

Promotion of Land, Infrastructure and Transport Administration Based on Universal Design Concept

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In July 2005, the Ministry of Land, Infrastructure and Transport (MLIT) formulated the General Principles of Universal Design Policy based on the universal design (UD) concept. This concept offers UD that can be used freely and easily by everyone anywhere to maintain and improve the living environment and transport 'space' in terms of both hardware and software so the personality and individuality of all people will be respected, offering enjoyable and free participation in social activities in safety and comfort, regardless of physical condition, age and nationality.

This article describes the main points of the General Principles with the focus on UD in the transportation sector.

Background to General Principles of UD Policy

The arrival of an aged society and the continuing decline in birthrate has seen Japan's population starting to decrease from 2006. To meet these challenges, the Japanese government has been emphasizing various activities, including measures:

- To help elderly people to rely on themselves so that they can choose their own way of life
- To create a gender-equal society in which both men and women can display their individualities and abilities to the full
- To help disabled people display their abilities and achieve self-realization in order to create a society in which they can participate fully

At the same time, ongoing globalization is creating closer relations between Japan and other nations in business, tourism, and other fields. Consequently, Japan is in a period of major change and it is time to create a society in which all people can display

their individualities and talents, take part in social activities freely and achieve self-realization.

Past Activities and Present Problems

Until recently, Japanese towns and transport systems operated on the assumption that the main users were all able-bodied people. But as it became clear that Japan would soon be an aged society, there have been more calls for barrier-free buildings, roads, public-transport facilities, etc., that would facilitate the easy participation of elderly and disabled people in all social activities. In response, the government enacted the 1994 Act on Buildings Accessible and Usable by the Elderly and Physically Handicapped (Heartful Building Law). This was followed by the 2000 Law for Promoting Easily Accessible Public Transportation Infrastructure for the Aged and the Disabled (Barrier-free Transportation Law).

In addition, the government has set specific targets in its social infrastructure development projects and transport policies, while pressing on with barrier-free measures in a planned manner. However, a review of the past activities of the MLIT based on the UD concept described above shows that the Ministry's barrier-free activities are still insufficient for the reasons outlined below:

- In principal, most barrier-free measures are intended for the elderly and physically disabled. Mentally disabled persons, foreigners, children, parents accompanying children and many other users are still not considered.
- Since different facilities use different barrier-free measures, continuity at the connecting point between facilities is sometimes inadequate, etc., or only part of the space around the passenger facility is barrier-free.

- Barrier-free measures emphasize hardware (facilities) but not barrier-free software (information services). Activities to supply barrier-free information are insufficient.
- Although more new buildings are barrier-free due to mandatory measures, etc., and many older facilities are being made barrier-free to some extent, barrier-free measures are insufficient as a whole.

Aside from these problems, connections between different transport operators and supply of information still do not have sufficient barrier-free measures. When it comes to providing new public transport services in the future, it is not always possible to implement effective barrier-free measures within the framework of conventional policies.

Additionally, there is still no process whereby barrier-free measures are implemented step-by-step and on a lasting basis from various viewpoints.

Basic Concepts and Specific Measures

In view of the above problems, the MLIT decided to adopt five basic concepts and deploy 10 measures to further develop the previous activities of individual entities.

The basic concepts and specific measures targeted at transport are described below:

Building participatory society from users' standpoint

The most important characteristic of barrier-free measures based on the UD concept is that participating measures are formulated from the users' standpoint—not the supplier's standpoint—and that various measures are implemented by sustainable activities on a step-by-step basis through an evaluation process (spiral-up approach).

Therefore, activities to reflect opinions of



Examples of barrier-free transport measures—installing elevators (MLIT)



Operating no-step buses (MLIT)

Present Barrier-free Status and Barrier-free Targets

Facility	Barrier-free measures	Barrier-free rate	
		Present status (2003)	Target in Priority Plan for Improvement of Social Infrastructure (2007)
Passenger facilities	Elimination of level differences	44%	Slightly over 70%
	Installation of tactile guide blocks for vision-impaired people	74%	Slightly over 80%
Roads	Reducing level differences, securing adequate width, installing guide blocks for vision-impaired people, etc.	25%	About 50%
Buildings	Providing handrails, wide corridors, etc.	30%	About 40%
Houses	Providing handrails, wide corridors, etc.	About 3%	About 10%

Notes:

- (1) Passenger facilities used by 5000 or more people/day on average (e.g., railway stations and bus terminals)
- (2) Main roads near passenger facilities mentioned above
- (3) Specific buildings used by many and unspecified persons (e.g., hospitals, theatres and hotels).

Proportions of Barrier-free Vehicles, in Public-transport Facilities

	Present status (2003)	Target in Basic Policy on Smoothing Movement (2010)
Railway carriages	24%	30%
No-step buses	9%	20%–25%
Passenger ships	4%	50%
Aeroplanes	32%	40%

Five Basic Concepts and Ten Measures

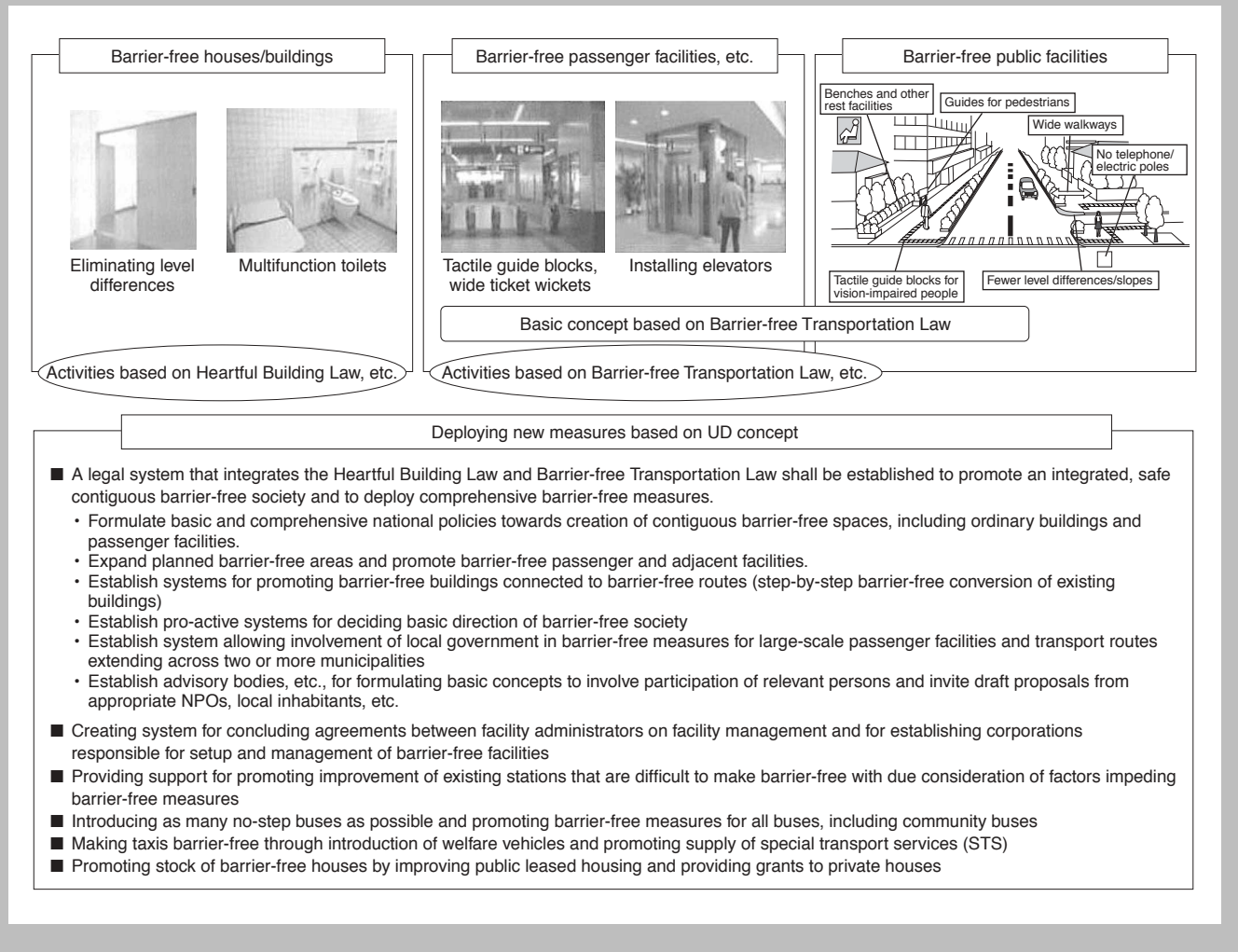
Five basic concepts

- (1) Building participatory society from users' standpoint
- (2) Coordinating barrier-free measures
- (3) Offering safe and easy to use public-transport facilities for everyone
- (4) Developing safe communities where everyone can live comfortably
- (5) Participating in various activities requiring advanced technologies and techniques

Ten measures

- (1) Building system based on UD concept for involving diverse persons
- (2) Installing system for sharing of assessment/information based on UD concept (universal design assessment)
- (3) Promoting comprehensive barrier-free measures in well-coordinated manner
- (4) Establishing appropriate standards/guidelines based on UD concept
- (5) Implementing full barrier-free software measures (barrier-free mind)
- (6) Building safe and easy-to-use public-transport system for everyone
- (7) Developing safe and comfortably communities for everyone
- (8) Responding flexibly to different persons/activities
- (9) Utilizing IT and other new technologies
- (10) Deploying pioneering well-coordinated activities (leading projects, leading areas)

Promoting Comprehensive Well-coordinated Barrier-free Measures



users, local inhabitants, NGOs, etc., in each of the stages from planning to implementation are carried out as the first step. As the second step, the results of implementing a measure are evaluated and the results are reflected in the planning and implementation of the next project or measure.

Coordinating barrier-free measures

Pressing ahead with barrier-free measures is one of the most important points in deploying policies based on the UD

concept. Therefore, it is necessary to substantiate and reinforce these measures in a well-coordinated way now and in the future.

In this context, barrier-free buildings and public-transport facilities integrated with a contiguous barrier-free area around the facilities, etc., should be promoted. Implementing various barrier-free measures in a well-coordinated way requires establishing a legal system that promotes integration of the Heartful Building Law and the Barrier-free Transportation Law. In addition, to

promote integrated, contiguous barrier-free zones through collaboration of the relevant parties, agreements on facility management should be concluded between administrators, and a system should be created for establishing and maintaining a corporation responsible for managing barrier-free facilities.

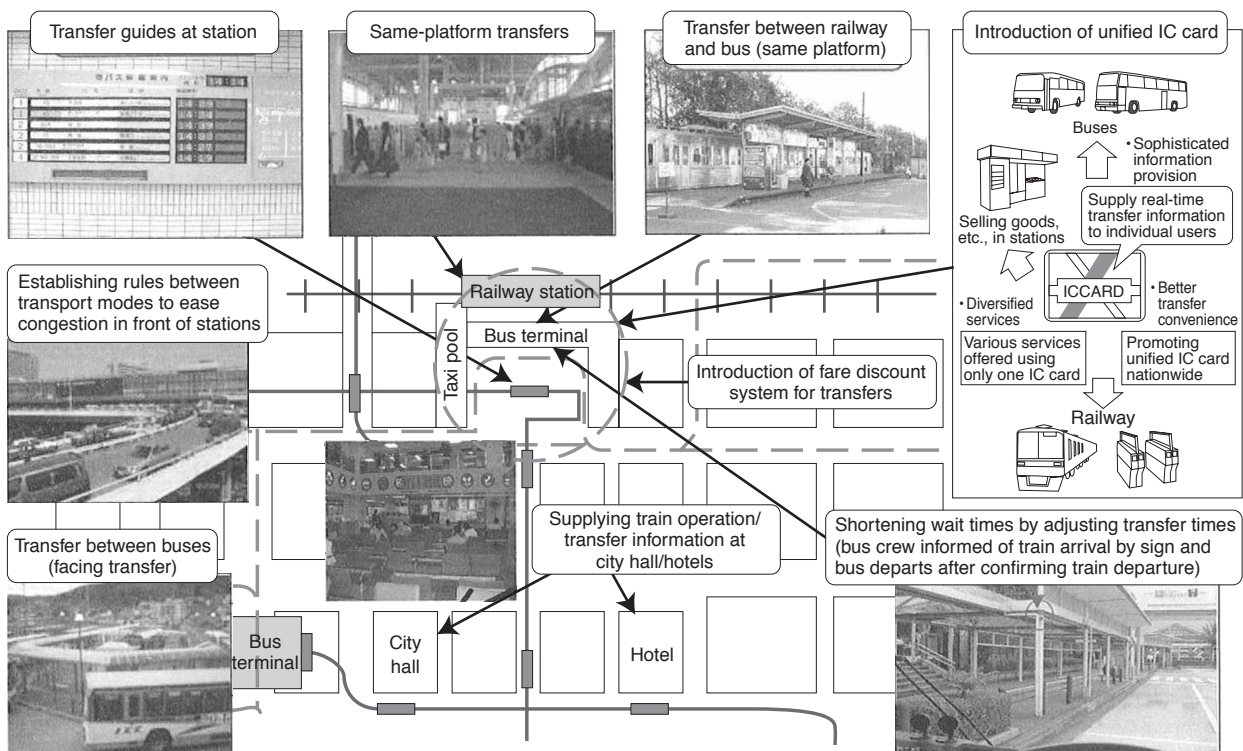
Offering safe and smooth public-transport facilities for everyone

Public-transport facilities play an important role in creating an environment in which everyone can move freely and safely. On

Creating Safe and Smooth Public Transport Systems for Everyone

Promoting smooth transfers between public-transport facilities near transport hubs

To promote barrier-free measures based on the UD concept in a well-coordinated manner, measures to allow smooth use of public-transport facilities at transport hubs shall be promoted in cooperation with related businesses to permit safe, and free movement of users.



the other hand, public-transport facilities are still not sufficiently 'seamless' to allow for smooth and convenient movements, especially at transfers.

Therefore, to allow everyone to use public-transport facilities smoothly, support for cooperation between users, local inhabitants and operators should be expanded to improve convenience. Specifically, efforts should be made to reach a consensus on activities to improve platform guides, transfer routes, etc., at transport nodes and to promote measures to ease transfers between modes and

operators. In addition, support for activities to improve methods for supplying information on public transportation should be expanded on a priority basis.■



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Further Reading

The General Principles of Universal Design Policy are on the home page of the Ministry of Land, Infrastructure and Transport at http://www.mlit.go.jp/kisha/kisha05/01/010711_.html