ABSTRACT

WHO and ILO found that access facilities for diffable people in developing countries have only reached 20-30 percent, while globally, it reaches 650 million people. The contribution of planners and construction service providers in efforts to facilitate access for diffable persons to public services has not been realized in the field because the builders still consider the provision of facilities to be a burden, causing a reduction in information and understanding of appropriate public facilities for them. It causes many public buildings to be considered insensitive to the needs of groups of diffable people. Therefore, it is essential to discuss the challenges faced in planning facilities for diffable persons to formulate strategic steps to overcome the challenges. This study aims to determine the considerations and constraints encountered during the implementation and planning stages of the facilities for diffable people. The method was a descriptive qualitative method to obtain a conceptual model regarding the considerations and recommendations for planning the facilities for diffable people.

Keywords: Planning, constraints, diffable persons, public buildings

INTRODUCTION

The importance of facilities' availability for people with diffabilities becomes a factor in increasing the assessment of services for the community at public buildings. Raharjo in Utami (2018) revealed that efforts to protect people's rights with diffabilities have been stated through laws and other regulations, but until now, they have still not received proper education and health services. Sudirman, the expert staff of the Minister for Socio-Culture and Community Role conveyed "Planning and development strategies, especially in urban areas whichsible for all, especially for people with diffabilities, is necessary receive special attention, efforts to increase the competitiveness of the city." (Antares, 2019)

The importance of facilities' availability for diffable persons will increase the assessment of services for the community in public buildings. The problem is that planners and construction service providers have not optimally paid attention to it. To realize the guarantee of the disabled's rights in obtaining equality in development progress, it is necessary to create inclusive development. The purpose of the research was to uncover the challenges of planning facilities for diffable persons in public buildings and to formulate the themes related to the stages in its planning.

The method used was descriptive qualitative, by seeking information through interview the persons who play a role in building construction field. This research is expected to be useful for construction services and planning consultants by providing input regarding the challenges found in the planning facilities for diffable people.

Previous research related to this writing topic was conducted by Dewang & Leonardo (2010) who concern on assessing and analyzing elements of facilities and accessibility in Taman Senopati Menteng. The results of His research found several problems that
caused ineffective implementation of the provision of accessibility for people with diffabilities. Furthermore, research conducted Aceh Market Irfan et al., (2017) examined that 50% and 65% of respondents answered that the building’s condition was unsafe and uncomfortable for the elderly and people with diff abilities. Related to this result, the key informant (building manager) confirmed that before the construction implementation, the related parties had discussed with persons with disabilities, but when the construction was carried out, there was a replacement contractor, so the plan was changed.

Based on previous studies, there is no research that explicitly explains the challenges of the planning process for the availability of facilities for the disabled in public buildings.

LITERATURE REVIEW
Mujimin (2007) states that diffable is a term translated from diffable (people with different abilities) in Indonesian which means people with different abilities. The difference between the meaning of diffable and disability is disability which describes a person unable to carry out an activity normally, but the term diffable describes someone who can do it differently. According to Law No. 8 of 2016 article 1, diffable persons or persons with diffabilities are any person who experiences physical, intellectual, mental and/or sensory limitations for a long time, in interacting with the environment will experience obstacles and difficulties to participate fully and effectively with other citizens based on equal rights. Types of Persons with Diffabilities according to Law No.8 of 2016 include:

1. Persons with physical diffabilities;
2. People with intellectual diffabilities;
3. People with mental diffabilities; and/or
4. People with sensory diffabilities.

Pynkyawati et al., (2012) stated that persons with disabilities need to meet their daily needs and need to get special treatment in the community, both in the existing facilities in the building and around the building, so that they do not experience difficulties and can mingle with communities wider. The Ministry of Public Works has issued Law No. 28, 2002 concerning Buildings and Ministerial Regulation Number 30/PRT/M/2006 concerning Technical Guidelines for Facilities and Accessibility in Buildings and the Environment with the consideration that persons with disabilities have the right to use public facilities and carry out activities outside the house. In addition, they have the same rights to meet their daily needs obtained from public service facilities with adequate and appropriate access.

Following are the elements of supporting facilities for diffable persons in buildings and its surrounding as well as technical requirements according to the Minister of Public Works Regulation number 30 / PRT / M / 2006:

| Building | Building Footprint |
|----------|--------------------|
| Basic Room Size | Parking Area |
| Door | Ramp |
| Ramp | Signs and Markers |
| Stairs | |
| Lift | |
| Stair Lift | |
| Toilet | |
| Sink | |
| Telephone | |
| Furniture | |
| Equipment and Control Equipment | |
| Signs and Markers | |

(Source: Sary & Kamil, 2018)

The building construction process consists of the following stages (Dipohusodo in Puteri (2019: 11-13))

1. Concept Development
2. Planning
3. Auctions
4. Construction Execution
5. Operation

In general, the problems faced during the implementation of building project construction include the mismatch between the organization and the applied management system with the technical challenges faced (Dipohusodo, 1996: 213). Implementation of effective building construction, including planning for disabled facilities, requires a coordinative organization to control all its management functions.

Gambar 2. The Parties Involved in Construction
(Source: Iwan Lie, 2018:2).

METHOD

This study used a post-positivism paradigm and a qualitative descriptive method. The first step was a literature study on theories related to facilities planning for diffable people, followed by interviews of experts. It was believed that by using the post-positivism paradigm in the verification process, the various methods can be utilized more flexible (Pinggi, 2013). The second stage, the results of literature studies and interviews, was described in reports on precedent studies and interview reports. The researcher made specific coding on each sentence in the essay. In this case, each sentence was a unit of information. Units of information that have the same or similar meaning were then classified inductively into themes. In this article, the themes are described in the research findings sub-chapter, all of which are related to the results of interviews regarding considerations and obstacles faced in planning facilities for persons with disabilities.

RESEARCH FINDINGS

Based on interviews conducted with several architects, planners, contractors and owners in case construction of public buildings. Shows a common opinion and experience of the parties involved in the construction implementation of several functions of public buildings. The similarity of opinion is summarized into a conceptual model in the case of the construction diffable facilities in public buildings.

Based on interviews conducted with several architects, planners, contractors, and owners, they had a common opinion and experience of the parties involved in constructing several public buildings' functions. They said that five essential things need to be considered in planning facilities for diffable persons in public buildings, namely principles and regulation, space, the leading facilities for diffable, cost and awareness. The following is an explanation of each of these considerations.

1. Principles and Regulation

Before designing facilities for diffable people, planners need to consider the principles and regulations that the government has issued. The provisions regarding technical guidelines are contained in the Minister of Public Works Regulation number 30 / PRT / M / 2006. The planner needs to pay attention to the following:

- Safety, every public building must pay attention to the safety of all people, including persons with diffabilities.
- Convenience, every development plan must pay attention to ease of access to all facilities outside the
building and in buildings that are public in an environment.

- Usefulness, everyone including persons with diffabilities is able to use all places and facilities that are common in an environment.
- Independence, everyone, including persons with diffabilities, must be able to reach, enter and use all places and facilities in public buildings without the need for help from others.

2. Space
The provision of space in facilities for people with diffabilities is included in planners and builders' considerations and constraints. Usually, the owner prioritizes room functions that produce high productivity or ordinary people. According to the standard, facilities for people with diffabilities have specific rooms with different sizes and dimensions of space.

3. The Main Facilities for Diffable
Expert sources stated that some facilities for persons with disabilities should be accessible together as shared spaces just like ordinary people. The addition of specificity for these diffable persons should not be a burden on owners or builders. The facilities are:
- a ramp, which needs to be located at each entrance to the lobby or vehicle drop-off area,
- a toilet for the diffable,
- a lift that can be accessed together, with a size adapted to wheelchair users,
- a particular parking lot for the diffable.
In addition to the above provisions, planners need to pay attention to aesthetics inside and outside the building.

4. Cost
Considerations and constraints that are often experienced not only in the planning of facilities for diffable people but also in every construction cost are always a matter to consider. Because in every public development, there are management parties who have individual interests. Of course, there is a ratio of the circulation area and sales area, where the owner will prioritize space that generates profits or takes sides with business interests. According to the planning architect, the cost of providing diffable facilities was not very significant in the development budget.

5. Awareness
The parties involved in the development, including the government, need to know the importance of providing facilities for persons with disabilities. The government needs to increase attention to providing facilities for people with disabilities (SMERU, 2019).

One of the expert architects stated that the weakness in implementing facilities for diffable people was caused by the absence of the obligation to fulfill these requirements in the construction permit. Therefore, what needs to be done is to increase policy oversight through a particular institution whose function is to oversee the consistency of the implementation of disabled facilities in public buildings. The government needs to focus more on providing equality in public services for all. The contractor's source stated that the architect was responsible for reminding and providing knowledge or insight to the owner regarding design for all people requirements. The fact shows that the lack of architects' attention to the importance of providing facilities for diffable people in the design of public buildings is related to a shift in disability-friendly design thinking.
with trendy designs in the last five years, such as green concepts, minimalist designs, energy-saving, and others. Planning architects need to familiarize themselves with disability-friendly designs by targeting people with disabilities as building users.

Based on the research finding, here the resume of provisions for each public building in various functions, both commercial buildings such as hotels, malls, offices, apartments and in the form of houses of worship, government services:

1. Facilities for diffable people that must be available in public buildings are: 1) Ramp, at each lobby entrance or vehicle drop off area. It is the primary support for access to the building for wheelchair users; 2) A toilet for the diffable, with a size that fits wheelchair users. The minimum area of toilet space with a width of 160 cm and length of 240 cm; 3) A shared lift, sized to suit the wheelchair users. To support vertical accessibility in buildings, and 4) special parking for the diffable.

2. There are five stages of essential activity in planning process from the very beginning of designing to development.

First stage: Concept Development
At this stage the planning and owner consultants need to do the following:
- Surveying and field investigation
- Understanding the principles and rules,
- Listing out the prices of materials and wages for work in the local area,
- Formulating construction strategies

Second stage: Preparation of design planning
The parties of planning consultants and the government in development licensing must do the following:
- Preparing pre-design,
- Determining diffable facilities types,
- Calculating the rooms area that sufficient for diffable people,
- Drawing up the final planning and design,
- Taking care of development permits

Third stage: Preparation of cost budget
The consultants and owners have to estimate the initial budget for construction and calculating:
- Cost for all facilities included facilities for diffable people,
- Reasonable fixed costs for construction.

Fourth stage: Construction execution
At this stage, the contractor, planning architect, and the Constitutional Court monitor whether the implementation match or not with architectural drawings. In addition, they do the following:
- Adjusting the existing progress to the goal of final product,
- Controlling project construction.

Fifth stage: Operation (maintenance period)
At the maintenance period, the contractor still plays a role in implementing the installation trial and facility functions. The steps taken are testing the functions related to security, usability, independence, and convenience for people with disabilities of the facilities provided.

CONCLUSION AND RECOMMENDATION
The considerations and constraints faced by the construction party in planning public facilities for diffable people are related to: 1) the lack of owner’s awareness and understanding on the design for all people; 2) the owner’s attention is more focused on business needs with the relatively insignificant percentage of people with special needs; 3) procurement requirements facilities for people with special needs are relatively neglected; 4)
procurement of space prioritizes the needs of ordinary people, assuming that greater profits result from visits of ordinary people; 5) Costs are allocated more to business interests.

Based on the research findings, the researchers recommend that: 1) the government establish a particular building licensing agency, whose task is to supervise the implementation of the provision of facilities for people with disabilities in public buildings, 2) the government provides periodic sanctions or warnings to building owners/managers who ignore the provision of disabled facilities in public buildings. 3) The architect helps the owner/public to realize the need to provide facilities for difable people in public buildings.

BIBLIOGRAPHY
Antares, P. R. 2019. Pembangunan Infrastruktur Ramah Disabiltas Jadi Prioritas Kementerian PUPR. Tagar.Id. https://www.tagar.id/pembangunan-infrastruktur-ramah-disabilitas-jadi-prioritas-kementerian-pupr.
Delu, P. 2013. Filsafat Ilmu: Pendekatan Post-Positivistik. https://www.kompasiana.com/delupingge/552ad88af17e615848d6243a/filsafatilmu-pendekatan-postpositivistik.
Dewang, N. 2010. Aksesibilitas Ruang Terbuka Publik Bagi Kelompok Masyarakat Tertentu Studi Fasilitas Publik Bagi Kaum Difabel Di Kawasan Taman Suropati Menteng-Jakarta. Jurnal PLANESA, 1(1), 8–18.
Dipohusodo, I. 1996. Manajemen Proyek dan Konstruksi (Jilid 2). Kanisius. https://books.google.co.id/books?id=yDJfhB5prioC&q=PA252&dq=%27piahak-pihak+yang+terlibat+dalam+konstruksi%27&hl=id&sa=X&ved=0ahUKEwjmkYWwvbpAhVEgUsFHV19D6sQ6AEITzAEdw=onepage&q=piahak-pihak+yang+terlibat+dalam+konstruksi'&f=false.
DPR dan Presiden RI. 2002. Undang-undang Nomor 28 Tahun 2002 Tentang Bangunan Gedung.
DPR dan Presiden RI. 2016. Undang-Undang Republik Indonesia Nomor 8 tahun 2016 Penyandang Disabilitas. August.
Irfan, Izziah, R. A. 2017. Kajian Aksesibilitas Kaum Difabel Pada Gedung Pasar Aceh Berdasarkan Persepsi Masyarakat, Lansia dan Penyandang Cacat. Jurnal Teknik Sipil, 1(2), 533–542.
Lie, I. 2018. Unsur-unsur Proyek Pihak-pihak yang Terlibat dalam Pekerjaan/proyek Konstruksi. SlidePlayer.Info. https://slideplayer.info/slide/12001910/.
Menteri Pekerjaan Umum. 2006. Pedoman Teknis Fasilitas dan Aksesibilitas Pada Bangunan Gedung dan Lingkungan. 30/PRT/M/2006.
Mujimin, WM. 2007. Penyediaan Fasilitas Publik yang Manusiawi Bagi Aksesibilitas Difabel. Dinamika Pendidikan 1, 60–75.
Puteri, S. 2019. Eksporasi peran Arsitek pada kegiatan perencanaan konservasi bangunan Cagar Budaya. Trisakti.
Pynkyawati, T, et. al. 2012. Kajian Desain Sirkulasi Ruang Luar Dan Ruang Dalam Bagi Penyandang Cacat Pada Kawasan Bangunan Ciwalk (Cihampelas Walk). Jurnal Arsitektur Universitas Bandar Lampung, 1(3), 7–13.
Sary, R. K., & Kamil, E. M. 2018. Evaluasi Fasilitas Penunjang untuk Penyandang Disabilitas di Kawasan Benteng Kuto Besak Palembang Evaluation Of Supporting Facilities For Persons With Disabilities In Benteng Kuto Besak Palembang Tinjauan Tentang Benteng Kuto Besak Palembang. Arsir, 2(8), 41–56.
SMERU. 2019. Kendala Mewujudkan Pembangunan Inklusif terhadap Penyandang Disabilitas. https://www.smeru.or.id/sites/default/files/publication/disabilitaswp_id_0.pdf
Utami, E, et. al. 2018. Aksesibilitas Penyandang Tunadaksa. Prosiding Penelitian Dan Pengabdian Kepada Masyarakat, 5(1), 83. https://doi.org/10.24198/jppm.v5i1.16962.