act, which stipulates about the building review, building planning standards, structural and equipment performance standards, as well as the modified usage classification such as the installation of parking lots, the calculation of sewage, and the standards for specific fire-fighting targets under other statutes

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