# – the city for everyone

Twelve years of the Project of Easy Access



 Design • Positioning • Conferences • Indoor environment • Dignified Entrance • Parking spaces • Lifts • Processes • Seating • Checklist. Walkways • Citizens • Information • Design support • Traffic safety • Arrows • Bevels • Mountain railway • Text loops • Trade fairs • Pil aterials selection • Stoma shelves • Induction loops • Text display • Entré Stockholm • Innovative • Policy measures • Checklists • Sliding c • Education • Training • Inspection • Scrutiny • Design • Positioning • Conferences • Indoor environment 🎔 Dignified Entrance • Parking s nsensus • Control þanels • Door oþeners • Walkways • Citizens • Information • Design suþþort • Traffic safety • Arrows • Bevels • Mour k 🔹 Intersections 🕴 🛊 Building meetings 🔹 Materials selection 🍨 Stoma shelves 🍨 Induction loops 🍨 Text display 🍨 Entré Stockholm 🍨 Innova sight training programmes • Screening-off • Education • Training • Inspection • Scrutiny • Design • Positioning • Conferences • Indoor envir rgrounds • Pavement cafés • Handrails • Consensus • Control panels • Door openers 🕴 Walkways • Citizens • Information • Design sup ntrasts • Entrances • Fitness facilities • Handbook • Intersections • Building meetings • Materials selection • Stoma shelves • Induction lo Desiderata • Preferences • Stairlifts • Rebuilds • Insight training programmes • Screening-off • Education • Training • Inspection • Scrutiny • Skills • Together • Differences • Adventure playgrounds • Pavement cafés • Handrails • Consensus • Control panels • Door openers • Wo Balance support • Trees in streets • Contrasts • Entrances • Fitness facilities • Handbook • Intersections • Building meetings • Materials s Challenge • Parks • Backrest • Desiderata • Preferences • Stairlifts • Rebuilds • Insight training programmes • Screening-off • Education • nage • Aesthetic • Knowledge • Skills • Together • Differences • Adventure playgrounds • Pavement cafés • Handrails • Consensus • Co ict councils • Daisy player • e-Adept • Balance support • Trees in streets • Contrasts • Entrances • Fitness facilities • Handbook • Interse hs • Entré Stockholm • E-tool • Solutions • Challenge • Parks • Backrest • Desiderata • Preferences 🎔 Stairlifts • Rebuilds • Insight traini • Stone edgings • Doorways • Workshop • Signage • Aesthetic • Knowledge • Skills • Together • Differences • Adventure playgrounds • . Checklists • Exchange • Family room • District councils 🕴 Daisy player • e-Adept • Balance support • Trees in streets • Contrasts • Ent. nents • Mentor • Integrate • Swimming baths • Entré Stockholm • E-tool • Solutions • Challenge • Parks • Backrest • Desiderata • Prefe actile slabs • Play equipment • Kerbstones • Stone edgings • Doorways • Workshop • Signage • Aesthetic • Knowledge • Skills • Togethe ons • Special structures • Flat • Measures • Checklists • Exchange • Family room • District councils • Daisy player • e-Adept • Balance eds • Specialist knowledge • Thresholds • Pavements • Mentor • Integrate • Swimming baths • Entré Stockholm • E-tool • Solutions • Cl 🛊 Colour contrasts • Wholeness • Evaluations • Tactile slabs • Play equipment • Kerbstones • Stone edgings • Doorways • Workshop • . ctures • St Julian Prize • Planning meetings • Icons • Special structures • Flat • Measures • Checklists • Exchange • Family room • Distric b • Bus stops • Flexstep • Urban planning • Needs • 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Stockholm 2010

## Stockholm – the city for everyone

Twelve years of the Project of Easy Access

## Preface

The vision for Stockholm in 2030 is that of a competitive, attractive metropolitan city of world class. A city of world class is a city that welcomes everybody.

The City of Stockholm has been systematically working since 1999 to make its streets and squares, and the City's own properties, accessible and serviceable to all. We have come a very long way, but a great deal remains to be accomplished.

This book briefs you on the results of our work so far, with Stockholmers and experts of various kinds describing their Stockholm in an accessibility perspective.

I hope you will enjoy what you read.

Hegdate Bogg

Magdalena Bosson Chief Traffic Manager

## Contents

#### The Project of Easy Access

#### My Stockholm

Niclas Rodhborn	13
Irene Montero	19
Micke Ståhl, Johan Häglerud	23
Tomas Hedborg	27
Lisen Wimo	31
Hillevi Caris Svensson	35
Ingrid Dalén, Berit Hinderson	39

#### Our Stockholm

Insight education	45	S
Pedestrian crossings	49	Ε
Lighting	53	
Sport	57	S
Trees	61	Т
Bus stops	65	S
Culture		

73
77
81
85
89
93
95
99
101
103
107
111
115
117
121

#### 7 Stockholm 2030

Towards a world-class	
Stockholm in 2030	126

## Twelve years of the Project of Easy Access

\*For persons with disabilities of any kind, States should (a) introduce programmes of action to make the physical environment accessible\*\*

From the UN Standard Rules on the Equalization of Opportunities for Persons with Disabilities, adopted in 1993, Rule 5.

Stockholm must be a city for everyone. In December 1998 the City of Stockholm Municipal Council resolved to inaugurate an expanded programme of accessibility promotion, aimed in principle at all accessibility deficiencies in the outdoor environment and on City-owned properties being eliminated not later than 2010 and at Stockholm then becoming the world's most accessible capital city. The then Streets, Roads and Real Estate Committee was put in charge of the programme. The project management came to comprise two persons.

#### Co-operation important

Disabled Persons' Organisations (DPOs) were contacted from the very outset in order to identify the problems which each category of disabled persons wanted the project to address. Project work ever since has been informed by co-operation with these organisations. Co-operation with the DPOs proceeds mainly through the municipal Disability Councils. They have a watching brief on disability issues within their local authorities and are playing an important part in the work of accessibility promotion. The Disability Councils take part in the planning of activities and are officially consulted, for example, on various traffic, planning and urban development issues.

#### Shared responsibility

Work on making Stockholm more accessible has focused on eliminating what are termed easily removable obstacles and thereby improving accessibility in the outdoor environment, on City-owned properties and in cultural and sporting facilities.

The work of the Project of Easy Access has not included accessibility improvements in such fields as public transport, nursing and care, privately owned properties, shops, restaurants etc. The City of Stockholm does not have authority over all aspects of accessibility in the city but is dependent on all parties contributing within their several fields of responsibility.

#### Systematic work

The first task facing the Project of Easy Access was that of inventorying the improvements needed in the city. The inventory was conducted in partnership with the City Districts and with the Disability Councils affiliated to those authorities. Deficiencies have since been tackled systematically, street by street, and proposals, measures taken and measures planned continuously documented in a database.

At the same time as work on the outdoor environment got underway, work also began on City-owned properties and on cultural and sporting facilities. Entrances and changing rooms were altered and ramps and lifts installed.

#### MSEK 100 annually

Every year since 1999, whatever the state of the parties in the City Hall, the City Council has voted MSEK 100 for the work of the Project of Easy Access. This has made it possible to work systematically and on a long-term basis to improve the city's accessibility.

Many obstacles to people with functional impairment have been removed in the city environment since 1999. This has helped to make Stockholm a better city for everyone, but a good deal of work remains to be done before the vision of an accessible Stockholm of world class by 2030 can be realised, and the Project's mandate has now been extended to 2015.

This book does not provide an exhaustive description of 12 years' work, but it does convey a

#### The foundations of Sweden's disability policy

- The UN Declaration of Human Rights, 1948.
- The UN Standard Rules on the Equalization of Opportunities for Persons with Disabilities, 1993.
- From Patient to Citizen: A National Action Plan for Disability Policy, 2000.
- The UN Convention on the Rights of Persons with Disabilities, 2009.

Work in Stockholm is guided by the Disability Policy Programme for the City of Stockholm, which is based on the UN Standard Rules.

general picture of what has been done. Otherwise the project has, among other things, tied up with several interesting development projects, two of which you can read about in this book, namely the development of a navigation system for people with vision impairment and "Dignified Entrance", which is concerned with development of entrance solutions and products for buildings of historic interest.

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Lars Cedergrund	1999–2010	Lennart Klaesson	2000–2010
Ingegerd Forss	1999–2010	Paulina Eriksson	2002-2004
Kristina Lekberg	1999–2010	Erica Löfqvist	2003–2004
Berit Mårtenson	1999 – 2010	Stina Räftegård	2003 –2006
Elisabeth Zettinger	1999 –2002	Sara Malm	2004-2010
Pernilla Johnni	1999–2010	Ira Lagercrantz	2007-2008
Catarina Nilsson	1999 –2010	Evelyn Lindell	2008–2010
Lennart Nilsson	1999–2007	Erika Nordberg	2008 - 2010
Lennart Dannelind	1999 – 2005		

#### Project of Easy Access staff, 1999-2010

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A large number of trainees have also participated in the project over the years, together with many people from various City Districts and specialised administrative units and from City-owned companies.

#### The Project of Easy Access, 1999-2010

- Converted some 5,200 pedestrian crossings to the Stockholm model, which is designed for persons with mobility and vision impairment and is a good thing for everybody.
- Replaced about 10,300 deep cross-pavement drainage channels with new, shallow, rounded ones, a solution of benefit to all concerned – wheelchair and wheeliewalker users, pram pushers and people lugging wheeled suitcases.
- High-contrast marked about 1,500 outdoor flights of steps on the first and last step, to make the going easier for people with vision impairment.
- Added new handrails to steps, making things easier for people with vision and/or mobility impairment.
- Stationed benches with backrests and armrests for people needing to pause and get their breath back every now and then.
- Added armrests to old benches, so that people can get up more easily.

- Rebuilt and improved a large number of play areas and action playgrounds, making them accessible to children and parents with functional impairment.
- Improved footpaths, waterside promenades and landing stages for easier access.
- Modified about 360 bus stops by raising the kerb height to facilitate boarding and lighting. High-contrast marking enables people with vision impairment to see, for example, where the bus will stop.
- Built and rebuilt about 38 public conveniences, so that they can now be used by people with mobility impairment or with medical functional impairments of various kinds.
- Collaborated with the Sports Administration to improve the accessibility of 80 or more sports facilities. Improved entrances, installed lifts, modified changing facilities for the benefit of persons with functional impairment, installed disabled toilets installed disabled lifts in public baths, provided disabled parking spaces etc.

- Collaborated with the Culture Administration in improving the accessibility of a large number of cultural amenities, such as Kulturhuset, the Liljevalchs Art Gallery, the City Museum, branch libraries and Kulturskolan (including Our Theatre). The improvements have comprised entrance modifications, disabled toilets, lifts, improved lighting, audio-loops, signage, door openers, ramps, PA systems etc., as well as an accessibility guide.
- Collaborated with the Real Estate Administration in improving the accessibility of City-owned properties, such as the City Hall, the City Planning Offices (Tekniska Nämndhuset), the Stock Exchange, the City Library, the City Museum, the Medborgarhuset civic centre and Sjömanshemmet. Improved entrances, disabled toilets, door openers and lifts, etc.
- Built new lifts on City-owned properties and in association with Stockholm Public Transport (SL).

Taken part in various projects together with Stockholm Public Transport; SL, Posten (postal services) and Hammarby Sjöstad (urban development project). Taken part in projects concerning, for example, e-service programmes and Entré Stockholm, the latter a web-based guide to public places and apartment buildings.

Taken part in various development projects, such as e-Adept, a navigation support for people with vision impairment, and Värdig Entré (Dignified Entrance), together with the National Property Board and EIDD/Sweden (previously also known as designforalla.se), which aims to find new solutions and products to make cultural buildings accessible to all.

Compiled "Stockholm – A City for Everyone. Guidelines for creating an accessible and serviceable outdoor environment" and "Stockholm – a City for Everyone. Design manual for an accessible and serviceable environment", dealing with both the outdoor and indoor environments.

- Conducted insight training programmes for over 500 local government officials, local politicians and consultants.
- Given briefings on the work of the project at conferences and seminars, both in Sweden and abroad. Several information folders have been produced and information is uploaded onto www.stockholm.se/tillganglig (mainly in Swedish).
- Arranged conferences and received a large number of field-trippers from all over the world, especially from Japan, France and Norway.
- Compared notes with Göteborg (Gothenburg) and Malmö and with the other Nordic capitals – Helsinki, Copenhagen and Oslo.

## My Stockholm

*Welcome to My Stockholm*. Now you are going to meet ten Stockholmers who will tell you what it's like, living in Stockholm. You will accompany them on walks and bus journeys, to the cafeteria, the theatre, the action playground and other favourite haunts.

How does the street environment affect their freedom of movement in the city? Why do lower kerbs matter? Why do pedestrian crossings with acoustic signals matter? Or an abundance of accessible toilets?

See Stockholm through other eyes and discover a city which has become more welcoming and accessible to everyone.

\*\*Sweden and Stockholm are well to the fore, but we ought to have legislation on accessibility.\*\*

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#### Niclas Rodhborn:

## "Stockholm's a good place, but it can get better still"

Stockholm can very well bear comparison with other cities in the world as regards wheelchair access. But the USA is the best country for access. There you never have any problems. That's probably because, like Norway, they've passed laws about public places being accessible to everyone, says Niclas Rodhborn, a wheelchair-bound élite sportsman playing both tennis and basketball at national league level.

Södermalm, Stureplan and Kungsholmen are Niclas Rodhborn's favourite haunts in Stockholm. He lives in Södermalm, likes going to places round about Stureplan for lunch and dinner and has many friends in Kungsholmen. His sporting activity also involves a lot of travelling, and he is able to compare accessibility in Stockholm with the situation in many other of the world's cities. We meet outside the door of his apartment block in Hornsgatan just before lunchtime, our plan being to visit a pavement cafeteria on Stureplan. On our way down to Slussen we talk about the improvements that have been made for wheelchair-bound people and others with functional impairment in recent years – and about the obstacles which, for one reason or another, nothing has been done about.

#### Eliminate gradients

"Look at this entrance. Here they've built up the pavement so that it slopes upwards to the entrance. That's a good way of avoiding steps and changes of level. They ought to do this in more places. It's a terribly simple change which people who can walk perhaps don't give a thought, but it makes a big difference to us'', he says as we pass by an entrance in Hornsgatan.

#### **Niclas Rodhborn**

- Södermalm, Stockholm.
- 40 years.
- Full-time élite sportsman since 2000, playing in the national basketball and tennis teams. Has taken part in two Paralympics, played tennis in Athens in 2004 and in Peking

in 2008. Won a European Championship gold medal with the national basketball team, a World Championship gold medal with the national tennis team and a World Championship bronze medal in 2009 for tennis.

- Swedish Ambassador for Wings of Life, an international organisation supporting spinal cord research.
- Formerly employed by Rekryteringsgruppen (the Recruitment Group), an association active in physical and mental training for

people with functional impairment.

- Born and bred on the island of Gotland, has lived in Stockholm since the beginning of the 1990s.
- Wheelchair-bound following a car accident 20 years ago.

A couple of doors further on things don't look so good. Here there is a video shop with several steps from the street, effectively excluding the majority of wheelchair users.

"Not good", says Niclas Rodhborn.

Arriving at the intersection of Ringvägen and Hornsgatan, we are left standing a while, waiting for the lights to change. Most pedestrian crossings now have bevelled kerbs instead of the former sharp edges.

"That's a great improvement for us wheelchairusers. Kerb edges don't give me any trouble: I still have strong arms and I'm in good trim. But for someone with less muscle power in their arms or sitting in an electric wheelchair with small wheels, kerb edges obliging you to 'do wheelies' are just out of the question", says Niclas Rodhborn.

#### Legislate on access

Niclas Rodhborn broke his back in a car accident when he was 19. He had played both football and hockey up to the age of 15 and then gone in wholeheartedly for hockey. That helped a great deal during his rehabilitation.

"And there's a big difference between getting injured when you're 19 and when you're 50. The body is stronger and you can adapt more easily to life in a wheelchair when you're younger. Quite soon after the accident I felt that I wanted to go on with sport, and for the past 10 years I've been playing tennis and basketball full time." He has harvested many medals from the Paralympics, world and European championships and other major events, as well as being a seasoned traveller who has seen many countries.

**"The USA is definitely** the best country for travelling. There they've passed laws about accessibility, and it makes a big difference. All public places, every little restaurant, pavement café and shop, has to have a toilet and a lift or a ramp so that people can get in everywhere. Sweden and Stockholm are well to the fore, but I think we should also pass legislation, then things here will get even better", says Niclas Rodhborn.

#### Think "flat" and remove obstacles

We continue down Hornsgatan, past all the shops and pavement cafés. Billboards, tables and chairs are scattered about, but nothing gets in Niclas Rodhborn's way.

"On the other hand, getting along here would be trickier for a blind person", he says.

On the subject of pavement cafés, the City is working to distribute information and knowledge of the rules to proprietors. Among other things, all pavement cafés must have chairs and tables properly screened off from the pavement, though the screening must not impede access for wheelchairbound persons.



**"Flattening" the street** environment is another important means of improving access for wheelchair-users and parents with prams. Among other things, the City has replaced all pavement guttering – the channels leading water from downpipes across the pavements and into the street drains.

"The channels used to be narrower and deeper, and if your wheelchair had small front wheels you were liable to get stuck or even to be pitched forward out of the chair. Riding over the new channels, you hardly notice them", says Niclas Rodhborn.

#### Getting the bus from Slussen

At Slussen we decide to catch the bus to Stureplan, and Niclas Rodhborn confesses that he doesn't go by bus very often. Mostly he goes by car or metro (T-bana).

"The steps on all the buses used to be quite a problem, but that's improved a lot in recent years, so I think I'll be taking more bus rides in future. I prefer travelling above ground to under it."

At the bus stop the kerb height has been raised to 16 cm to facilitate boarding, and a lot of buses can "curtsey" to make things easier still for wheelchairs, wheelie-walkers and prams. Many buses also have extendable ramps. "That's great. I can manage pretty high edges, but it's less easy with heavy electric wheelchairs and for people who don't have such strong arms", says Niclas Rodhborn.

#### I think I'll be taking more bus rides in future. It works much better than it used to.

When we get to Stureplan you can see quite clearly what he means. Here the bus doesn't pull right into the kerbside at the bus stop, because there are parked cars in the way. Instead it stops 2 dm from the kerb. Niclas Rodhborn gathers strength and "jumps" off the bus, missing by just a centimetre or two the tree and a rather unsuitably positioned waste bin ... No one in an electric wheelchair could have managed it.

"Look, here's another good change", he says, pointing to the bank's cash dispensers, one high up and the other low down. "I can't use the one high up, but the one low down works perfectly. More people ought to think like that, in every connection."

 Small, narrow pavement channels have been replaced with rounded ones to facilitate access.

The Södermalmstorg ramp is a good one, and there aren't any bikes in the way.



#### Better access for everyone

- Kerbs have been lowered at more than 5,200 pedestrian crossings, to eliminate level changes.
- Kerb heights have been raised to 16 cm at about 360 bus stops, to facilitate boarding by wheelchair users and others.
- 38 public conveniences are accessible to wheelchair users.
- The City of Stockholm has 1,552 parking spaces for drivers with functional impairment.
- About 10,300 new rounded pavement gulleys (leading downpipe water over the pavement and into the street) have replaced the old deep ones.

#### Not everyone gets pass marks

Over our fried Baltic herring at the kerbside restaurant in Stureplan, we go on talking about life, sport, the future – and accessibility. A well-subscribed restaurant and several neighbouring bars just a little way off do not pass muster. "If I go out with someone who's in a wheelchair, we go to places we know we can get into. I only visit the place next door with mates who can walk and who I know don't mind hauling me up the stairs. Though it's always a bit disheartening in places like that, you're not quite a free person. I don't like having to ask for help to get to the toilet or get out onto the street again, I want to fend for myself", says Niclas Rodhborn.

After 10 years as a professional sportsman with ten training sessions a week and many long journeys, he doesn't know how much longer he'll be able to continue at national team level.

"I'm 40 now and I've started to wonder what to do next. Now I've volunteered as an ambassador for Wings for Life, a voluntary fund-raising organisation for spinal cord research. There's far too little research into this kind of injury, in spite of many people being affected year by year and the injuries making such a big difference to their lives. I think many of us still dream of one day being able to walk again", he says.



With bus and pavement as flush as possible, boarding and alighting are made easier for lots of people.

If I go out with someone who's in a wheelchair, we go to places we know we can get into? <text>



2010



"I've got so much to catch up on, so now I go to everything!"

#### Irene Montero:

## "I feel like someone who's just learned to read"

When the Stockholm City Theatre began captioning some of its performances, a whole new world was opened up to Irene Montero, who has a hearing impairment. For the first time in her life she could understand what the people on stage were saying and could follow the plot.

Before the City Theatre began captioning some of its performances, Irene Montero hardly ever set foot in a theatre. There was no point, because she couldn't understand a word of what they were saying. She has now been a City Theatre habitué since the theatre began captioning some of its performances in 2002.

"I should think by now I've clocked up between fifty and a hundred performances. I've got so much to catch up on, so now I go to everything!"

#### Script in lap

The Stockholm City Theatre introduced text display as an aid to the deaf and hard of hearing in 2002, on the initiative of its Project Manager, Jakob Tigerschiöld. The Project of Easy Access has helped to fund the project, together with the Stockholm City Theatre and the Swedish Arts Council.

**The text display is a round,** oblong box with a display at the front. The display shows the actors' lines and all the sounds coming from the stage. It's a laptop unit, enabling the user to read the text at close quarters.

There is a murmur of voices in the main auditorium. In one row of seats there are two young women, each with a laptop text display. They are conversing in sign language. Next to them, a boy

#### **Irene Montero**

- Lives in Södermalm.
- 65 years old.
- Irene Montero is retired now, but she used to be a dancer and dance instructor.
   By dancing to live music she can sense rhythms

from the acoustic vibrations. She also worked as National Secretary with the Swedish Dance Teacher Association.

- Irene is still dancing and particularly enjoys dance karaoke at the Friskis & Svettis gymnasium.
- Her favourite spot in Stockholm is the waterfront promenade along Årstaviken, where she often goes for bracing walks.
- Irene's congenital hearing impairment prevents her from apprehending speech, but with assistive devices she can pick up certain sounds.

sitting beside his mother asks anxiously: "Is the dragon coming soon?"

And so the tale begins of the two Lionheart brothers who die and come to the land of Nangiala. The stage is all a-glitter with colourful costumes, beautiful landscapes and a sparkling night sky. During the interval, Irene waxes lyrical over the brilliance of it all.

"I love it when it's so visual, when things happen on stage which I can understand at once."

### The eyes decide what the ears will hear

Irene Montero is 65 and was born with hearing impairment. She can pick up sounds with a hearing aid but cannot hear words. She lip-reads everything that is said. She is very interested in the arts, goes to lots of art exhibitions and likes watching ballet at the opera house.

**"I have to sit well forward** so that I can see the orchestra. That way I can connect the sound with what I see and pick out certain sounds more easily. My eyes decide what my ears are going to hear. That's what it's like if you haven't been hearing properly for 65 years", she smiles. There are many children and parents in the audience. Irene is glad of the City Theatre captioning children's performances.

**"All parents must be able** to go to the theatre with their children. If the children ask about some-

#### I love it when it's so visual.

thing that's happening on stage, the parents must be able to answer. I can't explain anything to my child if I don't myself understand what's being said."

#### When the dragon comes in

Act II is about to begin and we return to our seats. Irene settles down in hers with the text display on her lap. Behind us the boy can be heard, anxiously asking: "Is the dragon coming now, Mum?"

When the dragon does finally appear, the real sensation is not its big head spouting fire but its horrendous belowing when Jonathan plunges the sword into its maw. A sound which Irene cannot hear but can still imagine because, simultaneously



The text display is a round, oblong box enabling more theatre aficionados to enjoy the performances.

with seeing what is happening on stage, she can read about the deafening roar in the text display window.

"I feel like someone who's just learned to read. Before, when people talked about different plays or referred to them, I just sat there looking daft, but now I've seen Waiting for Godot, I know what they're talking about."

#### Text display at the Stockholm City Theatre

- The Stockholm City Theatre introduced text display for the deaf and hard of hearing in 2002.
- The City Theatre also has an IR system, a loop for wireless transmission of sound from microphones to a hearing aid.
- The project is funded by the Swedish Arts Council, the Project of Easy Access and the Stockholm City Theatre.
- Captioned performances at the Stockholm City Theatre during the spring of 2010 will include Shakespeare's "Hamlet", Harold Pinter's "The Birthday Party" and Sofia Fredén's "Live and Learn".

The text display shows the actors' lines plus all the other on-stage sounds.



Sounds in the townscape are important sources of information

Johan Häglerud, left, and Micke Ståhl, right.

#### Micke Ståhl:

## "Here's hoping no one puts a signboard in the way"

Cyclists, dogs on long leads, billboards, café tables, flower pots, roadworks and scaffolding often make walks an involuntary adventure for Micke Ståhl.

"Sometimes getting around in the city is no trouble, sometimes it's a bit of a hassle. One thing I'd like to ask for is more pedestrian crossings with traffic lights", he says. "That would make a big difference to a lot of people with vision impairment."

At Tjärhovsplan in the Södermalm district, the traffic is heavy, with buses passing by in both directions at one-minute intervals. There are several pedestrian crossings here, some equipped with both lights and acoustic signals and others with just pole signs, as well as a couple of bus stops. We stop at one of the unguarded crossings.

"I've no idea if there's a crossing here. If I find the pole I can guess it's there, otherwise there's nothing to tell me I can cross here. And even if I found the crossing, I think I'd keep walking till I found one with lights and acoustic signals instead", says Micke Ståhl. "There's too much traffic for me to feel safe here."

Johan Häglerud also prefers crossings with lights and acoustic signals, even though he can make out the pole and the white zebra markings without too much trouble.

**"At a crossing with no lights** you need some kind of dialogue with drivers, and above all with cyclists, but I can't make visual contact, so I can't be sure if they're going to stop or not", he explains.

#### The stick as a working tool

Johan has a congenital vision disorder which gives him blurred vision, "like looking through a plastic pocket", as he puts it. Added to which, he lacks colour vision. At one time, when his vision was worse than it is today, he used a laser cane and found it very useful. Later, when his sight improved a little, he tried a white marking cane, mostly to alert other

#### Micke Ståhl

- 🕨 Lives in Hökarängen.
- 34 years old.
- Works as a political secretary with the Swedish Association of Visually Impaired Youth.
- Amateur musician, drummer with the Tempus rock band.
- Has severe vision impairment and cannot distinguish between light and dark.

#### Johan Häglerud

- Lives at Gullmarsplan.
- Freelance musician, mostly playing the double base. Plays in the Uncle Sun band and works a couple of days every week as a studio musician.
- An active member of the Swedish Association of Visually Impaired Youth.
- Has a congenital eye disorder which leaves him with roughly a quarter of normal vision.

people to his being vision impaired, but he didn't feel quite comfortable about it.

"No, people were too solicitous, and I can manage quite well on my own", he says.

Micke always uses a stick, and when we cross the street by the crossing with no lights, he uses the stick to find his way. He can sense the difference between the asphalt and the broad white patches, so long as the white paint hasn't worn away too much.

"I can also tell where the crossing starts and ends, thanks to the kerb and the bevel, which was originally meant to make things easier for wheelchair-users", he says.

"The Stockholm Model is a smart idea for pedestrian crossings. Both the acoustic signal and the arrow on the box make it easy to get your bearings, says Johan. I can't always see if the light's green or red, so the acoustic signal comes in very useful."

#### Things can get awkward if someone's just plonked a table down in the street.

#### Navigation by sound

The sounds of the urban environment are important sources of information, especially to Micke. He uses both noises around him and his own sounds to get his bearings – for example, the sound of his own footsteps and the sound of his stick hitting something. When visiting a new place he is naturally more concentrated and attentive then when walking along familiar streets.

"I think my knowledge of different places is a mixture of visual and tactile experiences. I had a certain residue of vision until I was into my teens, and there are some places I have clear pictorial memories of. Others which I have not seen I'm still able to picture. Somehow it takes root in your mind, like a bodily recollection. I just know what it looks like", he explains.

We pause at one of the bus stops in Tjärhovsplan to take a closer look at one of the latest improvements for people with impaired vision – a button on the shelter for recorded information about bus departures. When you push the button, the voice says: "The 76 bus for Ropsten is now starting. The number 2 bus for Roslagstull will be leaving in three minutes."

"A concrete improvement which quite definitely simplifies bus travel. It's hard for me to read the display, and when there's a button I use it, so that I'll know how long I have to wait", says Johan.

"Yes, this is great", Micke agrees. "This way I can find the right bus stop in places like Slussen, where there are many of them. My only complaint is that they could turn up the sound a bit, because it tends to get drowned out by all the other noises."

#### Accessible bus stops

Responsibility for bus stops is shared between the City of Stockholm and SL. The City looks after the ground and SL runs the actual shelters. Many bus stops have been rebuilt in recent years, to make them more accessible. Among other things, kerb heights have been raised for easier boarding with a wheelchair, wheelie walker or pram.

**Running along the pavement** is a wide marking in the form of white tiles, clearly indicating that this is a bus stop. Tactile black tiles at the end of the white ones show where the forward door of the bus will come to rest, for boarding. This is fine for Johan, but Micke seldom uses it.

"It can be hard to tell the difference with your stick or feet. I usually stand and wait till a bus comes along and then listen for the hissing noise instead. But that won't work if there are several buses following each other", he says. "It would be a good thing", Micke continues, "if they could develop some kind of 'speech' from the bus, a voice saying that this is the number 3 for Roslagstull."

#### Obstacles and attitudes

Walking towards Medborgarplatsen, we come across a good many obstacles on the pavements. A shop in Tjärhovsgatan, which is a narrow street, has positioned both tables and garment racks outdoors, and 10 metres further on there is a big advertising sign that takes up half the pavement.

Out along Folkungagatan, many cafés and restaurants have put furniture outdoors, most of it quite unenclosed, despite there being clear guidelines on how they should be marked and in spite of the Project of Easy Access working to disseminate information about good and simple solutions.

"When I think I know a place, I walk pretty fast", says Micke, "and so things can get awkward if someone's just plonked a table down in the street. Falling over someone while they're having their coffee is embarrassing and just a teeny bit dangerous."

Johan and Micke both find that attitudes to functional impairment and accessibility have improved in recent years.

"Yes, and this quite clearly has to do with the campaign for better accessibility. People with functional impairment are more visible in today's society. But there's still room for improvement."

Micke and Johan both think the Stockholm Model is a smart solution for pedestrian crossings.



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### Tomas Hedborg: Gulping down information non-stop

Kulturhuset is one of the liveliest places in Stockholm. Exhibitions, theatre performances and installations come and go endlessly, and there are people in motion all the time on escalators and in lifts. So what does it feel like standing here if you have difficulty sifting information? Ask Tomas Hedborg. He knows.

"I gulp down information non-stop. I swallow everything I see, so that if I go into a place like Kulturhuset and clear information is lacking, I'm liable to get a bit confused."

**To Tomas Hedborg,** every day is a struggle to cope with his various neuropsychiatric disabilities. "A cocktail of functional impairments", as he himself puts it. All through his formative years he had to contend with concentration difficulties. He was uneasy and impatient and was forever getting told off by teachers. He was diagnosed with ADHD in adult years, and it was only then that everything clicked into place. Now he knows why he has difficulty in focusing his attention and assimilating information, at the same time as parts of him love learning new things.

#### Overview a good thing

For 10 years now, Kulturhuset has been actively endeavouring to improve its accessibility and be a cultural centre for everyone. Clear information and communication, partly to make things easier for people with cognitive functional impairment, are a part of those efforts.

Each storey has a signboard next to the escalator, clearly showing what part of the building you're in. The signboard is red, which makes it en eye-catcher in the teeming surroundings.

As soon as we pass through the doors on the entrance storey, information is there to meet us. A notice board with flyers from performances and exhibitions, signage for the different theatre stages,

#### **Tomas Hedborg**

- Lives in Danderyd.
- 51 years old.
- Used to work as an IT technician and as an IT literary editor, but now works part time with RSMH – the Swedish

Association for Social and Mental Health – covering health issues.

Tomas is bipolar and has various neuropsychiatric functional impairments, including ADHD and Asperger syndrome, which makes it hard for him to manage information and create a correct view of time and space.

The Fältöversten shopping centre at Karlaplan is one of Tomas's favourite haunts in Stockholm. In summer he enjoys strolling along Strandvägen, looking at the boats.

#### A cultural centre for everyone

- Entrance doors open automatically.
- For better accessibility, the floors are level and have no thresholds.
- The rebuild now underway at Kulturhuset will including further accessibility improvements, e.g. an indoor guidance system for people with vision impairment.
- The lifts carry information in Braille, and a recorded voice tells you which storey you have come to.
- Hearing assistance is available at performances and lectures.
- Wheelchair spaces are provided at all events, and there is also a courtesy wheelchair.
- There are disabled toilets on several floors.

and arrows indicating cafés and shops. Tomas Hedborg goes up to the red sign to the left of the escalator. The sign gives an overview of the building's different storeys. At the top it says "K1" in big white letters on a black ground. The black stands out against the red.

"Why is it black?" Tomas wonders. The rest of the sign is red. Does the black, at the top of the sign, mean the top floor.

#### Kulturhuset's the ideal place for an information freak like me.

After looking more closely, we understand that the "K1" at the top of the sign means "You are here". Tomas Hedborg appreciates the sign showing all the different storeys together. That makes the information more coherent, giving him an instant picture of the whole building.



#### A building full of possibilities

We ride up on the escalator, pausing on the different floors. There are people everywhere. Children in thick winter jackets, suited gentlemen and chessplaying seniors.

On floor 2 we enter Läsesalongen, the Kulturhuset library. Tomas, catching sight of a shelf where there are comics, goes up to it and starts leafing through an Asterix in French.

**French is just one of** the many languages Tomas Hedborg speaks fluently. He has had a number of periods of travelling and living abroad. After high school he read mathematics and physics at university, and he worked for several years as an IT technician and editor.

"Kulturhuset's the ideal place for an information freak like me! I get bored easily, and all my life I've enjoyed learning things. My brain thrives on it."

At the music shelf he finds an acoustic guitar music CD which he decides to borrow. He's just made up his mind to go on a guitar course next spring, and he thinks the record may help him.

"There are so many possibilities here", he says.

#### A fuller life

At Café Panorama, up on the fifth floor, there are prams and lunch guest all over the place. The sound level is high, with cutlery and plates clattering on hard tabletops and hungry children in tired paternal laps.

We get a table by the window, overlooking the Sergels Torg piazza.

**"In order for my life to work",** Tomas explains, "it has to be a lot more structured than most other people's. That gives me security. If I weren't so structured, my life would fall to pieces. For example, I wouldn't have come in time to meet you today. I wouldn't have remembered it."

After our coffee, on our way down in the lift, Tomas says that it is important to him to be frank about things and to try and accept himself as he is.

"Sometimes I can feel that my disability is useful to me. My friends often tell me that they love being with me because I remember where everything is. I remember entry codes, names and places. All the things that no one else commits to memory."

 Kulturhuset is a goldmine for Tomas Hedborg, with his fondness for people, music, books and comics.

Clear signage and information in Braille helps everyone find their way more easily.





\*\*A few hardships don't matter, Elina wants to try her wings just like any other child.

#### Lisen Wimo:

## "A good thing Elina can play on her own terms, with other children"

It's the autumn mid-term holiday, and there are any number of children in the Bandängen adventure playground playing, riding the swings, climbing, making a fuss of the animals and grilling hot dogs. We're there to see how the action playground works for Elina Wiman, who uses a wheelchair and a wheelie-walker. Our first port of call: the rabbit hutch.

"I think we've been here before", says Lisen Wimo, "but it was a long time ago. I didn't actually know Bandängen was accessible to children with mobility impairment. It'll be interesting to see how Elina gets on."

After visiting the chickens in their big run, we arrive at the rabbit hutches. Elina has no problem negotiating the rap with her wheelie-walker.

"A good job it's quite level into the rabbits, so she can get inside and pat them just like all the other children", says Lisen Wimo.

#### Accessibility a balancing act

At the big climbing frame in the middle of the playground, things immediately turn more complicated. The frame is built for climbing in, with lots of obstacles, different levels and considerable heights.

"If Elina is to play in the climbing frame, my husband or I have to climb with her and lift her. The very best way is for both of us to be with her at once, that makes it easier for us to offset all the things that don't work. But if one of the grandmothers goes with children, it won't work, because lifting is too heavy for them, and then Elina has to go without playing there", says Lisen Wimo.

"I realise it's an awkward balancing act, how much you can change without spoiling the fun. Here it's the climbing that's fun, and so you can't completely anaesthetise it, because that destroys the excitement. Though it would make things easier if there were a ramp all round the climbing frame instead of steps", she continues.

#### Lisen Wimo, with daughters Tilde and Elina.

- Live in Farsta but will shortly be moving to Enskede.
- Aged 44, 6 and 5.
- Lisen is a nurse. Tilde is in a pre-school class

and Elina is in preschool.

- The family also includes Sverre Söderlund, 39, Axel, 21, Agnes, 16, and Leo, 9.
- Elina has a mobility impairment, due to cerebral paresis, which makes her dependent on a wheelchair or wheelie walker.
- The family are very fond of walking along the Djurgården waterfront, round Mariatorget in Södermalm and round Medborgarplatsen.

#### Welcome to the Bandängen Adventure Playground

The Bandängen Adventure Playground is also designed for children with mobility impairment. Facilities include:

- Sitting support in the sandpit.
- Wendy houses with ramps.
- Animal sheds with ramps.
- An obstacle course with handrails.
- An accessible land bandy pitch.
- An accessible paddling pool.

- Outdoor furniture that everyone can use.
- An accessible winter shelter with toilets.
- A flat underlay underneath the adventure frame and climbing frame.
- A special swing.
- Tactile footpaths.

"It looks like a big ship and now we're right at the top. Do you think it's creepy?" she asks. "No", says Elina.

#### Handrails make a difference

In adventure playgrounds which have not been made accessible, little things can mean big problems for children with mobility impairment. For example, a tall flight of steps up to a terrific slide, absence of handrails or excessively wide steps which make it impossible for the child to hold onto the sides.

#### A good underlay and something to hold onto while playing make life easier for Elina.

**But Elina finds** a point in the climbing frame where the steps are lower and there are handrails to hold onto. She climbs up to the first landing, crawls through a tunnel and finishes off by sliding down the helter-skelter together with Tilde.

"Though it was a bit slow", says Tilde.

"Yes, not exactly supersonic", says Lisen.

On the other side of the climbing frame, Elina wants to climb up to a higher landing. Here it's wide enough for Lisen to go behind and help her up. "It's much more fun for a child to be able to climb up independently", says Lisen Wimo. "Sometimes it doesn't take very much for things to work for Elina; she has some movement in her legs. Handrails at different heights can make all the difference.

**"We're a bit limited",** she continues, "because there isn't any adventure playground near us that's been made accessible. Elina can't do much in the one nearest to us, and it gets boring after a while."



The Bandängen adventure playground has gone in for integrated solutions, instead of special ones, to improve accessibility.

#### Playing naturally together

On the way to the Wendy houses we meet Kicki Nilsson, the Bandängen adventure playground's supervisor. She has worked in a variety of adventure playgrounds for over 30 years now and was actively involved in the Bandängen rebuild. That has been in progress for 3 years now and is a part of the City's accessibility programme.

**"We've tried to integrate** accessibility instead of providing special solutions. It's important for children with functional impairment to be able to play with other children. Among other things, we've made an opening onto the bandy court so that they can play wheelchair bandy, and we've built a sand table where children can stand or sit in wheelchairs and play", she reports.

"The sand table's a great success. It works excellently with a wheelchair and Elina can stand there with the wheelie walker too if she prefers to. Things work well at the Wendy houses too; the ramps enable her to join in on her own terms. She can sit in her wheelchair or walk with the wheelie walker and go in and out unassisted. And the houses are big, so there's room for lots of children."

#### Wanting to be independent

We continue towards the obstacle course, which is a narrow footpath with various kinds of surfacing and handrails at different heights. Elina lets go of her wheelie walker, grabs hold of the handrails on each side and starts walking and climbing.

"She appreciates things she can do entirely on her own and which are exciting and different. She wants to try her wings just like any other child. This is a good place – a bit difficult, but still possible", says Lisen Wimo.

Elina gets stuck at the log in the middle of the obstacle course. It's a bit high, but with one foot up on the log she can manage.

"A few hardships don't matter", says Lisen.

#### Other adventure playgrounds and play areas which have been improved

- Akalla By, Akalla.
- Bergsgruvan, Södermalm.
- Brådstupsparken, Hägersten.
- Båtsmanstorpet, Riksby, special arrangements for children with vision impairment
- Gulsippan, Hässelby villastad.
- Gustav Adolfsparken, Östermalm.
- Humlegården, Östermalm.

- Husby gård, Husby.
- Kulan, Sätra.
- Köpeskillingen, Hägerstensåsen.
- Lugnet, Västertorp.
- Nytorget, Södermalm.
- Nydalsparken, Tensta.
- Observatorielunden, Norrmalm.
- Tessinparken, Östermalm.
- Vippan, Fruängen.

**On the way to the swings,** Lisen gives Elina a lift in the wheelchair. There are steps here, but also a level gravel path. But Elina doesn't want to try the special swing, she's aiming for the two-seater swing instead. Tilde joins her, and soon the two sisters are swinging together.

"I think it's a good thing, there being several different activities that Elina can engage in by herself with both her wheelchair and her wheelie walker and where other children can join in", says Lisen Wimo. "That way, play gets off to a natural start."

"We'll definitely be coming here again. After all, it's quite near where we live", she concludes.

<sup>••</sup>Incontinence doesn't have to be suffered in silence. There are good treatments and good assistive devices.<sup>\*\*</sup>

#### Hillevi Caris Svensson:

## We still need more public conveniences!

Stop being ashamed of your incontinence! is Hillevi Caris Svensson's advice to all sufferers. She herself suffered in silence for four long years. She resigned from her executive post, lost touch with her friends and came near to wrecking her marriage. Once she had screwed up the courage to talk about her problems, she got help, and today her job is spreading information about incontinence and pressing issues to give the people affected better chances of a properly adjusted life. More public conveniences are an important part of that issue.

There are a lot of people about in Östermalmstorg at this time of day, just before lunch. In one corner of the square stands the very latest Stockholm loo model. The door carries symbols showing, among other things, that the toilet can be used by people in wheelchairs. Together with Hillevi Caris Svensson we insert the obligatory 5 crown piece and take a look inside. **"This is super!** Very well designed for wheelchair users, no thresholds, and plenty of room so you can wheel the chair under the wash basin. There's even an extra shelf for a stomi bag. And the waste bin looks OK, it doesn't need to be any bigger, because incontinence protectors nowadays are small and handy", she continues.

#### Common problem

Incontinence is endemic, far more common than diabetes. Nearly a million Swedes have incontinence problems, and it has been estimated that one out of every four women aged over 35 is affected at some time in life. The same goes for one-tenth of men over 35. Incontinence is more widespread among the elderly, but a lot of young and middleaged people are also affected.

#### **Hillevi Caris Svensson**

- Lives in Huddinge, on the outskirts of Stockholm.
- 46 years old.
- Chairperson and moving spirit of the Kontinet network, which

exists to illuminate and heighten awareness of incontinence issues by means of education, opinion formation and information distribution. Webmaster for www.kontinet.se, which among other things has a panel of experts who can answer questions and give advice. Often engaged to lecture at trade fairs and other

events up and down the country.

- Married to Tony and they have a son, Max.
- Suffered previously, for several years, from stress incontinence.

The three commonest types are stress incontinence, urge urinary incontinence and overactive bladder incontinence. Stress incontinence is an involuntary urine leakage caused by such everyday physical exertions as sneezing, coughing, laughing, bending down or lifting something heavy. With urge incontinence, the bladder muscle contracts involuntarily, and one often has sudden contractions and an overpowering urge to pass water. With an overactive bladder the bladder muscle tends to contract even through the bladder is not full, and one experiences a sudden, powerful urge to pass water.

#### Meticulous planning

If a person suffers from incontinence, just going shopping or meeting friends often calls for meticulous planning. Where's the nearest loo? Do I have enough protectors with me? Do I have anything to change into, in case I have an accident?

"I always carried an extra pair of identical slacks around with me. Black, preferably, because then if you have an accident it won't show so much. And in my bag I had any number of protectors, to be on the safe side", Hillevi Caris Svensson recalls. "I had knickers and ordinary sanitary towels, because I thought they worked just as well – which they don't! Proper incontinence protectors actually have nearly 8 times the absorption capacity of protector briefs." **Often she used to refrain** from drinking anything or having coffee with friends, so as to maintain a good fluid balance. Too much fluid augments the pressure in the bladder, and if you have an incontinence problem this can mean needing a toilet in a very big hurry.

### The only thing I miss in the loos is an incontinence protector dispenser.

"The toilet is really a friend in need", says Hillevi. "Stockholm is quite well off for public conveniences, but we quite definitely need more of them. You can't always just walk into a restaurant or café and use theirs. Sometimes I've been forced to buy a cup of coffee just to borrow the toilet."

#### Gender equality tube

At the back of the Östermalmstorg public convenience is a urinary. There is just a male symbol on the door and admission is free of charge, but, Hillevi explains, this urinary can be used by women too.

"During my years working with the Kontinet network I've met loads of women with good ideas



and inventions. The pee-tube is one of them. It's a funnel you pee into, and the result is led off in a tube. You don't have to pull your pants down and show your bottom, you simply pull down in front and pee standing up."

**"The pee-tube,** which in Swedish I've renamed "the gender equality tube", makes it easier for girls to pass water anywhere. At festivals, at sporting events, in open country and even here in Östermalmstorg!"

#### Laugh protector defuses

Hillevi has also found a new name for incontinence protectors – "laugh guards". It is quite common for people to leak when they laugh or exert themselves.

The change of name is a small example of her efforts to defuse the disorder and its symptoms, to embolden more people to talk about their problems and seek assistance. Education, opinion formation and publicity are other important fields for Hillevi Caris Svensson and Kontinet.

"There's no need to go round suffering in silence, like I did. That's a recipe for disaster. We all have

#### Where's the nearest loo?

▶ The brochure Offentliga toaletter (Public conveniences) lists 223 Stockholm loos, describing their accessibility and giving their addresses and opening hours. Some 80 per cent of them are designed for wheelchair access. Many of them are also designed for stoma patients, with a special shelf for the stoma bag. The brochure can be downloaded or ordered from www.stockholm.se (in Swedish).

to understand that incontinence is a widespread problem and nothing to be ashamed of. There are good treatments and assistive devices for all kinds of incontinence, and they can improve the quality of life considerably. The City of Stockholm can help by providing more public loos, preferably complete with laugh guard dispensers."

Most of Stockholm's public conveniences are designed to admit wheelchairs, and many also have a special stomi bag shelf.

Hillevi Caris Svensson gives the City's loos high marks but would like to see still more of them.



Accessibility has become a big issue in the past few years

OP DOLOMITE

Ingrid Dalén:

## "Level ground means everything to me and a lot of others like me"

Ingrid Dalén lives on Kungsholmen, the district where she grew up. She feels at home in Norr Mälarstrand and has vivid recollections of skating on the ice of Lake Mälaren 70 or 80 years ago. Today we rendezvous for a walk beside the water and a closer look at accessibility from the viewpoint of seniors who aren't as agile as they used to be.

We meet in the Rålambshov Park on a fine but blustery day in autumn. Ingrid Dalén has walked there from her home on Kungsholmen and her friend Berit Hindersson arrives, a little late, by special transport from Södermalm. An operation earlier this year has left her dependent on a wheelie walker.

"It's not easy being punctual when you're dependent on others", she says, smiling a little.

Along the waterfront at the bathing point and cutting through the park are new footpaths surfaced with asphalt and a smooth, hard fine aggregate. There is a ramp behind the cafeteria, leading up to the Rålambshovsleden clearway. Autumn spring cleaning is in full swing, with leaves being collected and carted off.

"The asphalt here makes the going easier", says Berit Hinderson, "but the gravel isn't so good, especially for wheelchairs. And I'm glad they're collecting the leaves, because it would get so slippery otherwise."

Ingrid Dalén agrees with her. Yes, that's much appreciated. If, like me, you use walking staves, autumn leaves can be really treacherous.

#### **Excellent** park benches

Norr Mälarstrand is a popular waterfront promenade extending all the way to the City Hall. There are several cafés, restaurants and seats along the way. Although it's the middle of the day and an ordinary weekday, we meet lots of people walking

#### Ingrid Dalén

- Kungsholmen, Stockholm.
- 87 years old.
- Retired.
- Formerly a Director at the then Ministry of Housing, actively involved with disabled policy since the mid-1960s.
- Has some mobility impairment, due to wear and tear on back and knees in the course of a long life.
- Favourite haunts include Kungsträd-
- gården in cherryblossom time, Reimersholme and the Kungsholmsstrand promenade in towards Tekniska Nämndhuset (the City Planning Offices).

#### From the City Hall to Rålambshov Park

- The walking distance along Norr Mälarstrand is about 1.5 km.
- Many accessibility improvements have been made at or near the City Hall: pedestrianised walking areas, and entrance zone with seating, ramps, cycle racks, new lighting, guidance strips with kerbstones, granite slabs with high-contrast markings at entrances.
- Along the promenade to the filling station opposite Kungsholmstorg: smooth granite slabs with small paving stones round them, seats with armrests, a public convenience, lighting.
- From the petrol station to Rålambshov Park the footpath is surfaced with asphalt, there are seats with armrests, two landing stages with wheelchair access, a play area, lighting, several ramps and footpaths down to the promenade, and an accessible outdoor cafeteria with a disabled toilet.

their dogs, strolling at a leisurely pace or seriously jogging. Others just sit and enjoy the sunshine peeping through intermittently.

We sit down to get our breath back on one of the many benches near Margot Hedeman's bronze sculpture, "Fabulous Beast".

**"These seats are excellent",** says Ingrid Dalén. "They've got good armrests you can get a real grip on. The seating height is not so easy to get right, because we're all differently built, but for my part it's a strain on my knees when seats are too high and when they're too low".

**"I'm impressed** with the seats being so close together and with there being so many waste bins at wheelchair height", she continues.

We observe that the lamps are closely spaced and do not dazzle, which is also an important accessibility factor.

"I seldom feel insecure in the evenings", says Ingrid Dalén, "but I quite understand those who do. There are some places I tend to avoid at dusk – the Kronoberg Park, for instance – but here I feel perfectly safe."

#### Accessible landing stages

After a coffee break on the seat we walk a bit further and then out on to one of the landing stages jutting out into the water. There are no level changes here and it's "plain sailing" for wheelie walkers and wheelchairs.

"Nowadays accessibility gets talked about in every possible connection", says Berit Hinderson, "but it used not to."

"Yes", Ingrid Dalén replies, "it's come to be a big issue in recent years. Things have certainly improved in Stockholm, and they can get really good if they carry on the way they've started. But there are lots of things that seem hard to tackle. Level changes between pavements and nearly all shop entrances, and lots of apartment buildings, for instance. More ought to be done about that. Perhaps the City and property owners could work something out between them."

Along the Norr Mälarstrand promenade there are lots of park benches, as well as accessible landing stages, where people can pause to get their breath back.

## Pedestrian crossings and public transport

One change both ladies keenly advocate is pedestrian crossings which make crossing the street easier, even for people with mobility and vision impairment. For example, crossings with lowered kerbs and tactile pavement markings.

# The asphalt here makes the going easier.

**"But I think** there should be an amber light for pedestrians too. Often the lights change from green to red so quickly that you can't make it across in time, even if you hurry", says Ingrid Dalén.

We continue on the subject of important ways of making the city more accessible, and Berit Hinderson describes her experience of travelling by public transport with a wheelie walker.

"I don't like jumping with the walker, so I really need the bus to "curtsey" at the bus stop. Metro station lifts make a big difference too. They should be clean and in working order, because riding on an escalator with a wheelie walker is awkward and just a bit too exciting..."

#### Other accessible promenades

Nearly all waterfront promenades everywhere in Stockholm are accessible. Here are some of the places where improvements have been made:

- Vattenstigen Luxområdet, Lilla Essingen.
- Blockhusudden, Djurgården.
- Grinds Hage, Vickersgatan, Södermalm.
- Tantolunden, Södermalm.
- Magelungen, Farsta.
- Monteliusvägen, Södermalm.

- Flaten, Skarpnäck.
- Fåfängan, Södermalm (Disabled parking up there).
- Vinterviken, Liljeholmen.
- Sätrastrandsbadet

   Skärholmens gård,

   Skärholmen.
- Hellasgården, Nacka.

**Opposite Kungsholmstorg** we part company, because the quayside from here to the City Hall is closed for rebuilding. Ingrid Dalén walks home to her flat in Fleminggatan and Berit Hindersson catches her bus for the heights of Södermalm.

#### **Berit Hinderson**

- Södermalm, Stockholm.
- 68 years old.
- Retired.
- Former actress, speaker and librarian.

Has chronic obstructive lung disease (COL) and has been using a wheelie walker since falling and cracking her hip. Is very fond of her own part of town, Södermalm, where Skinnarviksberget and Monteliusvägen are her favourite haunts.

# Our Stockholm

*Welcome to our Stockholm*. Here we describe important aspects and outcomes of the City's accessibility promotion. You will meet experts in various fields who describe how the street environment has changed, and you will also find facts and useful information.

The solutions have been introduced for the benefit of people with various kinds of functional impairment. But work under the Project of Easy Access has also led to changes benefiting the majority of Stockholmers. Improved lighting, clearer marking of pedestrian crossings, rebuilt bus stops and additional toilets are just a few examples.

The aim is to make Stockholm a city for everyone.



## Insight education

■ One Swede in ten has a permanent functional impairment and many more will experience temporary impairments of vision, hearing, mobility and other functions as a result of illness and accidents. Natural ageing also often leads to minor changes in many functions at once. But it is not until they encounter obstacles in their surroundings that people with functional impairment become disabled or handicapped.

Thinking accessibility must come naturally to everyone working with and influencing the Stockholm street environment. Through insight education programmes, handling officers working with the Stockholm outdoor environment have in a very hands-on fashion gained a better understanding of what living with functional impairment is like and how people's surroundings affect their ability to move freely in the city.

**External consultants** engaged by the City and concerned in the everyday run of things with planning and building the outdoor environment were also invited to take part in the education programme. The general public too have had the opportunity, in various connections, of testing the extent to which design of the outdoor environment impacts on freedom of movement.

#### From facts to insight

The insight education programmes begin with a rapid, concentrated review of facts and of the possible needs and circumstances of people with various kinds of functional impairment.

Vision impairment, for example, can mean greater need of guidance strips and clear boundaries, navigation points, good lighting, contrasting colour schemes, good acoustics, tactile surfacing, road markings and tactile signage. Lower kerbs at pedestrian crossings and intersections, and higher ones at bus stops, can for example make an important difference to people with mobility impairment. Clearly, minor obstacles in the street environment can mean major problems.

After the talk the participants go out on the streets with guides to gain first-hand knowledge of getting around in a wheelchair and with vision impairment.

**"My most abiding memory** of the programme", says Anne Kemmler, who took one of the insight programmes in the autumn of 2009 and is Head of Division at the Stockholm City Traffic Administration, "is the way in which small obstacles can cause big problems. I tried going round on the streets with glasses that made me nearly blind,

 It's not until there are obstacles in the way that people get handicapped. and it was a mind-blowing experience. Everything went grey, I kept bumping into street signs and tripping over edges, and I felt extremely vulnerable standing at an intersection and hearing the traffic. Now I can understand better than ever how important high-contrast markings are and other things creating contrasting effects in the street environment."

#### Useful feedback

Testing the experience of being wheelchair-bound or having vision impairment has given Anne Kemmler a deeper insight into the obstacles that people with functional impairment are liable to encounter and the problems which this can give rise to. Roadworks barriers are a case in point.

"It's very important to cordon streets off the right way and signpost properly, so that wheelchair users, people with vision impairment and others will not need to make long detours to get past a roadworks site. This is an important realisation for us", she says.

"Our work means interference with the street environment on varying scales, from small

kerb alterations to the barriers necessitated by construction of the City Railway (Citybanan) and the North Link (Norra Länken). There's a big span between our assignments. Most people in our department have taken the insight education programme, and it gives very useful feedback for our daily work."

### "My most abiding memory of the programme is the way in which small obstacles can cause big problems."

The insight education programmes are arranged by the Project of Easy Access in association with Bygg Klokt (Build Wisely), an umbrella organisation of seven DPOs working together for better accessibility and serviceability in the built environment, and the Recruitment Group for Active Rehabilitation (RG), a voluntary organisation providing physical and mental training to persons with mobility impairment, mainly persons with neurological disabilities.



The participants gain first-hand experience of getting around in a wheelchair and with vision impairment.





# The Stockholm Model works for everyone

The Stockholm Model for pedestrian crossings has made it easier for people with mobility or vision impairment to get about in the city. So far about 5,200 pedestrian crossings have been rebuilt and improved.

Stockholm has over 23,000 pedestrian crossings. Without them, getting across busy streets would be more difficult, whether you have a functional impairment or not.

Pedestrian crossing design makes a big difference to freedom of movement. To people with vision impairment it is particularly important to have a clear acoustic signal telling them when they have the green light and to have high-contrast markings and a tactile edge telling them where the carriageway begins and ends.

Wheelchair and wheelie-walker users or prampushers need a lowered kerb which will make it easier for them to get onto the crossing and up onto the opposite pavement. Pedestrian crossings used to have a 12 cm high kerb, which severely restricted many people's freedom of movement in the city.

Pedestrian crossing design must be uniform and clear. Ideally, all pedestrian crossings should look the same. This is particularly important to people with cognitive functional impairment.

#### A new model for Stockholm

Per-Inge Ahlström, Traffic Planning Officer at the Stockholm City Traffic Administration, and project leader in the 80s and 90s for the reconstruction of Stockholm's pedestrian crossings, describes how plans for making the City's pedestrian crossings more accessible evolved.

"Adjustment of pedestrian crossings since the 70s has meant lowering the kerbs from 12 to 3 cm. At the end of the 80s the then Swedish Handicap Institute proposed among other things putting a wheelchair ramp in the middle of the crossing. The Streets and Roads Office built a few experimental crossings to the new design but many objections were raised. It was easy to miss one's footing on the kerbstone in the middle of the crossing, and the ramp was a long way away from the signal post, making it impossible for wheelchair users to reach the push-button box actuating the signals."

"A better, more advanced version was then devised, known today as the Stockholm Model. It was well received by DPOs and since 1991 has been a standard solution for the rebuilding of Stockholm's pedestrian crossings."

 All new pedestrian crossings today conform to what is known as the Stockholm Model. Among other things, the Stockholm Model involved moving the lowered part of the kerb to one side of the crossing. Next to this the crossing was also marked with a kerbstone, providing a clear indication to people with vision impairment. The signal post was positioned between the countersunk part and the kerbstone or, if there were no signals, the crossing signpost. For the convenience of wheelchair users, the ramps were positioned opposite each other on each side of the side.

#### Developing the model

The Stockholm Model has been further developed since the end of the 90s, and nowadays all new crossings conform to it. Older crossings are being improved accordingly.

On the pavement, in front of the crossing, there are now tiles painted sharp white, as a signal to people with vision impairment. Rough-surfaced tiles in front of the white ones accentuate the effect, telling stick users that they are approaching a pedestrian crossing.

#### Signalling pole

A crossing with light signals has a push-button box positioned at sitting level, so that wheelchair users will be able to reach it.

When the button is pressed, a ticking sound begins, increasing in tempo when the green light is given for crossing the street.

The top of the box has an arrow in relief, pointing in the direction of the crossing. Being able to feel with one hand where the crossing is positioned and in which direction it goes makes things easier for people with vision impairment.

You can read more about the Stockholm Model design in the handbook Stockholm – en stad för alla (Stockholm, A City for Everyone), available (in Swedish) for downloading at www.stockholm.se/ tillganglig.



Clear contrasting marking by means of coloured and rough-surfaced tiles and a countersunk kerb are among the measures introduced for better accessibility.





# A new light on Stockholm

■ I think that if you find a place aesthetically appealing and pleasant, you feel safe there. Lighting is a powerful tool for changing people's perception of places, says Henrik Gidlund, Lighting Architect at the City Traffic Administration and in charge of lighting aspects of the Project of Easy Access.

Brunkebergstorg, the backyard of downtown Stockholm. A place most people go out of their way to avoid. A place between Sergels Torg and Kungsträdgården that got left over.

This late afternoon in November there's a lot of traffic round the piazza, with cars and buses sullenly hooting at each other. On one side we have the Riksbank (Sweden's Central Bank) and along another side is a well-lit arcade where various firms have their premises. A bit further down is one of the entrances to the Galleria.

In the midst of all this is a beautiful, peaceful park. A winding footpath describes a figure of eight between two large ponds. The places is bathed in warm lighting and the hibernating cherry trees are hung with multicoloured Christmas fairy lights.

"Creating a pleasant environment makes the city more attractive", says Henrik Gidlund. "Replacing old lighting is an important part of that process", he continues. "This new lighting conveys a better idea of what the place looks like and makes colours easier to distinguish."

The bulbs used previously were a mercury type casting a cold bluish light and guzzling energy. The new model is leaner and emits a warmer light.

The glow of the new lights makes it easier to distinguish minor details of a face, which can make things easier for a hearing-impaired person who lipreads and uses sign language.

## Light conforms to the park's geometry

The arcade running alongside Brunkebergstorg is bathed in a warm and pleasing light. The even spacing of light sources helps to create perspective, thus enabling people to tell the distance from one point to another.

Along the parkway the lamp posts are evenly spaced in line and the lighting conforms closely to the park's geometry. "This way", Henrik Cederlund explains, "you can see the structure of the place and get your bearings more easily."

"It can also be a help to people with vision impairment, for example, having the lamp posts next to each other along one side of the path."

#### 4 points about working with accessibility and lighting:

- Direct lighting. Throws shadows and makes the place clear.
- Logical structure.
   Lighting must conform to the place, so as to make it comprehensible.
- Create good lighting quality with warm colours. Make colours easier to see clearly.
- Screened lighting. Eliminates dazzle.

#### Incidence of light and shadow

The stones in the pond in the middle of the square a visible from a long way off. The front and back of each stone are illuminated, throwing a shadow. This is called direct lighting, Henrik Gidlund explains. It tells us about the objects in a place, which in turn makes the place clearer.

How can you tell it's direct lighting?

"You can tell from the incidence of light and shadows. Look how clearly our shadows are moving", Henrik Gidlund replies, pointing to the long, dark shadows we cast on the ground.

**Direct lighting** also helps us to see the differences between the paving stone at the edge of the pond and the asphalt on the walkway beside it. "Small signals", Henrik Gidlund continues, "but important enough when you're moving around in a place."

#### Welcoming park

A place like Brunkebergstorg is particularly important from a lighting point of view. Henrik Gidlund explains that when working with city-centre lighting you also have to think of security. A housing area can be a different proposition. There people feel more at home and the surroundings are familiar. Down town, the signals you perceive are much more critical.

### Lighting is a powerful tool for changing people's perception of places.

**Stockholmers,** Henrik Gidlund finds, often have preconceived notions about different places in town. Many people think a place like Brunkebergstorg ought to be insecure, and they come here expecting it to be.

"But then they see the lighting here and get quite a different feeling. Because here someone has taken trouble and wants the place to be beautiful! Brunkebergstorg today is a place that says 'come on in'!"



Direct lighting makes it easier to spot details and gauge distances.





## Swimming and sport

■ When the Skärholmen swimming baths and sports centre were built 30 years ago, accessibility requirements were not the same as today, and so extensive accessibility improvements have had to be retrofitted. By contrast, at the Hässelby sports centre, built three years ago, accessibility was a vital consideration from the very first stroke of pencil on drawing board.

"Sport gives people an opportunity of getting together, deriving support from each other and being active together", says Åke Roxberger, Head of the Stockholm City Sports Administration's Planning Division. "It goes without saying that City amenities must be accessible to everyone."

When the Project of Easy Access began 11 years ago, swimming baths and sports centres were an obvious target of expenditure. Stockholmers are fond of bathing and gymnastics, and the amenities admit large numbers of visitors. The Sports Administration has since 1999 been committed to improving accessibility at the older facilities, and the Skärholmen swimming baths and sports centre was one of the first to be rebuilt. "There are still differences between individual swimming baths and sports centres", Åke Roxberger continues. "Many have been built in the traditional way, without any thought for visitors with functional impairment, but we're putting that right."

#### Easy finding the way

At the Skärholmen swimming baths and sports centre they have among other things removed all thresholds, widened doorways, built accessible changing rooms and showers, improved the lifts, changed the sports centre flooring and installed a lift by the pool. The gym has a good deal of apparatus which is accessible to wheelchair users, including an exercise bicycle which you pedal with your arms instead of your legs.

"Finding the way must also be easy. Apart from the structural changes, we've devised a new, uniform signage system which clear arrow pointers, Braille and symbols, to be installed at all facilities during 2010 so that people will be able to find their way around more easily", says Åke Roxberger.

 Older facilities like the Skärholmen swimming baths and sports centre have been rebuilt. New facilities are made accessible from the word Go.

#### Check accessibility on the web.

Stockholm has 15 combined swimming baths and sports centres and 7 heated bathing pools.

At www.stockholm.se, under the Entré Stockholm accessibility guide (search by Simhall), you can study the accessibility of each facility, in Swedish.

### Swimming baths and sports centres:

- Beckomberga swimming baths and sports centre
- Eriksdalsbadet
- Farsta swimming baths and sports centre
- 🕨 Forsgrénska badet
- GIH-badet
- Husbybadet
- Högdalen swimming baths and sports centre
- Kronobergsbadet
- Liljeholmsbadet
- Sandsborgsbadet
- Skärholmen swimming baths and sports centre

- Tensta swimming baths and sports centre
- Vällingby swimming baths and sports centre
- Västertorp swimming baths and sports centre
- Åkeshov swimming baths and sports centre

### Outdoor swimming pools:

- Eriksdalsbadet
- Hägerstensbadet
- Kampementsbadet
- Nytorpsbadet
- Nälstabadet
- Stora Sköndals handikappbad (disabled bathing)
- Älvsjöbadet

"We also work with general aspects of visitor reception. All facility managers undergo training, and we count on their newly acquired knowledge spreading to the staff of swimming baths and sports centres", Åke Roxberger continues. "In the new ethical policy we've drawn up, response is a vital skill to be communicated to all our associates."

### "It goes without saying that the City's swimming baths and sports centres must be accessible to everyone."

#### Easy finding the way

There's a big difference between altering an existing building and putting up a new one. With the Hässelby Sports Centre, first opened in 2006, accessibility was a priority from the very beginning. Pupils from local schools come here during the week for their PE lessons. In the evenings clubs take over, with Swedish floorball as the main activity. The centre is open from 6.30 am to midnight and admits nearly a thousand visitors daily.

"Here we've gone in for a welcoming, spacious building with a café, which isn't so common in older places. There are no bumps anywhere, and there are guidance strips all the way to the changing rooms. The changing rooms and showers have low-



level coat hangers, of course, and low-level touch controls for the water", says Åke Roxberger.

#### Right first time

The new Hässelby and Sköndal sports centres are two facilities where accessibility has been good from the very beginning.

**"Putting up a new building** is a dream situation, because then we can get everything right first time. An awful lot has happened over the past 10 years where accessibility is concerned, both in structural engineering and in the way people are treated. We've accumulated knowledge and experience and changed the perspective. Nowadays we see things from the user's point of view in a way we never used to", says Åke Roxberger.

"Our co-operation with the Disability Council is also highly rewarding. The representatives are very committed and influential. They always visit old facilities which we have scheduled for rebuilding, and they vet the drawings for new buildings."

# Sport gives people an opportunity of getting together.

 Lifts in swimming baths, avoidance of thresholds, guidance strips and spacious changing rooms are things making swimming baths and sports centres accessible.

The Vällingby Swimming Baths and Sports Centre are one of the older facilities which have been made accessible.





# Trees make the city more human

■ The 30,000 trees lining the streets of Stockholm make a big difference to the city's environment and accessibility. Trees cleanse the air, elevate air humidity, provide shade and lower the temperature, making the city a pleasanter place. At the same time, care must be taken to position trees so as not to impair accessibility.

In Stockholm the nearest park or avenue is never far away, and the many trees lining the streets contribute towards the feeling of a green city. The trees make themselves very useful in more ways than one. They elevate the air humidity and dispose of the smallest air particles, the ones most dangerous to the lungs and a frequent cause of trouble to people with asthma or other respiratory disorders.

The trees afford shade and lower both the indoor and outdoor temperatures, which is vitally important to many seniors during the hot months of the year. Wind velocity is reduced and noise abated, and the bigger the crowns of the trees are, the more effective they will be in this respect.

"Quite simply", says Björn Embrén, tree specialist at the City Traffic Administration, "it makes the city more human, which does everyone good. There are many ways in which trees can give solace in a barren townscape. The new conifers we've planted along Grindsgatan in Södermalm are one such

 Every district has its own tree plan, showing among other things which trees are to be avoided for the sake of people with allergy. instance. In future I think we'll be able to use more conifers. They create a pleasant, cared-for atmosphere all the year round."

#### Consideration for allergics

Lime trees, elms and oaks are the commonest tree species. They are resilient and can withstand the environmental and ambient strains and stresses. The choice of trees for a particular place depends on its characteristics – where it is a busy street or a quieter neighbourhood. Every Stockholm district has its own tree plan, with species recommendations, also indicating which trees must be avoided for the sake of people with allergy.

# Trees can give solace in a barren townscape.

**"Birches are certainly resilient,** but we avoid them because of the allergy risk. There are still birches left in certain developments from the 60s, but nowadays we never plant any outside schools, day nurseries, housing or in places where there are a lot of people about. The same goes for all other allergenic tree species like alder, beech, oak, hazel and hawthorn", says Björn Embrén.

#### Think accessibility from the beginning

The trees have a stressful habitat, exposed as they are to road salt, air pollutants, vehicle impacts and other stresses in connection with roadworks. Poorquality and sick trees have to be regularly removed and replaced with new ones. Other trees need to be rescued by means of soil skeleton structures which make room for water, air and organic materials beneath the ground surface round the tree roots.

"These measures", says Björn Embrén, "encroach to a greater or lesser extent on freedom of movement on the streets and sometimes cause trouble to pedestrians and cyclists. But I don't see much of a conflict between trees and human beings."

**"We think accessibility** all through the process, from planning the tree species we are going to use to the actual planting and care of the trees. Our thinking and knowledge have developed over the years. We've been given good training which is now second nature to us", he continues.

#### No trees in the way

One rule of thumb is that trees must not make it more difficult for people to move round in the city. For example, they must not obstruct the path of pedestrians with vision or mobility impairments. This makes positioning important, and the actual planting needs to be marked with stone edging or something else distinguishing the planting patch from the street.

"Nowadays we have a holistic mindset", says Björn Embrén, "as regards both our way of looking after the trees and the effect which the trees have on people. The Project of Easy Access has added new dimensions to our work, and the allergy aspect is one of them. But we still have plenty to learn, development work continues and will do so for as long as Stockholm still has trees and people."



The trees give shade, lower the temperature and the wind velocity and attenuate noise, making the city more accessible to everyone.





# Bus stop design

■ The 59 bus pulls up at the Närkesgatan bus stop and its doors open. Sighingly the bus sinks down to pavement level. The elevated kerbstones at the city's bus stops are part of the Project of Easy Access and among other things have made bus travel easier for people with mobility impairment.

It's early afternoon, a quiet time of day in the Greta Garbo piazza, Södermalm. The afternoon rush hour hasn't started yet, and when the 59 bus pulls up at the Närkesgatan stop, nobody gets on, just a lady and her dog get off.

**Pernilla Johnni,** District Accessibility Inspector for the Södermalm and Liljeholmen districts, describes the work devoted to designing the area round Greta Garbos Torg. Bus stops, pedestrian crossings and passages have been rebuilt to make the whole neighbourhood more accessible.

"You need to think holistically when rebuilding a neighbourhood. The kerbstones at the bus stop have to be as high as possible, but then it's very important that people should be able to reach the bus stop by way of accessible crossings and passages", she says.

#### Kerb flush with bus floor

Street and pavement design at bus stops is a City responsibility. Stockholm Transport, SL, decides

The Närkesgatan bus stop in Södermalm has been rebuilt in accordance with the Stockholm guidelines.

#### A bus stop should ...

...stand out clearly from its surroundings, so that people with vision impairment and cognitive functional impairments will be able to use it more easily.

...be high-contrast marked with material of a deviating structure and brightness, so that people with vision impairment will be able to spot mark-ings more easily.

...have a 16 cm high kerbstone to facilitate boarding and alighting, for example by people with mobility impairment.

which stops are to have shelters and how the shelters are to be designed.

**Bus stop design** always follows the same guidelines, subject to minor differences depending on what the surroundings look like.

"It's important that all bus stops should look as much alike as possible and people should recognise the layout, partly to make life easier for children and people with cognitive impairments", Pernilla Johnni explains.

Every bus stop has a stone edging between street and pavement. In recent years these bus stop kerbstones have been raised from 12 to 16 cm for

- Bus stop design in Stockholm conforms to a standard drawing produced by the Traffic Administration, Stockholm Transport (SL) and the DPOs.
- About 60 per cent of SL departures employ lowlevel boarding. The printed timetable shows which services and departures have this facility.
- Most buses can be boarded with a wheelchair because they have a low floor which can be lowered still further at bus stops. Many bus stops have been elevated to facilitate boarding and alighting.
- Many bus routes are now equipped with ramps, and the number is growing all the time.

improved access. When the bus floor is lowered, it must be as flush with the kerb as possible, to facilitate boarding or alighting with a wheelchair or pram.

#### There's a bus stop here

There are two lines of chalk-white tiles next to the kerbstone, indicating the presence of a bus stop.

"Bus stops are the only places in the whole townscape where you will find double lines of white tiles", Pernilla Johnni explains.

The length of the marking depends on what the surroundings look like, what type of bus stop it is and whether more than one bus at a time will need to stop there.

**The white tiles also help** to tell motorists that they are not allowed to stop within the marked area.

Four darker tiles are positioned where the bus stops and people get on. These tiles are dark grey and have 16 "pimples" 5 mm high, to give a tactile as well as a colour contrast.

Pernilla Johnni steps onto the pimply tiling.

"Standing here, I can feel beneath my feet that this surface is different from the rest, and that tells me where the bus is going to stop", she says.

Behind the pimply tiling are two rows of white corrugated tiles which serve as a guidance route to the bus shelter, if there is one, or otherwise to the pole with the bus stop sign on it. The corrugated tiles make it easier for people with vision impairment to get their bearings at the bus stop.

#### Something to hold onto

The Närkesgatan bus stop has a litter bin and a seat for waiting passengers next to the sign pole. The positioning of the bus stop pole depends on the pavement surroundings.

**The narrow pavement** at the Närkesgatan stop has caused the stop sign to be positioned against the house front, between the bench and the litter bin. On wider pavements the pole can stand near the kerb next to the "pimply" tiles where the bus pulls in to pick up passengers.

"The best thing is when the post is near the street and properly visible", says Pernilla Johnni. "Then it gives people with vision impairment something extra to hold onto and shows clearly where the bus stop is located."

An elevated kerb and clear contrast markings give easier access.





# Culture – one of life's foundations

■ If we exclude groups of people, the whole of our society will be affected, and for that very reason it's important that everyone should have the opportunity of cultural participation. Thus Ernst Althin, a Director with the Stockholm City Culture Administration who has been working with accessibility issues for over 10 years now.

**Ernst Althin works** works to ensure that every Stockholm resident will be able to share in the cultural amenities on offer.

"Culture is one of life's foundations", he says. "There's more to it than just art and the theatre. Culture gives shared basic values to the people living in an open democratic society."

The Stockholm City Museum admitted 241,582 visitors in 2009. This was a good deal up on the preceding year. No doubt there are several reasons for the museum's popularity, but one important reason, unquestionably, is the accessibility improvements that have been made in recent years, one of them being the Ryssgården lift. Free admission is another important part of making the museum accessible to everyone, the objective being a City Museum open to all comers.

### The Culture Administration's Accessibility Guide

- In 1998 the Culture Administration began publishing a guide describing the accessibility of the city's various cultural activities. By looking up, say, sections on cinemas and museums, you should be able to see at a glance if there is a lift to the upper floor of the Sture Cinema (there is) and if the National-museum toilets have disabled access (they do).
- The Guide shows accessibility with reference to four disabilities: mobility impairment, vision impairment, hearing impairment and, to some extent, allergy. When the first edition appeared, 10 years ago, there was a great pent-up need for accessibility improvements in Stockholm. Today, six editions later, quite a lot of changes have been put in place. In the latest Guide, for example, we read that Vällingby Library has door openers and a wheelchair ramp at the entrance and that the Stockholm City Theatre has an audio loop.

### Examples of accessibility improvements in Stockholm's cultural sector

- The main entrance to the Liljevalchs Art Gallery has been rebuilt so that everyone, regardless of functional impairment, can use it. The entrance now has a ramp and a lift for wheelchairs. Inside there is a lift to the lower floor, as well as disabled toilets. Wheelchairs, folding stools and audio loop receivers can be borrowed.
- Kulturhuset has disabled toilets on several floors, audio loops in lecture rooms and auditoriums, and lifts with loudspeakers.
- The Museum of Medieval Stockholm opened the doors of its renovated premises to the public in January 2010. The museum has been rebuilt for better access. All doors have door openers. There is a disabled toilet near the entrance. Audio loops have been installed in all rooms.
- PUNKT MEDIS, the children's and young persons' library at Medborgarplatsen. Automatic doors and entrance door openers. Inside the library is a lift to the upper storey, big enough to take a wheelchair. A disabled toilet has been installed.
- The Stockholm City Museum has a lift from Rysstorget down to the entrance level, as well as a lift inside for the other floors.
- The Stockholm City Theatre has caption displays for the deaf and hearing impaired, for captioning of certain performances. There is also an IR system, an audio loop connecting up with a hearing aid.

#### More than just art

It should go without saying that culture in Stockholm must be accessible to everyone, but this is not always the case. Sometimes people with functional impairment are still denied admission, e.g. because there is no entrance ramp or because a lecture room has no audio loop.

#### Everyone's theatre

Our Theatre, an activity for young people and part of the Stockholm School of Arts (Kulturskolan), has long been working to enable all children and young persons to join in, whatever their circumstances. Everyone wishing to take part must be able to do so, and nobody must be turned away. People must be able to get from auditorium to stage without difficulty, with or without a wheelchair.

All theatre facilities, from dressing rooms to the control booth, must be designed so that anyone wishing to will be able to enter and use them. Some theatres, e.g. the Farsta one, have audio loops for people with hearing impairment. Our Theatre in Kärrtorp has an entrance ramp enabling wheelchair users to enter the premises.

#### Thinking accessibility

An accessible city with cultural life open to all is not just a matter of reducing physical obstacles but also a matter of heightening awareness on the part of workers. When organising an event, perhaps the most important part of the job, Ernst Althin believes, is thinking in terms of accessibility. This is a problem when not everyone understands the implications of working with accessibility.

"Informing staff at different events how the facility works and what assistive devices are available is absolutely vital, he says. Often there are aids available, such as an audio loop for people with hearing impairment, but the staff have not learned how to manage the technique and are therefore unable to offer the assistance."

#### Door openers and revolving doors

Door openers and automatic doors are becoming increasingly common for large entrances, which can be of benefit to anyone who is carrying something heavy and has difficulty in opening the door unaided.

The environmental aspect, Ernst Althin explains,

is one objection to automatic doors. Every time the door opens, the cold comes in and the heat goes out. And so revolving doors are still being used, but not by wheelchair users or people with vision impairment.

**The main entrance** to the main City Library in Sveavägen still has the revolving doors designed by architect Gunnar Asplund. There is a smaller entrance, with a ramp and automatic doors, on the other side of the building, in Odengatan.

# Culture gives shared basic values to the people living in an open democratic society.

But in Ernst Althin's opinion, using special entrances or having automatic doors apart from the main entrance is not a good idea. An affront to human dignity, he calls it. People must be able to go in through the same door. **"No one must need to be stigmatised** for

having a functional impairment. No one must need to say, 'I can't use this without help'. The absolute rule must be that everyone is able to do what they want, and we haven't got there yet, but all we have to do is keep on nagging about it."

#### A better, simpler existence

The wide steps down to the City Museum at Ryssgården can be fatiguing, especially if you are getting on in years and not much of a walker. Or if you are pulling a pram at the same time as you have your hands full of shopping carriers. In that case the lift is a good alternative.

One of the disabled toilets at Kulturhuset is on the top storey. It's a big one. For parents with children in thick winter clothing and with a pram to manage, a bigger toilet and avoidance of cramped spaces can be a welcome relief.

Last word to Ernst Althin. "An open cultural sector with accessible facilities benefits everyone. It makes life better and easier, and for that very reason should be a matter of common concern."

The lift makes the Stockholm City Museum more accessible.





# New navigation system helps people with vision impairment

■ Just hit the button on your mobile and a voice in your headset tells you exactly where you are and which way to go. This is how the navigation system works which has been designed to help people with vision impairment find their way from one place to another.

Accessibility Consultant Gunnar Häger sits in a small room at the offices of the Astandos IT company in Hantverkargatan, testing the latest prototype of the new navigation system. Gunnar Häger has impaired vision and, using a magnifying glass, tries to read the mobile display in order to find the right buttons.

Gunnar Häger is one of the representatives of the reference group which was set up when the navigation system for people with vision impairment began to be set up within the framework of the Project of Easy Access at the beginning of the 2000s.

#### A mobile solution

The project for the new navigation system was started up in response to wishes from people with vision impairment for something which would make it easier for them to find their way about in town.

Pernilla Johnni is one of the district accessibility superintends at the Traffic Administration and

GPS in the mobile, connected to digital footpath and cycle track network, points the way about town.

project leader of the Navigation Project. She says that one problem with the systems already commercially available is that they lack the pedestrian network which the project group considered absolutely essential for good navigation and positioning. In addition, previously tested prototype systems had too many gadgets for the user to keep a check on. People with vision impairment called for an assistive device based on something they were using already.

"The mobile phone had become more and more widespread", says Pernilla Johnni, "and so that seemed the natural thing to try and use."

#### The digital pedestrian network

A general meeting was convened to canvass interest in an assistive device with a digital pedestrian network.

"We invited people with vision impairment to hear what they thought of the idea. I've never known such a crowded meeting before and such a positive response", Pernilla Johnni recalls.

With assistance from the Astando IT company, work began on building up the digital pedestrian and cycle path network and on developing the appurtenant software. The foundation was already there, in the form of the City's local road database, and the thing now was to key into the database particulars of everything alongside the footpaths and cycle tracks.

#### Presenting e-Adept

The navigation system is part of the e-Adept umbrella project, e-Adept being short for Electronic Assistance for Disabled and Elderly Pedestrians and Travellers. The e-Adept project has three components:

- Navigation systems for people with vision impairment, making it easier for them to get their bearings in the townscape.
- Emergency alarm systems. As soon as the user gives the alarm, a signal is transmitted to a contact person. Compilation of a list of contact persons ensures that the alarm will automatically work through the whole list until someone answers.
- Journey planning. This helps people with cognitive and other functional impairments to plan their journeys.

e-Adept is a joint venture by PTS (the Swedish Post and Telecom Agency), the Stockholm City Traffic Administration, the Swedish Road Administration, the Swedish Rail Administration, the City of Malmö and VINNOVA (the Swedish Governmental Agency for Innovation Systems).

Elisabeth Dawidson is project leader at the Astando end.

"The City of Stockholm road database is huge", she says, "and is used and updated continuously." Every new detail in the townscape is recorded and added to give users information of the greatest possible accuracy. **The digital footpath** and cycle track network will provide detailed instructions and give the user good guidance along pavements and park footpaths. Information will be available, for example, on the whereabouts of pedestrian crossings, current excavation works, seating, the location of pavement cafés or steps and other things which people need to be told or warned about along the way.

#### The reference group

Slowly but surely and step by step, work on the navigation system has been moving forward ever since the project started. Every new step in the project has been carefully checked with the reference group before any permanent changes have been made to the system.

**The reference group,** consisting of people with vision impairment living in Stockholm, meets regularly to discuss and test new parts of the system.

When Gunnar Häger tries out the latest update of the navigation system, his opinion carries a good deal of weight. It is the reference group which, acting in consolation with the project management, decides the direction in which the project develops. Nothing, Pernilla Johnni says, is done without prior approval from the reference group.

#### A functional system

Using a mobile phone, a GPS receiver and other navigation equipment, the mobile can communicate with the database. The user enters a departure and destination address on the mobile phone for his or



her intended walk. A voice in the mobile headset then explains how to get there. During the walk the user receives continuous instructions and detailed information about things cropping up along the way. The journey can be planned with or without public transport.

For more exact positioning, Pernilla Johnni explains, the GPS navigation system is supplemented by a pedometer and a digital compass. If the GPS system loses coverage, the other components will help to explain the user's exact whereabouts.

The positioning equipment is worn on a belt or strapped to the small of the user's back.

**People using** the navigation system can have different degrees of vision impairment, and so the system has three different settings. Those with slight vision impairment can use the telephone display, with its colours and arrows. Those who are blind or severely vision impaired can use the verbal information which helps the user to navigate. Whatever the setting used, the talking information is always included.

"The most important thing of all in this project", says Pernilla Johnni, "is for the equipment to work properly and be dependable. People must be able to get from place to place and have no problems using public transport."

#### Great interest at world congress

The 2009 ITS (Intelligent Transport Systems) in Daily Life Congress took place in Stockholm. The delegates were given the opportunity of testing the

The navigation system has attracted a great deal of interest, both in Sweden and internationally.

Access Consultant Gunnar Häger, who himself has a vision impairment, is helping to develop the new navigation system.

#### On the market soon

Software for the navigation system has been created and will be available for downloading from the web and installation in the user's mobile. The aim is for the software to be available for downloading from the City of Stockholm website, www.stockholm.se, at the beginning of 2011.

navigation system, both at Stockholm International Fairs (Stockholmsmässan) and on a "technical visit", walking round Mariatorget and Södermalm. Several nations showed interest in the project, and South Korea, which will be hosting the next congress, has expressed a desire to include further presentation of the project.

#### An escort all the way

Back at the Astando offices, Gunner Häger has inserted his headset and is all set for walk through the surroundings of Hantverkargatan. A loud, distinct voice gives instructions concerning the way to go. "From Hantverkargatan. Five. To. Kaplansbacken. Four. To. The right. Kaplansbacken." Gunnar Häger praises the navigation system and feels that it has worked well during the test. He is certain of finding it very useful in his everyday life.

"It helps me to find my way about in the city. Having GPS in my mobile is almost like having a personal escort with me all the way."





# Welcome to the new, "flat" Hellasgården

Open countryside is never far away in Stockholm, with all the opportunities this implies of getting some exercise or just enjoying the scenery. As part of the Project of Easy Access, the city has made more outdoor recreation areas and fitness facilities accessible to people with mobility or vision impairment. The new, "flat" Hellasgården is a very good example of this.

Most Stockholmers know about Hellasgården, and many of them have been there, but not all of them have been able to benefit from the surroundings, the bathing lake and the jogging trails. People with functional impairment have had difficulty getting around at Hellasgården. Now the facility has been rebuilt so that people with mobility or vision impairment will also be able to use it.

Hellasgården, which is just outside Stockholm, receives 1.5 million visitors annually. People love coming here in summer to bath in the Källtorpssjön lake, walk in the nature reserve, or go running and get exercise on the fitness trails. In winter there are lots of people tobogganing down the slope, long-distance skiing on the skiing trails or skating on the ploughed lanes over the frozen lake. The restaurants, sauna and toilets have generous opening hours all the year round.

The newly built bathing jetty, just down hill from the sauna, is accessible to wheelchair users.

Hellasgården is part of the Nacka Reserve (Nackareservatet), which is partly owned by the City of Stockholm. The Reserve and Hellasgården are officially designated as Sites of National Interest for Outdoor Activity. This being so, it is only logical that the City should be committed to making Hellasgården universally accessible.

Thomas Wiklund, Project Leader at the City Sports Administration and in charge of the rebuild, describes Hellasgården and Nackareservatet as the most important and popular outdoor recreation areas in all Stockholm. The City owns and manages the western part of the nature reserve.

#### New sauna and bathing jetty

"Flattening" outdoor recreation areas forms part of the Project of Easy Access. At Hellasgården this has meant rebuilding and levelling the road from the car park, the footpaths between the different facilities and the path down to the lake. The paths have been asphalted to make things easier for wheelchair users, and new stone edgings make it easier for people with vision impairment to get around, because now they can find their way with their canes.

**"We were a bit apprehensive** as to what asphalted paths would look like in a place of outstanding natural beauty like this, but it turned out really well", says Thomas Wiklund.

The sauna and changing rooms have been completely made over, with showers and lockers at a convenient height and with room for several

## More outdoor bathing facilities and recreation areas where improvements have been made

- Smedsuddsbadet The area surrounding the bathing point in Rålambshov Park on Kungsholmen has been rebuilt and can now also be used by people with mobility impairment. Café Kajak has a ramp and disabled toilet.
- Stora Sköndal Outdoor recreation area and bathing facility for people with mobility impairment. Pool and lake bathing, changing rooms and showers with lifts. "Summer Castle" offers activities for children and young people between the ages of 7 and 20 with mobility impairment.
- Ågesta Fågeltorn (birdwatching tower) The footpath to the tower and the bottom storey of the tower itself are accessible to people with mobility impairment and there are disabled parking spaces in the car park.
- Tyresta National Park Woodland trail adapted for use by people with mobility impairment. The House of National Parks in Tyresta village is similarly accessible.
- Farsta Ridanläggning (riding centre) Lift and disabled toilets to the main stables, lift to the stable loft and ramps in the small stables.
- Enskede Ridanläggning (riding centre) Accessible spectator stands in the old riding school building, lift and disabled toilets.

wheelchairs inside the sauna itself. From the sauna, wheelchair users can move straight onto a big sunbathing terrace with a fantastic view of the lake, and then they can descend the ramp for a bathe.

**"The bathing jetty is brand new.** It was specially designed by hundred per cent stability. An electric wheelchair is quite heavy, and the intention is for several wheelchair users to be able to roll onto the jetty at once. Environmental restrictions prevented us from blasting rock or anchoring the jetty on the lake bed here, so instead we used these high-stability floating pontoons", Thomas Wiklund explains.

"We're going to install a lift, he continues, so that still more people will be able to bathe from this jetty."

#### Improved access for all

The jogging trails have been levelled but not asphalted. Instead roots and bumps have been eliminated and resurfaced with fine gravel. The lighting is all new, the old mercury lamps having been replaced with environmentally friendly ones that shine nearly all day and night.

"The new surfacing is an accessibility improvement for everyone", says Thomas Wiklund, "including seniors and families with prams. We are also going to take a good look at the signage, to make sure everyone really feels welcome here."

"Now that work at Hellasgården is practically complete, we're planning to lay out new 'flat' jogging trails and footpaths through the Nacka Reserve, as a connecting link between Hellasgården and Björkhagen."



New surfacing for the jogging trails, improved lighting, rebuilt changing facilities and a new, accessible sauna welcome visitors to Hellasgården.

New facilities at the Enskede Riding Centre include a lift and disabled toilets.





# Södra Stadsparken – safe, functional and pleasant

Several Stockholm parks and piazzas have been refurbished through the Project of Easy Access. Södra Stadsparken ("South Town Park") in Rinkeby is now a bright, open place where neighbours play boule together and socialise.

Standing in Rinkeby's main square, one has a downward view of the housing estate and the footpath running alongside the whole park. Three years ago the park was a place people would hurry past. Today things look different.

Ingrid Fors, Construction Project Leader at the City's Development Administration, who was in charge of the park refurbishment, describes how the alteration of the central axis traversing the park has played a vital part in improving conditions for people living in the nearby apartment blocks. The footpath and cycle track have been moved further in towards the centre, so that people living on ground level will not be disturbed by passers-by.

**Before the upgrade,** pedestrians and cyclists shared a single track, which could cause problems.

"There were frequent conflicts between cyclists and pedestrians before, so we needed to segregate the two", Ingrid Fors explains.

#### A natural guidance strip

The project for making the park more accessible was started at the request of the Rinkeby City District. The local Disability Council played an active part in drawing up proposals for improving the neighbourhood's accessibility.

**Plenty of seating** was one item on the Disability Council's wants list, and that has now been provided. In the middle of the walkway down to the open space is a bench for those wishing to sit down and rest their legs.

"Armrests on all benches were another item on the wants list, and we've acted accordingly", says Ingrid Fors.

### Footpaths and cycle tracks had to be segregated.

A little further downhill the walkway reaches a large open space. This is a footpath intersection and the central point of the park. Guidance strips have been laid out here at ground level, to assist people with vision impairment. The strips are coloured white and made of a rough material so that the different surfaces will be clearly distinguishable.

The central axis through the park has become a natural promenade.

#### Södra Stadsparken "some of the improvements

- New lighting the full length of the park axis.
- New trees planted.
- Footpath and cycle track separated.
- Seating along the way.
- Handrails on both sides of the walkway at steep points.
- A central open space with seating and guidance strips.
- A gravel pitch for boule.

#### A place where people want to be

A light mast has been erected in the open space, for light and security. There are now several lamps illuminating the whole area during dark nights and evenings.

Beautiful Gotland stones have been strategically positioned to give the place a character of its own and to put more life into it.

Ingrid Fors says that it was important, making the "South Town Park" a place where people wanted to be, and that today the park offers social opportunities in plenty.

"It used to be a pretty drab place, but today it's functional, safe, pleasant and accessible."

Södra Stadsparken today is a pleasant, accessible place.



There are seats and distinct guidance strips round the central open space.





# A dignified entrance to the Liljevalchs Art Gallery

■ No one need any longer go round the back to the goods entrance in order to visit the Liljevalchs Art Gallery on Djurgården. The ramp, lift and automatic doors make the big main entrance an obvious and dignified point of access for everybody, with or without a wheelchair, wheelie walker or pram.

The Liljevalchs rebuild is part of the Dignified Entrance project, which began in 2006 and is a joint undertaking by the City of Stockholm, the National Property Board and the European Institute for Design and Disability (EIDD). Dignified Entrance devises proposals and products combining accessibility with good design in historically sensitive environments, aimed at making the buildings accessible to all comers.

**"It's a challenge",** says Lennart Klaesson, Architect SAR/MSA and project leader with the Project of Easy Access, as well as being the City's project leader for the Liljevalchs entrance rebuild. "These are sensitive places and an old building has to be treated sympathetically so as not to travesty its qualities."

#### New ramp and lift

Liljevalchs is one of many historic buildings which were designed and constructed without any accessibility requirements for the benefit of people who have difficulty using stairs. Up until 2008, visitors using wheelie walkers or wheelchairs were referred to the back of the building for access. Then the planting to the right of the entrance was converted into a winding stone ramp with resting points, and the heavy old doors were replaced with automatic glazed sliding ones. All thresholds were removed and inside two small toilets were converted into a single big, accessible one.

**The new outdoor glass elevator** at the foot of the steps was installed in the autumn of 2009. This has automatic sliding doors and clear control buttons with speech synthesis, relief characters and Braille script.

"Several previous solutions for Liljevalchs came to grief for various reasons", Lennart Klaesson recalls, "but this time every concerned was in at the start, before a single decision had been taken or a pen stroke made. The task force included representatives of the property owner, the gallery, the user groups, the City Museum, the Council for Protection of Ecological and Aesthetic Matters and the City Planning Administration. Needless to say, we also called in some good designers and architects."

**"The method, based on consensus,** is the one we are quite definitely going to keep using. It takes time, but it pays off in the long run and the result is attractive and accessible."

A new lift and ramp and a new door design have made the Liljevalchs entrance accessible to all comers.

#### Welcome to Dignified Entrance

- Dignified Entrance is a joint project in which the City of Stockholm, the National Property Board and the European Institute for Design and Disability (EIDD Sweden) are taking part, devising proposals and products combining accessibility with good design for historic places. Read more about Dignified Entrance at:
- www.dignifiedentrance.com
- www.designforalla.se (EIDD Sweden)

Gallery Director Mårten Castenfors reports that since the rebuild Liljevalchs has received more visitors using wheelchairs or walkers.

"The ramp is a real boon, people coming here keep telling us. The lift too is very smart and functional. We're so glad", he continues, "not having to send people round to the back entrance any more."

#### New projects and products

Three more pilot projects are now in the pipeline – Södra Bancohuset in Gamla Stan (Stockholm Old Town), the Stockholm City Hall and Residenset, Göteborg (Gothenburg). All three are much-visited buildings of great historic interest which fall short of present-day accessibility requirements. **Developing new products** to improve accessibility is another important field which the Dignified Entrance project is concerned with. Together with various manufacturers, the project team devise products suitable for use in historic surroundings.

"The lift outside the Liljevalchs Gallery is a good example", says Lennart Klaesson. "We couldn't have it competing with the actual building, it had to be freestanding and it had to have a modern design leaving a clear imprint from our own age. No such product was commercially available, so we worked one out for ourselves. Now I'm hoping it will also come to be used at the entrances to other historic buildings."

The stairlift at Hotell Skeppsholmen is another example. That hotel is located in among the historic Skeppsholmen buildings known as Långa Raden ("Long Row") and built in 1699 to accommodate Charles XII's soldiers. The stairlift, which is let into the floor and invisible when not in use, was devised in collaboration with a Danish company.

"It's going to be put into mass production", says Lennart Klaesson, "and I think there's a huge market for it. Demand for neat, functional solutions blending with historic surroundings is bound to keep on growing."



The new ramp works well for everyone, e.g. prampushers and wheelchair and wheelie-walker users.





## Skärholmen's mountain railway makes people feel safer

For many years, residents up on Ekholmshöjden ("Oak Hill") in Skärholmen went out of their way to avoid the dark tunnel and the fouled lifts, the latter of which were often grounded on account of vandalism. In the end they'd had enough and grassroots initiative resulted in the building of the Bergbanan "mountain railway".

The lower Bergbanan station is right next to the Skärholmen piazza. With its flat round roof and the track leading up to the hilltop, it looks for all the world like a ski lift. An elderly lady with a shopping cart stands at the station, waiting for the cabin which will carry her to the top of the hill.

#### A claustrophobic tunnel

One of the main reasons for building Skärholmen's Bergbanan was that local residents felt very uncomfortable in the old rock tunnel and the lifts to the hilltop. A long, dark, winding flight of steps to the hilltop was the only alternative means of access. That was impossible if you were using a wheelchair or a wheelie walker or pushing a pram, and many people, women especially, felt insecure and preferred going the long way round so as not to be frightened.

 Bergbanan makes travelling from the Skärholmen Terrace up to Ekholmshöjden safe and easy. **The tunnel is still there** but is now closed. Inside it is cold and damp, and one can readily understand people walking there looking over their shoulders. Lennart Klaesson, the project leader in charge of Bergbanan under the Project of Easy Access, describes how the people of Skärholmen detested the tunnel.

"The lifts up to the housing estate were at the far end of a 60-metre-long tunnel, and that made people feel trapped and frightened. The lifts were often out of service because of vandalism, added to which, they were filthy and evil-smelling."

#### A civic initiative

The Skärholmen neighbourhood was developed in the mid-1960s as part of the Million Homes Programme. That project's priority was functional housing for as many people as possible. Security and safety took a back seat.

The people living at the top of Ekholmshöjden had to wait over 30 years for an alternative to the tunnel to come up for consideration. In the mid-90s the City launched the Neighbourhood Renewal Programme in a bid to refurbish and upgrade the suburbs and their image. The project encouraged grassroots initiatives, canvassing residents' ideas and suggestions for improving their neighbourhoods.

**Questionnaire surveys** showed the tunnel to be the most urgent issue in Skärholmen. A task force was set up, consisting of local residents, con-

### Bergbanan began operating in the summer of 2001

- Bergbanan resulted from collaboration between the City of Stockholm Neighbourhood Renewal Programme and the Project of Easy Access, together with the AB Stockholmshem housing utility.
- The lower station is at Skärholmen Terrace, near the central piazza, and the track leads up to the upper station serving the Ekholmshöjden housing estate.
- The cabin, which can carry 35 passengers, completes on average more than 300 runs daily, between 5 am and midnight.
- The facility is CCTV-monitored, both in the cabin and at the stations.

sultants and representatives of the City of Stockholm, to jointly devise various technical solutions, and it was these deliberations that eventually led to the construction of the "mountain railway".

#### An open solution

The elderly lady with the shopping cart is now sitting on the bench inside the cabin, admiring the view. The cabin moves noiselessly along the track and the sun shines in through the windows. Beside the track a long flight of steps leads to the summit, and through the window we see two young lads running up them, trying to outpace the cabin. **The open solution** using big windows, Lennart Klaesson explains, was the whole point of the new rail service, the important thing being for people to have contact with the outside world and not feel shut in.

"I think the best thing about Bergbanan is full insight. You can look out in all directions from inside the cabin, and everyone can see inside."

**Should anything happen** inside the cabin or at the stations, there are CCTV cameras recording everything that goes on. Anyone pushing the emergency button makes contact with an operator at the City's co-ordination centre who can see and hear from a display screen everything that is going on inside the cabin.

Riding in the cabin over the somewhat irregular track is a tummy-tickling sensation. To leave the original environment intact and avoid blasting operations in the rock, the decision was taken to give the track different gradients conforming to the shape of the hill.

"This of course", Lennart Klaesson explains, "means wear and tear on the track and makes heavy demands on the technology."

#### Less damage and fewer crimes

Bergbanan has been operating for almost 10 years now. Ronny Klingmo, a service technician at the Traffic Administration who has done maintenance work on Bergbanan, says that compared with simi-



Bergbanan makes travelling from the Skärholmen Terrace up to Ekholmshöjden safe and easy. lar installations elsewhere it has suffered remarkably little damage. This may be because it is used so much and because there are no hiding places inside the cabin.

**Observations have shown** that the facility is much used, with more than 300 trips up and down every day, from 5 am to midnight. Ronny Klingmo says that the crime statistics also point to a successful project. The neighbourhood crime rate has plummeted since the tunnel was closed and the "mountain railway" opened.

#### Suggestions for future improvement

A harsh climate and a heavy load on the track sometimes cause trouble, resulting in brief periods of downtime. Lennart Klaesson says that the City is aware of the problem and that the railway could be improved at some future date by building a parallel track beside the existing one for an additional cabin.

"That would provide a back-up for when the other one was out of order. It all comes down to money, of course. The investment would be a big one, but it would probably pay in the long run."

**The short trip** from the piazza up to Ekholmshöjden takes only a couple of minutes. Up at the top a loudspeaker voice inside the cabin tells passengers that the cabin has arrived at the upper station. The doors open and the lady with the shopping cart trudges homewards through the snow.

## Maria, 31, and her daughter Elsa live in Skärholmen

"I've been living in Skärholmen for nearly 6 years now and my daughter attends the parent-andtoddler centre at Ekholmshöjden, so I come here nearly every day. Elsa loves riding the mountain railway! She thinks the view is exciting. And then it's very practical and saves you having to climb the steps. It's a long way from the metro (T-bana) to the top of the hill, especially if, like me, you're pushing a pram."

#### Sulamita, 13, lives in Skärholmen

"I often take Bergbanan when I'm going to see friends living up here. It's much better than a lift in a tunnel. This railway runs outdoors, so you feel safer, and if you should get stuck you needn't be as frightened as you would getting stuck in a lift inside a dark tunnel."

#### Larry, 70, lives in Liljeholmen

"I use Bergbanan a couple of times every week when I come here to call on friends. The advantages outweigh the disadvantages. It's comfortable, it can carry a lot of people, it's quick and services are frequent. Bergbanan adds a pleasant touch to the Skärholmen scene, and you get a fine view from the cabin. It's smart-looking into the bargain."

The long, dark tunnel which Ekholmshöjden residents were formerly referred to has now been closed.





# Important keeping pedestrians and cyclists apart

The boundary between cycle track and footpath needs to be clearly marked if both cyclists and pedestrians are to feel safe in traffic. This is especially important where pedestrians with vision impairment are concerned.

It's early morning and the inner-city traffic buildup has begun. A few early-rising cyclists pass by along the cycle track in Birger Jarlsgatan. Their approach is practically noiseless, so you have to be on your guard.

**For better traffic safety** in Stockholm, cycle tracks have been built alongside streets with motor traffic, so that cyclists and motorists no longer need to be all mixed up together. Instead the cyclists have moved closer to the pedestrians, which can sometimes be a problem, and so it is important for cyclists and pedestrians to be kept separate.

#### Surprising results

Sara Malm is one of the Traffic Administration's local Accessibility Officers and has been in charge of an evaluation study concerning appropriate ways of segregating pedestrian and bicycle traffic so as to accommodate the needs of road and street users, especially people with functional impairment.

**The evaluation,** she says, showed the type of separation formerly recommended by the Project of Easy Access to have shortcomings. That design has been used near the old tram sheds (Spårvagnshallarna) in Birger Jarlsgatan, where the tracks are on separate levels.

Different surfacings for pavement and cycle track make the street enviroment more intelligible.

#### 800 km of footpaths and cycle tracks in Stockholm

- Separation of footpaths and cycle tracks must be designed so as to give both tactile and contrasting information.
- The street environment is made more comprehensible by pedestrian area and cycle lane being surfaced with different materials. The cycle area shall be equipped with bike symbols.

"A raised edge, like this one, is greatly appreciated by people with vision impairment but makes things difficult above all for cyclists and delivery vehicles, but also for people using a permobil or a wheelchair", says Sara Malm.

"The evaluation led to the conclusion that pedestrian areas and cycle lanes should be separated by means of both different surfacing materials and a tactile, contrasting marking between them. We find that solution in use on the other side of Birger Jarlsgatan, where different kinds of material make it possible to both see and sense the difference between the two lanes. Light concrete tiles on the footpath and dark asphalt on the cycle track."

The cycle and pedestrian lanes run the full length of Birger Jarlsgatan, and down towards Stureplan trees have been planted between them.

"A furnishing zone between the lanes, with room for example for trees and bicycle racks, is, if properly designed, the optimum solution", Sara Malm continues, "but unfortunately it's both expensive and space-demanding."



## Accessible, but not overprotective, play areas and adventure playgrounds

Stockholm is full of play areas and adventure playgrounds, from small, unstaffed play areas in back yards and residential neighbourhoods to big adventure playgrounds with recreation leaders and many different activities. During the past 10 years, many older play areas and adventure playgrounds have been made accessible to children and parents with various functional impairments, and new facilities are made accessible from the very beginning, the aim being for everyone to be able to use play facilities.

Minor changes can make big difference to many of the older play areas, not all of which need to be entirely reconstructed. This can be a matter of changing the surfacing, such as sand and gravel, reducing level changes and replacing certain types of apparatus.

In other play areas and adventure playgrounds the City has opted for more thoroughgoing alterations. Båtsmanstorpet in Rinkeby is one such play area, the first to be converted so that it could also be used by children with vision impairment.

Berit Mårtenson is a structural engineer and one of the Traffic Administration's local Accessibility Officers. "When we chose to make the Båtsmanstorpet play area accessible", she says, "we thought it was going to be easy. There were already several 'rooms', surrounded by fencing, which seemed to make it easier for children with vision impairment to find their way around. But we had to think again and devise quite different solutions, a process which taught us a very great deal."

"We now know that this is a changeable process in which nothing turns out quite as you imagined to begin with. And that's the fun of it."

#### Simple and challenging

The play areas and adventure playgrounds are being made accessible in connection with refurbishment and new construction. No two of these places look alike, and what is good for one of them may be quite unworkable in another, so customised solutions are often called for. In older places accessibility often needs to be improved by reducing level changes and doing away with difficult surfacing like gravel and sand.

**"I try to simplify things",** says Christina Söderström Lööf, a street environment architect with the Traffic Administration. "It must be easy to get in and get around, what functional impairment a child may have, and the place must be exciting to

 Clear information, both in relief and in Braille, makes it easier for everyone to find their way about.

#### Finding the playground in Stockholm

The City of Stockholm website, www.stockholm.se, provides particulars of more than 200 play areas and adventure playgrounds under the heading "find and compare amenities." The descriptions include, for example, particulars of the accessibility of each play area and adventure playground, which ones are staffed and the easiest way to get there.

> play in, for all children. I hope the children will be tempted to stretch the limits and challenge themselves."

#### Different surfacings and colours

At the main entrance to Båtsmanstorpet there is a signboard in relief and Braille. To help people find their way around inside, Berit and Christina have used different surfacings and colour markings. There are clear guidance strips and different surfacings, such as grass, stone and rubber, which make it easier for the children to get their bearings.

A communication system of speech tubes with underground piping is provided at several points. The play apparatus is designed in various ways to suit children with vision impairment but is also perfectly suitable for other children. Amenities include acoustic swings, a bicycle roundabout and a running line which the children can hold onto and run really fast.

The idea of the running line was born when the Båtsmanstorpet alterations were at the drawing board stage. An accessibility consultant was engaged who was herself blind and a parent, and she explained the importance to children with vision impairment of not being afraid to run freely and quickly.

**"It's important",** Berit Mårtenson continues, "to work with reference people throughout the process. There's a big distance between my job as local government official and a child's reality, and we must be able to draw on other people's ideas and experiences. It's also important for us to be on the spot and see for ourselves how the children play and how their play functions."

#### Comparing notes

The team go on field trips and look at other projects in other cities and countries to gather inspiration and expand their knowledge. When Båtsmanstorpet was scheduled for rebuilding, the practice playground at Tomteboda School served as a prototype. Tomteboda used to be a special needs school for pupils with vision impairment.

**"We went there together** with the consultants who were going to carry out the rebuild, and we collected many ideas about concrete solutions. There's no need to go inventing the wheel all over again", Christina Söderström Lööf continues.

"We also gained better insight into the fact of blind children wanting to run about just as much as normally sighted children. This may seem obvious, but it isn't always that easy to imagine what things are like in reality. It's easier to think oneself into the needs of a child who is wheelchair-bound."

Conversely, the City of Stockholm pools its knowledge and experience with others – consultants, manufacturers, other local authorities and interested parties from other countries. The Bandängen adventure playground frequently receives field trips, and the Båtsmanstorpet play area has attracted the attention of St Petersburg and Athens.

"With more and more adventure playgrounds and play areas needing refurbishment, our work continues. But there are still many small unstaffed neighbourhood play areas which we have not worked on. There instead we have seen to it that the City Districts have been given extra funding for accessibility, and we count on changes being made", says Berit Mårtenson.

A communication system of speech tubes with underground piping is provided at several points in the park.





# Armrest and backrest make all the difference

Try looking for a park bench going spare on a sunny Saturday afternoon in May. It isn't easy, despite the city having lots of outdoor seating. And to complete your enjoyment, if you have a mobility impairment, you also need to find a bench the right height and complete with armrest and backrest.

Park benches mean a lot to the people of Stockholm. Here you can take a breather on your way back from shopping, read the newspaper in peace and quiet, do some people-watching or just have a snooze. Probably not many people give a thought to the structural design of the bench, the main thing being that it is comfy and in a good position.

But for people with mobility impairment the bench needs to meet a number of criteria, failing which it can be difficult to sit down, sit comfortably and then get up again. This is where armrest, backrest and height make all the difference.

No new benches are to be deployed without backrests and armrests, and old ones are scheduled for upgrading.

**"We work with** the Disability Councils and suppliers to devise the best solutions", says Lennart

Klaesson, a project leader with the Project of Easy Access. The armrests must be easy to get hold of and remain steady when you go to stand up, and the backrests must have the appropriate angle. The seating height needs to be between 45 and 50 cm.

"We'd like most of all to have the same bench everywhere in town, but I quite understand people wanting new, distinctive benches in newly developed neighbourhoods", he continues.

It's also important for benches to be in good supply. Preferably one every 25 metres in busy places, and at 100-metre intervals in the vicinity of housing estates. In parks and green spaces, one bench every 250 metres or so will suffice.

**The City Districts** decide the deployment of benches, but the Project of Easy Access team can express viewpoints on the subject.

"Positioning", says Lennart Klaesson, "is important from an accessibility viewpoint. The bench mustn't obstruct people's path, and there must be room for a wheelchair next to it, so that everyone can socialise on the same terms."

The perfect park bench is the right height and comes complete with both armrest and backrest.



# Contrasts make the city's steps more visible

Several flights of steps in the city have been given high-contrast markings to make things easier for people with vision impairment.

The steps from Oxtorgsgatan up to Malmskillnadsgatan, near Hötorget, stand out from their grey surroundings, thanks to the sharp white stripes on the edges.

Catarina Nilsson, one of the Traffic Administration's Accessibility Officers, describes how the steps are marked with a 10 cm wide white stripe on the first and last tread. The marking is done using a white compound contrasting with the grey granite of which the steps are otherwise made.

**"High-contrast marking helps** people with vision impairment to see the steps more clearly", she says. A flight of steps must have a handrail on both sides. The handrails must project 30 cm beyond the first and last treads of the steps, so that people can easily tell where they begin and end.

The steps from Oxtorgsgatan up to Malmskillnadsgatan are divided into three flights with two landings. The handrails conform to the gradient of the steps. There are lamps posts on the two landings. The good lighting helps to bring out the contrasts and make them clearly visible.

### Types of high-contrast marking for steps include:

- Strömgatan/Fredsgatan

   grey granite steps.
   High-contrast marking: a white strip
   cm wide.
- Sergels Torg black granite steps. High-contrast marking: circles of white natural stone in a line.
- Östermalms IP (sports ground) – steps of pale concrete. High-contrast marking: a black strip 13 cm wide.
- Hammarby Sjöstad, Lumaparken – dark granite steps. Highcontrast marking: one entire tread of paler granite than the rest of the flight.
- Östermalms IP (sports ground) – wooden steps. High-contrast marking: a steel marker 4 cm wide.

 Clear white markings indicate the uppermost and bottom steps.



# Guidance for decisionmakers and private individuals

Sweden has just one Disability Ombudsman, namely Riitta-Leena Karlsson, who is attached to the Stockholm City Executive Board. Her job is to monitor the City's various activities and suggest improvements to conditions for people with functional impairment, and her aim is a city for everyone.

Stockholm acquired its first Disability Ombudsman in 2002, tasked with monitoring city activities from a disability viewpoint, and every year an annual report from Riitta-Leena Karlsson lands on the politicians' desks. The report contains clear descriptions of shortcomings in the city's accessibility and accounts of improvements completed or in progress.

The Ombudsman is not a member of the Project of Easy Access team, but close collaboration has evolved with the passing years.

#### Addressing the full picture

Riitta-Leena Karlsson looks forward to the City addressing the full picture of accessibility issues. The new disability policy programme will take as its starting point the UN Convention on the Rights of Persons with Disabilities and will indicate disability policy objectives of accessibility and participation.

Those objectives are to be achieved through a

 Riitta-Leena Karlsson, Sweden's only Disability Ombudsman at local government level, is working to make Stockholm a city for everyone.

## The Disability Ombudsman is tasked among other things with:

- Promoting good living conditions for people with functional impairment.
- Briefing City authorities and committees and suggesting improvements.
- Briefing and advising people with functional impairment, families, organisations etc., without intervening in individual cases.
- Monitoring legislation, City policy and guidelines and the work of City authorities and committees with reference to disability issues.

strategy of all City Councils and governing bodies making accessibility promotion part of their day-today activities. In addition, it has been proposed that a general steering group be set up to cover accessibility issues.

#### The Ombudsman's responsibilities are

overarching already. Riitta-Leena Karlsson scrutinises, monitors and suggests improvements concerning everything from schools, housing and the employment sector to sports, recreation and cultural amenities.

"Yes, all Stockholmers must be assured of a good life, from birth to old age", she says, "disability or no disability."

Several of her proposals have led to new disability policy decisions which impact beneficially on many Stockholmers' everyday lives. In other instances, her viewpoints have resulted in City guidelines being made clearer.

### \*\* The Project of Easy Access is a good initiative which has produced good results through a systematic, considered working approach.

#### Four main fields

In the course of a year, Riitta-Leena Karlsson fields more than 600 phone calls, processes more than 400 written transactions and attends more than 300 briefings and joint meetings. Her activities also attract a good deal of international interest, and during the year she receives getting on for 100 enquiries from other countries, asking how the City addresses matters of support, service and accessibility.

Her four main fields comprise horizon-scanning, monitoring, co-operation and interaction and, not least, providing a forum for people with disabilities, their families and representative organisations (DPOs).

**Horizon-scanning** includes, for example, observing developments on the accessibility front, both nationally and internationally, and passing on the information thus gathered to City committees and utilities. Monitoring means Riitta-Leena Karlsson verifying that the City's disability policy decisions are complied with and compiling annual reports on the accessibility situation.

#### Necessary co-operation

Co-operation between everyone involved, one way or another, in a person's life – national agencies like the Social Insurance Agency, the Stockholm County Council and the activities of the City itself – is of the essence, Riitta-Leena Karlsson explains.

"My task is to encourage co-operation. I do so partly by describing what happens in individual people's lives when co-operation breaks down, and with luck that produces results."

"I also try to develop co-operation with DPOs and other voluntary organisations. They give me a lot of information and knowledge about the living conditions of people with functional impairment, intelligence which I find useful in a variety of connections", she continues.

#### Counselling and guidance

The role of civic forum is also an important one, and in this capacity Riitta-Leena Karlsson provides counselling and guidance, for example on the subject of where to turn for support and how to appeal a decision one is not satisfied with. On the other hand she cannot handle particular cases, represent individual citizens or review decisions made by other authorities.

"Interest in, and knowledge of, disability issues has grown", she says, "but many people are still unlucky in their quest for necessary measures of support. And where local government support and services are concerned, issues relating to younger persons with functional impairment have difficulty in competing with interest in caring services for older persons. This, I think, is because we can more easily understand the importance of support for the elderly but do not have the same understanding for needs connected with functional impairment in lower age groups."

#### Response important

She goes on to say that young people with functional impairment often have to put up with being compared with older persons with functional impairment, whereas in fact they are entitled, as a matter of human rights, to have their living conditions compared with those of people their own age who do not have any functional impairment. **Much remains to be done,** in Riitta-Leena Karlsson's view, where understanding, knowledge and response are concerned.

"We can have any number of self-opening doors, but if there is no proper response on the human plane and people feel unwelcome, we will have failed them", she says.

Quite simply, better awareness and knowledge of disability issues is needed in every shop, restaurant and workplace, she maintains.

"It's hugely interesting, for example, to see how restaurant staff receive guests with functional

impairment. We have one restaurant here where they are superb, greeting everyone in a dignified and natural manner. That's nice to see, but there are still many places which are non-starters in this respect."

**"I used to believe** in good intentions, but my years as Disability Ombudsman have convinced me that legislation is needed which will make inaccessibility a form of discrimination. And I definitely want accessibility legislation to be linked to licensing procedures. That would bring real pressure to bear on a good many establishments."

#### How many people have functional impairment?

- At least 1.8 million people in Sweden have some form of permanent functional impairment.
- Mobility impairment:
  - over 500,000 have mobility impairment
  - about 470,000 need assistive devices
  - about 1 million have rheumatism
- Vision impairment:
  - about 120,000 have vision impairment
  - some 15 per cent of these, roughly 18,000, have impairment of such severity that they need assistive devices.
- Hearing impairment:
  - about 1.3 million people have hearing impairment
  - some 700,000 could do with a hearing aid
  - between about 8,000 and 10,000 have been deaf since childhood
  - about 15 per cent of the population have tinnitus, and about 100,000 have it severely
  - about 30,000 use sign language.

- Medical disabilities:
  - about 500,000 have severe incontinence
  - about 560,000 have severe allergy disorders
  - about 300,000 have electrical hypersensitivity
  - about 60,000 are epileptic
- Mental/cognitive functional impairment:
  - about 1 per cent of Sweden's population, roughly 93,000 people, are intellectually challenged
  - half of them have a moderate or severe intellectual disability
- Older persons:
  - there are about 1.7 million people aged over 65
  - about 490,000 over 80
  - about 140,000 with severe dementia
  - and an estimated 2.5 million Swedes will be over 65 years old in 2050

Sources: the Swedish Rheumatism Association, the Swedish Association of the Visually Impaired, the Swedish Association of Hard of Hearing People, the Swedish Institute of Assistive Technology, the Swedish Epilepsy Association, the Swedish Association for the Electro Hypersensitive, the Swedish Dementia Association, Statistics Sweden, the Swedish National Association of the Deaf, the Swedish National Institute of Public Health, SBU "the Swedish Council on Health Technology Assessment.

ockholm – en stad för alla

Stockholm

# The Handbook helps you get it right first time

The Handbook provides understanding of the environmental needs of people with functional impairment, as well as hands-on advice and guide-lines for accessible construction.

"Stockholm – a City for All. Handbook on the design of an accessible and serviceable environment" is a practical tool for everyone planning, designing or otherwise involved in shaping the city environment. The book, dealing with both the outdoor and the indoor environment, has been produced to show how accessible environments can be created on the basis of statute law, statutory instruments and general recommendations. It sets forth the guidelines applying in Stockholm and clarifies the requirements of people with functional impairment where design of the city environment is concerned.

Catarina Nilsson, one of those in charge of producing the handbook, Lasse Gustafsson, from the Disability Council of the Traffic and Waste Management Administration, also representing HSO (Sweden's umbrella DPO organisation), and landscape architect Sylvia Kornstad discuss the book's usefulness.

#### The working process

Even before the Project of Easy Access started in 1999, Catarina Nilsson recalls, guidelines for the design of the outdoor environment existed in the form of the "Outdoor Environment Programme". That programme was revised in 2001, but still focused exclusively on the outdoor environment. It remained operational for several years before the Handbook appeared. Lasse Gustafsson, representing the DPOs, took part in the revision.

**"A DPO reference group",** he says, "helped to draw up the programme. They held regular meetings and were deeply committed to this process."

When the National Board of Housing, Building and Planning issued new and supplementary building regulations on access for people with functional impairment, this called for a fresh update of the "Outdoor Environment Programme". By that time, Stockholm's policy-makers had also been calling for guidelines on the indoor environment. A task force was set up to devise a new programme, and the handbook "Stockholm – a City for All" was completed in 2008.

 Catarina Nilsson urges all concerned to use the handbook in their daily work.

#### Coherent and comprehensive

Unlike the earlier accessibility programmes, the Handbook includes guidelines on both the outdoor and indoor environment.

**It starts** with a conspectus of the accessibility needs of people with different kinds of functional impairment.

Seven more chapters then follow: Easily remedied obstacles, Public places and areas for structures other than buildings, Areas for building sites, Buildings, Traffic safety, Roadworks and construction sites, and Operation, maintenance and management. The chapters are divided into sections, e.g. on building entrances, bus stops and steps or stairs.

Each section describes points to be born in mind, with references to the Building Regulations of the National Board of Housing, Building and Planning, and includes a lucid summary. Most sections contain photographic illustrations.

**To make the contents** as straightforward as possible, Catarina Nilsson explains, everything to do with a particular subject has been gathered together at one particular point in the Handbook.

"For example, if an architect is going to design a flight of steps, they can look up high-contrast markings, handrails and stairway design all in the same place."

Landscape architect Sylvia Kornstad finds the Handbook straightforward and practical to use.

"It's an advantage", she says, "being able to see, along with the examples given, exactly what the law says. That, in my opinion, is one of the book's strong points."

#### The Handbook in practice

Sylvia Kornstad says that she uses the Handbook in her work as an architect. She often finds herself working on what she calls "day-by-day Stockholm" – places we frequent or pass daily, on our way to the bus or the shops. That environment, she says, must be aesthetically appealing and functional at one and the same time, and on this point there are clear guidelines.

**"But then there are** places more out of the ordinary which we hardly ever need to put any effort into but which still need refurbishing now and then, like the surroundings of Nationalmuseum or the Royal Palace. There perhaps one wants to break with the conventional design, in which case it's essential to consult the regulations. What can I do with a handrail? Well, I look that up in the Handbook."

"It's important to remember here", she continues, "that it's the Building Regulations of the National Board of Housing, Building and Planning that have to be complied with. The General Recommendations are just that, 'general', indicating one way of solving the problem."

"An architect working on a place of historic interest has to both comply with the regulations and find a solution that blends with that particular setting."

### "It's an advantage being able to see, along with the examples given, exactly what the law says."

That is why the Handbook works so well, Sylvia Kornstad finds. It's like a reference work you consult when you need to know the exact measurements of a handrail or the type of high-contrast marking needed for a particular flight of steps.

"My job as landscape architect is to see the big picture. I have to ask myself what overall impression this environment makes. The Handbook can give me examples of individual aspects of that picture, which gives me something to lean on."

**Lasse Gustafsson** agrees about the Handbook being practical and to-the-point. He wishes the DPOs would make more use of it than they are doing at present.

"The best thing would be to take it along to all our meetings, because then we could look up the rules on whatever topic we're dealing with", he says. "The more people who use the Handbook, the less danger there will be of anything not being got right first time. Demolishing and rebuilding can mean a lot of money wasted."

#### Looking ahead

"Of course", says Catarina Nilsson, "this Handbook will also have to be updated and revised one day. But a handbook like this will always be needed, as a practical aid to designing an accessible city.

"The Handbook is and must be a common platform for addressing accessibility issues."

#### The handbook

- The content is based on the Building Regulations of the National Board of Building, Housing and Planning.
- The handbook is intended as a tool for everyone working on urban planning and design in Stockholm – planners, designers, architects, clients, contractors, DPOs, Disability Councils and elected representatives.
- The handbook can be downloaded in various formats from the City of Stockholm website, www.stockholm.se/tillganglig, where orders can also be placed for hard copies. (In Swedish only.)

Catarina Nilsson, Lasse Gustafsson and Sylvia Kornstad.





# The St Julian Prize for easy access

■ In 2006 the City of Stockholm began awarding the St Julian Prize to businesses which have designed their premises so as to make them accessible to all comers. One of the very first recipients was the Scandic Sergel Plaza hotel in Brunkebergstorg.

Magnus Berglund, the Scandic Group's Disability Ambassador, comments: "It's a very good idea, the City highlighting best practices. We have a lot to learn from each other."

The 2006 St Julian Prize went to the Scandic Sergel Plaza hotel, but the jury citation referred to the entire Scandic Group's 93-point accessibility list.

The list, compiled in consultation with DPOs and hotel guests, applies to all Scandic hotels the world over. Scandic is also committed to extensive training for all its associates and its easy-access effort is growing all the time.

**The checklist** includes everything from coatholders in reception to a vibrating alarm clock which doubles as a fire alarm. This latter is a completely new product, jointly devised by Scandic and a manufacturer.

"We've adopted a holistic approach", says Magnus Berglund. "Adapting the physical environment is obviously important, but to us the training programmes are more important still. They give all

 Magnus Berglund is the Scandic Group's Disability Ambassador. Their Scandic Sergel Plaza hotel was awarded the St Julian Prize for 2006. our associates an insight into how they can go about making things more accessible for the guests in their particular department. To Scandic this is a matter of all our guests feeling at home and contented."

#### Many good ideas

Magnus Berglund got in touch with Scandic in 2003, to present ideas on how the hotel chain could adopt a new approach to accessibility issues. He had previously worked as a cook, but severe arthritis had forced him to change jobs.

"The hotel trade is very near to my heart, but I don't think I'd have started working with accessibility if I hadn't fallen ill myself", he says.

**"An awful lot** has happened in the accessibility field since then, both with us and in the community at large. I don't get the same questions as I used to from employees or guests. Things that used to be awkward have now become simpler and more natural."

#### Smart solutions

Many of the improvements serve a number of purposes. The reception coat holder, for example, is equally useful for hanging up a handbag or umbrella. A smart idea in the opinion of Magnus Berglund, who says that Scandic wants smart

#### Best practices commended

- The St Julian Prize is a part of efforts which are being made by the City of Stockholm and under the Project of Easy Access to inform and inspire shops, restaurants, places of entertainment and hotels to do something about obstacles which exclude people with different kinds of functional impairment.
- The St Julian Prize is being awarded annually between 2006 and 2010. It goes to the Stockholm undertakings which have designed their premises in such a way that everyone can use them "disability or no disability. It is a purely honorary distinction, carrying an abundance of goodwill. In other words, there is no prize money involved.
- The jury comprises representatives of the City of Stockholm, DPOs, the Stockholm Chamber of Commerce, the Stockholm branch of the Swedish Property Federation, and the Swedish Association of Architects.
- Together the jury visit and test premises with reference to the needs of people with various forms of functional impairment: easy access for wheelchairs, readable menus, reasonable noise levels, skilled staff etc. One very important consideration is the way in which staff respond to guests. Assessments, then, are not only based on a questionnaire setting out requirements to be met. The prize is also intended to reward those places in Stockholm where easy access has been imaginatively and intelligently achieved.

solutions which will make life easier for a lot of people.

"Often the focus of attention is on disabilities which can be seen, but many disabilities are invisible. Then there are also temporary disabilities which require modifications for a period of time. When building a new hotel or renovating an existing one, we go in for each hotel having several rooms which will be easily adaptable to different needs", he says.

**"For example** in the disability rooms at the Scandic Anglais we have beds which can be raised and lowered – just the thing if you happen to suffering from back trouble. If you are a wheelchair user, we want the bathroom to be as practical as possible for you, and so we install a shower stool and make sure that the grab rail is low down."

#### Money well spent

The 93-point list is developing all the time, and during 2010 Magnus Berglund expects the easy access measures listed to pass the hundred mark. Development proceeds through an ongoing dialogue with guests and associates. Different solutions are tested at different hotels worldwide to see what is worth developing and what is best suited to the individual hotel.

"We think it's money well spent. There are a million people with functional impairment in Sweden and over 50 million in Europe. They are warmly welcome to come and stay with us. At the same



A vibrating alarm clock makes things easier for hotel guests.

Casablanca Video at Sveavägen 88 won the 2010 St Julian Prize for successful initiative including, among other things, a new entrance and checkout counter, as well as in-service staff training.

The second winner, Farsta Centrum, was rewarded for its comprehensive approach to disability issues. The award was presented at the City Hall by Vice Mayor Ulla Hamilton (on the left in the group photo). time, modifications needn't cost huge amounts of money. We take the opportunity of changing things when we're rebuilding or building something new. And as I said earlier, much depends on the response from staff and their service-mindedness."

**Scandic today** is a front runner in the field of accessibility. Other hotel chains are peeking at Scandic's solutions, which have also received a good deal of European press coverage. CNN, the American TV company, ran a feature programme in which they interviewed Magnus Berglund.

"This is a good thing in many ways", he says, "not only from a business point of view but because it focuses attention on disabled access in every connection. Sweden is well to the fore in this respect, but we aren't best at everything and we have much to learn from each other. All best practices are worth highlighting."

"At the end of the day it's a question of my right, and other people's, to be received as a human being and guest, not just as someone with a functional impairment."

**One hint he offers** to others in the hotel and restaurant trade is to rent a wheelchair and station it in the office so that all associates will be able to use it for a couple of hours each. That will open their eyes to things which can cause problems in the environment and in terms of response. Even if it only demonstrates the needs connected with functional impairment, it will be a good way of getting the subject discussed in the workplace.

#### S:t Julian prize-winners, 2006–2010

- 2010
   Casablanca Video, Sveavägen 88
   Farsta Centrum, Farsta
- 2009

Hotel Hansson, Surbrunnsgatan 38 Indiska Odenplan, Odengatan 79 Sign Painter Bengt Elde, Drottninggatan 7

- 2008 no prize awarded.
- > 2007

Immanuelskyrkan, Kungstensgatan 17 Wirströms Järn & Färg, Folkungagatan 54 Ersta Konferens & Hotell, Erstagatan 1 K Grekiska Kolgrillsbaren, Liljeholmstorget 106

2006

Filadelfiakyrkan, Rörstrandsgatan 5 ICA Nära Axelsberg, Selmedalsvägen 3 Scandic Sergel Plaza, Brunkebergstorg 9 Bruno Café & Lounge, Götgatan 36

"Another tip is to have an eye for small things, like moving the coffee cups down off the shelf so that everyone can reach them. That way the big things will be easier to deal with."





# City of Stockholm wins the 2009 Accessible Travel Award

■ In November 2009 the City of Stockholm was presented with the Accessible Travel Award for 2009, in recognition of "determined efforts and a cogent strategy pointing the way towards promoting a society accessible to all." The distinction forms part of a campaign by SKL, the Swedish Association of Local Authorities and Regions, to encourage accessibility improvements by local and regional authorities.

SKL has endowed the Accessible Travel Award with the aim of disseminating best practices and inspiration. The award is presented annually for "successful measures enhancing travel for persons with functional impairment".

Lars Cedergrund and Ingegerd Forss accepted the award on behalf of the Project of Easy Access at the City of Stockholm Traffic Administration. They have both been working on the project from its inception in 1999.

**"One major factor of success"** said project manager Lars Cedergrund, in his address of thanks, "is that from the very first moment we have had politicians willing to supply funding. And the project team are ardent enthusiasts for change, as indeed they have to be, since part of our work is concerned with convincing and inspiring others."

 Lars Cedergrund and Ingegerd Forss, from the Project of Easy Access, receiving the "SKL Accessible Travel Award for 2009".

#### The citation

The Accessible Travel Award jury comprises representatives of SKL, DHR (the Swedish Association of People with Mobility Impairments), Svenska Färdtjänstföreningen (representing transport services for the disabled), SLTF (trade organization of local and regional public transport in Sweden) and the Örebro County Council. Their citation reads as follows:

"Through determined efforts and a cogent strategy, the City of Stockholm has pointed the way towards promoting a society accessible to all. Even though, in terms of size, the City of Stockholm is unique in Sweden, much of its work and working methods can also serve in smaller communities as a model for improving access for people with functional impairment. The so-called Stockholm Model for pedestrian crossings has become a household concept whose currency extends far beyond the boundaries of Sweden itself. By setting long-term targets and accepting formidable challenges, the City has created the dedication and insight needed in order to achieve results. We are unable to judge whether or not Stockholm will become the world's most accessible city in 2010, but we are convinced that the objective has helped to broaden commitment to accessibility issues among the City's various committees and authorities."



# The Stockholm City Hall must be open to all comers

The Stockholm City Hall was built at the beginning of the 1920s, at a time when present-day accessibility stipulations did not exist. This lovely building is full of level changes, stairs and subdued lighting. Accessibility is now being improved for everyone who works in the City Hall or comes there for guided tours, meetings, banquets or weddings.

The Stockholm City Hall is one of Sweden's most eminent buildings, cast in the idiom of National Romanticism. It was designed by architect Ragnar Östberg and officially opened on Midsummer's Eve 1923. It was intended as a citizens' building, open to all, hence the name of its open courtyard, Borgargården, meaning "Citizens' Courtyard".

The City Hall now receives about 400,000 visitors annually for guided tours. It is workplace to 250 politicians and local government officials, and its amenities include the Council Chamber, where the City Council meets, and many other assembly or committee rooms. The magnificent banqueting premises, best known among them being the Blue Hall, are much used and many couples opt for a civil marriage ceremony in the Oval.

Sympathetic alterations are in progress to make the City Hall more accessible. Thomas Schilén from the Real Estate Administration, P.O. Bengtsson from Build Wisely (Bygg Klokt) and Lennart Klaesson, representing the Project of Easy Access, are all involved in the process. Gunnar Kempe, District Manager at the City of Stockholm Real Estate Administration, comments: "The City Hall is a hugely important building to the people of Stockholm. Obviously it has to be as open as possible to the general public. But we have to take into consideration the historic nature of the place and the security of people working in the building. So accessibility measures have to be carefully worked out and understood and accepted by all concerned."

"We're always on the lookout for new technical solutions for overcoming the problem of level changes, making more lifts accessible and improving the lighting", he continues.

#### Better outdoors and inside

The Real Estate Administration manages the City Hall and is in charge of accessibility improvements there. The Project of Easy Access has been a prime mover in this process, partly through the inventory which was conducted in 2000, resulting in the programme entitled "Stockholm City Hall – open to all comers!" Planning and implementation are proceeding in consultation with City Museum conservators, the City Hall facilities and activities management, the Disability Council and property managers. A number of the measures in the programme have been put into effect since 2002. Outdoors, the street area and car park have been rebuilt, and improvements made to pedestrian crossings and bus stops in the vicinity of the City Hall.

**As regards the actual building** the office entrance at Ragnar Östbergs Plan 1 has been made accessible by means of automatic door openers. There are now disabled toilets on all floors, and an old storage facility by the entrance to the Eken Restaurant has been turned into new toilets.

"We're all the time looking for new ways of reducing level changes."

The Drätseltrappan staircase lift, which goes from top to bottom of the whole building, linking the Stadshuskällaren restaurant with the offices, has been sympathetically rebuilt.

Lennart Klaesson, project leader with the Project of Easy Access, says that it was a tricky but interesting problem to crack. The old lift had a very narrow door with inner grille gates, which meant that not even one person in a small wheelchair could get into it.

The lift door looks as narrow as ever, with the old hinges fully visible, but this is an optical illusion. The old original door on each storey, just like the lift shaft, has been widened so that the lift can also be used by people in wide wheelchairs.

"An elegant, tailored solution" is Lennart Klaesson's verdict.

#### Simple, smart solutions

Not all solutions need to be customised. A "Flexstep", which is a lift and stairs in one, is being tested on floor 5. When stationary it looks like an ordinary flight of stairs, but when you push the button the treads flatten out to make a platform which rises to the next level. After a while the platform turns back into steps again. The Flexstep is a readymade product requiring no structural alterations, but modifiable to suit the surroundings.

"The Flexstep has several advantages", says Thomas Schilén, Administrative Officer at the Real Estate Administration. "It can manage heavy powered wheelchairs and also comes in handy for the mail and coffee trolleys. The City Museum, which monitors the heritage aspects, prefers freestanding solutions where the difference between old and new is clearly visible, as it is here."

#### Priority measures

Quite a lot still remains to be done before the City Hall is really open to all comers, and work is progressing on schedule. Priority has been given to what is perhaps the most conspicuous change, a new ramp at the main entrance from the Borgargården courtyard. The existing steel ramp is a makeshift arrangement which finds little favour in the eyes of P. O. Bengtsson, initiator of Build Wisely.

"No, the temporary ramp is a long one with a gradient of 1 in 12, a real arm-twister", he says, showing pictures of a proposed new permanent ramp.

**The new scheme** has been worked out as part of the Dignified Entrance project, which is a joint undertaking by the National Property Board, Design for All (EIDD Sweden) and the City of Stockholm.

The Stockholm City Hall, designed by architect Ragnar Östberg, was officially opened on Midsummer's Eve 1923.

The walls of the Golden Hall are covered with 18.6 million pieces of glass and gold mosaic, the work of artist Einar Forseth. The end wall is dominated by the Queen of Lake Mälaren, symbolising Stockholm.

"The new ramp", P. O. Bengtsson continues, "is diagonal, let into the stone steps, from one side to the other, and has a long travel with two landings. The gradient is only 1 in 20, which is less than the regulations demand, and the ramp does not impede pedestrians. It's a simple, neat solution and fits in well with the ceremonial staircase."

**There are several places in** the City Hall with flights of two or three steps which have now been fitted with temporary, detachable ramps.

The Real Estate Administration is working here, together with the Dignified Entrance project, to devise a new type of stairlift which will be let into the floor when not in use, the same type as was recently installed at Hotell Skeppsholmen.

"The indoor lighting is another priority", says Thomas Schilén. "The old lamps emit a murky light and are real energy-guzzlers. We need new ones for the sake of both accessibility and the environment. We're collaborating on this with suppliers who have devised special LED lights which we hope will be approved by the City Museum."





# Entré Stockholm opens the door to all the best places

■ How wide is the door of the pizzeria round the corner? Is there a wireless loop system at the Modern Museum? What is the gradient of the street outside Gallerian in Hamngatan? The Entré Stockholm accessibility guide answers questions like this to do with many public buildings and their immediate surroundings. Whether or not they are accessible is left to the reader to decide.

**Entré Stockholm** is an accessibility guide to public buildings and apartment blocks in Stockholm. Accessed on the City of Stockholm website, it does not award marks for accessibility. Instead, using photographs, measurements and other data, it describes what each place looks like.

Ann-Marie Stenman is a handling officer at the City Planning Administration and has been one of the Entré Stockholm team from the very outset.

"We've chosen not to classify", she explains, "but instead to give a detailed description of the entrance and the building. Our aim is to give the reader as realistic a picture of the place as possible. Whether or not it is accessible is for the reader to decide, because everyone has different needs and requirements."

#### 7,000 public premises

The foundations of Entré Stockholm were laid in the mid-1990s, when Byggettan, a branch of the Swedish Building Workers' Union, compiled an access inventory of public buildings and apartment blocks in Stockholm. The City of Stockholm then took charge of the material and commissioned the City Planning Administration to make it available to the general public on the web. The Entré Stockholm guide was compiled with support from the Project of Easy Access and in close collaboration with the DPOs.

The creation of Entré Stockholm has included both on-site inventories of various buildings and the construction of a database to make the information readily available. Data can now be accessed concerning 7,000 public premises, from the tobacconist's on the corner to the big museums and gallerias. The guide is growing all the time as new inventories are added and existing ones updated. Space, however, has not permitted any updates of the apartment block data since Byggettan's inventory.

 Ann-Marie Stenman and Ulf Nyström-Stellan. Information about more than 7,000 public places can now be accessed on line.

#### Welcome to Entré Stockholm

The accessibility guide can be visited on www.stockholm.se (in Swedish only.) Search by Tillgänglighetsguide and click the link for Entré Stockholm. The guide covers more than 7,000 public places in the following categories:

- Shops
- Cafés
- Hotels
- Museums
- Cinemas
- Sports facilities
- Restaurants
  Libraries
  Theatres

Gallerias

- Swimming baths
- Public conveniences

#### Critical measurements

Ulf Nyström-Stellan, a handling officer at the City Planning Administration and one of those working with on-site inventories, describes how the team have worked over the years to develop methods and parameters for describing premises as well as possible.

Measurements are critical – measurements showing the distance from the entrance to the nearest parking lot, the gradient of the street outside, the width of the doors, the height of the thresholds. To the individual person, these measurements can make all the difference between being able and unable to visit the place concerned.

"We are quite strict in our on-line descriptions and base our information on measurements taken. This makes searching easier and gives people a better chance of comparing different premises", he says.

The inventories often generate useful discussions with proprietors, many of whom want to make improvements so as to attract more customers, and Ulf and the others supply hints on various solutions and distribute a brochure, compiled under the Project of Easy Access, and entitled "32 ways of making your shop more accessible".

"Attitudes have changed", Ulf Nyström-Stellan continues, "and I think the St Julian Award and the campaigns have played an important part in this. They have shown that accessibility investments pay dividends."

#### Further development

At the same time as Entré Stockholm is being developed to make it still more comprehensive and user-friendly, development work is in progress at national level. The Government has commissioned Handisam, the Swedish Agency for Disability Policy Co-ordination, to submit proposals and guidelines for the design of accessibility guides by municipal authorities.

"The response hitherto confirms that we were right in choosing to describe premises in pictures and words, instead of classifying them by symbols", says Ann-Marie Stenman. "It will be very interesting to see what conclusions Handisam comes to in its investigation and how they will affect Entré Stockholm in the future."

"We are continuing our work to integrate the Culture Administration's printed guide and the Cemeteries Administration's accessibility information with Entré Stockholm, as well as adding information about parks and walkways. We are also going to consider the possibility of developing the guide so that the general public themselves can contribute information, in keeping with wishes expressed by the City Council."

The accessibility guide shows the opening of the glass doors to the Medborgarplatsen library to be 1.21 metres wide.



# Stockholm 2030

*Towards a world-class Stockholm in 2030.* Here you meet five politicians who state their views on the importance of accessibility for realising the vision of the city's future development.

What is the role of accessibility in the vision of Stockholm in 2030? In what fields are special accessibility initiatives needed in order for the vision to come true? What do you want life, housing and employment to be like in Stockholm in 2030 for everyone with functional impairment? What bearing does accessibility have on Stockholm's international competitiveness?

How are the city's cultural amenities to be made available to everyone in 2030? How are opportunities for sporting activity and exercise to be made equal for everyone by 2030?

# Towards a world-class Stockholm in 2030

The City of Stockholm has formulated a long-term vision for the city's future development. Stockholm by 2030 is to be a city of world class – manifold and offering a wealth of experience, innovative and expansive. Stockholm then is to be the citizens' city, an accessible, safe city with neither social nor physical barriers.

This vision is a strategic pledge by the City of Stockholm. All authorities and utilities have been tasked with working to achieve it. To make the vision come true, close co-operation is also needed with Stockholmers, the business community, national government, the education system, NGOs, the County Council and the other municipalities in the Stockholm-Mälaren region. In the following, five politicians describe the role of accessibility in the city's development as they see it.

#### Ulla Hamilton (Moderate Party), Vice Mayor for the Environment and Traffic:

## What is the role of accessibility in the vision of Stockholm in 2030?

Stockholm is to be a world-class city, which means that it must be a city for everyone. The bid to become the world's most accessible capital city, which began in 1999, is strategic and makes the region more competitive. Many visitors, both with and without functional impairment, come here, and we attract many field trips from all over the world on the subject of accessibility.

The growing numbers of visitors are substantially boosting business earnings. But at the end of the day it is the people of Stockholm themselves, whatever their functional capacity, who gain most of all by living in a welcoming city which is workable for everyone. Accessibility must inform the city.

#### In what fields are special accessibility initiatives needed in order for the vision to come true?

Above all I think we need to create more insight in all walks of society concerning the importance of accessibility improvements.

The budget presented by the City Hall political majority tasks the Traffic and Waste Management Committee with devising a strategy whereby all authorities and utilities will pursue accessibility promotion as part of their day-to-day activities. Accessibility issues must be made a natural part of the planning process, not treated in isolation.

In the inner city of Stockholm it has now become easy to get around with a wheelchair, walker or pram. The same goes for the busiest streets in the outer city. We are now proceeding to make the rest of the city equally accessible.

What do you want life, housing and employment to be like in Stockholm in 2030 for everyone with functional impairment? What we politicians can do is create the prerequisites of good living. Where accessibility is concerned, I hope we will have caught up on the construction front and eliminated all obstacles in streets and squares. No new buildings in 2030 are to be inaccessible. Accessibility will then be looked on as an inherent quality of shops, restaurants, banks and other public buildings. This is how one can gain a competitive edge.

The greater the number of people with functional impairment entering the employment sector the better. This makes an important difference to attitudes. If you work with someone every day, this makes it natural to see the person rather than the functional impairment.

### What bearing does accessibility have on Stockholm's international competitiveness?

As I began by saying, I believe that our work for easier access has a big chance of becoming a major "export commodity". We are already receiving many official visitors who are interested to see how we have solved various problems of the street environment and in our buildings, in partnership with the DPOs. Many visitors are very interested in our development projects, such as our unique navigation system for people with vision impairment.

Tourism is an expanding industry. If we can receive tourists with functional impairment, meeting them with a positive attitude at the same time as they can easily make their way around and visit all our fantastic attractions, their reports will spread like rings on the water.

#### Jan Valeskog (Social Democratic Party) Deputy Chair, Traffic and Waste Management Committee:

## What is the role of accessibility in the vision of Stockholm in 2030?

Stockholm in 2010 is to be the world's most accessible capital city – a city for everyone, regardless of

functional impairment. That was already decided by the City Council in 1998. But Stockholm will not achieve the target of being the world's most accessible capital city this year, despite its ambitions. The law says that citizens are entitled to participate in what are public activities and to have access to public places. This also makes it self-evident that the city must be characterised by serviceability. And so accessibility is a very big part of the Stockholm Vision 2030.

#### In what fields are special accessibility initiatives needed in order for the vision to come true?

Since 1999 the City has been reserving more than MSEK 100 annually for accessibility improvements in the field of traffic and waste management. But there are so many other things in the city besides streets and parks that are inaccessible. Accessibility in the city should also apply to those who have vision impairment, hearing impairment or mental functional impairments. Very little indeed has happened in this field, despite heavy pressure being brought to bear and important work accomplished by the DPOs. I would like to see more being done to make the city navigable, for example, for people with vision and hearing impairments or with neuro-psychiatric functional impairments such as Asperger and autism.

#### What do you want life, housing and employment to be like in Stockholm in 2030 for everyone with functional impairment?

No one in Stockholm must need to feel they are a second-class citizen. People with vision and hearing impairment or mobility impairment must be able to take their share of the city on the same terms as everyone else. Both indoor and outdoor environments must be accessible to people with functional impairment. Everyone, for instance, must be able to find their way around in buildings, get to and from work and participate in cultural and recreational activities. To us Social Democrats it is important that both society as a whole and urban planning should be characterised by fairness. As things now stand, Stockholm Transport (SL) is setting a shining example, as regards information boards with Braille script at the Hötorget station and the recorded announcements played back when a bus reaches different stops in the inner city. I would like to see more such instances, and I would also like to see good lighting, high-contrast markings and selection of materials making it easier for people with vision impairment to find the entrance to premises.

# What bearing does accessibility have on Stockholm's international competitiveness?

Easy access in Stockholm means a lot, both for tourism and for enterprise. An accessible city mirrors a democratic, egalitarian attitude towards people and also makes things easier for people without any functional impairment. Improved access makes the whole of society work better for everybody.

Sweden is a leading country for design and could lead the world in accessibility design. This could attract both investors and students. I would like to see Stockholm becoming a pioneering city in matters of accessibility, and accessibility issues being placed still further up on the political agenda.

#### Madeleine Sjöstedt (Liberal Party) Vice Mayor for Culture and Sport:

### How are the City's cultural amenities to be made accessible to everyone by 2030?

Measures are needed in two main fields:

- Information as to how accessible different events, facilities or activities are.
- The physical accessibility of Stockholm's cultural amenities.

As regards information, the Culture Administration has long been publishing an accessibility guide both in paper form and on its website. This today is an old-fashioned, inefficient method. For several years now, the Culture Administration and the City Planning Administration – which owns the guide Stockholm Entré – have been tasked with coordinating these guides and publishing them in an open format, or as a wiki, so that NGOs and business undertakings can improve it themselves, instead of depending on the City to do so. We should soon have an accessibility guide as an iPhone application, for example, which all users could improve when something needs revising.

As regards physical accessibility, during the past few years the Culture Administration has also made accessibility funding available for cultural activities which rent private premises instead of using municipal facilities. This has had several positive results, and we are looking forward to still more in the years ahead. The more efficiently information is disseminated concerning the access shortcomings of cultural amenities, the more emphatically this issue will be brought home to the owners of those facilities. That should also have a salutary effect.

#### How are opportunities for sport and exercise to be made equal for all by 2030?

Our most important initiative in recent years has been the opening of the Beckomberga Sports and Swimming Centre for disabled persons, which will provide better sporting opportunities for disabled persons than ever before.

The accessibility makeover of Hellasgården a year or two ago and the refurbishment of the Sköndal disabled bathing facility in the years ahead are two of our increasingly large-scale initiatives for spontaneous sports facilities, exercise trails, outdoor gymnastics etc. which are accessible to all. People's health is their own responsibility, but it is the City's task to ensure that there are good opportunities available and that they are equally available to everyone. Roger Mogert (Social Democratic Party) Vice Mayor for the Opposition, Deputy Chair of the Culture Committee:

## How are the City's cultural amenities to be made accessible to everyone by 2030?

A strong cultural sector is essential to Stockholm's development as a creative, attractive city. Culture exists for everyone to experience, take part in and create themselves. No one must be excluded from it. This ought to be axiomatic today, and it is our common political duty to make it come true on the way to 2030.

More should be done to make the physical venues of the cultural sector more accessible. My vision also includes Stockholm taking the lead in digital infrastructure with a view to disseminating more culture to more people. City Theatre performances can be filmed, captioned, translated and interpreted for the blind and partially sighted, so that they can be transmitted to cinemas, community halls, TV, the web and mobile phones. Our museums can offer attractive 3D exhibitions and our libraries can "lend" author interviews via digital media. Imagination and political determination are the only limits to these possibilities!

#### Jari Visshed (Social Democratic Party) Deputy Chair of the Sports Committee:

#### How are opportunities for sport and exercise to be made equal for all by 2030?

Everyone must have the opportunity of engaging in sport and exercise on their own terms and regardless of gender, ethnic origin, age or physical capacity. Viewed in this perspective, accessibility becomes a very broad concept. We know from the Sports Administration's own surveys that socio-economic factors make an important difference to the exercise habits of different groups in society. Roughly speaking, if you are an immigrant, a woman and relatively poor, then you are very likely to be physically passive. Accessibility can mean offering separate bathing times to women who, for various reasons, are unable to bathe at the same time as men. It is also important for the City to provide activities which commercial interests cannot be expected to offer. Accessibility is also a question of money. The sporting facilities which the City offers must be accessible at reasonable cost, so that people will not go without sport and exercise for money reasons.

Exercise prescriptions are becoming more and more common in medical practice. This calls for facilities where people can engage in hydrobics and water gymnastics etc. Accessibility also calls for a sports infrastructure in all parts of the city, so that the different facilities will be easy to get to. It is then important for different interests to be given a hearing, so that we will not build ourselves into a bad corner. A lot of the knowledge exists already but, regrettably, is often "forgotten" in the construction of new facilities.





 Design • Positioning • Conferences • Indoor environment • Dignified Entrance • Parking spaces • Lifts • Processes • Seating • Checklist. 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A world-class city, of course, is accessible to everyone. A systematic endeavour to make Stockholm the world's most accessible capital city was already launched 12 years ago. Every year since 1999, MSEK 100 have been earmarked for the work of the Easy Access Project.

What changes have been made to streets and squares since then? Have cultural activities grown more accessible? Can everyone today visit their swimming baths and sports facilities?

In this book, Stockholmers with various types of functional impairment describe their everyday lives, and experts describe how Stockholm in many ways has become a better city to live and move around in.

