



Keeping active

Universal design of outdoor recreation close to urban areas and cultural heritage sites



KOMMUNESEKTORENS ORGANISASJON

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This booklet was inspired by the members of KS Network for Universal Design, established in 2013. The goal is to contribute to an inclusive society by sharing best practices and removing barriers.

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is defined in Norway



OLD SPOT, NEW USERS: 19-year-old Christoffer Folmer can finally enjoy the popular swimming spot Ystehedeneset, close to where he grew up outside Halden in the Southeast of Norway. New accessible parking, toilets, trails and a swimming ramp has made all the difference. "It is a lot better than it was. Previously, it was simply inaccessible to me, which was a shame, as this is a beautiful and popular spot," says Folmer, who was involved in the upgrade as a user representative. (Photo: Fredrik Naumann/Felix Features)

Keeping active

Outdoor recreation is deeply rooted in the Norwegian identity and cultural heritage. Ample access to outdoor recreation close to where people live, has a positive effect on public health and quality of life.

Accessible trails and easy access to the coastline and waterways is important, while accessible cultural heritage sites can serve as a motivation for many to get out and be active.

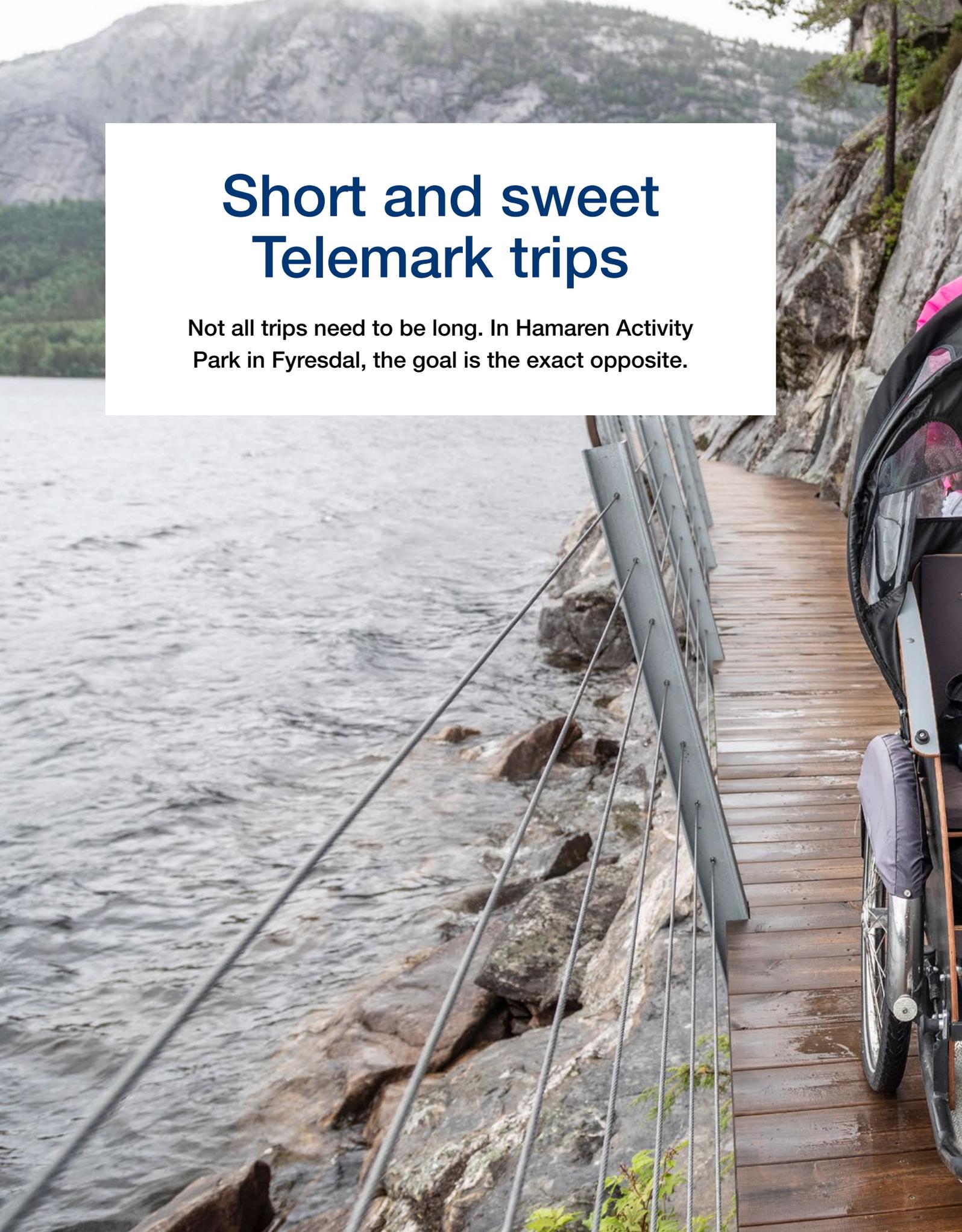
In this booklet, we present projects in Norwegian municipalities and counties, which have contributed to more people being able to be active close to where they live.

We hope you will be inspired!



Short and sweet Telemark trips

Not all trips need to be long. In Hamaren Activity Park in Fyresdal, the goal is the exact opposite.





ACCESSIBLE: Hamaren Activity Park in Fyresdal has become a success. “Here it is a short way to most things, and everyone can use the park,” says project manager and forest manager Aslak Momrak-Haugan. (Photo: Fredrik Naumann / Felix Features)



“**OUR FOCUS** has been to facilitate short-distance outdoor experiences,” says Aslak Momrak-Haugan, forest manager in Fyresdal municipality and one of the project managers for the park.

“We want as many people as possible to have the opportunity to get out into nature, not just the most active people,” he says.

Fyresdal is surrounded by wild and beautiful nature, but the great hiking opportunities are not suitable for everyone. The municipality’s ambition was therefore to create an accessible activity park that is suitable for as many people as possible in every age group, regardless of functional ability.

The park is located in the middle of Fyresdal, close to residential areas and natural hubs such as schools, kindergartens and nursing care centers.

“People don’t have to use a car to get here. It is a short walk away. And if it starts to rain, you can turn around and go home again,” says the project manager.

One of the main aims was to facilitate the park for as many user groups as possible. “The area was used in the past as well. But the

terrain is so hilly that it was difficult for many to walk here before we made the necessary interventions,” says Aslak Momrak-Haugan.

The headland itself, which plunges into the lake Fyresvatn, was completely inaccessible to most people.

The solution was a universally designed path of a total of 2.4 kilometers. The path runs along the water and over an airy footbridge, which is built on top of the steep mountain. Parts of the new footbridge are designed as an old-fashioned timber gutter, inspired by the traditional timber floating that has been an important industry in Fyresdal municipality.

Along the walkway, benches and seating areas have been set up with fire pits and barbecue facilities, and further into the forest, a larger outdoor kitchen has been installed, equipped with gas and hobs.

FUN FOR ALL AGES

Along the path two ladies come whizzing by on a nifty vehicle. One sits in the back and pedals, the other sits in the front in a wide, comfortable seat.

“This is my first park trip of the year, and it is



LOVING THE OUTDOORS: Kids and employees in Fyresdal kindergarten won't be stopped by a little rain. "We often use the activity park. The trail is suitable also for the youngest ones who have just learned to walk," says kindergarten manager Kathrin Theres Liltved. (Photo: Fredrik Naumann / Felix Features)

so nice to get out," says Turid Mandt (86) with a big smile in the front seat. The weather is capricious, and she is covered up with a blanket over her legs. The canopy keeps her snug and dry. Ingunn Lauvrak is in charge of the pedalling. She works at the local nursing care centre as well as at the volunteer centre. Since the park was ready in 2017, she has walked, run and cycled countless laps here, both at work and in her spare time.

"I have become very fond of this park," she says.

"It can be used by everyone, from toddlers who can barely walk, to the oldest approaching

100 years old. You can get around easily, whether you are using a pram, a walker, wheelchair or this style of taxi bike that we are using today." The bikes are ideal for older people who need a little help getting outside. Turid Mandt lives in her own apartment connected to the nursing care centre, and usually relies on a walker. Although she can easily go for short walks on her own, she can get further out into nature on a taxi bike. The two ladies have already agreed on a new trip.

"Next time, we will pick berries," says Turid Mandt firmly. She misses being able to go for a spontaneous walk in the forest.



NICE SHAPES: The footbridge is "shaped" along the mountain lines. (Photo: Fredrik Naumann / Felix Features)

HISTORICAL LINES: The start of the new footbridge is designed as a timber gutter, inspired by the traditional timber floating, an important industry in Fyresdal. (Photo: Fredrik Naumann / Felix Features)



"I have always loved picking berries, ever since I was a little girl. I can see that the lingonberry shrubs are in full bloom. It's looking to be a good year for berries," she predicts.

POPULAR PARK

Fyresdal municipality is located in upper Telemark and has only around 1250 residents. Nevertheless, the number of visitors to the activity park is sky high: The visitor counter at the timber gutter, the start of the footbridge, shows that almost 12,000 people make the route around Hamaren every year.

"On sunny days, the place is crowded,"

says Aslak Momrak-Haugan and lists examples of visitors:

"Schools, kindergartens, the nursing care centre, young people who like to hang out by the lake, employees at the local business hub who go for walks during their lunch break, retirees bringing a thermos of coffee, people who come for a work-out, families spanning several generations who go on outings together on the weekends." He continues:

"The park makes it possible for everyone to get around on the path. Fitter people can choose the more demanding route further into the forest, and maybe hike to the top of the



Hamaren mountain, where there are shelters and beautiful views. Or they can test the bike trail, which has eleven obstacles.”

The project manager believes an important reason for the success is that people in Fyresdal feel a strong sense of ownership of the park. When the municipality started the planning process, residents were invited to come up with ideas. Various user groups were given the responsibility for designing specific interventions such as bicycle paths, information posters and shelters.

“People really feel that this is their park,” says Aslak Momrak-Haugan.

Hamaren Activity Park has received attention from politicians in other municipalities, who make the trip to Fyresdal to get inspiration for their own projects. In 2017, the park received the Innovation Award for Universal Design from DOGA, Design and Architecture Norway.

NEW VANTAGE POINT

In the next few years, the plan is to expand Hamaren Activity Park with another spectacular intervention: A new walkway on wooden poles, 15 metres above the terrain. The walkway will meander in a zigzag formation up the mountain-side to the top of Hamaren. A new vantage point will be built there, a terrace with 45 metres in diameter, towering over the pine trees and with a panoramic view of Fyresvatn lake. This path will also be universally designed.

“It will be fully possible to get all the way to the top in a wheelchair,” says Aslak Momrak-Haugan.

Stage two of the park will be realised no earlier than 2022.

FACTS HAMAREN ACTIVITY PARK

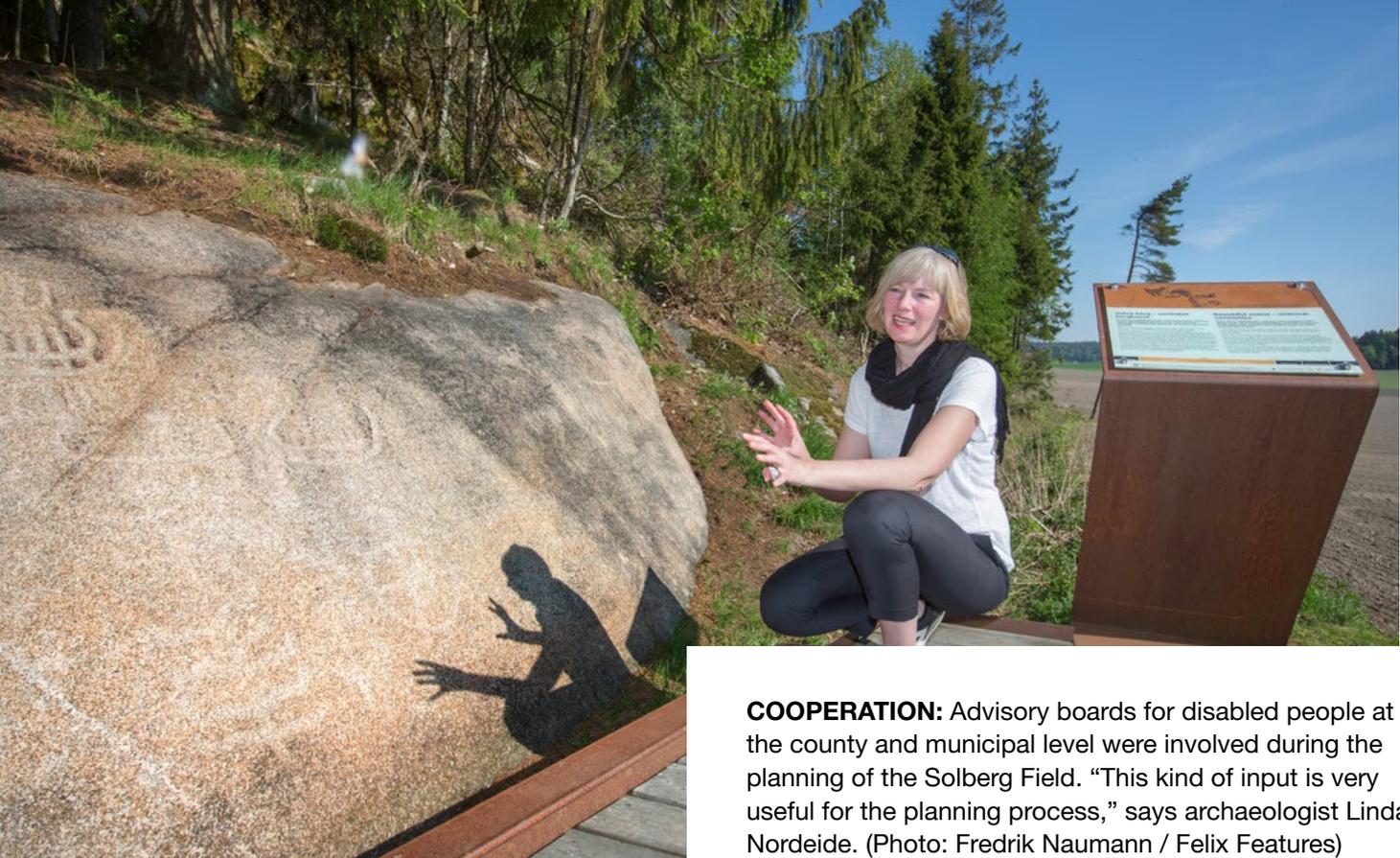
- Nature park in Fyresdal, Telemark
- Universally designed path
- Suitable for walking, cycling, prams, wheelchairs
- 2.4 km round trip
- Outdoor kitchen, barbecue facilities, shelters
- Bicycle trail with obstacles
- Bathing places
- Completed in 2017
- Budget NOK 3.4 million





Getting closer to the past

The path along the rock carvings was just one of several interventions to make history more accessible.



COOPERATION: Advisory boards for disabled people at the county and municipal level were involved during the planning of the Solberg Field. “This kind of input is very useful for the planning process,” says archaeologist Linda Nordeide. (Photo: Fredrik Naumann / Felix Features)

BOATS, HUMANS, WAGONS AND SPEARS: In the Bronze Age, people carved their history into the rocks in Sarpsborg Municipality. The Solberg Field is one of Østfold’s over 600 petroglyph fields from the Bronze Age. Nowhere else in Norway has this many rock carvings of this kind. In 2010, interventions were made so that more people could explore this historic treasure. Where previously it was muddy and impassable, an elongated platform was built that slides into the landscape. Instead of a fence, ramparts were laid just off the road.

LESS IS MORE

“We facilitated the area to make it accessible to as many people as possible. It is also important that people have something to look at when they arrive,” says Linda Nordeide, conservator and archaeologist in Viken County Council. She decided to make changes to the information boards.

“I prefer to write as little as possible. Previously, the signs had a lot of text. They now have around 160 words. I still think it is too much, and that some of the text is not fully understandable. A short text on a topic may be enough. There is a limit to how much people can absorb. Most visitors prefer to use their senses and explore the place,” says archaeologist Nordeide.

SPECIAL FONT

The font itself is chosen with care.

“It is not only the size of the font that counts, but also the type of font. We have used a font that is specially made for people who have difficulty reading. It should be very clear and easy to understand.”

The information boards are attached to the top of a stand at a custom-made height. The boards themselves, which are made of plastic, are covered with a film to avoid shine that can



THE MAGIC OF DARKNESS:

The rock carvings in the Solberg Field at night. The lighting project is unique in Norway. (Photo: Bjørn Finstad / Østfold County Council)

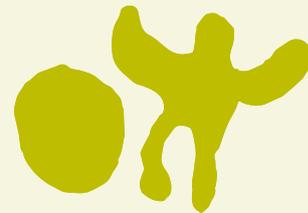
make reading difficult. In the first section of the Solberg Field, the rock carvings are painted red. Touching up rock carvings is generally avoided, but a dispensation has been granted at the Solberg Field.

“No one would see anything – regardless of their eyesight – if we had not been allowed to paint. These petroglyphs have such shallow cuts that if the paint is removed, they will be impossible to see.”

LIGHTS UP AT NIGHT

Viken County Council has been working with the Directorate for Cultural Heritage to find other methods for showing the petroglyphs. A few metres further away is another site. These carvings have not been painted, and are barely visible in the strong sun. But in the dark, they change completely: A lighting designer has developed a method that creates a special light and shadow effect.

“It provides a different experience. The light creates some of the magic, and can lead the mind to the use of torches in the Bronze Age,” says the archaeologist.



THE SOLBERG FIELD

The Solberg Field is located just east of the highway E6 in Skjeberg close to Sarpsborg. The field is one of many ancient monuments along “Oldtidsruta”, highway 110. Thousands of people visit this field every year. The field closest to the road has around 60 different figures: ships, carry wagons, humans, sun pictures and cup marks.





The serpent that could swallow all

In Norse mythology, the Midgard Serpent was a terrible sea creature, caught by the god Thor. It meant the end of both of them. Today, the serpent is wriggling again, in the form of a footbridge over the Frøyland Lake.

NORSE MYTHS: The Midgard Serpent passes Lalandsholmen, where the myth says that the Viking King Olav Tryggvason was born. Anne Marie Auestad, Deputy of the Norwegian Association of Disabled (NHF) in Nord-Jæren and NHF Southwest is one of many who have fallen in love with the bridge. She has come with Anne Reidun Garpestad, who works with universal design in the Municipality of Time. (Photos: Fredrik Naumann/Felix Features)



”THE MIDGARD SERPENT is an example of combining ambitious architecture and sense of aesthetics with universal design,” says Anne Reidun Garpestad, who was the project manager when Time was a pilot municipality for universal design from 2005 to 2013. She still serves as a universal design consultant.

Bryne Residents’ Association undertook the initiative for the Midgard Serpent, which connects important hiking trails in Time and Klepp municipalities in Jæren. Surrounding Frøyland Lake is a 16 kilometre long hiking trail. The bridge has made the hiking area more accessible to those who prefer shorter walks. In addition, the spectacular design of the bridge, designed by Asplan Viak in Stavanger, has become a destination in itself.

AESTHETICS MATTER

”Aesthetics mean a lot to us,” says Olav Hetland, leader of the Bryne Residents’ Association in Time. The association worked hard for 10 years to realise the project, which was launched by a public festival in 2016.

Attempts to plan a bridge stalled in the 1980s. Back then the idea was only to provide a functional access from A to B. When the Bryne Residents’ Association put great architectural

visions on the table, they managed to stir up the interest that was lacking in the previous round.

Each Norwegian krone collected by the Bryne Residents’ Association from private funders was matched by Jæren Savings Bank, which was established in 2015 when Time Savings Bank and Klepp Savings Bank merged. Financial support became an important symbolic act, as the bridge physically connects the geographic range of the new bank.

”We received one million Norwegian kroner just by selling name tags to be put on the bridge,” says Hetland. In addition the project received funding from Norsk Tipping, a government-owned limited company that regulates gambling and assigns the revenues to good causes.

GOOD TEAMWORK

An organic 230 metre long shape, covered in 33,000 metres narrow, lime pine timber planks, winds its way over the water today – almost like a twig. The Midgard Serpent is more than a convenient short cut; it has become a landmark and an attraction in itself.

Close cooperation between the Bryne Residents’ Association, the architects and the municipalities, ensured that both aesthetics and universal design were safeguarded.



BETTER COMBINED: «We managed to make universal design and aesthetics work together, and create something even better than if we had just paid attention to one or the other,» says Anne Reidun Garpestad from Municipality of Time.

”Initially, this seemed like a crazy idea. Through dialogue we managed to make universal design and aesthetics work together, and create something even better than if we had just paid attention to one or the other,» says Garpestad, adding:

”The Midgard Serpent really refreshes the meaning of universal design. It’s not a matter of dull facilitation and adaptation. It’s about creating exciting design for everyone.”

INCLUSIVE

”Here I can go for a trip with my partner, who is also a wheelchair user. In fact, we can roll side by side over the bridge. That means a lot,» says Anne Marie Auestad, Deputy of the Norwegian Association of Disabled (NHF) in Nord-Jæren and NHF Southwest.

Access roads as well as a picnic spot have been upgraded to universal standard. The Midgard Serpent itself has stepless access, non-slip cover, a gradient in accordance with regulations, and is two metres wide. Discreet green lighting along the surface lights up the bridge, providing both security in the dark and acting as orientation lines.

Auestad rolls unobstructed from the parking lot, along the upgraded trail and onto the bridge. She appreciates this:

”I can come here for a trip with friends and family without special planning, without anything being ‘facilitated’ only for me. It makes me feel more included.”



The caravan park with space for everybody

At Solvik Caravan Park it is just as common for guests to bring their guide dog to the beach cafe as it is to remove a prosthetic leg before stepping into the water.

“WAKING UP TO THE SEA BREEZE and birdsong ... it is absolutely magical. It means so much to be able to holiday in a place where both the surroundings and the voices are familiar. Where it is easy to ask for help. There is a limit to where you can go on holiday and feel free as a visually-impaired person. Here at Solvik,

the whole community is tuned in to giving us a good holiday experience,” says Marianne Tollefsen from Oslo.

The 55-year-old was born blind, and her husband is also visually-impaired. Together with their two children, who are now adults, they have spent many long summers at Solvik



LIKE THE BACK OF HER HAND: “I don’t like to feel more disabled than I have to. It means so much to be able to holiday in a place that you know like the back of your hand, where you can do ordinary holiday things,” says Marianne Tollefsen from Oslo. (Photo: Fredrik Naumann / Felix Features)



PUBLIC HEALTH: “The corona pandemic has highlighted the need from a public health perspective to facilitate good recreational activities,” says Jan Tore Lindskog, Senior Advisor for Universal Design in the City of Oslo. (Photo: Fredrik Naumann / Felix Features)

Caravan Park and Beach for disabled people.

“It has been incredibly nice to spend our vacation in a place where we feel familiar and can do ordinary holiday things: fish for crabs, buy ice cream in the cafe and swim on a beach that is not crowded. For the visually-impaired, it can be difficult to get to know people. Many sighted people become insecure when meeting blind people. Here at Solvik, we are many who know each other, and it is easy to pick up familiar voices,” says Tollefsen.

OPEN TO EVERYONE

Solvik Caravan Park is located in scenic surroundings on the island Malmøya, a stone’s throw from Oslo city center. The caravan site has been in operation since the 1960s, and is run by Solviks Venner, an association for

disabled people. The caravan park has 62 sites where disabled people can apply to set up their caravan, and the beach is open to everyone who wants to visit on a day trip. The only requirement for getting a site is that you live in Oslo and have a disability that means that you would have problems camping at a regular caravan park.

“I don’t like to feel more disabled than I have to. Here at Solvik it is easy to walk to the beach on my own. The whole facility has been upgraded in recent years, and it is easy to get around whether you are blind or in a wheelchair,” says Tollefsen.

In 2010, the municipality built a universally designed swimming jetty. It consists of three parts: a fixed part on land, a floating jetty of concrete, and a gangway with a swim platform. The whole area is universally designed without steps

and steep inclines. The railing has handrails at two heights, and there are orientation lines to the shower and jetty. All information boards are in Braille. Next to the swim stairs is a shelf where you can leave your prosthetic limb before going into the water.

FROM OUTSIDE LOO TO ARCHITECTURE PRIZE

Not least, the residents of the caravan park have appreciated the upgrade of toilets and showers. The old toilet block was cramped, draughty and poorly adapted to disabled people. Even non-disabled visitors struggled to use the outdated facilities.

“They were worn-down loos, to put it bluntly.” Jan Tore Lindskog, Senior Advisor for Universal Design in the City of Oslo, is proud of what they have achieved with tight budgets and strict



“There is a limit to where you can go on holiday and feel free as a visually-impaired person.

Here at Solvik, the whole community is tuned in to giving us a good holiday experience.”

MARIANNE TOLLEFSEN



UPGRADE: The old toilet block was cramped, draughty and poorly adapted to disabled people. Also non-disabled people struggled to use the outdated facilities. The new building has received an architecture award for good universal design. (Photo: Fredrik Naumann / Felix Features)



SAFE SWIM: The universally designed swimming jetty consists of three parts: a fixed part on land, a floating jetty of concrete, and a gangway with a swim platform. The railing has handrails at two heights, and there are orientation lines to the shower and jetty. (Photo: Fredrik Naumann / Felix Features)

requirements for adaptation to the vulnerable nature on the island. In 2017, the sanitary facility was awarded the Innovation Prize for Universal Design by Design and Architecture Norway (DOGA). The building is made of wood, with a superstructure in between. This provides a good view to the sea and the protected trees, and makes the building less dominant in the landscape. The building is easily accessible via automatic sliding doors, and the terrain is carefully modified to avoid the need for ramps and thresholds.

EVENS OUT SOCIAL DIFFERENCES

“Solvik has been part of a project to make municipal beaches and islands more accessible,” says Lindskog, who heads the project.

Other beaches, such as Hvervenbukta and Ingierstrand, have been equipped with more accessible walkways and swim ramps. An upgrade of ferry berths, new swim ramps and walkways is now being planned on several of the islands, which will make it safer and easier to get on and off for the visually impaired, people in wheelchairs and older people. New kayak

piers at Hovedøya and Sørenga make it easier to enter and exit kayaks for people with reduced mobility.

Over the last three years, NOK 330 million has been allocated to the project, and the City of Oslo is in the process of concluding a range of interventions to improve accessibility to buildings and recreational areas.

“The corona pandemic has highlighted the need from a public health perspective to facilitate good recreational activities. Universal design is not just about facilitating for disabled people – it is essential for creating age-friendly societies,” Lindskog stresses.

Meanwhile, Marianne Tollefsen is looking forward to spending another summer recharging her batteries together with her husband and friends at Solvik Caravan Park. The only thing that prevents her from using the swimming facilities is the water temperature.

“I’m a little fussy, and prefer a water temperature of at least 20 degrees before I have a dip. I also wouldn’t mind a universal design that could protect against stinging jellyfish!”

New path on historical grounds

A lighthouse, a fortress built during World War II and a universally designed path have made Fjøløy a popular destination in the Stavanger region.



WALKING COMPANIONS: Steinar Haugvaldstad, Ola Njå and Henry Magnus Haugvaldstad keep up their fitness by walking around Fjøløy three times a week. They have no problem getting around on the universally designed path. Fjøløy lighthouse is in the background. (Photo: Fredrik Naumann / Felix Features)

FOR MORE THAN 70 YEARS Fjøløy was a military ground that was closed to the public. Now it has been opened up and made available to as many people as possible. The new path leads to the last remaining cannon site on the island, and is suitable for most people regardless of their fitness and functional ability.

“Three times a week we go for a walk here,” says Ola Njå (84).

He walks along the path at a good pace, together with fellow hikers Henry Magnus Haugvaldstad (89) and Steinar Haugvaldstad (77). On Mondays, Wednesdays and Fridays, the three good old friends meet to go for a walk on Fjøløy. They have a fixed route, from the car park to the picnic area and back.

“On the weekends there is no point coming here. The parking lot is usually packed,” says

Henry Magnus Haugvaldstad.

“This is a popular place, and has become a very nice spot to go for a walk,” says Ola Njå, with a steady grip around his cane. He was born and raised on Fjøløy, and spent many years tending to the family’s sheep, which graze on the island.

“I’m still pretty fit. My balance is not as good as it used to be, and a cane makes it easier to walk,” he says.

«FESTUNG NORWEGEN»

It was the Germans who established Fjøløy Fortress and a number of other fortresses along the Norwegian coast, during World War II. The Nazi regime feared an Allied invasion from the sea, and the coastal fortresses were important in securing the occupation. On Fjøløy, three battle-ready cannons guarded the sea route to Stavanger.

In 1945, the Norwegian Armed Forces took over, and after the war, Fjøløy was used as a coastal fortress and military training area until 2009. In 2011, Stavanger Municipality took over and regulated the 270-acre area as a recreational area for the public.

CHALLENGING PROJECT

Fjøløy is located towards Kvitsøyfjord, a few kilometres from the famous Utstein Monastery. Following the regional municipal mergers, the area now belongs to Stavanger Municipality, and is managed in collaboration between the municipality, Fjøløy’s Friends, Stavanger Trekking Association and Ryfylke Outdoor Recreation Board.

Hans Olav Sandvoll, General Manager of the Outdoor Recreation Board, says that the choice of route for the universally designed path was not easy.

“The terrain is hilly and demanding, and there were many considerations to take along



ACCESSIBLE: Hans Olav Sandvoll in Ryfylke Friluftsråd is happy that the historic areas on Fjøløy have become an outdoor gem that is now accessible to everyone. (Photo: Fredrik Naumann / Felix Features)

the way, including all the birds that nest here. The path runs close to the beach and boat traffic, and should therefore be as secluded as possible,” he says.

From earlier times, another road enters from the back of the hill. But it is too steep to meet the requirements for universal design. Hence, a completely new path had to be made around the headland.

“On such projects, there is always a question of how large-scale the intervention should be,” says Hans Olav Sandvoll and explains:

“Our goal has been to make nature accessible to as many people as possible, without changing more than necessary.”

MANY CONSIDERATIONS

Four or five different routes were checked out before landing on the current solution.

“It may not be 100 percent perfect, but the climb is manageable for wheelchair users. With an electric wheelchair, there is zero problem. If you use a manual wheelchair, you may need some arm strength. But along the entire route, we have built resting areas and flatter ledges where people can take a break, says Hans Olav Sandvoll.

Before the path rounds the headland, you pass through a newly constructed gorge in the rock.

“We chose to cut and carve an opening in the rock and build the path on the ground, rather than construct a path on piles over the mountain. This would have been too visible and dominant in the landscape, for example from the sea.”

The path is illuminated, but the lampposts have been kept so low that they are invisible to passing boats. The surface is finely granulated gravel mixed with slightly coarser gravel, but not so coarse that it gets stuck in wheels.

“The gravel is a firm and solid surface that works well for most people. A concrete surface

would have been optimal for wheelchair users, but would have taken away the feeling of being in nature.”

Hans Olav Sandvoll stresses that recreational areas such as Fjøløy need to be supervised and maintained after completion.

“A universally designed path can quickly become impassable. It doesn’t take more than a tree falling over the path, or a heavy downpour washing away some of the gravel,” he says, adding an important reminder:

“We advise visitors not to walk here alone, just as listed in the Norwegian Mountain Code (“Fjellvettreglene”). This applies to everyone, and especially to wheelchair users.”



HIKING TRAILS AND TOILETS: New hiking trails cross the landscape, and a new toilet facility is available when nature calls. One of the four toilets is an accessible toilet. (Photo: Fredrik Naumann / Felix Features)



WAR MEMORY:

The Germans established Fjøløy Fortress in 1942. The last remaining German cannon on the island is near the path. (Photo: Fredrik Naumann / Felix Features)

MEETING POINT

The new picnic area and toilet facility, designed by Ole Trodal Architects, is located next to the last cannon left on the island.

“The facility is designed so that it stands out from the fortress and the old defence buildings. This is a new building, which should be immediately apparent,” says Hans Olav Sandvoll.

The picnic area is fenced in to keep out the grazing sheep. Roofs cover tables and benches to protect from rain and snow. On this particular day, Ola Njå and his fellow hikers take a seat at one of the tables, just as they usually do.

“The weather is rough out here, I can testify to that,” says Ola Njå.

He is one of the original landowners on the island, and when the military decided to no longer use the area, his family wished to buy it back. He was nevertheless happy when the municipality decided to turn Fjøløy into a recreational area.

“We were initially worried that wealthy investors would buy Fjøløy for property development.

It is much better that the area is used for the benefit of the public,” he says.

At the picnic area, information boards have been put up about Fjøløy’s history. Ola Njå and his friends know it inside and out. Even though they were young boys during the war, they remember well how the Germans held the fort. They love sharing stories. One time they even got to try on the helmet and hold the rifle of one of the young soldiers. The soldiers used to give them candy. Another time, one of the biggest and wildest rams burst through the window of the German command barracks.

Ola Njå chuckles.

“We thought it was exciting. But even if we were young, we always knew one thing: The Germans were the enemy.”

The plan is to expand the universal design of a number of the military buildings at Fjøløy. Several of the buildings are used for school camps and other activities. Even if they have been facilitated for wheelchair users, a fair bit of work still remains.



TOP NOTCH: Cato Lie grins on his way down, having been able to enjoy the view of the Grorud Valley – by his own accord. (Photo: Fredrik Naumann/Felix Features)

Everyone to the top

The Stovner Tower in Oslo is proof that the ideal of a society where everyone can participate at the same level can inspire spectacular architecture that provides adventure and qualities for the whole population.

It all began with a big, hairy idea, enthusiasts with a plan – and a municipality that cares about universal design through and through.

”You must believe in the impossible,” says Truls Korsæth, project manager in the Agency for Urban Environment in the Municipality of Oslo.

The idea of The Stovner Tower came from the spectacular walkway that is built in the treetops of a national park in the German federal state of Bavaria.

”The idea there is to preserve nature while allowing people to move through it and get a completely different experience of the forest and trees,” says Korsæth.

Scepticism was quickly turned into enthusiasm as both politicians and planners began to take in what The Stovner Tower could mean for The Grorud Valley Integrated Urban Regeneration Project. This collaboration between the

Municipality of Oslo and the national government is an environmental and living condition intervention that will create lasting qualities for communities in a suburb characterised by urban challenges.

”The response was unanimously positive,” says Korsæth.

TO THE TOP ON WHEELS

Today, The Stovner Tower is a natural part of the network of walking trails around the Stovner shopping centre, making up the heart of the universally designed activity park, Jesperudjordet.

”It was important for us to create park facilities that are adapted to all user groups: young and old, able-bodied as well as the disabled,” says Korsæth.

The jewel of the crown is a 260 metre long walkway, spiralling up over the treetops, with a gradient that allows visitors who are dependent



WAY UP: Fourth graders from Stovner School rush towards the top with delighted squeals. (Photo: Fredrik Naumann / Felix Features)

on a wheelchair or walker, or bringing a child in a pram, to get to the top on their own accord. Along the way are resting areas and benches. Rails and lighting provide safety and security for all, day and night, forming natural orientation lines and clear contrasts. At the top awaits views in all four directions.

STEPLESS TOWER

"Everyone thinks of a tower as something to climb or access by lift. It was fun to create a tower where the walkway slinks up towards the sky in one single long movement, inspired by a bird in flight," says Korsæth.

"Most people will associate ramps with wheelchair users. This is also a ramp, but it

URBAN REGENERATION: The Stovner Tower is located between Stovner's characteristic suburban high-rises. 3 and There is a lot of traffic up and down the tower, which has become a popular outing destination. (Photo: Fredrik Naumann / Felix Features)



is a long and amazing ramp that can be used by everyone. I think this is a fantastic and impressive construction," says Cato Lie, Policy Advisor for Universal Design in The Norwegian Federation of Organisations of Disabled People (FFO).

Project Manager Korsæth believes the best thing about the tower is that it gives everyone the opportunity to see the tops of the trees, not just experience the scenery from the ground, and the view that extends far beyond the Oslo Fjord.

"When you get an idea like The Stovner Tower, which initially seems a little wild and crazy, you shouldn't let it go. You should have the guts to implement it. Most constructions can be universally designed, and the design



does not have to suffer,” says Korsæth.

”Symbolic projects like these are important. They get attention and demonstrate that universal design can be beautiful,” adds Cato Lie.

Korsæth agrees:

”We must make sure that universal design not only manifests itself in flat and unobtrusive projects. You can create so many exciting projects if you just wrack your brain a bit and include the users from the idea stage onwards. Automatically you will design a better building for everyone.”

”We must make sure that universal design not only manifests itself in flat and unobtrusive projects.”

TRULS KORSÆTH,
THE AGENCY FOR URBAN
ENVIRONMENT



International voices

KS Network for Universal Design was established in 2013, to contribute to an inclusive society, by sharing best practices and removing barriers. The network stretches far beyond the Norwegian borders. We have asked some of our international partners to comment on why universal design is important to ensure access to outdoor recreation in nature for all.



FRANCESC ARAGALL

President and Founder of Design for All Foundation

A non-profit organisation based in Barcelona, Spain, and working at an international level. The foundation aims to support companies, public institutions and education organisations to better adjust the design of environments, products and services to human diversity.

“It is essential to carry out processes of participation and co-creation, so that people who find it more difficult to get close to nature can explain their physical, sensory and emotional needs and requirements.”

“Norway can teach other countries a lot about how to make natural environments with snow and ice accessible. On the other hand, some countries have devised excellent methods to enjoy the water.”

“International collaboration is essential, as it prevents us from reinventing the wheel every time. It is essential to be informed about places that have made it possible for all users to enjoy a natural environment to get inspiration.”

“We must bear in mind that nature, by definition, is inaccessible to humans. We should not aspire to make the entire natural environment accessible as this would upset the ecological balance. But we can adapt small portions of the natural space so that we can all enjoy them.”

“Regardless of ability, age or physical condition, we all benefit from clean air and green and peaceful environments. Being in contact with nature is essential to ensure physical, psycho-logical and emotional balance. But not all of us can travel far, so it is necessary to bring nature close to the city as well.”



YUVAL WAGNER

Founder and Chair of Access Israel

Established in 1999, Access Israel is the first non-profit organisation in Israel promoting accessibility and inclusion, striving to make Israel a place where people with various disabilities are integrated into society with dignity, respect, equal rights and maximum independence. Covers many areas, such as promoting legislation and raising awareness, runs accessibility consulting services, a web portal and a complaint centre, and also offers accessibility awareness training to schools and companies – amongst others.

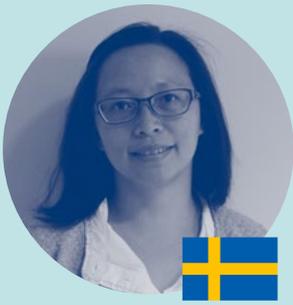
“It’s important [to ensure that everyone can participate in outdoor recreation] for many reasons – like personal wellbeing, health, avoiding loneliness and to be inclusive.”

“We have to remember that universal access is good for all.”

“Access to nature gives you energy and motivation to move forward.”

“You have to start with accessibility information, advertised so that people with disabilities will know what is accessible and where. Then it is the physical accessibility for all kinds of disabilities, such as wheelchair users and the visually impaired. We need information, signs, trails, picnic areas, observation points, parks, beaches – all universally accessible.”

“Currently, no, [universal access to outdoor recreation is not adequate or equal to the efforts made to make buildings and transport accessible to all], but it definitely should be.”



LENA MELLBLADH

Accessibility Adviser, City of Borås

Her department makes sure that the city offers residents healthy and efficient premises, as well as facilities for municipal activities. They are responsible for local resource planning, new and rebuilding, technical and financial management. The City of Borås won the Access City Award in 2015 for its commitment to making 'Borås accessible for all'.

"Everyone has the right to outdoor recreation."

"We can learn from each other on the cross-sectional aspect such as preserving nature and at the same time increasing opportunities for as many as possible to participate in outdoor recreation. Sharing handbooks and guidelines could also be beneficial."

"Participating in outdoor activities promotes good health."

"In Borås, we have increased accessibility in our outdoor environment by for example making fishing ramps, bath ramps, outdoor barbeques and paths universally accessible."

"It's important to keep in mind that accessibility in outdoor areas is not limited to, for instance, paths, ramps or accessible fishing ramps. Outdoor areas also include transport accessibility, both public and private, to and from the location. It includes parking, accessible toilets, using signs with pictures to make orientation easier, and guide services."



HELLE NEBELONG

Landscape Architect and Director at Helle Nebelong

Helle Nebelong works within health design, with the objective to create environments improving people's quality of life. She is especially passionate about designing spaces for children and how to adapt and improve the city for everyday life. She is based in Denmark, but works on projects both nationally and internationally, and also gives lectures around the world.

"It is crucial for our health to get out and recreate ourselves and interact with other people. Attractive green areas should be easily accessible where people live. It strengthens the public health and the cohesion of the local community."

"All places are unique, and you need to look closely at the context and consider what is possible to do with as small interventions as possible to get the best out of it and at the same time keep nature as original as possible."

"There's a steady growing focus on how to make outdoor recreation universally designed. During the covid pandemic, it has become even more obvious how important outdoor life is and that no one should be excluded from this."

"We learn from each other by working interdisciplinary and sharing best and worst practice and evidence."

"To me this is obvious: as human beings, we are part of nature, and we have a natural need for being in close contact with nature. We need to be out there in the green now and then to be well balanced. The eyes and the mind calm down and relax in natural, green environments. We recreate ourselves and get renewed energy."



PER-OLOF HEDVALL

*Director of Research at Certec, Department of Design Sciences,
Lund University in Sweden.*

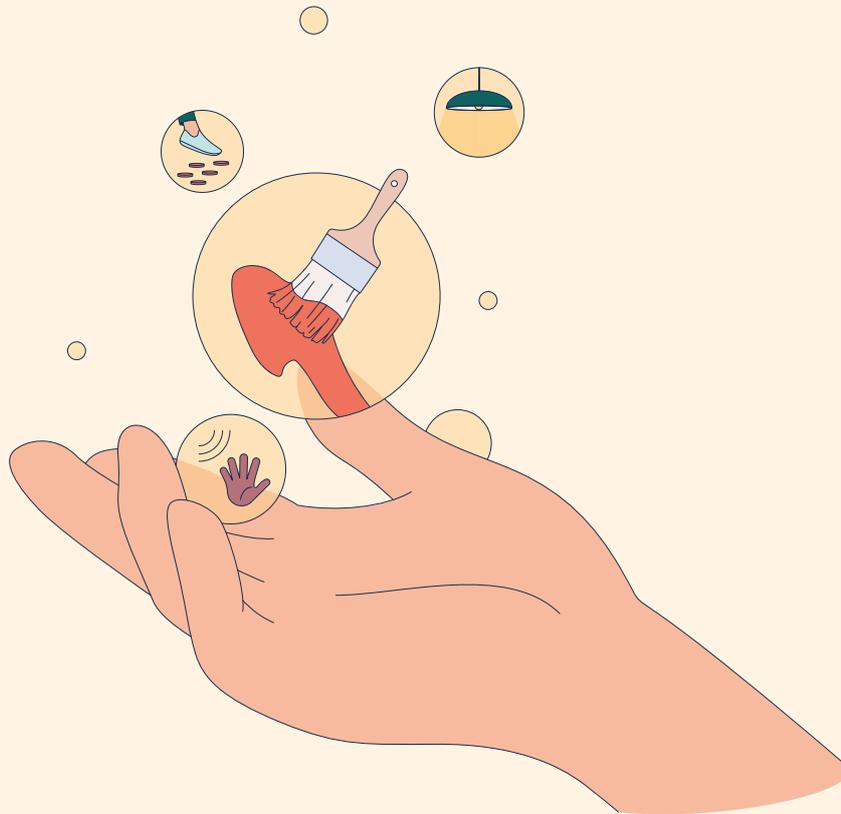
His research deals with accessibility, participation, and universal design. His interest is particularly in the interplay between people and technology. He focuses on how human and artifactual assistance can be designed to support people.

“Every ‘one’ is part of ‘all’. Outdoor recreation for many people involves not only yourself but also children, family and friends. It is an essential part of life.”

“To me, universal design entails awareness of norms and stigma, e.g. thought patterns and beliefs that create a feeling of ‘us’ and ‘them’, in this case in relation to outdoor recreation.

“We can learn from each other’s design processes. I would concentrate more on learning from the processes, rather than from the end results.”

This is how universal design is defined in Norway



Norway bases the understanding of universal design on the 1997 definition and seven principles by Center for Universal Design, North Carolina State University (US).

The principles were developed by a group of architects, product designers, engineers and environmental design researchers, led by the late Ron Mace.

Universal design is the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.

1

Equitable Use

The design is useful and marketable to people with diverse abilities.

Guidelines:

- 1a. Provide the same means of use for all users: identical whenever possible; equivalent when not.
 - 1b. Avoid segregating or stigmatizing any users.
 - 1c. Provisions for privacy, security, and safety should be equally available to all users.
 - 1d. Make the design appealing to all users.
-

2

Flexibility in Use

The design accommodates a wide range of individual preferences and abilities.

Guidelines:

- 2a. Provide choice in methods of use.
 - 2b. Accommodate right- or left-handed access and use.
 - 2c. Facilitate the user's accuracy and precision.
 - 2d. Provide adaptability to the user's pace.
-

3

Simple and Intuitive Use

Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.

Guidelines:

- 3a. Eliminate unnecessary complexity.
 - 3b. Be consistent with user expectations and intuition.
 - 3c. Accommodate a wide range of literacy and language skills.
 - 3d. Arrange information consistent with its importance.
 - 3e. Provide effective prompting and feedback during and after task completion.
-

4

Perceptible Information

The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.

Guidelines:

- 4a. Use different modes (pictorial, verbal, tactile) for redundant presentation of essential information.
 - 4b. Provide adequate contrast between essential information and its surroundings.
 - 4c. Maximize "legibility" of essential information.
 - 4d. Differentiate elements in ways that can be described (i.e., make it easy to give instructions or directions).
 - 4e. Provide compatibility with a variety of techniques or devices used by people with sensory limitations.
-

5

Tolerance for Error

The design minimizes hazards and the adverse consequences of accidental or unintended actions.

Guidelines:

- 5a. Arrange elements to minimize hazards and errors: most used elements, most accessible; hazardous elements eliminated, isolated, or shielded.
 - 5b. Provide warnings of hazards and errors.
 - 5c. Provide fail safe features.
 - 5d. Discourage unconscious action in tasks that require vigilance.
-

6

Low Physical Effort

The design can be used efficiently and comfortably and with a minimum of fatigue.

Guidelines:

- 6a. Allow user to maintain a neutral body position.
 - 6b. Use reasonable operating forces.
 - 6c. Minimize repetitive actions.
 - 6d. Minimize sustained physical effort.
-

7

Size and Space for Approach and Use

Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.

Guidelines:

- 7a. Provide a clear line of sight to important elements for any seated or standing user.
- 7b. Make reach to all components comfortable for any seated or standing user.
- 7c. Accommodate variations in hand and grip size.
- 7d. Provide adequate space for the use of assistive devices or personal assistance.

Source:

[*Centre for Excellence in Universal Design*](#)

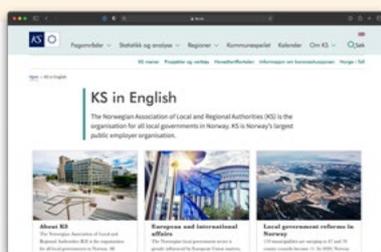
The UN Convention on the Rights of Persons with Disabilities (CRPD)

Norway also follows the Human Rights based approach to persons with disabilities, and the definition of universal design as stated in Article 2 of the convention: “The design of products, environments, programmes and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design”, not excluding “assistive devices for particular groups of persons with disabilities where this is needed.”

Equality and Anti-Discrimination Act

Universal design is embedded in several laws and regulations, such as the Planning and Building Act and Regulations on technical requirements for construction works (Tek17). The Equality and Anti-Discrimination Act, Chapter 3, section 17, defines universal design as:

«Universal design» means designing or accommodating the main solution with respect to the physical conditions, including information and communications technology (ICT), such that the general functions of the undertaking can be used by as many people as possible, regardless of disability.



KS IN ENGLISH

Read more about KS' work on universal design on our website: <https://www.ks.no/om-ks/ks-in-english/>

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