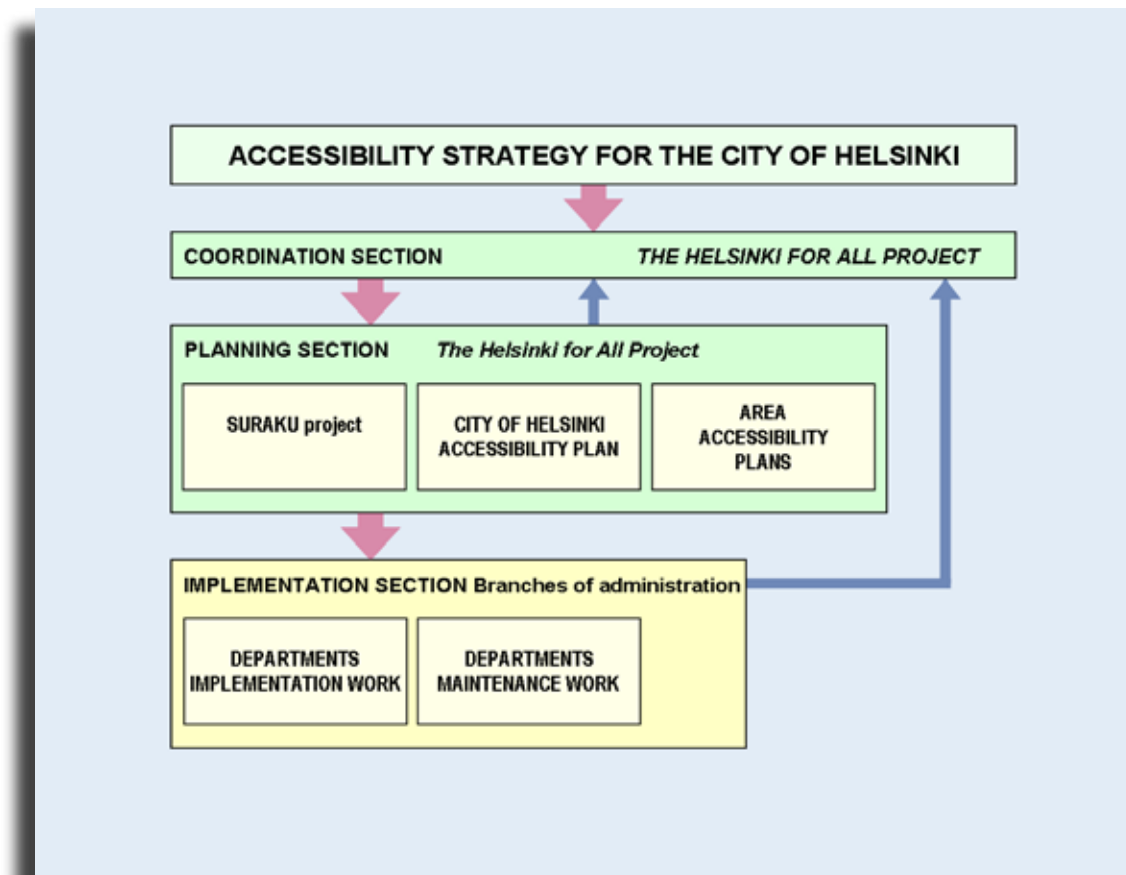




CITY OF HELSINKI ACCESSIBILITY PLAN FOR 2005-2010



ISBN 978-952-223-445-2 (PDF)
ISBN 978-952-223-446-9 (Print)

CITY OF HELSINKI
 PUBLIC WORKS DEPARTMENT
 P.O. BOX 1500
 FI-00099 HELSINGIN KAUPUNKI

DESCRIPTION

Author(s) Sito Consultants Ltd	
Public Works Department contact person Project Manager Pirjo Tujula	
Title City of Helsinki Accessibility Plan 2005-2010	Where obtainable (person and room) City of Helsinki Public Works Department
Series title	
Series number	Date of publication 14th November 2005
No. of pages 61	Appendices
ISBN 978-952-223-445-2 (PDF) 978-952-223-446-9 (Print)	ISSN
Language English	Summary
<p>Abstract</p> <p>The objective of the City of Helsinki Accessibility Plan is to steer and coordinate the practical accessibility measures being taken by the various branches of city administration for the period 2005-2010. The draft of the city's accessibility plan is based on the accessibility strategy approved by the City Board and complies with the principles for implementing accessibility presented in the decision of the City Board which was taken on 15 October 2001. The City Board approved the City of Helsinki Accessibility Plan for 2005-2010 on 14 November 2005.</p> <p>The earlier SuRaKu guidelines, already the fruit of extensive cooperation, created a basis for the city's accessibility implementation work. The purpose of the accessibility plan is to steer practical work in a way that promotes accessibility across the city with maximum efficiency, while at the same time assisting branches of administration in their individual efforts.</p> <p>Prioritisation under the accessibility plan adheres to two main principles, the one needs-based and the other based on construction costs. The plan presents areas defined in terms of needs-based prioritisation, further subdivided, according to the urgency of the measures required and the specified implementation period, into three groups: pilot sites launched during 2005 which assist in the garnering of information and development of work practices for implementation of the accessibility programme, surveys begun during 2006-07 in areas considered vital in terms of accessibility (such as the central business district), and the areas earmarked as urgent for work during 2008-10. Needs-based prioritisation is formulated on the needs and points of view of the users, and includes the volume and quality of service provision and the age structure of the inhabitants. Prioritisation in terms of construction costs influences implementation programmes and the implementation plan.</p> <p>The City of Helsinki Accessibility Plan is used as the basis for drafting area-based accessibility plans through cooperation between the Helsinki for All project and various branches of city administration. Programming, implementation plan and implementation measures are carried out within the framework of the funds available for the work of the individual administrations. Each administrative branch is to incorporate accessibility into all its operations and projects. The draft of the accessibility plan was presented to the Helsinki for All project steering group and to councils for the elderly and disabled in Helsinki. In spring 2005 various branches of administration and interest groups were requested for their opinions on the plan.</p>	
Key words Physical and functional accessibility, accessibility, accessible environment Accessibility plan, area accessibility plan, implementation plan and implementation programme Helsinki for All	
UDK	

INTRODUCTION

On 15 October 2001 the Helsinki City Board approved the programme for 2001-2010 relating to accessibility strategy. At the same time the decision was taken to establish the Accessible Helsinki project (now the Helsinki for All project) under the wing of the Public Works Department, to cover the period 1 January 2002-31 December 2011, charged with the implementation, coordination, communication, reporting and quality assurance of the programme.

The Helsinki for All project has prepared the City of Helsinki Accessibility Plan with the objective of steering and coordinating the practical accessibility measures being taken by the various branches of city administration for the period 2005-2010. The draft of the city's accessibility plan was based on the strategy for physical and functional accessibility approved by the City Board, and complies with the principles for implementing accessibility presented in the decision of the City Board taken on 15 October 2001. The City Board approved the City of Helsinki Accessibility Plan for 2005-2010 on 14 November 2005.

At about this time, and partially concurrent with the City of Helsinki Accessibility Plan, accessible public area guidelines were being introduced for the planning, construction and maintenance of streets, parks and courtyard areas (known as the SuRaKu project). Work had begun in 2003 in the form of a joint project involving six cities, under the direction of the Helsinki for All project. The SuRaKu objective was to create a set of accessibility guidelines for use in safeguarding the accessibility factor in planning, construction and maintenance of public streets, parks and courtyard areas. The guidelines are formed of two parts: firstly, the criteria by which the accessibility of outdoor areas can be assessed and regulated and, secondly, guidelines based on model designs to aid application of the criteria in the practical planning of outdoor areas. The guidelines are a result of extensive cooperation and have created the basis on which accessibility work can progress to the stage of practical implementation in accordance with the City of Helsinki Accessibility Plan.

There are relatively few areas in Helsinki which meet the criteria for an accessible environment. As a result, sizeable reparation measures will be required in almost all areas. Careful planning and coordination is required in allocating work for the appropriate issues and sites and in proper scheduling. This is on account of the significant volume of work, the large number of administrative branches involved, and the length of time needed to complete assignments.

The aim of the City of Helsinki Accessibility Plan is to provide long-term assistance in the programming of work.

The plan presented areas defined in terms of needs-based prioritisation, subdivided, according to the urgency of the measures required, into three groups. The schedule presented area-based recommended implementation times divided into three corresponding stages of implementation. Pilot sites were launched during 2005 to assist in the garnering of information and development of work practices for the later implementation of the programme, surveys were initiated during 2006-07 in areas considered vital in terms of accessibility (such as the central business district), and the areas earmarked as urgent for work during 2008-10.

Prioritisation under the accessibility plan adheres to two main principles, the one needs-based and the other based on construction costs. The starting point for needs-based prioritization is the user perspective and concrete needs in relation to the accessibility of the environment. These factors include the volume of services in the area and the age structure of the inhabitants. The Accessibility Plan is steered, with regard to extensive areas requiring improvements, for example, by prioritisation in terms of construction costs, which impact upon the implementation plan and implementation programme.

The City of Helsinki Accessibility Plan is used as the basis for drafting area accessibility plans through centralised cooperation between the Helsinki for All project and various branches of city administration. Effectively, the implementation plan and implementation measures are carried out as the work of the individual administrative branches. The aim is for branches of administration to draw up their own annual implementation programmes on the basis of accessibility plans for the entire city and for individual areas, within the framework of the funds they have available.

The draft accessibility plan has been presented to the Helsinki for All project steering group, which includes representation from various administrative branches and interest groups. A presentation has also been made during the drafting stage to councils for the elderly and disabled in Helsinki.

Opinions on the draft plan were requested from the city's administrative branches and from key interest groups. Responses were received from the following:

City of Helsinki Procurement Centre
Port of Helsinki
Helsinki Water
Helsinki City Library
Helsinki City Museum
Helsinki City Planning Department
Urban Research
Helsinki City Transport
City of Helsinki Sports Department
City of Helsinki Education Department
City of Helsinki Rescue Department
City of Helsinki Building Control Department
City of Helsinki Social Services Department
City of Helsinki Health Centre
Finnish Environment Institute

Uudenmaan asuntokiinteistöyhdistys (Uusimaa House Property Association)
Helsinki Chamber of Commerce
Helsinki Council for the Elderly
Parish Union of Helsinki
Finnish Association of People with Mobility Disabilities
Finnish Federation of the Hard of Hearing
Finnish Federation of the Visually Impaired
RAKLI - The Finnish Association of Building Owners and Construction Clients
Opinions on the draft plan have been taken into account in the report.

The Project Manager for the Helsinki for All project, Pirjo Tujula from the Public Works Department, acted as project leader for the drafting of the City of Helsinki Accessibility Plan, while Head of Department Terhi Tikkanen-Lindström, Planning Adviser Veli Silvo and Project Secretary Sirpa Linnola were other Public Works Department representatives participating in the work of the steering group. Architects Marjut Kivelä and Anja Niera were the steering group representatives from the Town Planning section of the City Planning Department, while Head of Department Markku Salimäki represented Transport and Traffic Planning.

A working group acting as consultants comprised architect Jari Mäkynen as Project Manager, Licentiate of Arts Ulla-Kirsti Junttila from Sito Consultants Ltd as planner and, from RÖNKÄ Consulting Ltd, Kimmo Rönkä M.Sc. (Eng.) as adviser.

TABLE OF CONTENTS

INTRODUCTION	5
STARTING POINTS	10
1 BACKGROUND	10
1.1 Accessibility strategy for the City of Helsinki	10
1.2 Determining accessibility	13
1.3 Legislative obligations	15
1.4 Previous accessibility work in Helsinki	16
2 OBJECTIVES AND INITIAL SITUATION	23
2.1 Objectives	23
2.2 Planning process	23
2.3 Initial situation	24
3 PRINCIPLES OF THE ACCESSIBILITY PLAN	26
3.1 Refining the objectives	26
3.2 Accessibility target levels	27
3.2.1 The special accessibility level	28
3.2.2 The basic accessibility level	29
3.3 Prioritisation of construction and renovation projects	30
3.3.1 Needs-based prioritisation	30
3.3.2 Construction cost prioritisation	31
PLANNING SECTION	33
4 CITY OF HELSINKI ACCESSIBILITY PLAN FOR 2005–2010	33
4.1 Planning flow	34
4.2 Accessibility development areas and special sites for 2005-2010	34
4.3 Examples of 2005 pilot areas	37
4.3.1 Public Works Department area plans as a tool for area accessibility plans	37
4.3.2 Southern city districts	38
4.3.3 Keski-Vuosaari	39
4.4 Development areas for 2006-2007	40
4.5 Development areas for 2008-2010	40
4.6 Separate site improvement	41
5 MEASURES	43
5.1 Area accessibility plans	43
5.2 Implementation by individual branches of administration	44
5.2.1 Implementation programmes of the individual branches of administration	45
5.2.2 Implementation plans of the individual branches of administration	45
5.2.3 Construction	46
5.2.4 Maintenance	47
5.2.5 Producing cost information	47
5.2.6 Procedural methods and innovations	48

6	THE HELSINKI FOR ALL PROJECT AND THE ROLE OF THE ADMINISTRATIVE BRANCHES	49
	6.1 The Helsinki for All Project	49
	6.2 Branches of administration	50
7	ACCESSIBILITY WORK	53
	7.1 Chain of responsibility in planning, construction and maintenance	53
	7.2 Factors influencing accessibility	54
	7.2.1 City plan and traffic plan	54
	7.2.2 Planning, construction and maintenance of public street and park areas	56
	7.2.3 Buildings and courtyards	58
	7.2.4 Supervision	59
	7.2.5 Public transport	60
8	SUMMARY AND PRINCIPLE RECOMMENDATIONS	61

STARTING POINTS

1 BACKGROUND

1.1 Accessibility strategy for the City of Helsinki

Drafting of the programme concerning the City of Helsinki accessibility strategy for 2001-2010 was launched in spring 2000 on the basis of an initiative proposed by Councillor Kalle Könkkölä and seconded by Councillor Maija Könkkölä. The work produced a recommendation in the form of a programme relating to accessibility strategy, whose principles are gathered in a two-part report, the first of which, "Accessible Helsinki – A city for all" contains the strategy objectives relating to accessibility, and the second, "Accessible Helsinki – Implementation programme" the methods and initial measures necessary for achieving the objectives outlined in the first part.

Accessibility strategy refers to overall and long term development of the accessibility and functionality of the urban environment. The goal has been set to make Helsinki fully accessible by 2011 through construction and renovation of the city's public spaces and buildings and public transport solutions to make them safe and accessible for all – including those with mobility and functional disabilities, the elderly, children and families.

On 15 October 2001 the Helsinki City Board approved the programme relating to the city's accessibility strategy for 2001–2010. (City Board 15 October 2001, section 1353, 2000-2702). At the same time it was decided to establish the fixed-term Accessible Helsinki project (now known as Helsinki for All), to cover the period 1 January 2002–31 December 2011, with the following principles as its operational starting points:

1. Helsinki is to be made fully accessible by 2011 through construction and renovation of the city's public spaces and buildings and public transport solutions to make them safe and accessible for all – including those with mobility disabilities, the elderly, children and families. The city is furthermore to exert influence on private sector business so that this objective can be achieved.
2. The aim is to form common and functional overall solutions and routes and make buildings accessible and usable. Special note should be taken of the problem of bottlenecks occurring in public spaces, buildings and public transport.
3. Implementation of the accessibility strategy to contribute to user-based planning, implementation and maintenance, and to cooperation between branches of city administration and various partners, including associations for the elderly and disabled, the trade and business sector, property owners and the government.

4. Accessibility strategy implementation to be incorporated as part of the annual financial and operational planning of the city and administrative branches from 2003.
5. The accessibility perspective to be taken into account in the housing programme and in formulating the city's other comprehensive programmes. Accessibility inspections and performance analyses to be carried out at the project planning stage for construction and renovation projects and in connection with maintenance work.

The City Board also decided on the tasks for the Accessible Helsinki project placed with the Public Works Department:

- To coordinate implementation of the accessibility strategy in accordance with the above-mentioned guidelines determined by the City Board, and to develop practices and operating models which promote accessibility in city operations
- To draft the city accessibility plan and area accessibility plans and to coordinate and maintain an information system based on geographic data for the purpose of monitoring accessibility projects
- To make presentations of funds and subsidies that might possibly be allocated for accessibility renovation and other special projects promoting accessibility, and to oversee practical measures relating to distribution of funds and subsidies allocated to projects in accordance with the relevant decisions
- To promote cooperation between the city and different interest groups on questions relating to accessibility.

The accessibility strategy is targeted at areas falling within the city's jurisdiction and at the privately owned and administered areas connected with them. The city is responsible for the structural and functional accessibility of public spaces (street milieu, parks and other common spaces) and public buildings (buildings which are the responsibility of branches of city administration). The city is also responsible for the functionality of public transport (rolling stock, stations and stops). Strategy work also involves promoting measures to increase the environmental accessibility and safety of privately owned and administered buildings and spaces.

The accessible urban environment is formed of three components: accessible public spaces, accessible traffic, and accessible buildings. The facility for movement in the city's streets, market places and parks should be adapted for all users, routes should be continuous and buildings accessible and useable.

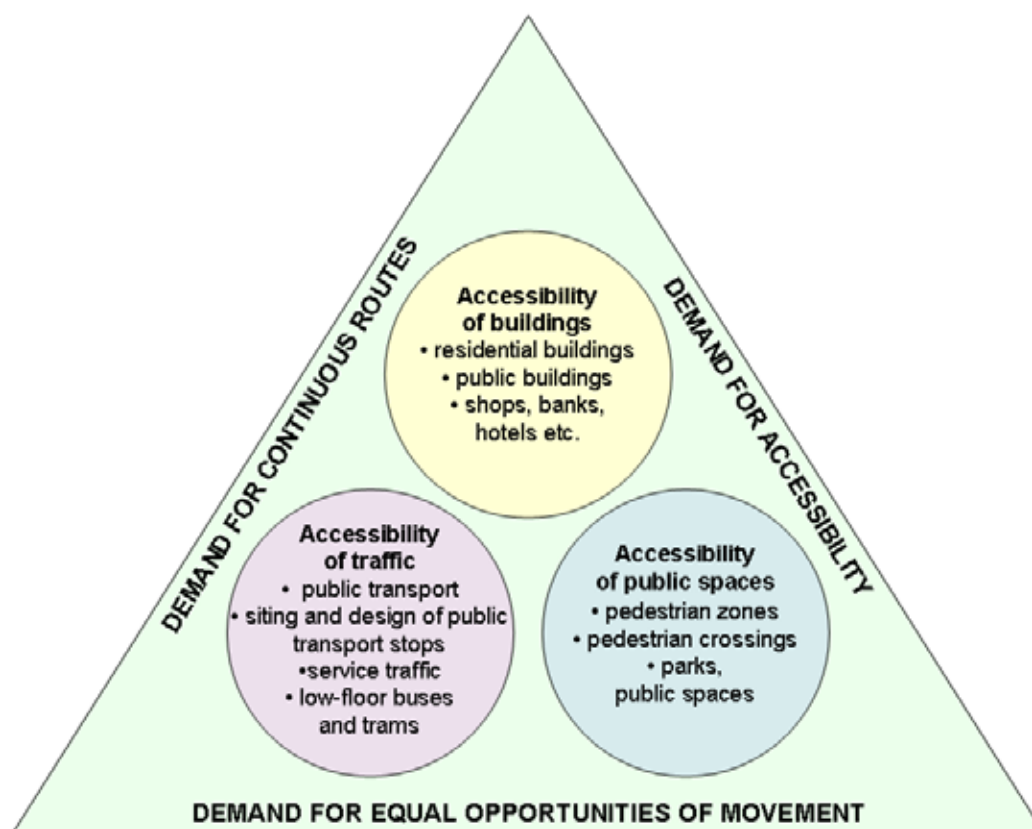


Figure 1: Principles of the accessible urban environment.

The Helsinki for All implementation programme consists of three mutually complementary sections: coordination – applicable to different branches of administration and tasks; planning – needs-based and area-based; implementation – focusing on practical measures.

Coordination seeks to reconcile the tasks of the various branches of administration. Coordination is the responsibility of the Helsinki for All project established at the Public Works Department. A steering group has been created in support of tasks, chaired by the City Engineer, with membership formed from the departments of City Planning, Building Control, Real Estate, Sports, Social Services and Education, together with the Health Centre, Helsinki City Transport and the Public Works Advisory Committee, as well as representatives from various disability associations. Furthermore, the tasks require extensive cooperation among different users, the trade and business sector, and a variety of communities and organisations, as well as interest groups representing other partners.

The purpose of the planning section is to assess the current accessibility status, to develop solutions for improving accessibility and to promote implementation work aimed at achieving accessibility at the city-wide level. The comprehensive City of Helsinki Accessibility Plan is being drafted towards this end, while area accessibility plans are

being drafted for the purpose of detailed accessibility assessment. The Helsinki for All project, placed under the Public Works Department, is responsible for the planning section with the assistance of the City Planning Department and in cooperation with other branches of administration.

The aim of the implementation section is to implement accessibility with regard to the designated operations of administration branches. The administrative branches are responsible for implementing measures within their own operations and administrative areas. Each drafts for its own administrative area the criteria and guidelines for promoting accessibility, which are then complied with during planning, construction, use and maintenance.

The accessibility strategy and related measures are treated as part of the financial and operational plans of the city and administrative branches. Improvements in the accessibility of the urban environment are in the main effected through funds currently available to the administrative branches and through normal work. Since 2002 branches of administration have been required to include presentations, as part of their operating plans and budgets, which relate to accessibility within their own spheres of activity. The Public Works Advisory Committee's presentation to the City Board also referred to the City Board reserving separate annual appropriations for the shared accessibility projects of the administrative branches, and for reparation subsidies to be granted to parties outside the city organisation for the purpose of accessibility renovation.

The implementation programme for 2002-2010 outlined in conjunction with the accessibility strategy has been examined in this plan in terms of structure and content and drafted as a more detailed plan proposal.

1.2 Determining accessibility

Accessibility objectives for various sites are defined in the accessibility strategy as follows:

- Accessible Helsinki refers to unobstructed and safe mobility in streets and other public spaces, unobstructed access to buildings, and public transport suitable for all.
- With regard to streets and other public spaces, accessibility includes equality of status within the traffic system for the different participants, as well as high quality, unobstructed, safe and pleasant routes and surroundings.
- Accessible buildings are easy to approach, with clear entry and exit and unobstructed passage within the buildings themselves, as well as being available, functional and suitable for all users.
- Accessible public transport refers to a public transport system for all, with purpose-designed transport stops and stations and a well trained, service-minded staff of vehicle operators.

- The accessible urban environment consists of continuous routes, improved accessibility of buildings, transport stops and public spaces, and equality of mobility for all users. Accessibility implementation demands analysis of the city's operations from the broadest possible perspective.

The accessibility strategy is based on the city's service tasks and their quality of performance: regarding traffic, public and private sector services and public spaces. City inhabitants must be able to journey to work, school, day care centre, shops or health centre without fear of interruption and in safety, at any time of day and in any season of the year. Winter maintenance, for example, is meant to ensure the city continues its primary functions through the winter months, when surface conditions are treacherous, or in otherwise challenging weather conditions.



Figure 2: The central principle of the city's accessibility strategy is interactive planning, involving various disability associations in a key role as experts. The photo shows trials of a pedestrian crossing kerbstone at Itäkeskus in 2004.

Customer centricity and interaction have been the starting points for the accessibility strategy from the very outset. Customer centricity has meant taking more notice of human individuality when planning the environment. A well planned environment does not differentiate between people on the basis of their ability to move and function. By taking account of people with mobility or functional impairments we are improving the functionality of the urban environment as a whole to the benefit of all who live and work in it.

The city's cooperation partners in implementing accessibility are users (residents, workers and visitors) as well as the business world (companies), service providers (trade) and property owners. With regard to improving area accessibility, note must be taken of the accessibility objectives of other parties involved, in addition to those of the city. Working interactively increases the activity and impact potential of the various partners, creates a positive image for the city and promotes mobility within and comfort of the city environment.

1.3 Legislative obligations

An environment may be considered accessible when it is functional, safe and pleasant from the point of view of all users. The requirements for an accessible environment are based on the notion of socially sustainable development and equality of mobility mentioned in the general objectives of the Land Use and Building Act (MRL 2000) and Land Use and Building Decree (MRA 2000). This refers to the opportunity for mobility and the availability of guaranteed basic services for all sectors of the population, irrespective of age, gender, degree of mobility, financial status, place of domicile, etc.

The socially sustainable development perspective mentioned in section 1 of the Act relates to the fulfilment of basic human needs, the balanced distribution of well-being, and to a socially functional environment. Emphasis in the Act with regard to socially sustainable development is placed on questions of health and on incorporating the needs of different population groups in planning and construction.

The objectives in land use planning mentioned in section 5 of the Act are based on promotion of interactive planning and adequate impact assessment:

- the creation of a safe, healthy, pleasant, socially functional living and working environment which provides for the needs of various population groups, such as children, the elderly and those with disabilities
- appropriate traffic system arrangements and, especially, operating conditions for public transport and non-motorized traffic.

Among other provisions regarding the construction of accessible buildings, section 53 of the Land Use and Building Decree states "Administrative and service buildings, commercial and service premises in other buildings to which everyone must have access for reasons of equality, and their building sites shall also be suitable for use by persons with restricted ability to move around or function otherwise."

Section 167(2) of the Land Use and Building Act states "An authority appointed for the purpose by the local authority shall ensure that traffic ways, streets, market places and squares, and parks and areas intended for the enjoyment of residents meet the standards of a satisfactory townscape and of pleasantness and comfort. Routes provided for non-motorized traffic must be kept safe and free of obstacles."

Furthermore, the Ministry of the Environment has issued regulations and instructions on accessibility relating to public administrative and service buildings, commercial and service premises and housing and courtyard areas. These are incorporated in the Department of the Built Environment's guidelines, the National Building Code of Finland:

- F1 Accessible building, Regulations and instructions 2005
- F2 Safe usage of buildings, Regulations and instructions 2001
- G1 Housing planning, Regulations 2005

Both F1 and G1 have been reformed with effect from 1 March 2005, with the introduction of new regulations and instructions relating to accessibility. The task of the Building Control Department is the promotion of accessibility and the efficient integration of the reforms into construction practices in Helsinki. The rules of interpretation are available for reading, for example, on the Building Control Department website.

The requirements contained in the above-mentioned legislation and in the National Building Code of Finland place greater than ever demands on the municipalities, and on other bodies responsible for the planning and construction of the public environment, for incorporating accessible environment objectives in all planning, construction and maintenance of public spaces and buildings.

1.4 Previous accessibility work in Helsinki

The needs of people with mobility and functional disabilities with regard to the planning, construction and maintenance of public spaces has long been acknowledged in Helsinki in various ways, and cooperation with various disability associations has been carried out on a number of occasions for the purpose of overcoming specific problems. Implemented projects have, nevertheless, mostly been separate, with an impact restricted to the particular area or site. The objectives set for accessibility only became crystallized with the appearance of the Helsinki accessibility strategy and the Helsinki for All project, when the coordination of implementation work led to individual measures being linked as part of a broader programme of measures.

Helsinki for All project (formerly Accessible Helsinki), Public Works Department, from 2000.

Drafting of the implementation programme relating to the City of Helsinki accessibility strategy began in the spring of 2000. The goal has been set to make Helsinki fully accessible, both functionally and in terms of mobility, by the year 2011 through construction and renovation of the city's public areas and buildings and public transport solutions to make them safe and accessible for all – including those with mobility and functional disabilities, the elderly, children and families. The city, furthermore, exerts influence on private sector business so that this objective can be achieved. The Helsinki for All project (formerly the Accessible Helsinki project) was set up for the purpose of implementing accessibility. Although the Helsinki for All project functions within the Public Works Department, it is a project which concerns the city as a whole, having responsibility for the implementation programme with regard to public spaces and for project coordination, communication, reporting and quality assurance.

Earlier projects relating to accessibility implementation include:

Living Environment for All, Social Services Department, 1989. The "Living Environment for All" report was made in cooperation with the Vuosaari project with the purpose of investigating the problems relating to housing and the living environment from the point of view of various user groups.

Road Junctions for All, Public Works Department, 1994. The project objective was to alter the junction of Mäkelänkatu and Elimäenkatu in Vallila, in the vicinity of the Library for the Blind and the office space at that time belonging to the Finnish Federation of the Visually Impaired, to render it accessible and easier for the visually impaired people to negotiate. The project contained a study and general plan relating to the area of the junction which aimed to explore detailed solutions from the perspective of the different user groups. The project was implemented as a Public Works Department assignment in broad cooperation with various branches of city administration, disability associations and the Ministry of the Environment. The feasibility of the solutions was assessed during a trial involving a select user group which took place immediately upon completion, while the sustainability of implementation was monitored over the following winter.

Raising of tram and bus stops and adoption of low-floor vehicles, Helsinki City Transport.

Helsinki City Transport's changeover to low-floor buses and trams has increased the accessibility of the city and enabled the use of public transport for many groups for whom this was previously impossible.

The first low-floor buses were introduced for operation within the Helsinki area during 1989-91. Currently around 60% of buses are of the low-floor type. As high-floor buses are no longer being procured, it is anticipated that the entire stock will be low-floor by 2010. Bus stops have been raised and improved in conjunction with street construction work wherever this has been possible.

The raising of tram stops began in 1993 when the decision was taken to introduce low-floor trams. The first of the low-floor tram stock entered service in 1999, by which time most tram stops had been raised to permit stepless ingress. The last of the 40 low-floor trams ordered entered service during 2004, and Helsinki City Transport intends to convert at least some of the older articulated tramcars to semi-low-floor configuration. Design and trials of low-level centre entry for these tramcars are currently in progress. The Helsinki metro and metro stations have in the main been accessible since the metro's inception at the beginning of 1982.

Planning guide for service flats for the elderly, Social Services Department, 1996. The guide was drawn up by the Social Welfare and Healthcare Real Estate Service Centre, part of the Social Welfare Department, with the aim of assisting planners in incorporating the special demands set for service accommodation with regard to different user groups.

Kustaankartano environmental planning competition, Social Services Department, 1998. The aim of the competition was to draft environmental planning for the grounds of the Kustaankartano Centre for the Elderly at Oulunkylä which would gua-

rantee the availability and accessibility of the area for all users, as well as for accessible and pleasant therapeutic gardens attached to the accommodation building to enable their use as part of daily care work. The implementation plan was put into immediate effect with regard to the garden of the B building which had been targeted for basic renovation. The work was completed in spring 2000. The general plan for the entire grounds was completed in 2001 and renovation work continued on the basis of the plan within the framework of annual funding.

Töölö accessibility plan, Public Works Department, 1999. The plan related to the Helsinki accessible strategy then under preparation. The aim of the plan was to address the accessibility-related problems of residential areas in Töölö, Helsinki by means of a questionnaire and a charting of the terrain during winter and spring. Special attention was paid to establishing the role of maintenance, which involved work being linked to a three-year experiment in which maintenance work was implemented in accordance with approved quality criteria. Recommendations for renovation and maintenance measures were made on the basis of the plan.

City centre accessibility plan, Public Works Department, 2000. The plan related to the Helsinki accessible strategy then under preparation. The plan aimed to resolve the problems relating to accessibility of areas designated principally for pedestrians in the city centre of Helsinki. Street area pedestrian crossings, pedestrian zones and building entrances were mapped. Data was collected and stored in a geographic information-based accessibility database. Recommendations for renovation measures were issued on the basis of the plan.

Lift project, City Office. The City Council launched the City of Helsinki Lift Project in 2000. The aim is to promote the construction of lifts in both privately and publicly owned residential accommodation. A particular goal is to increase opportunities for elderly people to remain at home longer and thus reduce the burden on homes for the elderly. The Housing Fund of Finland and the City of Helsinki provide support for the construction of lifts in older apartment blocks with three or more floors. A total of 8 events under the project were held in 2001 in various parts of the city, with a further 10 in 2004. More than 170 housing association lifts have already been installed, providing guaranteed apartment accessibility.

Puumerkki nature trail, Public Works Department, 2000. The nature trail is an outdoor route laid out at Kivinokka where planning of pathways, bird viewing platforms and nature information also makes provision for user groups with mobility and functional disabilities.

Accessible Aleksi, Analysis of the accessibility of shopping street entrances, development project, Public Works Department, 2002

Accessible residential area – Accessible Vuosaari, Analysis of the accessibility of public spaces in the centre of Vuosaari, development project, Public Works Department, 2002

Accessible Töölönlahti park route, development project, Public Works Department, 2002

The above-mentioned projects relate to the Helsinki for All project and the accessibility strategy drafted within the Helsinki for All framework. These three projects took the form of pilots and were the first to be launched. The pilots were intended to assist in clarifying the accessibility problems in areas with different characteristics, and the measures needed to implement accessibility in the individual areas in question. The existing environmental accessibility analysis was used for all the sites and recommendations issued on the measures required to improve accessibility. The different natures of the site areas gave rise to slightly differing projects, clearly highlighting the necessity of measures to meet the specific demands of different areas. A further aim of the pilots was to develop operating practices which will enable the future launch of accessibility projects in intrinsically diverse areas.

Accessible and safe street milieus – environmental products development project, Public Works Department, 2003. The aim of the project was to create new products and planning solutions with particular regard to the construction of an accessible public environment. This was a group project initiated and led by the Finnish Granite Centre, involving the participation of several stone companies operating in the environmental products sector, together with the Public Works Department representing the City of Helsinki. Additional funding was provided by the Finnish Funding Agency for Technology and Innovation within the limits of the Finnish Natural Stone Association's STONE technology and development programme.

The project was aimed at improving the overall safety of the pedestrian and cycle environment through accessibility and guidance materials and products. Senior citizens and persons with mobility disabilities were significant groups within this particular environment, whose requirements steered project objectives.

Granite guidance paving flags for the visually impaired people, developed as a result of the project, underwent a trial installation at the junction of Vuosaarentie and Valkopaadentie in order to evaluate their operating characteristics and durability. In addition to the paving flags, the product series which emerged at the conclusion of the project covers granite bollards and stair elements. These have been on the market since the beginning of 2003.

Accessible play park, Ratsaspuisto, Public Works Department, 2002

The plan for an accessible park and play area at Ratsaspuisto in Ruskeasuoli was launched through cooperation between the Finnish Association of Landscape Industries and the Public Works Department. The previous plan for the park was incorporated into the new plan and the objective set of creating an accessible park and play area serving the nearby day care centre, the Invalid Foundation hospital, rehabilitation centre and vocational institute, and the Folkhälsan service home for the elderly. The plan was drafted through interactive cooperation between the relevant interest groups. The park plan also contains arrangements for the adjoining Ratsaskatu to allow fully accessible passage from the street to the park. Basic improvements to the park are part of the Public Work Department's 2006 implementation programme.

Suursuonpuisto Exercise Route for the Elderly (Maunula), Public Works Department, 2004. The idea of an exercise route designed for the elderly gained an award five years ago during the Asukkaiden Helsinki (Residents' Helsinki) competition. The idea evolved into the 2000 Maunula Exercise Route project plan which established

user needs for different types of nature trails and specified three types of routes of varying lengths: the basic route of approximately 400 metres (garden route), an extended route of approximately 1,000 metres (nature route) and the full route of approximately 2,000 metres (exercise route). The basic route was selected from these alternatives and an implementation plan drafted. Construction of the path began in 2003 and was completed in the spring of 2004.

The exercise route serves the recreational needs of residents and visitors of the nearby Helander Home, the Paanumäki home for the elderly, the health centre and Suursuo Hospital, as well as the relatively large elderly population of the Maunula area. The basic route is a 250 metre loop running through leafy parkland, with a pathway of corresponding quality leading off to Suursuo Hospital. Path surfaces of crushed stone fines enable the use of rollators or wheelchairs. Paths are fitted with railings to aid those with impaired vision or other mobility difficulties. Signboards, including tactile maps for the visually impaired people, are situated at the start and at points along the route. Resting places are provided at regular intervals at the side of pathways, with furniture planned for use by all user groups, for example, benches of varying heights and a table-top high enough to allow a wheelchair underneath.



Figure 3: The Maunula exercise route is used daily by Maunula residents.

Planning guide for service housing for the elderly, Social Services Department, 2004. The guide gathers together the existing regulations, instructions and good practices and aims to define the general operating models and quality criteria for the grounds of service housing for the elderly. The guide was drafted alongside the renovation plan for the grounds of the Social Service Department's Syystie service house for the elderly at Malmi. The renovation plan is the responsibility of service accommodation property company Kiinteistö Oy Helsingin Palveluasunnot and the guide was drafted in cooperation with joint publishers Finnish Association of Landscape Industries and the Central Union for the Welfare of the Aged.

SuRaKu, Guidelines for planning, construction and maintenance of accessible public spaces (streets, parks and courtyard areas), Public Works Department, 2004. The SuRaKu project was launched in 2003 as a joint project involving six cities: Helsinki, Espoo, Joensuu, Tampere, Turku and Vantaa. The SuRaKu objective was to create guidelines for use in safeguarding the accessibility factor in planning, construction and maintenance of public streets, parks and courtyard areas. The guidelines are formed of two parts: firstly, accessibility criteria by which the accessibility of outdoor locations can be assessed and regulated and, secondly, guidelines based on model designs covering key accessibility-related area types and solutions for outdoor public spaces. The SuRaKu guidelines are based on broad cooperation involving City of Helsinki branches of administration, other cities participating in the project and various disability associations. The guidelines were published in November 2004.



Figure 4: In establishing SuRaKu accessibility criteria a variety of pedestrian crossing kerbstone alternatives were installed at Itäkeskus and a user test organised in autumn 2004.

Extended green traffic light, City Planning Department. The Transport and Traffic Planning Division of the City Planning Department has developed the concept of the extended green traffic light to allow time for various user groups to cross the street. The development was carried out in cooperation with a selection of schools and day care centres and with the Folkhälsan service home for the elderly. Experiences of the implemented procedure have been positive. In conjunction with the Finnish Federation of the Visually Impaired and the Helsinki and Uusimaa Association for Visually Impaired, the Transport and Traffic Planning Division has also developed types of audible signal for traffic lights, including for night use.

Improving accessibility in the central business district. Many changes have taken place over the last ten years in the Helsinki central business district. These changes have radically improved conditions for pedestrians. At the same time pedestrian areas in the central area have similarly improved in terms of accessibility, despite this not being one of the starting points of the project. Measures that have been implemented include

- Iso-Roobertinkatu pedestrian zone, 1985
- Mikonkatu pedestrian zone, 1993
- Basic improvement to pavements at the western end of Mannerheimintie and construction of a cycle lane, 1996
- Basic improvements to Kamppi Square, 1997
- Kluuvikatu pedestrian zone, 1989 and its partial basic improvement and installation of an ice and snow melting system, 1999
- Restructuring of pedestrian crossing arrangements on Kaivokatu in front of the central railway station
- Renovation of pavements on North Esplanade, widening of the pavement on the side of the road fronted by the buildings and installation of an ice and snow melting system, 1997-1999
- Basic improvements to Aleksanterinkatu and Three Smiths' Square and installation of an ice and snow melting system, 2001-2003
- Basic improvements to Railway Square and Eliel Square, 2001

Accessibility, already set in the town plan, formed the objective of the plan for the Kamppi area, and related to the forthcoming street area as well as to the properties and their respective plots. When complete the Kamppi area will constitute a remarkably extensive and uniform pedestrian area with fully accessible connections between the new public transport terminus, the new shopping centre and the original blocks surrounding the complex.

2 OBJECTIVES AND INITIAL SITUATION

2.1 Objectives

The objective of the City of Helsinki Accessibility Plan is to promote and steer practical work for achieving accessibility in order to implement the objectives of the city's accessibility strategy. The city's accessibility plan presents general measures for promoting accessibility across the city and sets objectives for implementing practical work in terms of both area and scheduling. The plan functions as a work tool for the Helsinki for All project in coordinating implementation work relating to urban accessibility, and forms a comprehensive framework for the accessibility-related implementation programmes belonging to the individual branches of administration and for the branches' mutual interaction. Actual implementation measures and scheduling are defined in the authorities' own implementation programmes and plans.

The city accessibility plan will have a far-reaching impact on the city's development over the long term. The aim of the accessibility plan is to function as a guideline for use in organising accessibility planning and improvement work for street and park areas, public buildings (services, office space etc.) and public transport (terminuses and stops). Targeted accessibility measures often cross over the boundaries between branches of administration, who must agree on a mutual course of action. The broad cooperation of the branches of administration is essential both at the planning and implementation stages, along with a common preparedness for incorporation of implementation work in the implementation programmes of all authorities.

Cooperation with the various city branches of administration has revealed a particular need for the polishing and concretising of the following objectives:

- identification, application and adoption of good accessibility practices
- improvement in the setting of objectives, cooperation and flow of information between branches of administration
- incorporation of customer/resident centricity in the accessibility plan
- synergy benefits of multi-sector cooperation (opportunity to create more effective gains and cooperation during planning, construction and use)
- accessibility issues as part of quality considerations

2.2 Planning process

Drafting of the city accessibility plan follows on directly from the SuRaKu project, with part of the work having been done in tandem with it. In this way the work has benefited at the outset from the extensive cooperation network built up through the SuRaKu project and comprising representatives of the various city branches of administration and interest groups. The planning work has been commissioned by the Public Works Department and carried out within the framework of the Helsinki for All project in cooperation with the City Planning Department. The draft plan has been presented to the Helsinki for All project steering group, which includes representation from various administrative branches and interest groups. A presentation has also been made dur-

ing the drafting stage to councils for the elderly and disabled in Helsinki. Opinions on the draft accessibility plan were requested from the city's administrative branches and from key interest groups. These opinions were taken into account in the plan.

2.3 Initial situation

Assessment of the current status leans initially on the existing geographic databases: the advanced databases of the Social Services and City Planning departments, the City of Helsinki master plan databases and SeutuCD. SeutuCD, a CD-ROM produced by the Helsinki Metropolitan Area Council, is a compilation of the key municipal geographic data on population and land use in the metropolitan area, in a common format. The data on SeutuCD is from the end of 2002.

Information from reports drafted in connection with the master plan was obtained on new site construction, the location of urban hubs and local centres and the location and proportion of the elderly population in various areas. New construction sites and areas should be accessible; urban hubs and local centres with large populations and a wide range of public and private services, together with areas having a large elderly population, should be emphasized as renovation areas during prioritization. Notably large employment hubs are also taken into account.

Work involved primary use of the City of Helsinki's own digitized information. Data on services for the elderly, day care centres and municipal social and welfare services were obtained in geographic data format. The city data were complemented by information from the SeutuCD business register distributed according to business sector. Other information supplied by SeutuCD included the location of private medical centres and cultural institutions, churches (including parish premises), museums and sports facilities. Construction databases yielded information on terminuses on the basis of the purpose of use of the building, which was supplemented by information on metro and train stations.

Database accuracy can be considered adequate for the intended work, but attention should be paid to inaccuracies while interpreting the information. Problems in this respect are connected with duplication, outdated information and omissions. In particular, administrative points may be attached to information obtained on the basis of business sector which are not applicable to accessibility prioritisation sites. Factors relating to the reliability of information from the business register are explained in more detail in the SeutuCD data content descriptions. The data as such are relatively reliable, but the search and filtering of information is a process of many stages, nor has it been possible to check every point during the work carried out.

The data have nonetheless been checked to some extent in a discretionary manner. Regarding private medical centres, for example, the number of staff indicated was used to identify smaller units so that proprietorship enterprises could be eliminated. Dentist are not included under private medical services. The data targeted for the work are essentially construction-based, so that duplicate statistics for the same building or multiple offices in the same building somewhat colour the figures in the site data.

For final calculation purposes, however, the number of different special accessibility sites was assessed in such a way that offices situated in the same building or in the immediate environs were considered as one individual area.

The most serious omission from the work perspective has been that the locations of physical and mental disability services have not been converted into geographic data format. Part of the missing data was retrieved from the SeutuCD business register. The only class concerned directly with such services – *institutions for persons with developmental disabilities* – contained just three entries. On the other hand the class *service housing and group homes* also contained services for the elderly which would have duplicated the city's own information. In more detailed planning significantly higher demands can be set for quality of information, with particular regard to updating and to making data searches more systematic. From the point of view of analysis and presentation of results it would be beneficial to have information on business premises available in geographic data format.

The planning and investment programme related to the Public Works Department's street projects and the 2005 Street and Park Division programme for area planning projects have both been accessed as initial information, as have route maps for trams, buses and service routes from Helsinki City Transport.

In May 2004 the City of Helsinki launched a map-based questionnaire which collected categorized accessibility information direct from users. It was planned to use this information to complement and sharpen the more general principles of accessibility development. The questionnaire nevertheless produced only a handful of accessibility-related entries during the year, failing to serve needs determination or prioritisation in the way that had been hoped.

3 PRINCIPLES OF THE ACCESSIBILITY PLAN

3.1 Refining the objectives

There are relatively few areas in Helsinki which meet the criteria for an accessible environment. As a result, sizeable reparation measures will be required in almost all areas. Careful planning and coordination is required in allocating work for the appropriate issues and sites and in proper scheduling. This is on account of the significant volume of work, the large number of administrative branches involved, and the length of time needed to complete assignments. Implemented accessibility solutions produce a long term impact upon the use of the environment and, where subject to good planning and quality implementation, promote sustainable environmental development. The aim of the City of Helsinki accessibility plan is to assist individual branches of administration in the programming of implementation work over the long term.

The decision of the City Board stated that department-based implementation programmes should be drafted in such a way as to concentrate during the first half of the project term on those projects which can be implemented as part of the normal work of the administrative branches, while implementation of special projects would be launched according to the city's financial situation towards the end of the project.

In drafting the plan it has been stated that preparation of implementation work, for example drafting of the SuRaKu guides, has occupied far more time than anticipated, and that the preconditions for launching of implementation work will exist only after the guides have been approved. The implementation principle approved by the City Board has not, therefore, been effected in terms of the first year. Drafting of the needs-based accessibility implementation programme has also demonstrated that the most pressing improvement needs are often in older areas where there are no large-scale reconstruction or renovation projects. Implementation and scheduling of accessibility projects is not, therefore, necessarily targeted at those existing projects where, from the accessibility perspective, the need is greatest. It is nonetheless vital when implementing accessibility that objectives are set primarily in accordance with needs-based prioritization and do not yield to pressures over construction costs which sideline the needs of the user.

Reviewed principles of the accessibility strategy:

1. Accessibility to be incorporated at all levels of operation of the city's branches of administration.
2. All reconstruction and renovation to be accessible and of high quality and to comply with City of Helsinki planning and construction guidelines with regard to accessibility issues.
3. Accessibility implementation is based on the accessibility needs of users and planning employs user centricity and interaction which takes note of all user and interest groups.
4. Where possible, accessibility renovation to be linked with existing construction projects. In the absence of suitable projects, accessibility renovations to be implemented as separate projects.
5. Maintenance to guarantee the preservation of good condition and accessibility of public spaces and buildings under all conditions.

3.2 Accessibility target levels

The implementation programme for the accessibility strategy (2000) outlined three approved accessibility objectives: the special level, the target level and the basic level. In contrast, the accessibility objectives in connection with the SuRaKu project were set at two levels: the special level and the basic level. The Finnish Association of People with Mobility Disabilities, the Finnish Federation of the Visually Impaired, the Finnish Federation of the Hard of Hearing and the Finnish Association of Shelters for the Aged, together with the cities of Helsinki, Espoo, Joensuu, Tampere, Turku and Vantaa, were among the parties involved in jointly agreeing principles and implementation solutions relating to accessibility.

The reasoning for setting the objectives at two levels was that:

- the guidelines should be sufficiently clear and straightforward
- the environment should be as harmonious as possible to enable ease of function within it
- user demands in relation to the environment are universal

The areas with special level of accessibility are determined by specific areas, routes or sites having greater than normal accessibility requirements according to service provision and use. Accessibility requirements for all other areas are at the basic level.

Suraku instruction cards contain guidelines for planning, construction and maintenance of accessible public spaces. Criteria tables and instruction cards contain somewhat more demanding guidelines for special accessibility areas than for the basic level. Planning and construction is greatly eased by determining the set target level for accessibility for a given area, route or site during initial planning, enabling the use of instructions on, for example, dimensioning according to the target level for that area.

The target levels and limits for each area to be set for the plan are determined in cooperation with city planners, the plan's client and the city's accessibility experts prior to launching of the implementation plan. Preliminary outlining for new areas requiring the special level of accessibility is already undertaken at the city planning stage and the limits inspected before starting on the implementation plan. Where planning instructions are drafted for the area's immediate surroundings, these will include areas, routes and sites requiring the special level of accessibility. For older areas which preclude the carrying out of accessibility mapping in connection with the area plan these special accessibility areas, routes and sites will be determined when drafting the area accessibility plan.

3.2.1 The special accessibility level

SuRaKu criteria tables and instruction cards standardize the following types of area as special accessibility areas:

- Pedestrian street milieus
- City centre areas with public facilities and services
- Environments of premises providing social and health care services and services for the elderly and persons with disabilities
- Areas with a predominance of housing for the elderly or people with disabilities
- Public transport terminuses and areas surrounding public transport stops
- Sports areas and playgrounds catering for all types of users
- Accessible routes in recreational areas, etc.

Special accessibility areas and their limits are invariably determined on a case-by-case basis, but the objective of this standard list is to provide planners with a logical overview to assist in assessing accessibility requirement levels and determining areas which, from the user perspective, require the special accessibility level.

Special level requirements diverge from those of the basic level in terms of certain environmental elements. One example that could be mentioned is the limiting of the use on pavements of guidance paving flags intended for people with visual impairment to areas with the special level of accessibility; a further example is the different requirement between the two levels of accessibility regarding the use of blister paving flags to mark out stairways and pedestrian crossings. The use of guidance paving flags should always be discussed with experts from the Finnish Federation of the Visually Impaired. The additional use of a snow-melting system for pavements and stairways to ensure their continued usability in winter conditions is often a recommendation for areas with the special accessibility level.



Figure 5: The environs of Iiris, the office of the Finnish Federation of the Visually Impaired, are at the demanding level of special accessibility, with particular attention paid to mobility guidance for people with visual impairment.

3.2.2 The basic accessibility level

The basic level of accessibility refers to a high quality, accessible and safe public environment. All areas other than those designated as special accessibility areas must comply with the accessibility requirements of the basic level.

In planning, construction and maintenance at the basic accessibility level, attention must be focused wherever possible on the differing needs and circumstances of users. The basic level quality requirements do not, however, cover special solutions arising from the demands of various user groups, such as guidance paving flags for people who are visually impaired. Basic level requirements are set in such a way as to enable accessible mobility for the majority of members of all user groups. The criteria take account of current solution methods which fulfil the user requirements set for the basic level. The criteria also ensure that the basic accessibility objectives become part of the environment at all times of day and throughout the year.

Although some aspects of the basic level requirements are less stringent than those of the special level, some requirements such as those regarding kerbstone arrangements at pedestrian crossings deviate from standard practice to the extent that implementation of the basic accessibility level is creating a significant need for renovation in almost all older areas of the city.

3.3 Prioritisation of construction and renovation projects

Only the handful of more recently built areas and environments may be considered as truly accessible. The scarcity of older areas fulfilling the criteria for an accessible environment demands fairly extensive renovation measures in almost all areas. The large volume of work, the number of city branches of administration involved and the lengthy duration of tasks give rise to a situation where the targeting of work to the appropriate issue and site, as well as overall steering and coordination, begin to acquire great significance if the core objective of an accessible Helsinki by 2011 is to be attained.

Prioritisation under the accessibility plan adheres to two main principles, the one needs-based and the other based on construction costs. The starting point for needs-based prioritization is the user's viewpoint and concrete needs in relation to the accessibility of the environment. Emphasis in the city's accessibility plan is on needs-based prioritization. Prioritisation in terms of construction costs may steer the area accessibility plan, for example, regarding areas requiring extensive basic improvements, but above all its impact will be upon programmes and plans for implementation.

Implementation programmes are tied to the individual construction programmes of each branch of administration and to the funds they have available. Implementation work should be organised so as to minimise construction costs as far as possible. Where possible, construction cost-based prioritisation should support the needs-based objectives that have been set and should not be permitted to supplant needs-based prioritisation.

3.3.1 Needs-based prioritisation

The key principle of the accessibility plan is user centricity. The City of Helsinki accessibility strategy was founded on initiatives supplied by users, and emphasis throughout all strategy phases and in all objectives has been on taking the needs of users into account. The principles of interactive planning have been complied with during different stages of the accessibility strategy and accessibility plan, and representatives from the various disability associations have been connected to work in an expert role from the outset. Work has nevertheless laid stress on an accessible environment being a requirement relating to all users and not just to certain special groups.

Prioritisation of area and site renovation should be determined for the purpose of scheduling the measures to be taken. The following factors influence needs-based prioritisation:

- area prioritisation (user volume, volume and significance of public and private services in the area, number of persons over the age of 65)
- site prioritisation according to the importance of operations and services (environments at the special accessibility level: premises providing services for the elderly and disabled and social and health care services, elderly and disabled persons' service housing environments, public transport terminuses and stops, sports areas and playgrounds and accessible routes taking account of the needs of all users)

- area and site prioritisation based on feedback from municipal residents and interest groups

This work included a needs-based assessment of accessibility strategy programme measures (from 2000). Of the housing stock features from the earlier list of characteristics affecting prioritisation it was revealed that the number of apartment blocks fitted with lifts and the general standard of the apartments themselves were too open to interpretation from the point of view of the overall plan. The different buildings inspected across the entire city are so widely distributed that it is not possible to conduct prioritisation on this basis. Nor is it simply a matter of saying that accessibility should first be improved through, for example, an environment of buildings fitted with lifts. Prioritisation for areas with good transport connections is implemented through area prioritisation according to user volume.

3.3.2 Construction cost prioritisation

From the point of view of the appropriateness and profitability of construction it is essential to link accessibility implementation projects wherever possible with other implementation plans and programmes for construction and renovation sites. The key objective is the widest possible implementation of accessibility improvement measures in conjunction with other construction. This will reduce any separate costs generated by accessibility and create an accessible and high quality environment over the long term. This requires, nevertheless, that the area earmarked for improvement is the focus of other construction projects to which accessibility improvement projects can be linked. Separate accessibility projects, requiring separate funding for implementation, would otherwise be unavoidable for such areas.

Construction cost prioritisation can be subdivided into three main groups:

1. New construction, with the objective in every case of creating an accessible environment
2. Renovation, where accessibility improvements can be linked to other renovation plans and construction
3. Separate accessibility renovation required for areas lacking other renovation needs or projects

New construction should incorporate the accessibility factor as an objective at all planning phases in such a way that planning and construction invariably produce an environment for the intended area that fulfils the set accessibility requirements.

Accessibility-related costs in new construction can be compared to other costs induced by quality factors, such as the general cost of an above average level of quality or otherwise exceptional choice of material or decorative detail. Accessibility, therefore, does not generate additional costs during new construction; on the contrary, the

cost can be assimilated as part of the overall costs produced, for example, by the generally demanding quality requirements of typical pedestrian zones in special accessibility areas.

Connecting accessibility requirements to the first stage of the planning process and taking account of accessibility at all planning stages serves to minimise any extra costs accessibility may generate. Emphasis on accessibility requirements in all new construction will thus produce an accessible environment over the long term which serves all user groups while being as cost-efficient as possible.

The situation with **renovation**, as regards extensive basic renovation projects, is in part the same as with new construction. Taking account of and improving accessibility is the objective in all renovation work as much for public spaces as for public buildings and their courtyard areas. Incorporating accessibility at the start of renovation planning and construction does not necessarily give rise to extra costs. Costs are comparable to other costs generated by the raising of quality levels which occurs as part of normal renovation work.

Complementary building and renovation should always include an assessment of the accessibility requirements of the site's neighbouring environment, so that the continuity of accessible routes can be preserved wherever possible. Accessibility inspection of the immediate environs and any renovation measures should be timed together with other construction in order to implement accessibility in the area as soon as construction work is complete. Funding from outside the project will be required to cover costs generated by external renovation measures at a new construction site or renovation site; this funding should be demonstrated as being allocated specifically for accessibility implementation.

The extent of **separate accessibility renovation** can fluctuate dramatically. The objectives set in the accessibility strategy cannot be achieved by only implementing improvement measures whenever they are linked to new construction or renovation projects arising from other needs. Sites selected for planning and construction programmes on the basis of other requirements do not necessarily support accessibility implementation objectives in terms of location or scheduling.

Implementation of the city's accessibility strategy objectives requires the creation of a separate programme for the period 2005-2010 for accessibility improvement measures relating to special sites and areas. This programme cannot be implemented on the strength of funding reserved for annual maintenance, but requires separate funding. The starting point for steering the implementation plan and implementation work is the schedule for objectives presented in this report concerning improvements for different areas and special sites. The practical implementation of projects requires sufficient reserves of annual funding for the budgets of departments and institutions to cover planning and implementation of accessibility renovation for the period 2005-2011. The costs of standard renovation measures should be established with the aid of pilot sites so that practical information can be obtained concerning renovation costs for the purpose of drafting the annual implementation programme.

PLANNING SECTION

4 CITY OF HELSINKI ACCESSIBILITY PLAN FOR 2005–2010

4.1 Planning flow

The Accessible Helsinki – A City for All report presents the principles of the accessibility implementation programme, according to which practical planning and implementation work is made up of three complementary parts:

The **City of Helsinki Accessibility Plan** is a comprehensive plan containing the set objectives for accessibility work covering the full breadth of the city, assessment of the current status, determination of the general accessibility criteria and general needs- and area-based principles which act as the platform for prioritising implementation work according to area.

Area accessibility plans are created by the Helsinki for All project during accessibility planning for specified areas. These are based on mapping of the current status in a particular area and involve determining the area quality objectives and the most important routes, special areas and sites by area from the accessibility perspective.

Implementation programmes of city branches of administration are drafted on the basis of the city accessibility plan and area accessibility plans as part of the normal work carried out by the individual branches. Administrative branches draft the accessibility-related criteria for their operations which are to be complied with during the making of planning, construction, maintenance or other operational decisions. On the basis of the implementation programme the branches of administration draft their own annual implementation programmes and launch implementation work within the framework of existing funds.

4.2 Accessibility development areas and special sites for 2005-2010

This accessibility plan is drafted on the basis of studies made in accordance with the needs-based prioritisation principles presented in section 3.3.1. *Needs-based prioritisation*.

From the accessibility perspective city implementation programmes did not contain the type of operations targeted at important areas or special sites which would have elevated them to the status of primary improvement sites, nor were such sites referred to during the accessibility questionnaire conducted by the city (section 2.3 Initial situation) or in feedback from municipal residents and interest groups. Special sites and areas for prioritisation in the proposals presented in the plan were thus highlighted

as being environments and areas requiring the special level of accessibility whose significance derives from user volume, the number of services and the proportion of elderly citizens.

ACCESSIBILITY DEVELOPMENT AREAS AND SPECIAL SITES FOR 2005-2010				
Pilot sites 2005	Sites 2006-2007		Sites 2008-2010	
<p>Areas designated for accessibility improvements Area plans: <u>Southern city districts</u> 3 sites providing services for the elderly 2 municipal social welfare and health care service sites 6 terminuses <u>Vuosaari</u> 7 sites providing services for the elderly 2 terminuses <u>Kannelmäki/Kaarela</u> 4 sites providing services for the elderly 2 municipal social welfare and health care service sites 2 terminuses <u>Haaga/Pohjois-Haaga</u> 10 sites providing services for the elderly 3 municipal social welfare and health care service sites 2 terminuses</p>	<p>Areas designated for accessibility improvements</p> <p><i>Central area I</i> <i>Central area II, extension</i> <i>Maunula</i> <i>Munkkivuori/Munkkiniemi</i> <i>Myllypuro</i> <i>Kontula</i> <i>Itäkeskus</i></p> <p>Individual special-level environments</p> <p>approx. 25 sites providing services for the elderly approx. 7 municipal social welfare and health care service sites approx. 9 terminuses</p>	<p>In-terim as-sess-ment</p>	<p>Areas designated for accessibility improvements</p> <p><i>Central area III (Töölönlahti Park, inspection and addition)</i> <i>Lauttasaari</i> <i>Malmi</i> <i>Pasila</i> <i>Herttoniemi</i> <i>Puotila</i> <i>Mellunmäki</i></p> <p>Individual special-level environments</p> <p>approx. 15 sites providing services for the elderly approx. 5 municipal social welfare and health care service sites approx. 9 terminuses</p>	<p>Implementa-tion assess-ment and drafting of accessibility plan II</p>

Figure 6. Accessibility development areas and sites for 2005-2010.

The number of sites is based on geographic database studies and is indicative only. The figures are shown in an attempt to give a rough overview of the volume of work required. Sites that are located next to each other are counted as one site. In this case the site is recorded as a site providing services for the elderly. Sites are described in the report under section 3.2 Accessibility target levels. The figures in the table do not include private medical services or rehabilitation centres

According to the number of sites shown in the table a total of 46 special-level sites are located in the Public Works Department's Street and Park Division pilot areas for 2005. Of these, 30 are of the type whose environmental measures should be determined through cooperation between the Street and Park Division and the Premises Centre. The order of priority for environmental site improvements will be determined by the Social Services Department and the Health Centre. The railway stations at Huopalahti, Pohjois-Haaga, Kannelmäki and Malminkartano, the metro stations at Vuosaari and Rastila (development responsibility belonging to Helsinki City Transport) and two terminals in the South Harbour (development responsibility belonging to the Port of Helsinki) are also located within the pilot areas. Development measures should also be determined for the neighbouring environments of these sites in the form of cooperation between the responsible bodies and the Street and Park Division of the Public Works Department.

The most important areas for development have been selected as the central area, urban hubs and local centres, on the strength of large user volume and the extent of service provision. Regarding local centres, the proportion of elderly citizens has also been assessed. According to this principle the Viikki area is not considered as having a primary need for an area improvement project. Furthermore, the area's new construction is in very good condition and accessibility has already been incorporated to some degree in area planning. As an employment hub Pasila possesses a considerable user volume and its significance will continue to grow on the back of complementary building in the area.

Initially the plan presents development of 3-4 new areas each year. Start-up of area projects begins with accessibility mapping. Additional resources, for example, the services of a large number of students during the summer, may result in area mapping during the accessibility mapping phase being accomplished over a shorter time span in several areas. Concrete accessibility mapping is followed by preparatory determination of improvement measures for special level areas and routes, and, finally, steering of the implementation plan and drafting of detailed plans.

The following justifications are emphasised in area prioritisation:

Significant user volume:	Central area I-III, Itäkeskus, Malmi, Pasila
Significant user volume and size of elderly population (no. of over 65 year-olds, end 2002):	Lauttasaari (3,100), Munkkivuori/Munkkiniemi (3,000), Kontula (2,800), Vuosaari (2,500), Maunula (1,700), Kannelmäki (1,700), Herttoniemi (1,600)
Size of elderly population:	Haaga/Pohjois-Haaga (2,600), Myllypuro (1,900), Mellunmäki (1,300), Puotila (1,000),

The aim of area improvement projects is to create accessible sub-areas and routes where the greatest possible proportion of daily life can be accomplished under accessible conditions. These area improvement projects would still exclude a significant number of important public and private services which would need to be made accessible and available. Such services include day care centres, schools and educational institutions, libraries, museums, parish premises, churches, sports facilities, beaches, shopping centres and municipal and government departments, such as the Social Insurance Institution. As there is an enormous variety of services available, only the neighbourhood areas designated by the SuRaKu project as requiring the special level of accessibility have been prioritised within the framework of the year's objectives and financial resources. These comprise:

- Environments of premises providing accommodation or other services for the elderly and people with disabilities
- Environments of premises providing social and health care services
- Public transport terminuses and stops, and taxi ranks

In addition to municipal services, inspection also takes into account public and private service provision. Other sites requiring the special accessibility level are implemented in accordance with prioritisation with the development areas. Sports areas and playgrounds catering for all types of users together with accessible routes, for example, in recreational areas, were categorised as new construction or renovation projects steered separately by the Public Works Department.

Improvement measures for special sites should be planned and implemented as a unified whole comprising both plot and street. Plot inspection involves pedestrian and cycle routes from the street, pick-up and drop-off area and parking area to the entrances to buildings. The objective is for accessible routes and flowing and unobstructed operation which also covers maintenance traffic and routes used by staff. Inspection of the street should at least cover routes to the nearest public transport stop and possible connections to the nearest accessible routes or sites.

There is insufficient experience of the practical functioning of processes and methods for improving accessibility to permit any certainty of the extent of their assistance in implementing the set objectives. An attempt to assess the functionality of selected mapping methods, steering, planning and construction processes, available criteria, accessibility level requirements and planning solutions will be made with the aid of pilot areas. Use of the pilots to obtain improvement measures capable of implementation is particularly important, while also providing cost information for different measures and user assessment of the success of implementation.

Special accessibility areas (separate sites, inspected)	Pilot areas	Development areas 2006-2007	Development areas 2008-2010	Development and pilot areas total	Other areas	Grand total
Services for the elderly	24	25	15	64	61	145
Municipal health care services	6	7	5	18	29	47
Private medical services large	7	19	8	34	15	49
Rehabilitation centres	1			1	5	6
Terminuses	12	9	9	30	16	46
Total	50	60	37	147	146	293

Figure 7: The number of sites is based on geographic database studies and is indicative only. Regarding individual sites, the database is insufficiently precise to allow presentation of the exact number of sites according, for example, to branch of administration. Sites that are located next to each other are counted as one site. In this case the site is recorded as a site providing services for the elderly. The column headed "Development areas 2006-2007" does not contain sites which would otherwise be duplicated in the column headed "Pilot areas".

Concerning development measures, it is essential at the end of the first year of implementation to ensure that the selected operating procedures, methods and solutions are efficient and justified, and that they fulfil requirements both in terms of finance and when assessed on the basis of other criteria such as quality, aesthetics, technical functionality, etc. An interim assessment was presented at the end of 2007, permitting examination of the above issues and the opportunity to confirm that the objectives would be achieved. The views of interest groups on the measures carried out and on the success of the project should also be heard during the interim assessment.

It is clear that when the Helsinki for All project reaches its conclusion in 2011 there will still be a plentiful need for improvement throughout the Helsinki area. It may then become necessary to reassess the focus areas and how accessibility work can be progressed.

4.3 Examples of 2005 pilot areas

4.3.1 Public Works Department area plans as a tool for area accessibility plans

Area accessibility plans implemented as pilots in 2005 are for areas where the Public Works Department's Street and Park Division are instigating area planning work. Area plans are a planning tool used by the Public Works Department in development at the area level. A needs assessment is drafted as part of the area plan, together with long-term objectives for the related street and park areas. Linking the area accessibility plans to the area plan enables the natural transfer of accessibility improvement measures relating to the street and park areas to form part of the prioritisation of the Public Works Department's area needs inspection and procedures.

The content of area plans is further complemented by incorporating accessibility mapping, and the definition of special accessibility areas and routes and of preliminary accessibility development measures. The definition of accessibility development measures in connection with the area plan also ensures that other development perspectives, including those relating to cityscape, structural and other quality and technical systems, are taken on board. As a separate task there is often the need in area accessibility planning to refine or top up with other development viewpoints prior to the drafting of implementation plans.

The next section presents the starting points for two area plans acting as pilot sites: Southern city districts and Keski-Vuosaari. These examples are an attempt to illustrate the definition and limitation of an area accessibility development project.

4.3.2 *Southern city districts*

The central business district is prioritised in the accessibility plan as the most important development area in Helsinki. The area is the city's busiest in terms of function, with a heavy concentration of public and private services. The volume of pedestrian traffic in the central business district is vast and includes a substantial number of tourists and other visitors to the metropolitan area. Accessibility in this area is of value to all the city's inhabitants. The area is bordered to the north by Kaisaniemi Park, to the east by Unioninkatu, to the south by the Market Square and South Esplanade, and to the west by Mannerheimintie and the Kamppi area under construction. Mannerheimintie northbound as far as the Töölö Sports Hall is also included.

The second important area for development is delineated as the southern part of the city centre, also burgeoning with public and private services. The area covers Kaartinkaupunki and Punavuori as far as Viiskulma and Albertinkatu, Bulevardi and Lönnrotinkatu up to Hietaniemi Market Square, and the area surrounding the Kamppi centre currently under construction.

The Southern city districts area plan of the Public Works Department's Street and Parks Division includes parts of the central business district and the residential and recreational areas to the south with the exception of Munkkisaari.

The area plan deals with over half of the area designated according to needs assessment as Central area II. Central area II's southern part, although not the most urgent area for development in the central business district, has been selected as a pilot area on the strength of it being immediately possible to use the area plan to link the accessibility improvement measures to another Street and Park Division plan, and thereby to the Public Works Department's area implementation programme.

Measures

An accessibility map was produced for the central business district in 2000. The mapping is, however, no longer usable for steering accessibility development measures on account of reinforced accessibility criteria and the extensive reconstruction of street areas that has since taken place (Aleksanterinkatu, Kluuvikatu, North Esplanade, Yli-

opistonkatu). Furthermore, the previously mapped area forms only a small part of the current area planned as a pilot, with the result that the earlier work is of no value in drafting the area accessibility plan.

During 2005 the Public Works Department drafted an area plan for the southern city districts and for Bulevardi, Vanha kirkkopuisto and Lönnrotin puistikko. At the same time the Helsinki for All project, together with the requisite cooperation partners, drew up an area accessibility plan for the area in the form of a pilot. The accessibility plan contains accessibility mapping relating to the area's current status, on the basis of which objectives regarding levels of quality and the areas, routes and sites requiring the special accessibility level can be determined. Guidelines and measures for the improvement of accessibility in the area can also be defined.

Within the pilot area, two separate sites providing services for the elderly, Villa Ensi and Lesche-hemmet, lie outside the prioritised needs-based area. These sites could form pilots, in cooperation with public/private bodies, for the implementation of development projects for special sites.

4.3.3 Keski-Vuosaari

Current status and phases of development

Accessibility mapping and drafting of a preliminary accessibility plan for the Keski-Vuosaari area was carried out in 2002. Following this, tactile granite paving flags designed for persons with visual impairment were installed at the junction of Vuosaarentie and Valkopaadentie in a trial to establish their operating characteristics and durability. The flags are still in place but are in poor condition and no longer function in the manner intended.

After the 2002 accessibility report a new service housing hub for the elderly comprising three units was constructed to add to the previous service housing unit in the area. A 1960s built shopping centre was demolished to make way for the new buildings, resulting in all four service houses being situated in close proximity on the northern side of Vuosaarentie.

Vuosaari Sports Centre, the upper level comprehensive school and upper secondary school, the Vuotalo cultural centre providing library and cultural services, the Columbus shopping centre and the area's social and health care services are all in the immediate vicinity, on the south side of Vuosaarentie. Efforts have been made to incorporate accessibility in planning and construction of the new business centre completed at the end of the 1990s, as well as the adjacent public service buildings, metro station and bus terminus. Accessibility should continue as a prime objective in extension to the business centre and other new construction in the area.

The meteoric growth in service housing and services for the elderly and other services in Keski-Vuosaari and in the area around the new business centre increases the demand for accessible routes, both to the service housing from within the Keski-Vuosaari area and from the service housing to the business centre and its adjacent public services, Vuotalo cultural centre, sports centre and public transport stops.

Measures

The 2002 accessibility mapping information and improvement proposals remain largely relevant. These may be considered as starting points and used to steer the implementation of practical development measures in the Keski-Vuosaari central area. Accessibility work already launched supports the choice of the area as a pilot.

Active new construction in the area, which includes the environs of the new service houses, together with the updated accessibility criteria and model plans resulting from the SuRaKu project, nonetheless necessitate a review of earlier mapping data and plans before initiating improvement measures. At the same time the area designated for mapping and planning is also being extended to the north to cover the greater part of the Keski-Vuosaari area devoted to apartment blocks.

Within the pilot area, the Rastila metro station and two separate sites providing services for the elderly, the Lillesgården home for the elderly and the Villa Kaarina intensive service housing unit, lie outside the prioritised needs-based area. These sites could form pilots, in cooperation with public/private bodies, for the implementation of development projects for special sites.

4.4 Development areas for 2006-2007

The most important development areas for accessibility are prioritised for 2006-2007. These areas are Central areas I and II, Maunula, Munkkivuori/Munkkiniemi, Myllypuro, Kontula and Itäkeskus. The grounds for prioritisation of the central areas is presented in section 4.3 Examples of 2005 pilot areas.

The grounds for Maunula, the Munkkivuori/Munkkiniemi area are both their significance as urban and service hubs and their sizeable elderly population. In the case of Maunula, prioritisation was further supported by the successful launch of a project concerning routes for the elderly and improvement projects for the shopping centre and its environs. Myllypuro prioritisation was founded on the large proportion of elderly. Itäkeskus, a major urban hub with a wide range of services, also has a significant elderly population.

4.5 Development areas for 2008-2010

After prioritisation of the most important areas, development can be extended to other areas containing a higher than average proportion of elderly or significant service providers, such as areas classified as city districts or local centres.

The accessible area in the city centre will be extended to cover the public and private services in the centre of Hakaniemi, the key recreational park areas of Töölönlahti, Kaisaniemi and Tokoinranta, and Hämeentie and Helsinginkatu with their public transport stations and parking. Support for prioritisation of these areas is derived in particular from the central location of the parks and the development work initiated in

the Töölönlahti Park (accessibility mapping and definition of development measures drafted in 2002). The development measures defined earlier for Töölönlahti act as a starting point to be honed in accordance with new and common accessibility criteria.

The urban hubs of Malmi and Pasila have been prioritised on the strength of user and service volume. Lauttasaari and Herttoniemi are local centres with large elderly populations. There is also a high proportion of elderly in Puotila and Mellunmäki. In determining the boundaries of mapping for these areas preliminary prioritisation has also been based on building stock and population density. The most evident and extensive block areas comprising single-family homes have been left outside the map frame. This marking of limits should be carried out in more detail when launching development in the individual areas.

4.6 Separate site improvement

The neighbourhood environments of operations requiring the special accessibility level but which remain outside the scope of area improvement projects are especially important sites for accessibility development. These include:

- Environments of premises providing accommodation or other services for the elderly and people with disabilities
- Environments of premises providing social and health care services
- Public transport terminuses

There are several sites which fall outside the scope of the development areas presented (section 4.2. figure 7), amounting to approximately 150 over the entire Helsinki area. Spread over the 2006-2010 implementation period this would average out to approximately 30 improvement sites per year. The actual number of improvement projects is not, however, of this magnitude, as within the same context it is often sensible to examine a single area which contains several sites. The figures presented in these tables, nevertheless, no longer include sites located in the same block.

Prioritisation of separate sites should take place primarily in the Social Services Department and the Health Centre. Agreement is then reached with the Public Works Department, on the basis of this preliminary prioritisation, as to how the separate sites may be implemented. The launching of separate sites requires genuine cooperation between departments and potential convergence of differing perspectives on accessibility prioritization and of implementation principles. The most pressing measure is the drafting of the accessibility programme for the Social Services Department and the Health Centre.

The sites often have public and private service provision in addition to municipal service providers. The Helsinki for All project aims to support accessibility development on their behalf. The project renders assistance in the procurement of accessibility-related information and, according to need, on the launching of accessibility work.

CITY OF HELSINKI ACCESSIBILITY PLAN FOR 2005-2010

14 November 2005

In 2003 the Finnish Rail Administration drafted accessibility mapping of 175 stations handling passenger traffic. Mapping focused on accessibility problems related to differences in elevation. In addition to the actual station area, mapping also covered pedestrian and cycle routes leading to the station, in line with trip chain philosophy. The Finnish Rail Administration and the City of Helsinki are jointly responsible for the development of these stations. Mapping did not include the local traffic stations on the Vantaankoski railway line under the control of their respective cities. These stations, of which Malminkartano remains outside the areas prioritised, are the responsibility of Helsinki City Transport. The metro stations at Ruoholahti and Kulosaari remain outside both prioritised and pilot areas. The above-mentioned stations should be mapped and planned as separate sites by Helsinki City Transport.

Sites to be mapped in the port of Helsinki are the passenger terminal at Katajanokka and those in the South Harbour and West Harbour. Of these the terminal in South Harbour will be included in the 2005 pilot area.

5 MEASURES

5.1 Area accessibility plans

Accessibility is invariably linked to mobility within an environment. An environment accessible in terms of both mobility and function can only be implemented when all routes and sites in general use, for example, public service buildings and public transport stops, fulfil adequate accessibility requirements. Accessibility must therefore always be examined area by area and consideration given to any special local characteristics.

To facilitate practical accessibility work in areas allocated needs-based priority under the city's accessibility plan, area accessibility plans should always be drawn up covering all of the given area's city-controlled public premises. The area accessibility plan includes mapping of the area's current status and the consequent definition of area accessibility objectives, for example, definition of areas, routes and sites requiring the special level of accessibility. The necessary measures for the area are also defined, along with the optimum schedule for implementation.

Area accessibility plans function as guidelines, with departments drafting their own programmes and plans for implementation and budgeting for implementation work. Area accessibility plans will be drafted within the framework of the Helsinki for All project in order that all city branches of administration operating in the above-mentioned areas will be involved in planning. Drafting of the plans will make use of planning methods based on user centricity and interaction and which take account of the needs of interest groups operating in the area, such as representatives of local associations for the elderly and disabled, parishes, trade and business, property owners and government.

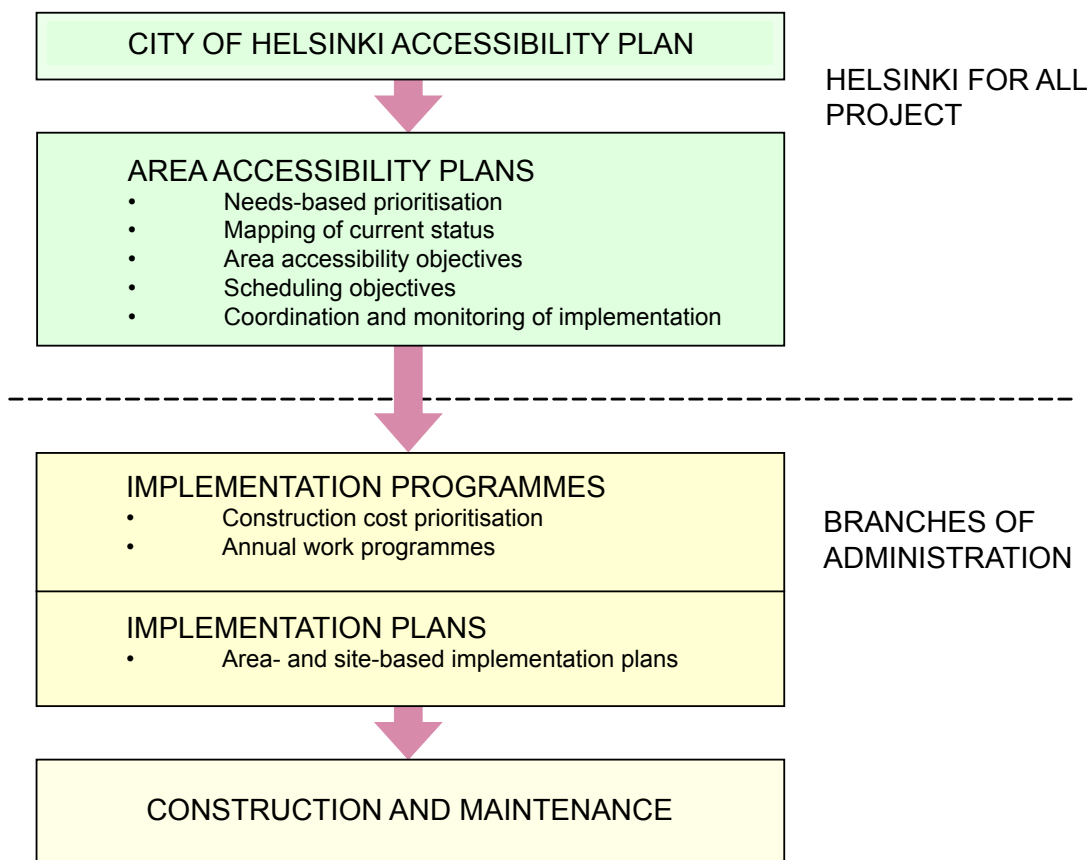


Figure 8: Accessibility planning levels.

Area accessibility plans are a tool for steering the practical implementation of accessibility improvement work in older areas in such a way that it best supports the objectives enshrined in the city accessibility strategy and plan.

5.2 Implementation by individual branches of administration

Responsibility for practical accessibility implementation rests with the branches of administration responsible for corresponding work within their own operations and in the areas under their control. This demands of each administrative branch clear work organisation and an examination of its own processes.

Branches should examine their own operations and planning guidelines which impact on accessibility and ensure that consideration is given to accessibility at all process stages. Persons or groups responsible for accessibility implementation should monitor the implementation work of their own organisation and submit a report to the Helsinki for All project, who communicate and report on progress to the City Board on an annual basis.

5.2.1 *Implementation programmes of the individual branches of administration*

Each branch of administration should map the areas and buildings under their jurisdiction in order to establish the current status in terms of accessibility. Mapping may also be carried out for plots and buildings in connection with the area accessibility plan, provided a comprehensive accessibility plan has been drawn up for the area. Branches should also take responsibility for accessibility mapping of their own premises and environs in accordance with the objectives presented in the city accessibility plan.

Each branch determines the accessibility improvement needs based on the mapping information for the sites under their control and drafts its own implementation programme for achieving accessibility by 2011. The implementation programme should take note of the needs-based prioritisation and scheduling objective presented as guidelines in the city accessibility plan and area accessibility plans.

Branches carry out the drafting of the implementation programme within the framework of their individual budgets. Accessibility implementation or improvement projects should principally be incorporated in projects within the implementation programme or connected to them. Where resources permit, a separate implementation programme may be drawn up for accessibility implementation defining the sites to be implemented annually. An attempt should also be made to achieve simultaneous implementation of construction measures intended for the same area, for example, projects led by different branches, in order that accessibility improvement work can be implemented with the best possible efficiency and control. The implementation plan and practical construction fall within the framework of annual implementation programmes.

5.2.2 *Implementation plans of the individual branches of administration*

The key objective of implementation plans should be to incorporate accessibility issues and safeguard accessibility in all planning and construction.

The implementation plan should always start with establishment of the previously set objectives regarding accessibility quality levels for the area, together with detailed definition and limits of the areas, routes and sites requiring the special accessibility level. The implementation plan for areas requiring the special accessibility level complies with the guidelines for planning and dimensioning defined in the SuRaKu instruction cards and criteria tables, while the plan for all other areas complies with the corresponding guidelines for the basic level.

For older areas, detailed accessibility mapping of the current status should always be carried out prior to initiating the implementation plan. Alternatively, the validity of previous mapping information should be checked where, for example, several years have passed since mapping in connection with the area plan was undertaken. The mapping is used as a basis for detailed definition of starting points for the improvement plan.

If the improvement plan is formed of several parts, for example for individual streets, it should be ensured that accessibility is implemented as a whole and that accessible routes form an unbroken chain. Where necessary, improvement measures should also extend to safeguarding accessible routes in the neighbouring environments beyond the planned area.

The implementation plan includes a planning map dealing with the entire area, presenting the areas, routes and sites to be implemented together with the necessary measures. For specification purposes the required detailed plans are drawn up showing dimensioning of structural details, materials to be used, colour schemes and installation methods. Detailed planning should indicate the critical structural dimensioning and tolerances, materials and installation methods with regard to accessibility to a degree of precision that precludes errors in interpretation and ensures accessibility criteria are fulfilled. Repetition of similar detail, for example, renovation measures relating to pedestrian crossings, may be presented as type drawings. Attempts should be made in atypical situations to apply the issued guidelines as far as possible, although transforming older environments to correspond with new accessibility criteria is not always feasible.

Maintenance and sanitation requirements should be considered during planning and construction. These include sufficient width of passageways to accommodate maintenance machinery, enabling guaranteed accessibility of pedestrian routes under all conditions. The possibility of installing a snow-melting system or roofing should always be investigated in connection with reconstruction of pedestrian zones set at the demanding special level of accessibility. This is to guarantee accessibility for pedestrians during winter conditions, and to markedly reduce any damage to surfacing and structures that may be caused by winter maintenance machinery.

5.2.3 Construction

During renovation it is vital to comply fully with the plans and to implement precisely the fundamental details within the framework of dimensioning deviations defined and permitted in the plan. Furthermore, materials and products presented in the plan should not be changed on site without the planner's approval. When altering plans the planner must ensure that such alterations do not serve to weaken the degree of accessibility.

The functionality of accessibility solutions and their compliance with the issued guidelines should always be checked during final inspection of the completed site.

In the public environment accessibility should be implemented to function under all conditions. It is thus vital that a traffic system plan which takes into account the accessibility requirements is invariably drafted for sites in public areas to cover the construction period. A plan should always be demanded and inspected when granting excavation permits for sites in key areas involving pedestrians and cyclists or for otherwise significant or long-term sites.

Indicated passage across or around the site should always be accessible during all phases of site work. Separate guidelines to cover temporary traffic arrangements for roadworks have been issued in the publication "Tilapäiset liikennejärjestelyt katu-

alueella" ("Temporary Traffic Arrangements in Street Areas") (Finnish Association of Municipal Engineering (FAME), issue 19/1999). The guidelines refer to dimensioning of routes, site protection, signs and communication with the aim of reducing disruption to traffic as far as possible.

The fundamental factors with regard to accessibility are the adequate dimensioning of routes, the evenness and lack of obstruction of surfaces, lighting and route protection, enabling even pedestrians with visual impairment to walk past a construction site without needing, for example, to use the carriageway or access the site.

5.2.4 Maintenance

Making public spaces accessible also demands maintenance implementation that enables accessible mobility under all possible conditions, and that maintenance is committed to implementing the measures required for accessibility. It is essential that consideration is already given during the planning phase to maintenance requirements and that the area is planned so that maintenance is largely of the standard type and extra work and expense can be kept within reasonable bounds.

Maintenance planning and implementation should take note of the objective for accessibility quality levels set for each area. Special accessibility areas demand an extremely high level of maintenance, for example, snow clearance and slip prevention, enabling accessible mobility in all seasons and in changeable conditions. More frequent maintenance rounds may have to be performed, for example in winter conditions, in order to achieve this level, requiring special arrangements for maintenance work. Furthermore, specialist materials and products may be in use for the higher accessibility level, such as guidance paving flags for the visually impaired people, which require clean and unbroken surfaces to function properly. This cannot be guaranteed by normal maintenance procedures, for which reason special accessibility areas will require the development of maintenance procedures.

Accessibility implementation requires effective and continuous monitoring of areas to ensure that damage, subsidence or loose materials or objects resulting from external factors do not obstruct mobility. Obstructions should be removed as soon as possible after identification. A snow-melting system is the best guarantee for pedestrian accessibility in winter conditions and brings a considerable reduction in damage to surfacing and structures caused by winter maintenance machinery.

In promoting accessibility it is essential that normal maintenance measures leave the site in an accessible condition. The demands a tight knowledge within maintenance circles of the criteria of the accessible environment. These kinds of straightforward measures, to be implemented without the need for separate planning, could include, for example, inspection of the type and height of pedestrian crossing kerbstones, installation of traffic signs at the correct height, etc.

5.2.5 Producing cost information

Cost information should be gathered for implemented projects concerning the implementation costs of various accessibility improvement measures, both for cost management of later improvement measures and as a basis for drafting annual imple-

mentation programmes. Monitoring of the cost impact of implementation programmes assists in the drafting of the city's accessibility plan and implementation programme and assessment of their cost impact for the entire implementation period until 2011.

5.2.6 Procedural methods and innovations

Making the city accessible is a task of such magnitude that all operational sub-areas and levels must be brought on board. Successful enhancement of accessibility depends on new operating practices, implementation models, cooperation, training, steering, interaction and new products and planning solutions. Key factors are identification of good practices and operating methods based on a knowledge of accessibility issues, their application and development through cooperation among the branches of administration, and adoption and testing. Accessibility should be perceived primarily as a general environmental quality factor and not as a package of special solutions.

The objective for accessible routes which forms part of the basic accessibility objectives demands planning and implementation through cooperation. User-orientation and customer/resident centricity are fundamental in planning and prioritising improvement measures relating to accessibility. It is essential that all work impacting on accessibility should receive any good planning solutions and functional new products or ideas for product development which have been identified. The Helsinki for All project functions on behalf of the entire city as a common body for gathering accessibility-related information and distributing it to other city operators through, for example, annual seminars.

6 THE HELSINKI FOR ALL PROJECT AND THE ROLE OF THE ADMINISTRATIVE BRANCHES

Responsibility for planning and construction of streets and other public spaces, buildings and public transport, as well as administrative and maintenance tasks, is distributed among several departments and institutions within the City of Helsinki organisation, each with a considerable measure of independence regarding the tasks within its own sector.

A wide range of departments and institutions exert an influence on the accessibility of the public urban environment and public buildings during the different phases of the plan. This is why it is essential to establish an organisation for accessibility work, operating within the broad city framework and including representatives from all branches of administration considered vital in terms of accessibility.

6.1 The Helsinki for All Project

On 15 October 2001 the Helsinki City Board approved the programme for 2001-2010 relating to accessibility strategy. At the same time the decision was taken to establish the Accessible Helsinki project (now the Helsinki for All project) under the wing of the Public Works Department, charged with the drafting, coordination of implementation work, communication, reporting and quality assurance of the area accessibility plans.

The Helsinki for All project leadership consists of a project manager and steering group.

The chair of the steering group is the City Engineer from the Public Works Department, with members comprising representatives appointed by the departments of City Planning, Building Control, Real Estate, Social Services and Education, as well as the Health Centre and Helsinki City Transport, and representatives from the Public Works Advisory Committee.

In addition, the interest group includes representatives of associations for the disabled and elderly, users (residents), service providers (including trade), property owners and others. The task of the interest group is to ensure user centricity and the provision of feedback for plans and implementation programmes.

Cooperation among the various parties has already been established, for example, through the SuRaKu project, implemented within the framework of the Helsinki for All project and involving representatives of City Office, the City Planning Department, the Real Estate Department, the Public Works Department, the Education Department, the Social and Health Care Department, Helsinki City Transport, the Sports Department, the Building Control Department, the Housing Production Department and the Port of Helsinki. Cooperation between these departments and institutions will still be required as the set accessibility objectives progress towards practical implementation planning and construction.

The Helsinki for All project sets objectives for accessibility implementation work covering the entire urban area and coordinates the implementation of measures in a way that permits the tasks of different departments to be performed in the same areas simultaneously.

Within the Helsinki for All project the content and scheduling of implementation programmes may be inspected upon demand and an assessment made of implementation of the objectives across the entire urban area. Assessment of mapping methods, steering, planning and construction processes, and the functionality of available criteria, accessibility level requirements and planning solutions, together with implementation costs, should be carried out with the aid of pilot areas. The assessment should be used for the development of operations. An interim assessment will be carried out at the end of the first years of implementation, involving evaluation of implemented solutions and a plan inspection. Plans aimed at accessibility implementation and assessment of implemented solutions should be realised through interaction with local disability and other interest groups.

The Helsinki for All project prepares funding applications to the City Board for implementation of those projects which cannot be realised within the bounds of department funds. The Helsinki for All project reports to the City Board annually by 31 March on the measures carried out during the previous year and on the progress made.

6.2 Branches of administration

For the most part branches of administration are responsible for practical implementation of accessibility work. The various departments evaluate the accessibility impact of their own work or the accessibility of the premises and areas under their control, set objectives for action and for implementing measures, and oversee the maintenance of their managed premises and areas.

Helsinki City Planning Department

Town Planning Division

Transport and Traffic Planning Division

The City Planning Department is responsible for the city's general and town planning and for the planning of transport and traffic. The department also establishes starting points for all later planning and construction, and lays down the requirements for incorporating accessibility in subsequent planning of public street and park areas, plots and buildings. Factors influencing accessibility include dimensioning of streets and plots and their location, as well as the siting of buildings in relation to them. The Transport and Traffic Planning Division is responsible for the city's traffic control planning and the incorporation of accessibility requirements.

Public Works Department

Street and Park Division

Architectural Division

PWD Environmental Production

PWD Construction Management

The Public Works Department administers all the city's public street and park areas. Its responsibility for planning, construction and maintenance of public spaces gives the department a key role in promoting accessibility in public areas, making it only natural that the department should also house the Helsinki for All project. Accessibility of street and park areas should be set as an objective in all Public Works Department operations, planning, construction and maintenance. Apart from public areas, the Public Works Department also plans and constructs other buildings and courtyard areas under the control of branches of administration.

Real Estate Department

Premises Centre

The Real Estate Centre is responsible for all buildings and plots owned by the city. On 1 January 2005 the department established the Premises Centre, a unit whose tasks include renting city-owned office space to branches of administration, procurement of premises, control of investments and rents, and monitoring of property values and maintenance liabilities. The Premises Centre bears centralized responsibility for all the city's real estate procurement and maintenance-related tasks together with the branches of administration responsible for use of the premises concerned. The centre thus has a key role in improving the accessibility of buildings and plots with regard to the procurement, planning and repair of premises and the guidelines pertaining to them.

Helsinki City Transport

Helsinki City Transport is responsible for the use and function of buildings and public transport areas under its control. The department is also responsible for the accessibility of its buildings and grounds and for accessibility objectives set in reconstruction and renovation. The department drafts needs-based reports on new premises and premises in need of repair as a basis for project planning to be carried out at the Premises Centre. With regard to public transport stops, the department is responsible for accessibility in its own areas, although planning, construction and maintenance of stops in street areas takes place partly under the control of the Public Works Department.

City of Helsinki Sports Department

The City of Helsinki Sports Department is in charge of the use and function of its buildings and sports areas. The department is also responsible for the accessibility of its buildings and courtyards and for accessibility objectives set in new construction and renovation. The department drafts needs-based reports on new premises and premises in need of repair as a basis for project planning. With regard to outdoor areas, the department is responsible for accessibility in its own areas, although area maintenance is partly the responsibility of the Public Works Department.

City of Helsinki Social Services Department

The City of Helsinki Social Services Department is responsible for the use and function of its buildings and courtyard areas. The department is also responsible for the accessibility of these areas and for accessibility objectives set in new construction

and renovation. The department drafts needs-based reports on new premises and premises in need of repair as a basis for project planning to be carried out at the Premises Centre.

Health Centre (formerly Health Department)

The City of Helsinki Health Centre is responsible for the use and function of its buildings and courtyard areas. The department is also responsible for the accessibility of its buildings and courtyards and for accessibility objectives set in new construction and renovation. The department drafts needs-based reports on new premises and premises in need of repair as a basis for project planning to be carried out at the Premises Centre.

City of Helsinki Education Department

The City of Helsinki Education Department is responsible for the use and function of its buildings and courtyard areas. The department is also responsible for the accessibility of these areas and for accessibility objectives set in new construction and renovation. The department drafts needs-based reports on new premises and premises in need of repair as a basis for project planning to be carried out at the Premises Centre.

Port of Helsinki

The Port of Helsinki is responsible for the use and function of the buildings, structures and areas under its control. The Port of Helsinki is also responsible for the accessibility of its buildings and grounds and for accessibility objectives set in new construction and renovation, including implementation of these objectives within its own sector operations.

City of Helsinki Building Control Department

The Building Control Department supervises conformity with plans and legislation and the quality of buildings, structures and plots to be constructed, as well as other undertakings with a long-term impact on the environment. Supervision includes the accessibility perspective. The Building Control Department also ensures that the city's public areas fulfil the set requirements and remain accessible and safe. The department plays a key role in monitoring accessibility implementation in relation to all construction, buildings and plots subject to licence. The department may also ultimately intervene in matters of public area accessibility in cases where such intervention is deemed necessary.

City of Helsinki Economic and Planning Centre

The Economic and Planning Centre steers and monitors the city's housing production and supports basic improvement projects. The centre sets general quality objectives for housing construction and supports improvement projects in older residential properties, for example, by granting subsidies for lift construction within the framework of the lift project, and other related accessibility improvement measures in older apartment blocks.

7 ACCESSIBILITY WORK

7.1 Chain of responsibility in planning, construction and maintenance

Contributions to the final accessibility result occur at all phases of the planning, construction and maintenance process. City planning and related traffic planning create the starting points which, to a large extent, dictate the later planning of streets, parks and block areas.

Solutions arrived at in the city plan, for example, regarding the location, plot access or dimensioning of a street, cannot materially be changed during a later planning phase. If, according to the city plan, a street area is located in an area too steep from the accessible mobility perspective, or streets are too cramped for the safe distribution and separation of functions, there are few opportunities for addressing the situation by means of the street plan.

Detailed dimensioning, levelling, surface materials, structures and furnishing as well as the location of public areas are defined in the street and park plan, which therefore occupies a key position with regard to the accessibility of the environment.

Practical creation of the environment's physical structures occurs during the construction phase. If construction does not comply precisely with the plans, or dimensioning deviations exceed the permitted limits during implementation, street surfacing and structures may fail accessibility criteria. The accessible environment demands greater than ever precision during the construction of surfacing and structures for pedestrian routes.

Solutions arrived at during planning and construction have an impact on maintenance. Mechanical street maintenance in particular places heavy demands on the dimensioning, surfacing and furnishing of streets. Unless these factors are taken into account in street planning, maintenance will be compromised and the result directly evident in street usability, especially in winter conditions. On the other hand, maintenance should also take account of changing requirements and adapt the type of machinery accordingly.

At the city plan phase it is important to create the requirements for accessible connections to public service buildings, in particular to those institutions providing health care services and services for the elderly and disabled, and to special accommodation such as residential blocks containing apartments for the elderly and disabled. It is also vital that the connecting routes from public areas to all plots can be made accessible. With regard to individual plots, the task of building control is emphasized as ensuring that buildings and courtyard areas fulfil the accessibility requirements set for them.

Implementation of accessibility over the long term in all new construction can be secured by taking account of accessibility and confirming the functionality of solutions at all phases of planning. Compromises will still need to be made in older areas with regard to accessibility requirements, but renovation planning and construction should also ensure that accessibility is taken into account at all process phases.

Safeguarding accessibility throughout the chain requires intense cooperation between the various branches of administration during the process. It is essential to secure the preservation of set objectives when planning responsibility transfers from one department to the next.

7.2 Factors influencing accessibility

Measures which have an impact on accessibility take many forms and are often difficult to identify. The overall tasks of various departments, and at various planning phases, in which accessibility should be incorporated are listed below.

7.2.1 City plan and traffic plan

With regard to accessibility and other requirements, the city plan is steered by the Land Use and Building Act and Land Use and Building Decree and their supplementary provisions.

The city plan creates the framework for subsequent planning of the city's public areas. Clear perception and orientation of city premises eases general mobility in the environment and simultaneously promotes accessibility.

Accessibility in newly planned areas and areas involving change of land use

For newly planned areas the areas, routes and sites requiring the special level of accessibility are determined in conjunction with the city plan. Special accessibility level areas and routes should be determined when drafting the local plan. This takes place through cooperation among town planners, traffic planners, the implementation plan and the Helsinki for All project coordinating implementation of the city's accessibility plan. The objective for other areas is set at the basic level with implementation complying with the relevant guidelines.

It is necessary at the draft planning stage for the city plan to establish that the principles and solutions defined in the local plan are possible to implement. It is especially important to ensure that it is possible to implement areas and routes at the special level of accessibility. This requires cooperation between town planning, traffic planning and the implementation plan.

Extensive plan alterations for older areas or plans relating to complementary building should ensure that the area accessibility plan takes account of the set target levels for accessibility in the areas covered by the plan. Where an area accessibility plan has not been prepared, an assessment of accessibility requirements should be carried out in conjunction with the renovation and complementary building plan, and the target accessibility levels defined for the area. Inspection should extend over an area large

enough to ensure that connections between the area intended for construction and the surrounding areas remain accessible. With respect to newly planned areas this involves similar cooperation to that mentioned above.

Location and availability of services

The availability of services both within an area and from outside is influenced through proper location. The concentration of public services prevents distances between service points becoming unmanageable and promotes service availability. In the same way, requirements should be laid down for making the planned routes between service points safe and accessible.

Plots reserved for public service buildings should be large enough to accommodate all the necessary functions. Plots should be situated so that connections avoid difficulties such as differences in elevation or the need to cross traffic routes. Significant differences in elevation, in particular, should be clarified during planning with regard to the possibility of ensuring accessible entry to buildings. Factors to be considered during planning:

- Reserved plot size sufficient for public service operations and incorporation of accessibility perspective in service location
- Location of public service buildings close to efficient public transport connections
- Establishment of requirements for accessible and safe connections from the street to the plot and to building entrances
- Establishment of requirements for the courtyard area concerning sufficient dimensioning of pick-up and drop-off traffic and disabled parking spaces, good location and accessibility.

Functionality of the public transport network

Connections between public transport stops and terminuses and public service points should be arranged so that they can be made safe and accessible. Factors to be considered during planning:

- Location of public transport routes and stops to provide good public transport connections between stops and public service points, and between individual service points
- Location of public transport stops and terminuses to allow accessible and safe connection to public service points
- Sufficient dimensioning of public transport stop and terminus areas taking account of requirements for pick-up and drop-off traffic, wheelchairs and prams, and maintenance machinery

Street accessibility

Planning should ensure that streets remain within the 5% longitudinal inclination limit for areas of special accessibility and 8% for other areas, these being the maximum inclinations permitted in terms of accessibility.

Street crossings may easily form obstacles, for example, to wheelchair users or people who have a vision impairment. Crossings should be dimensioned so that different means of mobility can be separated, allowing a sufficiently gentle slope up to the pavement where required. Factors to be considered during planning:

- Location of streets so that limits for longitudinal inclination are not exceeded
- Sufficient dimensioning of streets and public transport stop areas for different functions, and separation of functions
- Maximum clarity and safety in the planning of pedestrian and cycle connections
- Sufficient dimensioning of pedestrian routes for the operation of maintenance machinery, with adequate space for piling snow alongside
- Planning of traffic signal guidelines to include the accessibility perspective

7.2.2 Planning, construction and maintenance of public street and park areas

Planning

The planning of street and park areas plays a key role with regard to the accessibility of public street and market areas, squares and parks. The dimensioning of routes and structural detail, the properties of surfacing materials, the location of furnishings and equipment, the planting of greenery and illumination can all be influenced by the implementation plan for public areas. Particularly important from the accessibility viewpoint is the planning of easily discernible, smooth and accessible pedestrian and cycle routes. Safety in crossing streets and the accessibility of pedestrian crossing arrangements are vital elements in the public service building environment.

Outdoor public spaces form continuous chains where unobstructed mobility across the links are a prerequisite for function and accessibility. To ensure the accessibility of connections, planning should extend beyond the confines of the targeted street area or part into neighbouring areas where necessary. This has particular significance with regard to basic improvement plans for older areas.

Factors to be considered in public area planning:

- Sufficient dimensioning in the area for different functions
- Clear location, separation and marking of service operations
- Minimization of longitudinal and lateral inclination for routes
- Evenness and lack of obstruction of route surfaces
- Accessibility of route structures
- Sufficient even, glare-free lighting in the area
- Safe and accessible plot connections
- Sufficient frequency and dimensioning of resting places
- Functionality and accessible location of furnishings and equipment
- Suitable plant selection and planting for accessibility
- Ensuring the inclusion of accessibility in plans

Construction

Construction and the quality of construction has a decisive impact on the practical implementation of accessibility. Products, materials and construction methods employed, together with the professional skill of the constructors, ultimately determine the quality and precision of the work.

Relatively large dimensional tolerances have traditionally been the norm during excavation. Refinement of accessibility requirements now demands greater precision during construction to ensure that the set objectives are met. Furthermore, there is a need for the ability to predict and prevent post-constructional changes, such as subsidence, which can cause surface indentation or increase the height of traffic islands above the required level.

It is also important to ensure the accessibility of construction site traffic arrangements for the duration of the work. Pedestrian routes should be easily discernible and of sufficient breadth. Mobility by wheelchair or with an escort past the construction site should be facilitated, including a suitably accessible surface. Regarding the site itself, it is also essential to provide timely information on the location of the site and the disruption it will cause. Factors to be considered in street and park area construction:

- Careful plan implementation
- Examination of plan alterations from the accessibility viewpoint
- Refinement of dimensional tolerances in construction
- Accessibility during construction work
- Quality assurance in construction

Maintenance

The condition of surfaces and structures in public areas is subject to constant changes which may be the consequence of damage through external factors, wear or other causes. Continuous monitoring through maintenance of the condition of routes is essential, as is the prompt repair of broken structures or other observed defects, so that these do not interfere with or obstruct mobility within the environment.

Maintenance is the final link in the chain in terms of preserving environmental accessibility. Movable objects, such as furniture or advertising stands, litter, sand or water and street ice and snow may compromise or obstruct mobility. Street maintenance should safeguard adequate route width and surfaces traversable under all conditions. Factors to be considered during street maintenance:

- Proper monitoring of street and park areas and determination of maintenance needs
- Safeguarding of adequate route width
- Street markings kept visible, for example, painted pedestrian crossings
- Route surfaces and structures to remain unobstructed
- Accessible condition of furnishings and equipment and their location to be preserved
- Accessibility of greenery and its condition and location to be preserved
- Route maintenance, for example, removal of sand and movable objects
- Care of the effectiveness of drying methods for routes

- Anti-slip treatment for routes and snow removal
- Quality assurance for maintenance

7.2.3 Buildings and courtyards

Construction of buildings and courtyards is subject to licence and must comply with the Land Use and Building Act and Land Use and Building Decree and the provisions and guidelines of the National Building Code of Finland, as well as the guidelines on interpretation concerning accessible construction prepared by the Building Control Department. The reference to buildings in this connection does not apply here.

Planning

The accessibility of courtyards is of decisive significance when passing from the street to the plot and from the plot into buildings. Unlike street construction, the construction of courtyards is subject to licence. Courtyard areas are governed by issued regulations and guidelines concerning accessible construction, with implementation monitored by the Building Control Department. Accessibility generally plays a major role in new construction, but older areas often contain obstructions to mobility, such as flights of stairs, which are problematic in terms of adaptation to modern requirements. Courtyard planning should particularly ensure continuity of connections from the street into the courtyard and from the courtyard into the building.

Factors to be considered during the planning of courtyards:

- Safe and accessible plot connections
- Appropriate location and marking of routes and entrances
- Sufficient dimensioning in the courtyard for different functions
- Effective siting of pick-up and drop-off traffic and parking spaces for the disabled
- Minimisation of inclination on routes
- Evenness and lack of obstruction of surfaces
- Accessibility of courtyard structures
- Adequate even, glare-free lighting
- Functionality and accessible location of furnishings and equipment
- Adequate plant selection and planting for accessibility
- Ensuring the inclusion of accessibility in plans

Construction

Construction quality is decisive in terms of practical accessibility implementation. Products, materials and construction methods employed, together with the professional skill of the constructors, ultimately determine the quality and precision of the work. Factors to be considered during the construction of courtyards:

- Careful plan implementation
- Examination of plan alterations from the accessibility viewpoint
- Refinement of dimensional tolerances in construction
- Accessibility during construction work
- Quality assurance in construction

Maintenance

Maintenance is the final link in the chain in terms of preserving courtyard functionality and accessibility. Movable objects, such as furniture or advertising stands, litter, sand, puddles or snow and ice may compromise mobility and create courtyard obstructions. Maintenance should safeguard adequate route width and surfaces traversable under all conditions. Factors to be considered during courtyard maintenance:

- Safeguarding of adequate route width
- Surfaces and structures to remain unobstructed
- Accessible condition of furnishings and equipment and their location to be preserved
- Accessibility of greenery and its condition and location to be preserved
- Care of the effectiveness of drying methods for courtyards
- Anti-slip treatment and snow removal
- Quality assurance for maintenance

7.2.4 Supervision

Section 167(2) of the Land Use and Building Act states “An authority appointed for the purpose by the local authority shall ensure that traffic ways, streets, market places and squares, and parks and areas intended for the enjoyment of residents meet the standards of a satisfactory townscape and of pleasantness and comfort. Routes provided for non-motorized traffic must be kept safe and free of obstacles.” Responsibility for such supervision in Helsinki rests with the Building Control Department. According to the Helsinki Building Code the surface materials and other structures for streets, market places and corresponding traffic areas should be planned and constructed in a suitable and accessible form appropriate to the townscape and characteristics of each individual area (section 36 of the City of Helsinki Building Code).

Officials from the Building Control Department ensure that acts, decrees and official guidelines issued for urban construction are complied with. The department may also issue instructions and recommendations for construction which enlarge on the official guidelines. The Building Control Department, therefore, also plays a key role in defining the guidelines relating to accessibility. Supervision of the location of advertising stands also falls within the department’s jurisdiction.

Issuing of permits and monitoring

Officials from the Building Control Department supervise compliance with set requirements by means of the permit process, with regard to projects subject to licence involving buildings and structures or otherwise having a long-term impact on the environment. This method also ensures that accessibility is incorporated into planning and construction. The permit procedure ensures that entry to plots remains accessible, that the set accessibility requirements for courtyard areas are fulfilled, and that accessible passage from street and courtyard areas to building entrances can be achieved wherever possible, bearing in mind the applicable starting points. Compliance with accessibility-related regulations and requirements is also demanded of the interior of buildings.

The implementation of accessibility for buildings and courtyard areas being completed can also be ensured in connection with supervision during construction and at final inspection. Factors to be considered during building supervision:

- Control and supervision of plan implementation
- Supervision of implementation of quality objectives
- Inspection and approval of solutions subject to licence
- Permit guidelines for construction
- Supervision of permit implementation

General supervision of construction quality

Apart from supervising buildings and structures subject to licence, the Building Control Department is also tasked with monitoring the general quality of construction. By this means the Building Control Department has the opportunity to intervene in construction measures which are contrary to the regulations issued, even where such measures are not subject to licence. Thus the department also has an obligation to intervene where necessary with regard to accessibility in public areas, whenever deficiencies are observed. Action that may be taken by the department may include demanding the removal of obstructive or dangerous equipment from public areas. Factors to be considered during building supervision:

- General supervision of construction quality
- Supervision of accessibility and safety of public areas
- Supervision of the cityscape of structures in public areas

7.2.5 Public transport

Public transport holds key significance with regard to equal mobility opportunities for all user groups. The development of public service routes can promote the availability of services; similarly, development of public transport equipment and stop designs can improve the applicability of public transport for different user groups. Factors to be considered in public transport planning:

- Route planning taking account of functional and user needs
- Adoption of low-floor equipment applicable to all user groups
- Dimensioning of stops and platforms to suit wheelchair users and those with prams

8 SUMMARY AND PRINCIPLE RECOMMENDATIONS

1. The Helsinki for All project should draft area accessibility plans in co-operation with branches of administration and involving interaction with interest groups.
2. Branches of administration should examine their internal processes having an impact on accessibility implementation in order to ensure its practical realisation.
3. Branches of administration should update their own planning guidelines to bring them into line with the accessibility requirements defined in the SuRaKu project.
4. Branches of administration should decide on the method for steering and practical implementation of their individual accessibility work.
5. The Helsinki for All project should coordinate and monitor accessibility implementation and report on its progress to the City Board.

The steering group for "City of Helsinki Accessibility Plan 2005-2010" proposes that an assessment of results achieved be carried out during the accessibility objective year 2011, and a plan drafted for subsequent years.