

A stylized, abstract illustration in shades of blue, red, and yellow. It depicts a person in a wheelchair, with the person's head and shoulders in black and white, and the wheelchair in white with blue spokes. The background is a textured blue with various geometric shapes and architectural motifs like windows and columns.

# Mistra SAMS

Sustainable Accessibility and  
Mobility Services

Annual Report  
2021

# Mistra **SAMS**

Mistra SAMS Sustainable Accessibility and Mobility Services Annual Report 2021

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This annual report highlights the research carried out in the Mistra SAMS program during 2021 and share the scientific output and impact that we, along with our partners achieved during this period.

Mistra SAMS is supported by Mistra, the Swedish Foundation for Strategic Environmental Research, in which KTH Royal Institute of Technology and VTI, the Swedish National Road and Transport Research Institute have leading roles.

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## Chair's page

Today's global political and economic uncertainty has brought various challenges. We have for example seen a shortage of certain raw materials which resulted in that some voices have claimed to ease on the ongoing green transition. Meanwhile, the pace of global warming didn't slow down. That is why it has become even more important to reduce greenhouse gas emissions, particle emissions and congestion which requires a radical rethinking of accessibility and mobility. Mistra SAMS research program dares to question current solutions for the ways we travel today and tests new ideas that can lead to sustainable and socially just urban places.

2021 has been a strange, hybrid year that have required a great deal of flexibility but also brought possibilities. As Chair of the Board I am fortunate to have a unique insight in Mistra SAMS activities and I witnessed how successfully they navigated through this period.

Researchers in the programme have been designing and prepared for a new living lab in Riksten while sustaining the Tullinge work hub, which was set up during the first phase of the program. Their method has proven to be successful in delivering both theoretical and practical research results and even societal impact.

Since its opening in 2019, the Tullinge work hub has generated interest both in Sweden and internationally. The project will be exceeding its planned lifespan and instead of closing in 2021 the hub will continue its operations as a pilot project, in cooperation between academia, public and private actors.

Ericsson is proud to participate in such projects that not only give us the possibility to test and develop new technologies but are also directly advantageous to citizens.

Mistra SAMS' main task during the previous year has been the planning of a new living lab in Riksten, an area that provides a rare opportunity to investigate the potentials of mobility and accessibility services in a suburban region. Using a transdisciplinary approach the program's researchers were able to synthesize three main empirical perspectives (Public, Citizen and Market) and outline a package of interventions for the participants in the project, while preparing for a systematic analysis of possible scenarios for a future with more digitally supported mobility and accessibility services.

I am looking forward to the launch of this exciting new testbed of interventions and also other key activities in 2022, for example the exhibition "Zero City" at Tekniska museet, where Mistra SAMS will present its research, the further development of the program's relations with decision makers and the continued co-operation with the Exponential Roadmap project. This year will hopefully be a period when we accelerate our efforts and work together for a more sustainable and just future.

Torbjörn Lundahl  
Chair of the board, Mistra SAMS



## Programme directors' page

The first year with Mistra SAMS phase 2 has been intense, challenging and instructive. We started the second program period in January 2021, which was right in the second wave of the pandemic. Due to covid-19, almost all activities have been digital or hybrid events: that goes for the doctoral defenses, the final conference for Mistra SAMS phase 1, the kick-off meeting for phase 2, the internal literature seminars as well as the Listen and co-create-workshops where we took important steps to shape the program's new living lab in Riksten together with partners.

What we have experienced is a "crash course" in the possibilities and limitations of digital meetings. Being forced to work almost exclusively at a distance has saved time, energy, and other costs for travelling. At the same time, we have missed the small talk and informal exchange of ideas which are important to get to know each other and stimulate the development of joint insights and discussions that are often referred to as key features of transdisciplinary knowledge development. Under these challenging conditions, the researchers and partners involved in Mistra SAMS have found solutions that allowed us to take important steps in our work. We are very grateful for this.

Some of the main milestones in the program during 2021 have been:

- Four doctoral dissertations where Tina Ringenson, Jacob Witzell, Fredrik Johansson and Liridona Sopjani have successfully defended their dissertations.



- The final conference from phase 1 was an important opportunity for reflection and conversation about the results from the research in Mistra SAMS phase 1 2017-2020. At the same time, it became a starting point and an inspiration for the program's work in phase 2.
- During the year, researchers and partners in the program have actively contributed to the gradual framing and shaping of the content of Mistra SAMS new living lab for sustainable mobility and accessibility in Riksten in Botkyrka municipality. As programme directors of Mistra SAMS, we have been very happy to see clear indications that the research carried out in our programme is relevant and timely. This has been shown not least in how Botkyrka municipality has chosen to continue working with the local workplace hub in Tullinge in a new pilot project, but also in the way in which researches from Mistra SAMS are often invited to give lectures and provide input to working groups, seminars, conferences and other research and policy-oriented activities.

In 2022, we look forward to a study trip to Oslo as well as to gear up the work both with the living lab and other parts of the research. With a little bit less than eight years left until 2030, we feel that Mistra SAMS research on how digital services can be used to achieve the transport sector's climate goals, and at the same time meet goals of social justice, is more relevant than ever.



Anna Kramers  
Programme director Mistra SAMS



Karolina Isaksson  
Deputy Programme director Mistra SAMS

## About the programme

### Vision, mission and targets

The overall vision of Mistra SAMS is that digitalization and other measures for sustainable mobility and accessibility will be implemented in a way that supports Sweden's objective of a 70% reduction in emissions from the transport sector by the year 2030 compared to 2010. The mission of Mistra SAMS is to build and communicate empirically grounded knowledge, together with policy actors, market actors and citizens, to support the achievement of this overall vision.

The targets of Mistra SAMS phase 2 are to within the timeframe 2021-2024:

- 1) be an internationally leading research program for developing in-depth insights on how policy and market actors, in collaboration with citizens, can design and implement digitally supported accessibility and mobility services that contribute to a climate-neutral and socially just transport system.
- 2) initiate transformation processes in line with this target, in close collaboration with citizens, market actors and policy actors at the local, regional and national level.
- 3) develop further specific collaborations with the program's partners (and other organizations) to ensure that knowledge from the program is spread and applied in practice, resulting in a broader transformation towards a sustainable transport system.

New services based on digital platform technology can contribute to a world with more connection, where travel is less destructive to the environment and un-travel is more satisfying. Advanced digital technologies have opened the path for configuring new accessibility options and combining these in smart ways, both reducing demand for transport and achieving more efficient use of transport capacity.

But new services such as car-sharing, workhubs or integrated ticket systems do not intrinsically contribute to sustainability. Nor do digital platforms automatically optimize for sustainable behaviour. Some new services have the potential to be transformative, some don't. And those that do, need a context in which they fulfill their full promise.

The Mistra SAMS research programme provides knowledge on the potential role of public actors, together with private actors, in creating that context. Mistra SAMS investigates how actors can facilitate societal transition to platform-based accessibility and mobility services that contribute substantially to sustainability.

Mistra SAMS defines “public actors” primarily as urban and regional actors responsible for traffic and accessibility, as well as digital and transport infrastructure (mainly regional authorities and municipalities). Research results will also be relevant for actors with planning and decision-making responsibility on a national and European level.





## A transdisciplinary and integrative research program

Mistra SAMS uses a transdisciplinary approach, which involves both interdisciplinarity and a close collaboration with users and practitioners. The involved researchers come from engineering, behavioral, design and social sciences. The program uses multiple methodologies that include a “living lab” approach which is based on collaboration and dialogue between researchers and stakeholders (e.g. entrepreneurs, service providers, transport and urban planners) and strong engagements with user groups as “co-creators” in a continuous innovation and knowledge building process.

Mistra SAMS is organised through a number of work packages, led by the researchers of the program.

The program builds on an integrated research approach, with a close collaboration among the key research perspectives involved, namely the Living Lab Design (WP LLD), Citizens (WP C), Policy Actors (WP P), Market Actors (WP M) and Sustainable Futures (SF).

The integrated structure and way of working will enable the research team to make further developments toward an integrated understanding of the critical technical, behavioral and institutional factors involved in a transformation towards a climate neutral and social just transport system. The close involvement of citizens and practitioners from public and market organizations means that a mutual dialogue can be developed between different fields of knowledge and experience throughout the program.

### Avoid - Shift - Improve

Mistra SAMS is underpinned by an understanding that the transformation to a sustainable transport system needs to be based on three main types of measures, summarized through the concepts avoid, shift and improve, which are defined as follows:

Avoid inefficient or unnecessary travel and transport

for example via improved and integrated urban planning, less complex delivery chains and e-communication options (teleworking, mobile solutions)

Shift transport mode

to the most efficient or sustainable modes, and/or move the journey to off-peak times

Improve transport's environmental performance

via technical, operational, legislative or pricing-related improvements. Use existing infrastructure and vehicles in a more resource-efficient way.

[Read more about the Avoid-Shift-Improve strategy](#)

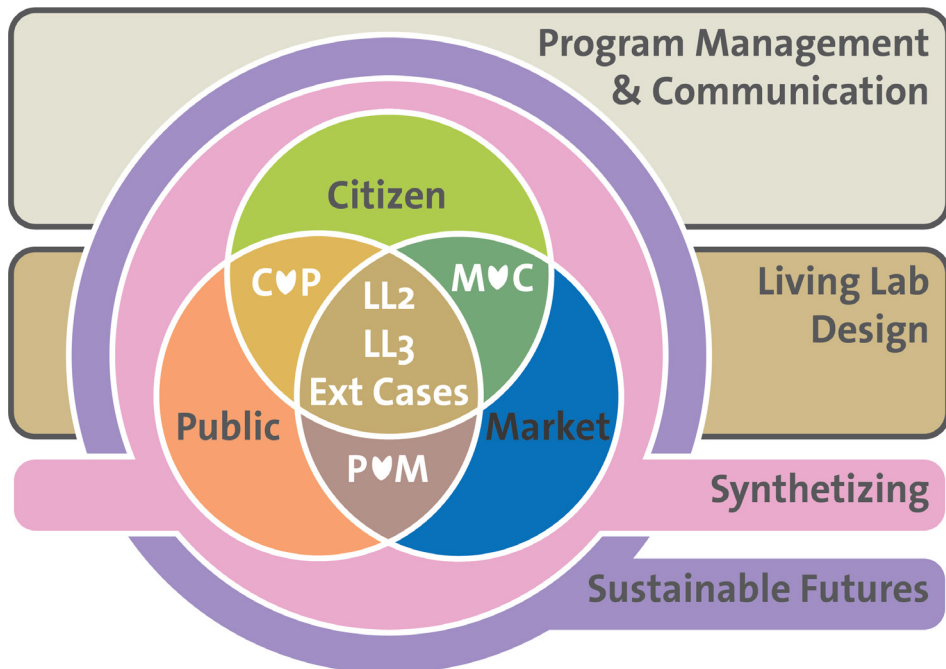


Illustration: Mistra SAMS intergrated research approach

# Team

## Programme management

- Anna Kramers, programme director, KTH
- Karolina Isaksson, deputy programme director, VTI and KTH
- Claus Hedegaard Sørensen, VTI
- Malin Henriksson, VTI
- Mia Hesselgren, KTH
- Olena Tatarchenko, programme administrator
- Marta Marko-Tisch, communications officer

## Programme board 2021

- Chair: Torbjörn Lundahl, Ericsson
- Karolina Skog, Swedish Parliament
- Christer Hårrskog, Swedish Transport Administration
- Gunilla Glantz, City of Stockholm
- Prof. Göran Finnveden, KTH
- Professor Sofia Ritzén, KTH
- Dr. Anna Anund, VTI
- Prof. Karl-Henrik Johansson, KTH
- Co-opted member: Linda Bell, Programmes Director, Mistra

Read more at [sams.kth.se/team](https://sams.kth.se/team)

## Associated researchers

- Lars E Olsson, Karlstads universitet
- Margareta Friman, Karlstads universitet
- Martin Sjöman, KTH
- Peter Arnfalk, Lunds universitet
- Katrin Lättman, Karlstads universitet
- Erika Kriukelyte, KTH
- Jacob Witzell, KTH
- Inger Aspåker, Konkret Utveckling AB
- Hampus Berg Mårtensson, KTH
- Jan Bieser, KTH
- Anders Gullberg, Urban city
- Jessica Berg, Researcher, VTI
- Kelsey Oldbury, VTI
- Joel Göransson Scalzotto, VTI
- Jonas Ihlström, VTI
- Jana Sochor, KTH
- Katarina Larsen, KTH
- Greger Henriksson, KTH



Mistra SAMS management group meeting August 2021, photo: private

## Consortium

Mistra SAMS engages researchers as well as key public and private actors. Consortium partners participate in the administration of the programme as well as in research.





## Results from 2021

### Designing a new living lab

A key part of the research in Mistra SAMS phase 2 is about designing, setting up and sustaining living labs to provide empirical material and spaces for transdisciplinary learning among all other work packages including researchers, partners, and participants. There is also an aim to advance practice-oriented design research and collaborative design methods within living lab research.

#### Living Lab methodology

Mistra SAMS regularly carries out intervention studies with users of accessibility and mobility services. These living labs provide useful data for the ongoing research into user needs and preferences, as well as the sustainability impact of various services.

Design interventions in the living labs are used to gain knowledge on how users respond to a combination of accessibility and mobility services together with policy instruments. We provide a combination of services via a digital platform and test it in different urban contexts. The purpose of the living labs are to encourage businesses, researchers, authorities, and citizens to work together for the creation, validation and testing of new services, business ideas, markets and technologies in real-life contexts.



Mistra SAMS jobbhubb i Tullinge, photo: KTH





Listen & co-create workshop, September 2021, photo: Mistra SAMS

## Framing workshop

Through two "framing workshops" the participants identified possible areas for research within the upcoming living lab.

The workshop resulted in a more concrete basis for the decisions about the content of the digital platform.

## Listen & co-create workshops

Two "listen and co-create workshops" have been held with the aim to define and create the specific interventions that will be developed and run in the living lab in Riksten.

## Workshop 2

The 13th of September 2021 the consortium was gathered for a joint workshop with the aim of gaining perspective for Mistra SAMS' new Living Lab in Riksten. Mistra SAMS researchers presented ideas for possible interventions for a sustainable everyday mobility, followed by group discussions to capture advantages and disadvantages from the perspective of different actors and to explore further collaboration opportunities within the consortium.

## Workshop 1

The 17th of June Mistra SAMS gathered all researchers together with Botkyrka municipality, Smart Resenär and Region Stockholm to have the first Listen and Co-create workshop. The purpose was to find possible interventions for the living lab in Riksten.



# Citizens perspectives on sustainable mobility and accessibility

During 2021, initial research activities were carried out to explore the potential of new mobility and accessibility services. This part of the work is based upon social practice theory perspective applying primarily qualitative research methods and with a close connection to the new Living lab in Riksten.

There have been several activities with the aim to build knowledge regarding citizens' mobility practices and engagement in policy processes that support new mobility services. For instance, the research team has worked on an international review of interesting cases and projects regarding possible ways to shape and implement more sustainable accessibility and mobility services from a citizen perspective. The results point to the importance of embedding mobility and accessibility initiatives with broader neighborhood issues and needs as well as to build on existing spaces in which groups of citizens and policy makers can discuss issues related to transport, mobility and accessibility.

The research team has also designed a survey targeting citizens that live or work in Riksten. The survey helped to clarify mobility and accessibility conditions for citizens living or working in the area.

According the results, a majority of the citizens have access to a car on a daily basis and perform most of their errands by car, but we also see a modality mix mostly including public transit. Bicycle trips are low in numbers.

Following the survey, online and in-situ interviews, as well as focus group interviews, have also been carried out to gain more in-depth knowledge about current mobility practices and needs in Riksten. Altogether, this initial empirical work provides an important basis for the continued work to explore the potential of new mobility and accessibility services from a citizen perspective.

## Policy Lab Workshop

10 December 2021 Mistra SAMS held its first intersection of the Citizens and Public Act "How can citizen participation contribute to sustainable mobility?". The aim was to start a process with citizen participation which we will develop and also continue after the program's end. The workshop was about generating ideas about the role of citizens in the development of sustainable and socially just mobility services in Riksten, Botkyrka. A follow-up workshop will be held in the future.

The Policy Lab is part of an ongoing series of workshops that will be held by Mistra SAMS in collaboration with citizens' perspectives, as well as the Living Lab, and

## Public Actors' transformative capacity

Another part of the research in the program is focused on building knowledge regarding the potential role of public actors to more actively govern and orchestrate the ongoing transition to digitally supported mobility and accessibility services.

During the first year, the research team focusing on the role of public actors has worked on reviewing, selecting and conducting case descriptions and analyses of promising cases where public actors has taken an active role to govern new mobility services to ensure that goals of sustainable development are secured.

ts first Policy Lab workshop at the Actor perspectives, with the theme ute to the transition to sustainable ess to develop ideas and forms for work ll develop during the program, but The discussion focused on exploring tizen participation can play in the lly just accessibility and mobility up workshop is planned for spring 2022.

eries of workshops and events which ration with the program's three main and Business Model Lab.

The cases illustrate different roles and responses of public actors in governing new mobility solutions, and provide opportunities to reflect over possibilities to strengthen governance capacities.

The cases selected include Seattle's New Mobility Playbook, the steering of e-scooter trials in Birmingham, Stockholm's approach to steering e-scooters in the city, an example of parking requirements being shifted to requirements for mobility services in housing, and a rural MaaS pilot (KomiLand) in western Sweden.

Results from this review of cases has been summarised in a report that has been written together with researchers from other parts of the program.

In November 2021, of the research team held a policy lab workshops, which was jointly arranged together with the team that are focusing on Citizens perspectives. The workshop was focused on the intersection of policy and citizen participation.

## Sustainable innovation ecosystems

The research in Mistra SAMS phase 2 has also a focus on market actors and innovation ecosystems. During 2021, the research team has started the work to explore what would drive market actors/entrepreneurs to accelerate the pace of the required transformation toward a climate-neutral and socially just transport system. It also aims to clarify which new business models and digital technologies that could act as useful enablers for promising services, and the conditions required for these transformations to support a sustainable development of the transport system.

In 2021, one conference article was accepted and presented at the Environinfo conference in Berlin in September 2021. The title of the article is "A Framework for Assessing Impacts of Information and Communication Technology on Passenger Transport and Greenhouse Gas Emissions".

A report with the title "The digitalization of passenger transport: technologies, applications and their impact on greenhouse gas emissions" has also been published. The report presents a review of (1) digital technologies that are used in passenger transport, (2) applications that are supported by digital technologies and (3) their potential impacts on GHG emissions. A literature review has also been completed:

"Exploring digital transformation and relational dynamics - platforms, ecosystems and sharing economy".

In addition, the research team has held a Business Model Lab-workshop to explore the complex interactions between the different public and private players on the market and also to inspect how these actors could accelerate the change towards sustainable societies, by collaborating and offering mobility and accessibility services via digital platforms.

### The Tullinge workhub continues as a pilot project



[Watch our short film about the Tullinge work hub](#)

The living lab in Tullinge has been sustained and re-opened after the Covid restrictions was cancelled. A workshop with stakeholders interested in scaling up the work hub have been held. As a result of this, the hub will continue to be open for users and will be managed as a pilot project in co-operation with KTH, Botkyrka kommun and Vakansa.

# Exploring sustainable futures



Photo: Unsplash

Researchers in Mistra SAMS phase 2 has also started activities that aims to explore what a sustainable transport system for the Stockholm region might look like in a future with more digitally supported mobility and accessibility services.

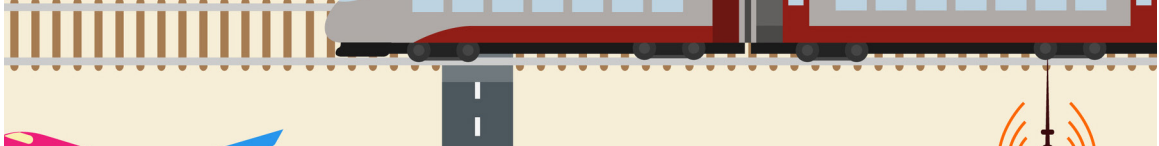
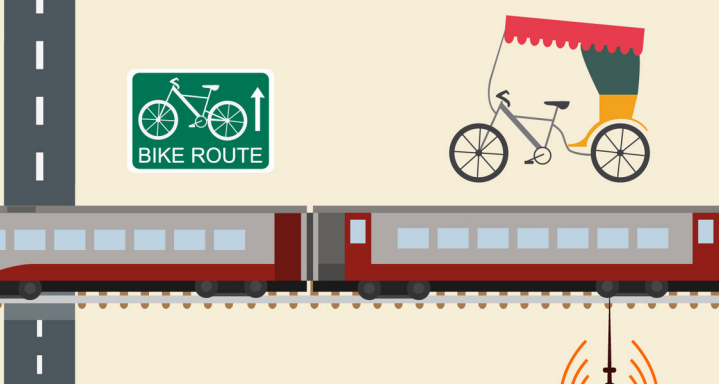
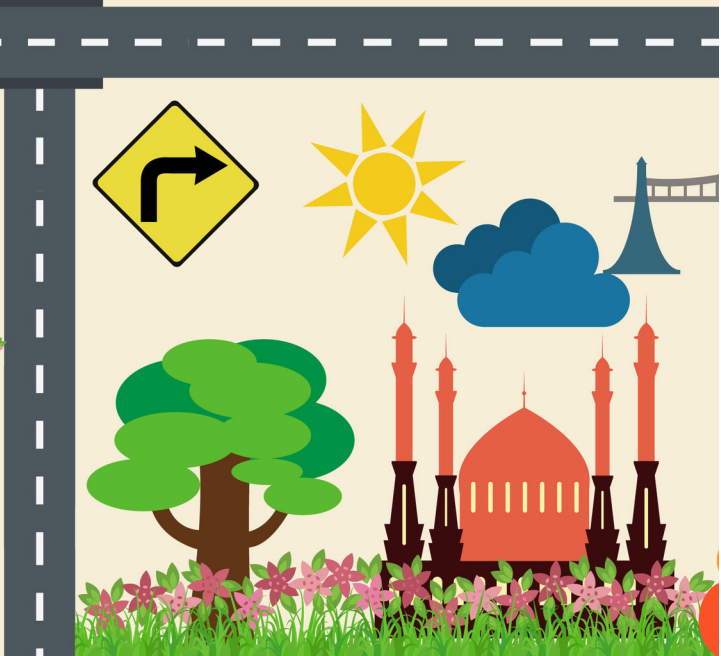
Systems-dynamics models and backcasting images of the future will be designed to explore possible future tensions which could appear through relying on digitalization and platform-based services to support the development of a sustainable transport system based upon the principles of Avoid, Shift and Improve.

In this part of the work, casual loop diagrams are used to identify and analyze the most important causal relations affecting the environmental sustainability with specific focus on energy-use and greenhouse gas emissions.

In 2021 series of workshops have been held with researchers, planners and other experts from partner organisations. In parallell a literature study is ongoing, and a first paper will be published during spring 2022.







# International Scientific Advisory Panel - ISAP

The International Scientific Advisory Panel contributes to the scientific assessment of Mistra SAMS, where research height and innovation are key criteria.

The ISAP consists of senior researchers and experts who are internationally recognized as outstanding academic leaders in core fields that are directly relevant to Mistra SAMS.

Mistra SAMS have recruited a new ISAP when the program's phase 2 started. 8-9 November the new panel had its first annual meeting, which was held as a digitally, with the program's management group and members of the board.

During two intensive days the panel listened to presentations from Mistra SAMS researchers and gained a detailed insight into the ongoing work in the program.

After the informative sessions, the panel gave feedback and "constructive criticism" regarding the program's planned research activities with a specific focus on the new living lab in Riksten.

“ Don't be afraid of challenges and failures, take them as lessons with transformational capacity.

“ Real life experiences are the way forward to achieve key systematic and consumer behavioral changes.

“ The kind of living lab that Mistra SAMS wants to set up is ambitious and internationally interesting.

“ Dare to be more agile and flexible during your planning and executing processes.

Some reflections  
from the ISAP



## Members of the International Scientific Advisory Panel 2021-2024



Professor Marianne Ryghaug  
Norwegian University of Science and Technology  
Trondheim, Norway



Professor Glenn Lyons  
University of the West of England (UWE)  
Bristol, England



Dr. Jacqueline Klopp  
Columbia University, New York, USA



Professor Sampsa Hyysalo  
Aalto University School of Art, Design and  
Architecture, Helsinki, Finland

# Impact

Outreach and societal impact have been important to Mistra SAMS. Our researchers have been active in traditional and social media, and the program has a science communicator. The program's online outreach has been based on the program website, LinkedIn, Twitter and a monthly newsletter, while the societal impact has taken place via the news media, public presentations as well as in meetings with decision-makers.

## Public actors



A crucial target group for Mistra SAMS has been public decision-makers, who have a central role in creating a context in which accessibility and mobility services can contribute to sustainability. Mistra SAMS goal is to establish relationships with relevant public actors and raise their awareness of the possibilities and challenges with mobility and accessibility services.

## Scientific capacity-building



Mistra SAMS has made concrete contributions to capacity-building in the scientific community that studies mobility, accessibility and digitalisation. The program engages doctoral and licentiate candidates and motivates the researchers to present at international scientific conferences. The program regularly hosts public lectures and seminars by Swedish and international experts.

## Stakeholder collaboration



Mistra SAMS has a close collaboration with its stakeholders and involves its consortium members from outside academia in co-producing studies and activities. This cooperation has been an integral part of the transdisciplinary approach to research that guides the program.

## Result Conference for Phase 1

In April 2021 the program management arranged a digital result conference for Mistra SAMS Phase 1, where results from the program was presented both in plenum and in smaller breakout sessions. The conference ended with a panel discussion with politicians at national and regional level as well as researchers and a strategist at the Swedish Transport Administration.



Panel conversation about mobility in cities after Covid-19, photo: Mistra SAMS

["Slutsniffat i andras armhålor" an article about the result conference at mistra.org](#)

## Phase 2 Kick-off



Mistra SAMS Phase 2 had a successful online kick-off on 4 February 2021. There were 50 participants from the consortium who joined the meeting. Linda Bell, Mistra and Torbjörn Lundahl, Ericsson, chair of the Mistra

SAMS board made an introduction to Phase 2 and members of the executive team gave presentations about each work-package. Each partner organization gave pitches focused on what they found most interesting in the research program what they wanted to explore and learn though the Living Labs as well as in what way they intended to make use of the results from our research. In breakout sessions participants discussed topics like "How we can make sure that our research will make a difference". After the meeting we had a virtual mingle in the Wonder application.

## Kitchen Talks

At every party it is in the kitchen where you find the most interesting conversations. That is where you get drawn into the best discussions, exchange ideas, and make new connections.

That's why we started Mistra SAMS Kitchen Talks and meet once a month for an informal lunch webinar where our researchers and partners present actual and relevant research results, followed by discussions with the audience.



In 2021 we discussed, among other topics, the future of enterprises, local work hubs' impact on sustainable travel digital applications in passenger transport.

## Mistra SAMS Work Hub in KTH Climate Actions Advent Calendar

[The Climate Action Advent Calendar](#) was an initiative by the KTH Sustainability Office. They have recorded short videos from all parts of KTH to explore projects that could contribute to positive changes towards sustainability.



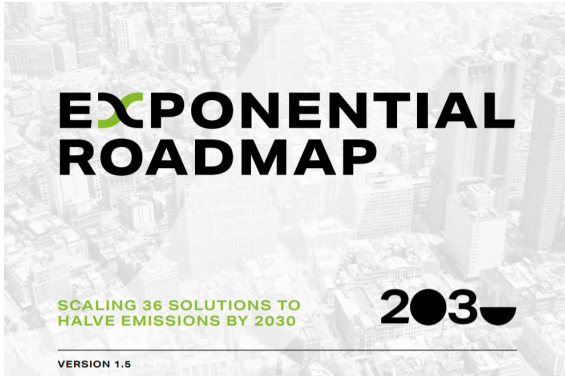
**Bhavana Vaddadi**  
Doctoral Student, KTH

Bhavana Vaddadi talked about the Tullinge workhub behind Door 6, photo: KTH

Every day between 1–24 December, a new door was opened where students and researchers at KTH talked about what they were doing to contribute to the climate transformation. Bhavana Vaddadi, a PhD student within Mistra SAMS, was invited to record a video for about the Work Hub in Tullinge. You can find it behind the Door number 6. Also, Mia Hesselgren, a member of Mistra SAMS management team, made a video about Human and Technology (Door 15), and Göran Finnveden, who is a part of Mistra SAMS board, talked about Measuring Sustainability in his video behind the Door 19.

# Exponential Climate Action Roadmap & 1.5° Business Playbook

Mistra SAMS renewed its partnership with Exponential Roadmap Initiative, which collects innovators, transformers and disruptors taking action in line with 1.5°C, with the mission to halve emissions before 2030 through exponential climate action and solutions.



[Read more at exponentialroadmap.org](https://exponentialroadmap.org)

The Exponential Roadmap highlights the 36 solutions that can scale exponentially to halve Greenhouse Gas Emissions by 2030 worldwide. As a supporting partner organization in the Exponential Roadmap Initiative, Mistra SAMS are also part of the Race to Zero and visible on the [UN website](https://un.org/race-to-zero).

Mistra SAMS is also a partner to the 1.5°C Business Playbook initiative, a spin-off from the Exponential Roadmap. It is a concrete tool guiding companies and organisations of all sizes to exponential climate action, and helping them align with the 1.5°C ambition.

**“** We believe that the Playbook has a great potential to be widely spread and thereby support the necessary transformation of companies and organisations”  
Dr. Anna Kramers, Programme director of Mistra SAMS



## Regional environment- and community building day

The Regional environment- and community building day 2021 was arranged by the Stockholm County Administrative Board in collaboration with Storsthlm, Center for Occupational and Environmental Medicine, Regional Management Office Stockholm Region, and the City of Stockholm. The purpose of the conference, was to inspire and increase general knowledge about transport issues from a climate perspective and to make visible uniformity and collaboration between the county's

actors in the pursuit of a fossil-free society. Anna Kramers, Program Manager for Mistra SAMS, was one of the speakers at the conference.

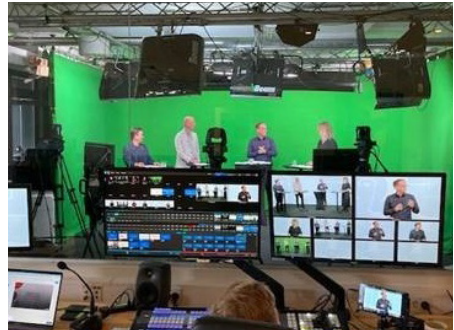


Photo: Mistra SAMS

## Mistra SAMS in EIT Urban Mobility project HALLO



The HALLO (Hubs for Last Mile Delivery Solutions ) project is creating shared urban consolidation and distribution centres (UCDCs) through a series of pilots in Barcelona and Stockholm. In Barcelona, the centres are being implemented in municipalities bordering the Low Emission Zone (LEZ) in the Metropolitan Area of

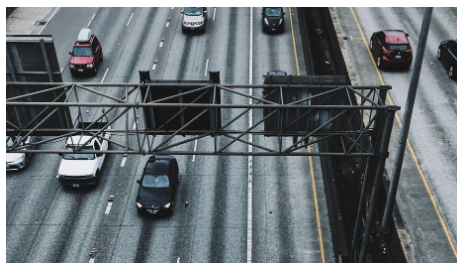
Barcelona (AMB). In Stockholm, the pilots are demonstrating complementary activities including implementing fossil-fuel free delivery logistics in the district of Södermalm; testing innovative delivery solutions across Stockholm; planning and testing a micro-terminal for logistics and other services in Södermalm; as well as holding a stakeholder dialogue to outline a roadmap for the future development of fossil-free logistics in Stockholm.



## A real transformation is required in transport planning

Researchers from Mistra SAMS wrote an article "Det krävs ett rejält omtag i transportplaneringen", published in Dagens Samhälle on 29 January 2021.

[Read the full article](#) (in Swedish).



## Attractive with a work hub - but who should pay?



In an interview for Akavia Aspekt Anna Kramers talks about perspectives for a work hub, as a substitute for working from home or from the office, based on the experience with Mistra SAMS work hub in Tullinge. "Since there will be many people working remotely in the future, several municipalities have realized that it could be valuable to offer a solution for those who do not want or can work from home. Even now, before the project is completed and evaluated, there has been great interest from other large commuting municipalities".

[Read the full article](#) (in Swedish)

## Mistra SAMS International Young Researchers Grant

Through the [Mistra SAMS International Young Researchers Grant](#), five doctoral students from outside Sweden have visited the programme, and two students from Sweden have had an opportunity to visit universities in the United States. The work with young international researchers has so far resulted in two publications co-written by researchers from KTH and the University of Zürich.



# Presentations and participation at conferences, events and workshops

Mistra SAMS at "Cycling and Society" Researcher Malin Henriksson has attended the "Cycling and Society" conference where she and Michala Hvidt Breengard from the TinnGO project, had submitted a [video](#) on cycling among ethnic minority women. Malin was in a panel that discussed "cycling for all" where the platform economy and its consequences for cycling justice emerged as an important theme.



Mistra SAMS representation at Decarbon8 Program co-director Karolina Isaksson and doctoral student Jacob Witzell participated at the international conference [Decarbon8: Real zero in a hurry](#). The presentation focused on links and tensions between national and local approaches when planning for sustainable and decarbonated transport.

Presentation at The European 5G Conference 2021

The European 5G Conference, meeting place for discussion on 5G policy, took place on 23-25 February. Jan Bieser, one of the Mistra SAMS researchers, participated in the conference and presented during Session 5: Building a Safer, More Sustainable World with 5G. [The video recording of the session is available here](#)

1 October 2021, Professor Margareta Friman, Karlstad University, was invited as an expert to the 26th [ACEA](#) (the European Automobile Manufacturers' Association) Scientific Advisory Group meeting on Social benefits of Shared mobility: metrics and methodologies. The participants of the workshop were ACEA members, EU officials and other transport stakeholders.

Mistra SAMS researcher Martin Sjöman held a seminar "Design-driven Living Labs - Making complex societal challenges tangible through engaging future prototypes" at Mälardalens Högskola for representatives of municipalities and organizations in the region.



Anna Kramers participated in the final webinar of the project "[Baltic Dialogue Platform on Smart Cities for Climate](#)"; supported by the European Climate Initiative of the German Federal Ministry of the Environment. The project intended to connect stakeholders and build up capacity for a climate-friendly smart city development in Germany and the Baltics. The final project webinar: Climate Friendly Smart Cities in the Baltics was organised on 23 February, where Anna contributed with the presentation "Smart cities and climate protection – Insights from the Mistra SAMS research project". Presentation at Climate-smart mobility 2030



Viable Cities and Drive Sweden has started a collaboration to accelerate the climate transition in cities with a focus on climate-neutral mobility. The first joint event was held on 4 June 2021 where Anna Kramers contributed with presentation about Global spanning. [Read the article](#) about the event and [watch the presentation](#).

Margareta Friman, Karlstad University, participated in a panel discussion "Nordic Smart Cities - where we are and what is the future?" within the [7th IEEE International Smart Cities Conference](#) on 9 September.

Jan Bieser was one of the speakers at Swedish 6G Workshop 2021. Jan presented about "Opportunities and risks of digitalization for climate protection: the case of mobile" within the session [Sustainability](#) on 6 October.

### Transportforum

Karolina Isaksson and Claus Hedegaard Sørensen contributed to the Session 4.2. "Samverkan och styrning" of the Transportforum 2021, that took place online on 13-14 January. Karolina was the session moderator and Claus gave a presentation on "Planering för hållbar mobilitet. Vilka roller kan smart mobilitet, medborgardeltagande och coronakrisen spela?"; co-written by Karolina. The presentation was based on the work performed within Mistra SAMS phase 1.

## Publications

Bieser, Jan C.T.; Kriukelyte, Erika. 2021 "[The digitalization of passenger transport. Technologies, applications and potential implications for greenhouse gas emissions \(pdf 632 kB\)](#)", KTH Report, TRITA-ABE-RPT-2132

Ringenson, Tina; Kramers, Anna. 2021 "[Mobility as a Service and the Avoid-Shift-Improve Approach](#)" in "Advances and New Trends in Environmental Informatics, A Bogeyman or Saviour for the UN Sustainability Goals?", Volker Wohlgemuth et al. (Eds) Springer. DOI : 10.1007/978-3-030-88063-7

Bieser, Jan C. T.; Höjer, Mattias. 2021 "[A Framework for Assessing Impacts of Information and Communication Technology on Passenger Transport and Greenhouse Gas Emissions](#)" in "Advances and New Trends in Environmental Informatics, A Bogeyman or Saviour for the UN Sustainability Goals?", Volker Wohlgemuth et al. (Eds) Springer. DOI : 10.1007/978-3-030-88063-7

Wallén, Warner, Henriette; Björklund, Gunilla; Andersson, Jan. 2021 "[Using a three-stage model of change to understand people's use of bicycle, public transport, and car](#)" Transportation Research Part F: Traffic Psychology and Behaviour

Hedegaard, Sørensen, Claus; Isaksson, Karolina. 2021 "[Omställning till hållbar mobilitet: vilka roller kan smart mobilitet, medborgardeltagande och coronakrisen spela?](#)" Rapport, VTI Statens väg- och transportforskningsinstitut

Bieser, Jan C.T.; Vaddadi, Bhavana; Kramers, Anna; Höjer, Mattias; Hilty, Lorenz M. 2021 "[Impacts of telecommuting on time use and travel: A case study of a neighborhood telecommuting center in Stockholm](#)" *Travel Behaviour and Society* Volume 23

Wallsten, Anna; Henriksson, Malin; Isaksson, Karolina. 2021 "[The Role of Local Public Authorities in Steering toward Smart and Sustainable Mobility: Findings from the Stockholm Metropolitan Area](#)" *Planning Practice and Research*

Ringenson, Tina. 2021 "[Mobilising digitalisation to serve environmental goals](#)", KTH Doctoral thesis, TRITA-ABE-DLT ; 2044

Sopjani, Liridona. 2021 "[Sharing The Design Authorship Of Sustainability: Towards co-creation of sustainable transport systems and practices](#)", KTH Doctoral thesis, TRITA-ITM-AVL ; 2021:48

Johansson, Fredrik. 2021 "[A Shift in Urban Mobility and Parking?: Exploring Policies in Relation to Practices](#)", KTH Doctoral thesis, TRITA-ABE-DLT ; 2136

Witzell, Jacob. 2021 "[Approaching transformative futures, Discourse and practice in Swedish national transport policy and planning](#)", KTH Doctoral thesis, TRITA-ABE-DLT ; 2048

## What is next?

### New Living Lab in Riksten

Mistra SAMS' third living lab is planned to be set up during 2022 in Riksten, Tullinge, an area that provides a rich illustration of an accessibility and mobility situation which is quite typical for many suburbs in metropolitan regions. The planned interventions include a digital platform, the "hardware" (such as selected vehicles and spaces) as well as specific services that will be used by the participants.

### Mistra SAMS participates at the exhibition "Zero City"

Mistra SAMS will be presented at the exhibition Zero City at Tekniska museet in Stockholm. Zero City will offer an interactive experience where visitors will meet possible future scenarios and can test the planning process of carbon neutral cities. Visit the museum to see interviews with three Mistra SAMS researchers as well as a short film about our workhub in Tullinge. The exhibition opens for the public 5 March 2022.

### Study trip to Oslo

May 2022, the Mistra SAMS management group together with the programme's researchers will visit Oslo to meet with fellow researchers and public actors to learn more about Norwegian projects regarding mobility and accessibility services in urban areas.

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