

Universal Design for the Added Value Enhancement of Asia Free International City



(사)한국컬러유니버설디자인협회
Korea Color Universal Design Association



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— **LEE Hyoungho** Korea’s public design policies are governed primarily by the Ministry of Trade, Industry and Energy, the Ministry of Land, Infrastructure and Transport and the Ministry of Culture, Sports and Tourism. Recognizing the significance and effects of public design on the quality of life, the Ministry of Culture, Sports & Tourism created its Space & Culture Division in 2004 to pursue public design policies in earnest. In 2013 it was renamed the Visual Arts & Design Division. The Ministry of Culture, Sports & Tourism divided universal design between its Visual Arts & Design Division under the Culture and Arts Policy Office, and its Sports for the Disabled Division under the Sports Policy Office.

The Ministry of Culture, Sports and Tourism conducted research to analyze the current status of universal design and cultural application in 2012. The research conducted in 2013 led to the establishment of universal design guidelines for cultural facilities, according to categories such as concert halls, exhibition rooms and libraries, taking into consideration the need for universal design guidelines in cultural

facilities and design considerations based on user characteristics. The study on facility types analyzed the need for universal design in public libraries in 2014, the most familiar cultural space for the general public, and developed a universal design manual based on user characteristics and specific facilities. The introduction of the Act on Public Design in 2016 enabled public design policies to develop in a more systematic and consistent way.

In accordance with the Act on Public Design, Korea’s first basic plan for the promotion of public design is being developed in 2017 to specify the spirit of universal design and other detailed tasks. The Korean government is working to build social consensus on “Design for All.” It ensures the freedom of activities unconstrained by disability and equal participation in society. The goal is to provide and spread design guidelines to make society a better place for the elderly, the disabled and socially underprivileged groups. Notably, for the successful opening of the 2018 PyeongChang Olympic and Paralympic Winter Games, universal design is in-

troduced not just to sport facilities but also to public toilets, restaurants, accommodation and tourism facilities in hosting cities(Gangneung, PyeongChang, Jeongseon) to improve accessibility for people with disabilities. The project, which launched at the end of 2016, involves related ministries and organizations encompassing the Ministry of Culture, Sports and Tourism, the Ministry of Government Administration and Home Affairs, the Ministry of Health and Welfare, the Ministry of Land, Infrastructure and Transport, and Gangwon-do Provincial Government with the signing of an MoU on the creation of disabled-friendly cities.

— **Sari YAMAMOTO** For international airports, universal design is an important method of communication for passengers with language, physical and sensory challenges. In the U.S., it is advised that universal design be implemented in a way that: 1) limits the number of signs to avoid obscurity and confusion; 2) organizes signage in a way readable by those with poor vision; 3) ensures uniformity of directional and informative signage; 4) ensures direction signs are recognizable by users coming from different directions; 5) ensures color codes or other visual signs help people recognize a place or a direction; 6) provides the same information to people who are color blind; 7) ensures menu boards are readable by people who are color blind; and 8) ensures that signage complies with Americans with Disabilities Act(ADA) guidelines.

The U.K. also offers model cases on signage design for the visually impaired. A sign is only valid when users can find, understand and read it. As such, the most critical case is the contrast of colors, especially between backgrounds such as trees, stone walls and sign boards and between sign boards and symbols and letters. In addition, the U.K. has a separate design guideline for signage in hospital facilities. The guideline takes into consideration color-blind people, understanding of colors, the use of the color red in safety information, risks of color fading and color awareness.

The Ministry of Land, Infrastructure, Transport and Tourism of Japan uses colors in maps in

accordance with the guidelines for signage design. The Nishikawa Institute of Art and Design’s Color Design Guideline(2002) emphasizes: 1) visibility of signage 2) relevance in surrounding environments, 3) proper information of signage, 4) readability of signage, and 5) attractiveness of the signage itself. It is possible to establish a framework for Color Universal Design(CUD); however, it is desirable to avoid setting specific guidelines.

— **TU Kung-Gen** Color is a critical part of life. Notably, a pleasant living environment should be created for people who are color blind. Of Taiwan’s public policies on universal design, the Design Guidelines for Accessible and Usable Buildings and Facilities(2008), combine signage color with universal design. Taiwan’s CUD research organization brings together researchers, interior design, industrial design and commercial design departments to study various subjects such as color weakness, defects in color vision, color blindness, and the vision of the elderly. Taiwan is witnessing the rise of CUD. Due to the lack of related regulations, the Taiwanese Society of Color Studies plans to conduct studies on public facilities, museums, exhibition spaces, subways and stations, roads, schools and prep schools. I hope Korea and Taiwan will be able to work together on this.

— **Manabu TANABE** Japan began to introduce universal design to manufactured goods from the 1990s and has been expanding the scope of application to include signage graphics, products and architecture. In 2004, the Color Universal Design Organization(CUDO), a non-profit organization, was established. The greater Tokyo area is seeing many urban redevelopment projects ahead of the 2020 Summer Olympics in Tokyo. In particular, efforts are being made to improve Tokyo Station, Shibuya Station, overpasses, underpasses and transit systems. The recent introduction of color-coded subway lines and subway station numbering systems has improved the readability of the complicated and challenging public transit networks with visual signs such as colors and symbols.

The proliferation of cooperative universal design

should engage all stakeholders in places of social interaction, such as roads, plazas, transportation facilities and public architecture. In Japan, universal design is seen as part of added value on individual products, services and business excellence; however, it is necessary to build an urban environment which enables comprehensive connections. As such, efforts are being made to promote universal design by way of characters and education. In the greater Tokyo area, a growing number of local authorities are recognizing the proliferation of universal design as a major policy task and continue their efforts. In a modern city with increasingly complex urban functions and diverse groups of users, there is a need to recognize universal design as a social foundation for sound urban administration.

— **CHOI Young** Statistics may provide a glimpse of the future of Korea. According to experts in population statistics, the economic cost of supporting the elderly will increase, and by 2065 the population will decline due to an increase in death rates. A decline in fertility rates is attributable to an inflow of people from other countries and an accelerating shift to a collective lifestyle. Notably, such changes are taking place on Jeju at a pace that is faster than the rest of the region, mainly on the back of the tourism industry. As such, Jeju is expected to see an increasing need for design which enables coexistence between people from different backgrounds while eliminating discrimination and inconvenience. Let me introduce how universal design is being implemented by local authorities in Korea. The municipal government of Seoul is working to establish municipal bylaws on universal design, developing design guidelines for social welfare facilities and conducting pilot projects. Gyeonggi-do is taking the lead in developing and introducing universal design guidelines, the first of their kind in Korea. Dong-gu district in Daejeon is creating pilot streets and children's parks in accordance with universal design by laws. Jinju in Gyeongsangnam-do is undertaking an environment improvement project in line with bylaws on a barrier-free city.



Policy Implications

The introduction of universal design in the XII Paralympic Winter Games in PyeongChang

- Incorporation of universal design into facilities and administrative processes to ensure that people with and without disabilities and of all ages will be able to enjoy the sporting event without any difficulties
- Through cooperation between central and local governments, and related authorities, projects are underway in hosting cities(Gangneung, PyeongChang, Jeongseon) to improve accessibility for people with disabilities to public toilets and private facilities such as restaurants, accommodations and tourist sites.
- An agreement on a Barrier-free Tourism City: The Ministry of Culture, Sports and Tourism, the Ministry of Government Administration and Home Affairs, the Ministry of Health and Welfare, the Ministry of Land, Infrastructure and Transport and Gangwon Provincial Government

The Ministry of Culture, Sports and Tourism's policy direction for universal design

- A shift from barrier-free to universal design
- Design approach to enhance physical accessibility as well as information / service accessibility
- Institutionalization of universal design in cultural and sports facilities
- Development of universal design guidelines and evaluation tools for culture and sports facilities
- Establishment of a system which can evaluate universal design suitability throughout the construction of culture and sports facilities

Nine tasks in the tourism, sports and tourism segments

- Development of universal design application methods and guidelines for cultural and sports facilities
- Pilot project on introducing universal design to cultural space with a focus on public facilities for the underprivileged
- Universal design consulting support for newly-established cultural and sports facilities
- Institutionalization of the evaluation of universal design suitability
- Designation and promotion of cultural and sports facilities with excellent universal design
- Improvement in accessibility to cultural heritage
- Evaluation of universal design suitability at cultural and sports facilities and ways of improvement
- Accessibility map on cultural and sports facilities
- Tourism street with a pilot project for universal design

Chapter FIVE

GLOBAL JEJU