Digital Futures ISPP project proposal

Project title	Sensoring safety perceptions in and around Kista: A temporal perspective of place users
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FUNDING

The project will be funded with 1 MSEK overall in terms of Digital Futures funding. More details about the budget, see pages 7 and 8.

Existing Digital Futures funding for PI	-
Existing Digital Futures funding for co-PI #1	-
[Add more lines for further co-PIs]	
Requested funding for PI per year	1,000 MSEK
(minimum 300 KSEK, multiple of 100KSEK)	,
Requested funding for co-PI #1 per year	
(minimum 300 KSEK, multiple of 100KSEK)	
[Add more lines for further co-PIs]	
Total funding requested	1,000 MSEK

EXECUTIVE SUMMARY

Safety is a fundamental quality for the attractiveness of an area. People are willing to pay more for properties that are located in neighborhoods that are attractive and offer public places that are safe (Ceccato & Wilhelmsson, 2020; Gibbons, 2004; Wilhelmsson et al., 2021). Yet, safety depends on what happens in public places, and what happens in them (e.g., walking, cycling, preventing crime) depends on how safe these places are, or are perceived to be (Loukaitou-Sideris & Eck, 2007; Reynald, 2010). Poor maintenance or signs of physical deterioration of an area are thought to be more important determinants of poor safety perceptions than the actual incidence of crime (Skogan, 1990; Wilson & Kelling, 1982). The buildings' façades, their design, and the sense of ownership that they promote are bound to affect crime and safety (Armitage, 2013; Cozens & Love, 2015).

The mechanisms linking safety to particular environments are also determined by the resident's capacity to exercise social control in those particular settings, at particular times (Cohen & Felson, 1979). More than residents, visitors and those who work in the area can directly contribute to its safety. People's social bonds bring collective benefit to neighborhoods; for instance, communities with high stocks of social capital feel safer and are more effective in exerting informal social control through the establishment and maintenance of norms (Hirschfield & Bowers, 1997). Sampson et al. (1997) argue that 'action to restrict crime does not necessarily require strong local social ties'. Places and settings that promote social interactions such as working places, transportation nodes, schools—compose the neighborhood physical infrastructure that facilitates the formation of social ties, affecting safety.

Public places are often contested places where individuals relate to rules conduct and publicness (Smith & Low, 2013). The right to feel safe rests on a thin equilibrium between place users of all kinds (youth, older adults, women, children, etc). Each public place bears a certain morality that defines what can be done in it (under or beyond the rule of law). This morality also determines those who are the "legitimate users" (Knutsson, 1997), and those who are not. *Who has the right to feel safe? Which are the settings that promote safety and for whom? (local users and outsiders) What do these settings look like from a safety perspective?*

These are some of the questions we want to answer in this research project using Kista as a study area. Kista and its immediate areas constitute an interesting case study for several reasons. The area is one of the most vibrant parts of the Stockholm city—more than 8000 new housing units are planned in the next coming years, with a new transportation link, hundreds of new workplaces, parks and schools (Stockholm municipality, 2019). However, 44% of respondents in Kista area declare feeling unsafe in one or more places in their residential area or its vicinity because the risk of becoming a victim of crime. Such fear is also triggered by the physical environment. In an ongoing study where people were asked to classify Google Street view images, results have shown that the physical environment of Kista area was one that got the lowest safety scores across the whole of Stockholm!

Therefore, we assess variations in people's safety perceptions in Kista and surrounding areas exploring spatial data from multiple sensors at various scales (spatial and temporal). A combination of qualitative and quantitative methods underlies the analytical framework of the research that builds on an ongoing cooperation with MIT Senseable lab, Stockholm municipality, local stakeholders and civil society.

This knowledge base is fundamental for future planning of the built area of Kista area as well as for providing clues for immediate interventions that can make the area safer and more attractive to local residents, daily users, and visitors.

AIM & OBJECTIVES

The aim of this study is to obtain a better understanding of how people assess safety in a particular area of Stockholm - Kista area, more specifically, how people's safety perceptions relate to the quality of the physical and the social environment of the area. This research has two main parts. First, the study investigates the nature of safety by particular types of city users: living, and working in Kista (*intra-area focus*). Then, we explore ways to capture how outsiders living in the Stockholm municipality and elsewhere assess Kista, focusing on how they link safety to the quality of the environment in this area (*city-wide focus*). This aim is achieved by:

- 1) using multiple sensors and data types to capture *temporal variations* of people's safety perceptions in micro-urban settings where people spend time when conducting their daily routine activities.
- 2) detecting the *characteristics of the settings* that "work" and those that do "not work" from a safety perspective. Here the focus is on particular types of micro situational environments that are perceived as (un)safe, such as façades, paths and other settings.
- 3) investigating the nature of safety declared by *particular types of city users* working, visiting, and living. The types of places and feelings that they may trigger in frequent users or first-time visitors. Encourage those who normally are considered illegitimate users to also take part on the study, give voices to those who are often considered "the problem", such as youth.
- 4) *making recommendations* for interventions for future planning of the area which will be presented in a final workshop with participation of local stakeholders and civil society.

STATE-OF-THE-ART AND SCIENTIFIC NOVELTY

Safety is a product of the way one perceives environments, so an individual's safety perceptions depend on the individual characteristics: physical and psychological abilities, age, gender, ethnic background, sexual and socioeconomic statuses (Box, Hale, & Andrews, 1988; Garofalo & Laub, 1979; Pain & Smith, 2008). It is also these characteristics (individually or intersectionally) that determine an individual's safety perceptions.

Studies have long reported a positive association between the aesthetics of places, physical activity that in turn affects safety (Ball et al., 2001; Brownson et al., 2001; Corti, Donovan, & Holman, 1997; Takano, Nakamura, & Watanabe, 2002, for a review, see van Lenthe et al. (2005)). Safe public places invite outdoor activities, while fear may inhibit human activities at particular settings, leading individuals to avoid these settings at certain times of the day (Gray, Jackson, & Farrall, 2011; Jackson & Gray, 2010).

Safety depends on the *mental image of places* which is an outcome of individuals' knowledge, experience, emotions and external stimuli that determine the process occurring between the city and the observer (Lynch 1960). Previous research shows that every individual creates their own image but the images are usually consistent within homogenous groups.

Our analytical framework of safety is grounded in the dynamics of the day-to-day human activities captured by multiple sensors, inspired by the seminal work of Hägerstrand (1970) and Gehl (1987) with consideration for the role of space and time-geographical principles. In this study, we take distance from traditional theoretical perspectives that rely on either individual psychological based measure of safety or the rough macro-aggregated zone indicators of crime and fear to propose a new

situational perspective of safety based on <u>the interaction</u> between *individuals* and *micro-settings* where people spent time, within particular areas and city contexts (Figure 1).



Figure 1 – The conceptual framework of analysis: Sensing safety in public places.

Drawing from environmental criminology theories and principles of crime prevention through environmental design, we investigate the nature of safety in relation to particular types of:

- a) settings such as housing of different types public places, transit areas but also interstitial spaces and pedestrian paths.
- b) users, those working and living in the area but also daily visitors and particular groups, such as youth, women, groups of individuals with special needs and newcomers.
- c) times, near-real time, daytime/nigh time, seasonality, and by sequence of events. This suits our datasets which are based on descriptions of circumstances by time that are dependent and influenced by each people's capacity to recall the events experienced during a particular time.

PROJECT PLAN

We will explore a number of data sources and combine them with pre-existent available data over the Kista area. We propose to combine records from Apps, online surveys (applied to samples of the living, working and visiting population), Google Street views, AI safety scores with several urban security indicators (e.g. police records, calls for street services and disorder, Table 1) to produce *not a single* diagnostic of the safety conditions of the Kista area, but *various* depending on different time frames and users (Figure 2).



Figure 2 – Multiple data sources/sensors of the study. The study generates a kaleidoscope of perspectives split into two main parts: one part looks into safety perceptions of micro-settings in and around Kista area (**1. Intra-area focus**) and the other, focuses on outsiders' knowledge, images, discourses of safety perceptions of Kista area (**2. City-wide focus**). The project will be carried out from January 2023 to June 2024.

1. Intra-area focus

In this part, we investigate the nature of safety according to particular types of city users: living in this area. In order to achieve this goal, we work with our local stakeholders to identify groups of interest to participate in our analysis. The first target group is 'young people' from two youth associations in the *Rinkeby-Kista District administration* of Kista, Rinkeby, Husby och Akalla. Young people are often treated by official authorities as "the problem" but instead, in our study, we capture young people's perspective and see how their safety relate to their whereabouts, their settings, the people they meet and their perceptions of safety in Kista and related areas. We are going to use the *Eye level city app* by *Gehl architects* to collect the data (Figure 3) and later compare with patterns of crime and other safety incidents available for the area (see the list of available data in Table 1). This step will involve also Kista Science Center.



Figure 3 – Data collection using the eye level city App.

Data & text and photos from Eye level city app – is a digital participatory photography tool that allows for geo stamped photos, route tracking, prompt specific tasks and individual annotation of photos. The tool can be helpful to gather photos of places that people use on an everyday basis in different parts of the area, at different times of the day/week.

In cooperation with *MIT senseable lab*, another placed-based analysis will be carried out using *Google street view images*. We will use publicly available street view images to train and perform the machine learning algorithm. This method, already used by this group, evaluate at a large scale, safety perception. Here we use thousands of pairwise images from the city, to ask people to assess how they perceive those settings. The same image is randomly sampled with other images, hundreds of times. Using this assessment as a training dataset, we develop a machine learning method that assesses safety perception of all collected Google Street View in Stockholm. In the case of Kista, we propose to refine the model to understand how residents of Kista, as well as other neighborhoods (insiders' views), perceive safety in the area (outsiders' views).

MIT senseable lab will also work with slices of the Telia data showing on maps the areas in Kista and surrounding areas which are more frequently used, and we will later compare with crime and other indicators of safety by hours of the day. A density map (hotspots and cold spots) will show the most and least used settings at particular times of the day, week and each season. This step will involve also Kista Science Center.

2. City-wide focus

We explore ways to capture how outsiders living in Stockholm municipality or elsewhere in Stockholm region assess Kista area, focusing on how they know about its location, its mental image, their discourse, whether and how they associate the quality of particular environments to safety. *Maptionaire* will execute two surveys. The objective is to assess whether local's and outsiders' safety perceptions vary according to groups of individuals as well as by types of settings, and temporally.

- (1) one study with the working/visiting population (a representative sample of individuals working in Kista area, such as Ericsson employees). We will assess how urban settings are perceived in places they spend time, in particular we look into the relationship between the settings to be found safe (or/and unsafe). How do these mental maps fit the maps of crime? and/ or how do these mental maps fit the maps of those living in the area?
- (2) the other survey targets outsiders (individuals living in Stockholm municipality or elsewhere in Stockholm region) that do spend time in the area. The objective is to investigate whether and how outsiders' image of the area is affected by the stigmatization of the area as an (un)safe place. Do these perceptions vary over time and group of city users? Which are the settings that most contribute to their image of the area as (un)safe? how do these mental maps fit the maps of those living in the area?

Table 1 - Available data sources – 'In-house'

- *Police records* Crime data (from RAR system) over Stockholm over all types of offences defined by the penal code.
- *Tyckatill data* an app that helps inhabitants in Stockholm inform their local authority of problems needing their attention, all types of complains as well as praise.
- Stockholm safety survey The overall aim of each survey adheres with the city council's goal of creating a safer city, thus the data can be compared with results of previous surveys and Land use and census data Are available on the Stockholm portal. (available)
- *Telia data* anonymized data at coordinates allows mapping of particular bundles of movement in space and time. The data can be helpful to identify "desert" of movement, areas where people pass/spent time because necessary activities take place (e.g. bus station), areas where people enjoy spending time.

Co-creation workshops together with residents, planers/practitioners will be organized by researchers in preparation for the data collection(s). The organization of these forums will be supported by local stakeholders. Visualization and analyses of the photos and paths as well as safety patterns by places will be coordinated by Gehl architects and Maptionaire together with PI-team.

We will make recommendations for immediate interventions that can make the area safer and more attractive to local residents, daily users, and visitors as well as for future planning of new residential areas. These recommendations will be presented in a workshop with participation of researchers, politicians, local stakeholders and civil society.

Time plan and implementation – This is one year project, from January to December 2023.

Milestones	Expected deliverables
-Reading/preparing surveys - Jan/feb	- Co-creation workshops with place users & local
-Preparation of data collection/workshops – March	stakeholders - empowerment of Kista Youth
-Data collection App/Maptionaire/MIT SLL -	- Two workshops (Middle/end of the project)
March-August	- Website
-Analysis/visualization - April-October 2023	- A report in Swedish

-Writing/workshops/dissemination	-	October-	-	Research	article(s)	to	be	submitted	to	a
December 2023			co	onference o	r peer-revi	iewe	ed jo	urnal		

IMPACT

The novelty and impact of this study reside in the combination of state-of-the-art research questions using innovative digital place-based methods (*Digitalized Industry*) to deal with pressing safety problems affecting various societal groups from a cross-disciplinary perspective (*Educational Transformation*). This knowledge is valuable for immediate safety interventions and future planning of an area in Stockholm that struggles with safety challenges (*Climate-positive urban expansion, Agenda 2030*). This research directly involves our target groups through the use digital solutions, empowering individuals and giving them a voice, which is often unheard in traditional participatory schemes. This goal is made possible by bringing together actors from the academia, industry and civil society (triple helix).

STRATEGIC RELEVANCE

The project directly contributes to KTH strategic pillars by considering safety as an integral dimension of *social sustainability*. The *gender dimension* of safety is an integral part of the theoretical approach and research questions that can be empirically tested. For example, how does gender relate to perceived safety and intersects with other individual characteristics, such as age, ethnic background or disability. We offer young people in Kista the opportunity to express themselves, to *feel empowered* by taking part in the research process using innovative digital tools. The project is headed by KTH (PI) but is composed of an *international team* which is highly *interdisciplinary*, with architects, geographers, computer scientists, planners—from Sweden, USA, Finland and Denmark.

PROJECT TEAM COMPOSITION AND RESOURCES

Table 2 describes the project team and each co-PI's specific contribution to objectives according to the project plan.

Participants	Data collection	Execution analysis	Writing	Dissemination
			reports	
KTH – STF group- all	Jan and June	March 23 to March 24	Ongoing	December
MIT Senseable (focus 1)	March-April	March 23 to March 24	Sept to Oct	June-December
Gehl architects (focus1)	March-April	April to October 2023	Sept to Oct	June-December
Maptionaire (focus 2)	March-April	April to October 2023	Sept to Oct	June-December
Kista-Rinkeby dist all	Feb-September	NR	NR	June-December
Kista Science Center -all	Feb-September	NR	NR	June-December
Stockholm mun all	NR	NR	NR	June-December

Table 2 - Project team and timetable of tasks and activities – Jan 2023 to June 2024

Project feasibility: We have a team that fits the aim and objectives of the research. We are aware of potential risks for the execution of the project. One risk is that the data collection takes longer than initially planned. We will keep regular meetings with partners to prevent delays. Unforeseen hinders (e.g. people do not answer the survey) will require an extension of the timeframe. Another risk is unforeseen problems with the study area/groups. We prevent this by choosing area/group that are stable and allow less risk for the data collection and analysis.

BUDGET

The total costs for the project is 2,8 MSEK. Of this total, SEK 800.000 is in-kind.

The requested funding is 1 MSEK from Digital features (DF) and 1 MSEK from Stockholm Senseable Lab (SSL).

KTH is the project leader with costs of 1,25 MSEK (1M from DF and 0,25 MSEK from SSL) working in cooperation with:

- MIT with costs of 0,5 MSEK from SSL
- Gehl Architects with costs of 0,15 MSEK from SSL
- Maptionaire with costs of 0,1 MSEK from SSL.

The costs is composed of three parts, salaries, indirect costs and overhead. The running costs include organization of workshop, data, software, premises, and data collection. A third of these costs are inkind (databases, software licences, basic infrastructure) as shown in the table below.

Participants	Organisation	Cost (SEK tusen)	In-kind	Total requested funding	Requested from Stockholm senseable lab	Requested from Digital Futures
Vania Ceccato (PI)	KTH	200				
PhD student	KTH	800				
Data/Sofware/Pcs/lab	KTH	250				
Indirect costs (37%)	KTH	300				
		1550	300	1250	250	1000
Fabio Duarte (co-PI)	MIT	800	300			
Liselott Stenfeldt	Gehl artictects	150				
Maarit Kahila	Maptionnaire	100				
		1050		750	750	
Toni Mellblom	Rinkeby-Kista	50	50	-		
	Kista Science					
Karin Bengtson	center	50	50			
Lukas Ljungkvist	Stockholm mun.	50	50	-		
Anne Håkansson	KTH- EECS	50	50			
		200				
Total in-kind			800			
Total costs inclusive						
in-kind		2800				
Total requested funding				2000	1000	1000

REFERENCES

- Armitage, R. (2013). Crime Prevention through Housing Design: Policy and Practice. Palgrave Macmillan
- Ceccato, V., & Wilhelmsson, M. (2020). Do crime hot spots affect housing prices? *Nordic Journal* of Criminology, 21(1), 84-102. <u>https://doi.org/10.1080/2578983X.2019.1662595</u>
- Cohen, L. E., & Felson, M. (1979). Social change and crime rate trends: A routine activity approach. *American Sociological Review*, 44, 588–608.
- Cozens, P., & Love, T. (2015). A Review and Current Status of Crime Prevention through Environmental Design (CPTED) [Article]. *Journal of Planning Literature*, *30*(4), 393-412. <u>https://doi.org/10.1177/0885412215595440</u>
- Gehl, J. (1987). Life between buildings. Using public space. Islandpress.
- Gibbons, S. (2004). The Costs of Urban Property Crime*. *The Economic Journal*, *114*(499), F441-F463. <u>https://doi.org/10.1111/j.1468-0297.2004.00254.x</u>
- Hirschfield, A., & Bowers, K. J. (1997). The Effect of Social Cohesion on Levels of Recorded Crime in Disadvantaged Areas. Urban Studies, 34(8), 1275-1295. <u>https://doi.org/10.1080/0042098975637</u>
- Hägerstrand, T. (1970). What about people in regional science? *Papers in regional science* association, 24, 7-21.
- Knutsson, J. (1997). Restoring public order in a city park. Policing for Prevention: Reducing Crime
- Loukaitou-Sideris, A., & Eck, J. E. (2007). Crime prevention and active living. American Journal of Health Promotion, 21(4 Suppl), 380-389, iii.
- Reynald, D. M. (2010). Guardians on Guardianship: Factors Affecting the Willingness to Supervise, the Ability to Detect Potential Offenders, and the Willingness to Intervene. *Journal of Research in Crime and Delinquency*, 47(3), 358-390. <u>https://doi.org/10.1177/0022427810365904</u>
- Skogan, W. G. (1990). *Disorder and Decline: Crime and the Spiral of Decay in American Neighborhoods.* Free Press.
- Smith, N., & Low, S. (Eds.). (2013). The politics of public place. Routledge.
- van Lenthe, F. J., Brug, J., & Mackenbach, J. P. (2005). Neighbourhood inequalities in physical inactivity: the role of neighbourhood attractiveness, proximity to local facilities and safety in the Netherlands. *Social Science & Medicine*, 60(4), 763-775. https://doi.org/10.1016/j.socscimed.2004.06.013
- Wilhelmsson, M., Ceccato, V., & Gerell, M. (2021). What effect does gun-related violence have on the attractiveness of a residential area? The case of Stockholm, Sweden. *Journal of European Real Estate Research*.
- Wilson, J. Q., & Kelling, G. L. (1982). Broken windows. Atlantic Monthly, 249, 29-38.

CV'S

Principal Investigator - Curriculum Vitae Vania Ceccato



Dr. Vania A. Ceccato

KTH Professor (i samhällsplanering med inriktning mot urban säkerhet) Department of Urban Planning and Environment, School of Architecture and the Built Environment - ABE, KTH Royal Institute of Technology **Nationality:** Brazilian and Swedish **Date of birth**: 2nd June 1968

Research profile

Ceccato is interested in the relationship between urban environment & safety. GIS & spatial methods underlie her research on transit safety, individual's mobility & the intersectionality of safety, geography of crime & fear in urban & rural environments, the impact of crime on housing markets. She is the (co)-author of 7 books, the most recent is: 'Transit Crime and Sexual Violence in Cities' (2020), by Routledge. Her past research is international in outlook and has mostly focused on the situational conditions of crime and fear in urban and rural environments from an interdisciplinary perspective (with studies in Sweden, the UK, Baltic countries, Brazil as well as a global comparative study in 6 continents). She is the coordinator of the national <u>network Safeplaces (Säkraplatser)</u> funded by The Swedish National Crime Prevention Council (BRÅ) that aims to improve knowledge and practices in situational crime prevention in Sweden and has recently become a partner of UN-Habitat SaferCities program.

Research is carried out in collaborations with non-academic partners those including (2015-2020): The UN-Habitat Safer Cities program, The Swedish National Crime Prevention Council (BRÅ), The National Board of Housing, Building and Planning (Boverket), The Police authority, The national transportation Board (Trafikverket), The Swedish Retail and Wholesale Council (Handelsrådet), Public Health Agency of Sweden (Folkhälsomyndigheten), Södersjukhus/Karolinska Institutet, Stockholm County council, Stockholm public transportation and NGOs, such as Hela Sverige Ska leva!.

Current relevant achievements

- o TEDx KTHWomen *Can architecture and planning ensure safety for women*?, November 2018.
- Ceccato was ranked among the top 20 Nordic criminologists in the article <u>Ranking Nordic Criminologists by</u> <u>Impact and Prestige</u>, *Journal of Criminal Justice Education* by Moeller in 2019.
- o Ceccato serves as International Ambassador of British Society of Criminology (BSC) (since 2017-).

Previous employment

- Associate professor KTH Kungliga Tekniska Högskolan, Sweden, 2017-2017.
- o Post-doctoral candidate, Associate Researcher, University of Cambridge, UK, 2002-2008
- o Researcher at Nordregio Nordic Centre for Spatial Development, Sweden, 1999-2001
- o PhD candidate KTH Kungliga Tekniska Högskolan, Sweden, 1996-2001
- o Lecturer, Department of Geography, University of Vale do Paraíba, São Paulo, Brazil, 1990-1994

Publications (selected)

Books 1. Ceccato, V., Loukaitou-Sideris, A. (2020) <u>Transit crime and sexual violence in cities: International evidence and prevention</u>. Routledge.

- 2. Ceccato, V., Nalla, M. (2020) Crime and fear in puplic places: Towards Safe, Inclusive and Sustainable Cities. Routledge.
- 3. Ceccato, V., Armitage, R. (2018) <u>Retail crime: International Envidence and Prevention</u> Palgrave MacMillan.
- 4. Ceccato, V. (2015) <u>Rural crime and community safety</u>, Routledge, London.
- Ceccato, V., Newton, A. (2015) <u>Safety and security in transit environments: an international perspective</u>. Palgrave, 2015.
- 6. Ceccato, V. (2013). *Moving safely: crime and perceived safety in Stockholm's subway stations*. Plymouth: Lexington.
- 7. Ceccato, V. (2012) Urban fabric of crime and fear. New York, Dordrecht, London: Springer. (editor)

Recent commissioned research (Forsknings uppdrag)

- 8. Trygg stadsmiljö i praktiken: Visioner, exempel & tips (2019) Boverket rapport 2
- 9. <u>Trygg stadsmiljö Teori och praktik (2019)</u> Boverket rapport 1

Peer-reviewed articles - selected from most recent articles

- 10. Ceccato, V., Gaudelet, N., Graf, G. (2022) Crime and safety in transit environments: a systematic review of the English and the French literature, 1970–2020. *Public transport*. <u>10.1007/s12469-021-00265-1</u>.
- 11. Ceccato, V., Solymosi, R. & Müller, O. (2021). <u>The Use of Twitter by Police Officers in Urban and Rural</u> <u>Contexts in Sweden</u>. *International Criminal Justice Review*, *31*(4), 456-476.
- Ceccato V, Kahn T, Herrmann C, Östlund A. (2021) Pandemic Restrictions and Spatiotemporal Crime Patterns in New York, São Paulo, and Stockholm. *Journal of Contemporary Criminal Justice*. September, doi:<u>10.1177/10439862211038471</u>
- 13. Ceccato, V., Näsman, P. & Langefors, L. (2020) <u>Sexual violence on the move: An assessment of youth's</u> victimization in public transportation, *Women & Criminal Justice*, DOI: 10.1080/08974454.2020.1733732.
- Yates, A., & Ceccato, V. (2020) <u>Individual and spatial dimensions of women's fear of crime: A Scandinavian study case.</u> International Journal of Comparative and Applied Criminal Justice, <u>https://doi.org/10.1080/01924036.2020.1719531</u>
- 15. Ceccato, V. (2019) Eyes and Apps on the Streets: From Surveillance to Sousveillance Using Smartphones. *Criminal Justice Review*, <u>https://doi.org/10.1177/0734016818818696</u>.
- Ceccato, V., & Wilhelmsson, M. (2019). Do crime hot spots affect housing prices? Nordic Journal of Criminology, 1-19. doi:10.1080/2578983X.2019.1662595
- 17. Ceccato, V. (2019) <u>Fieldwork protocol as a safety inventory tool in public places</u>. *Criminal Justice Studies*, doi.org/10.1080/09589236.2019.1601367.
- Ceccato, V., Willems, O. (2019) <u>Temporal and spatial dynamics of falls among older pedestrians in</u> <u>Sweden</u>. *Applied Geography*, 103 (2019) 122–133.
- 19. Ceccato, V., Li, G, Haining, R. (2018) <u>The ecology of outdoor rape: The case of Stockholm</u>, Sweden. *European Journal of Criminology*, doi: 10.1177/1477370818770842
- 20. Abenoza, R., Ceccato, V., Susilo, Y., Cats, O. (2018) <u>Individual, Travel, and Bus Stop Characteristics Influencing</u> <u>Travelers' Safety Perceptions</u>. *Transportation Research Record*, doi: https://doi.org/10.1177/0361198118758677
- 21. Ceccato, V., Masci, S. (2017) Does the environment of airports affect passengers' satisfaction with safety? *Journal of Applied Security Research*, 12:1-18.
- 22. Ceccato, V., Wiebe, D., Beshagi, B., Vrotsou, K. (2017) Women's mobility and situational context of rape. *Journal of Interpersonal Violence*, doi.org/10.1177/0886260517699950

Publications from 1994 to 2022 can be found in this page.

Teaching and supervision

- Ceccato has been the main supervisor of 4 PhD students (own external funding, 3 ongoing PhD students) and 3 post-doctoral candidates as well as dozens of supervisons of master and undergraduate thesis.
- She accumulates experience in teaching and teaching administration in 3 cycles over 25 years, distributed in 3 countries, Brazil, Sweden and the UK. As faculty member, she takes actively part in the development of courses and programs, including the first Blended learning (distance) course in the School of Architecture and Built Environment (ABE) to safety experts and other practitioners that started in 2017.

Fábio Duarte

fduarte@mit.edu | fdbr@yahoo.com | +1(857) 928-9282 | Cambridge, MA, 02139 | Green Card holder Languages: Portuguese (native), English, French, Spanish

For the past several years at MIT I have been managing multi-year and multi-million research projects involving qualitative and quantitative research, technology development and design. My involvement goes from the inception, negotiation with sponsors and collaborating institutions in different continents, coordination a team with multiple principal investigators in different departments at MIT and abroad, and simultaneously supervising 20+ researchers, from research scientists and post-docs to undergrad students.

PROFESSIONAL EXPERIENCE

 Massachusetts Institute of Technology Principal Research Scientist * Managing multi-year and multi-million research projects involving collaborations with universities and private companies in the Netherlands, Sweden, Kuwait, South Korea, and other countries on topics ranging from robotics and autonomous vehicles to environmental monitoring and smart cities. * Leading research team at the Senseable City Lab, including 60+ postdoctoral researchers, PhD and Master research fellows focusing on technology, data, and cities, with publications in <i>IEEE Internet of Things, Scientific Reports</i>, and many others. + Leading the data visualization team at the Senseable City Lab, exhibiting at Copper Hewit, Science Museum London, MIT Museum, and featured on the cover of <i>Nature</i>. + Heading Research Strategic Alliances, at the MIT Center for Real Estate (since 2019) + Lecturing on urban planning and transportation, and digital design workshop. 	2013-2014 & 2016-present
Harvard University	2014-2016
+ Co-developed environmental planning collaborative tools for Exuma, an	
archipelago in the Bahamas. + Co-led workshops with Exuma residents and Harvard Graduate School of Design students on community development and environmental planning.	
World Bank	2013-present
 Consultant + Consulting on Transit Oriented Development projects, mainly in India. + Consulting on the implementation of autonomous vehicles in Saudi Arabia. 	
Pontifícia Universidade Católica do Paraná, Brazil	2003-2021
 Director of the Graduate Program in Urban management (2008-2012). Taught the course <i>cities and technologies</i> for over 15 years. Mentored more than 15 master and PhD students. 	
PROJECT LEAD AT MIT (highlights)	

+ Roboat: a fleet of autonomous boats for Amsterdam (<u>http://roboat.org</u>), featured on CNN, NBC News, Forbes, Wired, The Guardian, and many other media outlets.

+ Underworlds: using robots to monitor public health in wastewater (<u>http://underworlds.mit.edu</u>). Deployed in Kuwait City, Boston, Seoul, among others cities, it has beeen featured on CNN, Wired, Atlas Obscura.
+ Favelas 4D: laser scanning informal settlements (<u>https://senseable.mit.edu/favelas/</u>), the project combines high-technolgy with community engagement, and is a finalist in the Bloomberg Philanthropies.
+ City Scanner: a modular environmental sensing device which can be mounted on ordinary vehicles, such as taxis or garbage trucks (<u>http://senseable.mit.edu/cityscanner</u>). Deployed in the United States, Sweden, Kazakhstan, it has received the Fast Company Innovation by Design Award.

PUBLICATIONS (over 2,800 citations; 5 highlights)

+ Urban Play: make-believe, technology, and space (MIT Press, 2021): The book argues that technology is powerful while it is still playful and open to experimentation. It includes chapters on virtual reality, theme parks and interactive design.

+ *Unplugging the city* (Routledge, 2018): The book discusses **urban phenomena as technological** assemblages, involving economics, politics, technology and design.

+ "Self-driving cars: a city perspective", *Science Robotics*, 2019: published in a top journal, the article argues that the future of self-driving cars lies in the technologies embedded in the cities.

+ "Evaluating the Human Experience of Autonomous Boats with Immersive Virtual Reality", *Journal* of Urban Technology, 2020 (second author): we conceived an immersive virtual reality experiment, combined with skin conductance data and interviews, to compare users' perceptions and stress levels when using manned and unmanned of autonomous vehicles.

+ "From SARS to COVID-19: Digital infrastructures of surveillance and segregation in exceptional times", *Cities*, 2021 (principal investigator): we discuss the long-term influence of digital infrastructure in the combat of epidemics, comparing the 2003 SARS outbreak and the 2020 COVID-19 pandemic Singapore, Hong Kong, and mainland China.

EDUCATION

Harvard University, Extension School Project Management (fall semester)	2017
Universidade de São Paulo, Brazil PhD Communication and Culture Visiting PhD fellow, Université Paris 1 Panthéon-Sorbonne Visiting PhD fellow, Université Laval, Canada	2000
Unicamp, Brazil Master in Multimedia	1997
Universidade de São Paulo, Brazil Bachelor, Architecture and Urban Planning	1994

Partners

Liselott Stenfeldt

Director, Head of R&D Cand Arch, MAA

As Director and Head of R&D. Liselott is responsible for developing strategic visions and innovative concepts that incorporate citizen-centricity and new models of collaboration, with the goal to guide future urban development.

Liselott is driven by her curiosity for how technology can support the liveability of our cities and wishes to challenge the way we communicate with data in order to help expose hidden patterns and unfold the stories of people's lives. She has more than 10 years work experience in initiating and co-creating digital large-scale projects and innovative tools. With specialisation in advanced design processes, she is an experienced workshop leader and facilitator of masterclasses, rethinking the process of urban development, in order to make cities more open, inclusive and democratic.

.5

Contact Liselott: +45 61 70 95 06 liselott@gehlpeople.com

Qualifications

2008

Master of Architecture, Aarhus School of Architecture, DK

2002

60 Credits, First Cycle, Designtheory & Interactiondesign, Malmö högskola (K3), Malmö, SE

2001

Certificate in Spatial design, The Design School, London, UK

Work

2022 -

Team Director & Head of R&D, Gehl Copenhagen 2020-

Director, Gehl Innovation, Copenhagen, DK 2018-

External Examiner & Teacher, Advanced Designmethods, ITU, Copenhagen, DK 2017-2019

Head of Interactive Spaces CPH, The Alexandra Institute, Copenhagen, DK 2012-2017

PM, The Alexandra Institute, Copenhagen, DK.

2008-2012

Interaction Designer & Architect MAA, The Alexandra Institute, Aarhus, DK

2005-2006

Conceptdesigner, Superflex, Copenhagen, DK.

2005

Intern, PLOT, Copenhagen, DK



Selected Gehl projects

2021/2022

Urban95 toolkit - Project Director for the development and implementation of a tool that enables and supports studying the city from the eyelevel of children. The project is part of Bernard van Leer Foundation's Urban95 program, with focus on small children. The tool is used to evaluate the public realm and for building capacity.

2020/2021

EIT Urban Mobility - Project Director for the development of a tool that supports studying movement in traffic in multiple cities, including data collection and study across four cities- Istanbul, Conenhagen, Lublin and Munich. Studying the impact of street elements when choosing routes for traveling within the city. Accompanied by the development of a new digital tool for collecting data on the inventory of public spaces as well as the occupancy rates of different elements in the streets.

2020

Public space, public life and covid19 -Project Director for a data-based study across 4 danish cities focusing on how public life have changed during covid19 Urban95 during covid19 - Project Director for several data-based studies across global cities, focusing on children's use of public space during covid19

Previous Projects: 2019 Data democracy, Aarhus, DK - A micro-bit

Liselott Stenfeldt

Director, Head of R&D Cand.Arch, MAA [...selected projects continued]

solution that enables children to make sound registrations all around the cities in Denmark.

PRIX BLOXHUB Interactive, CPH/LINZ -

An international initiative consisting of an Open Call and Symposium, focusing on how we can co-create new ideas on how to use digital technology (and data) in urban planning.

2018

Public Life Data, Cph, DK - Mapping and analysis of new business models within digital data in urban planning, both for private companies and public stakeholders. Digital futures for the built environment A deep-going analysis of how the Danish

industry use digital technology – and especially digital data – to qualify urban planning today.

Sound Manual for The City of Struer, DK-A manual to be used in urban planning, creating awareness of soundscapes

Digital Neighborhood, Aarhus, DK - a digital engaging tool for involving Citizens in the development of the local area they live in

2017

Update, Cph, DK – making the city smart The first Danish extensive exhibition concerning smart technologies in the urban space, containing a large-scale interactive urban model showing collected real-time data from Copenhagen C (that we developed)

2016

TREE.0/Vester Voldgade, Cph, DK - An urban initiative focusing on how we can use different datasets in an urban context, showing the potentials in making smart data-driven solutions.

2014

Nordlys, Horsens, DK - A playful interactive urban installation that invites Citizens to enjoy time together in public space. The installation is non-commercial and accessible for everyone. (AKA SwingScape)

2012

Mobile Probes, DK - a research project with focus on collecting qualitative data about the use of urban space, with a digital tool.

Relevant academic work

2019

BLOXHUB, Urban Tech programme – Mentor for Start ups and Companies 2018

Prix BLOXHUB Interactive - Founder in collaboration with BLOXHUB, DK & Ars Electronica, AU 2015 -

Aarhus School of Architecture External Examiner

2013 ACE, SIGCHI Conference Program Chair, use of technology to create

playful activities in urban space KEA, Cph School of Design and Technology Advisory Board, Interactiondesign education 2012

The Danish Ministry of Housing, Urban and Rural Affairs

Part of the Smart City Advisory Board Smart Aarhus, DK Part of Advisory Board

Teaching

2019

Ars Electronica, Linz, AU - The need for a digital revolution in our cities Ars Electronica, Linz, AU - Poetic Systems

(and new intersections)

Bartlett School of Architecture - How can we use digital technology to create more liveable cities?

Liveable Cities Conference, Edinburgh new digital tools for Citizen engagement 2017

Stanford University, San Francisco – Guest Lecturer, Design X Lab, Creating interactive experience in urban space

2014

Sydney Opera House, Sydney - Visions of an interactive Utzon archive

2010-

IT-University, Cph, DK - Guest teacher in Urban Digital Experiences

Publications

2020 Using data to Rethink Cities for people in a

Omega maptionnaire

Maarit Helena, Kahila-Tani

Mapita Oy Fredrikinkatu 55 A 2 00100 Helsinki Finland tel. +358 40 5626951 maarit@maptionnaire.com Born February 3rd, 1978 in Turku, Finland Citizenship: Finnish Current residence: Espoo, Finland Gender: female Family status: married, two children



Maarit is passionate about making the interaction between residents and experts smoother, thereby supporting the creation of more livable and lovable cities. With Maptionnaire she wants to help cities to change their way of interacting with residents in a more inclusive way by making the community engagement process easier and more efficient. Maarit has her background in planning geography and urban planning. Her research focused on new methods for public participation. In her dissertation she studied the opportunities for urban planners to take advantage of PPGIS tools like Maptionnaire.

EDUCATION

2015	Aalto University, Doctor of Science (Technology), School of Engineering, Department of Built Environment
	Thesis name: Reshaping the planning process using local experiences: Utilising
	PPGIS in participatory urban planning
	Link: https://aaltodoc.aalto.fi/handle/123456789/19347
2005	University of Helsinki, Master of Science (M.Sc.) Planning Geography
	Secondary subjects: urban planning, environmental protection, development studies

WORKING POSITIONS

2018 - present	Mapita Oy, co-founder and CEO
2016 - 2018	Aalto University, Postdoctoral researcher, School of Engineering,
	Department of Built Environment
2011	Mapita Ltd, Development Director
2005 - 2011	Aalto University, Reseacher, School of Engineering, Department of
	Built Environment

PUBLICATIONS

List of my academic publications is available through Google Scholar at: http://scholar.google.fi/citations?user=xsdLISAAAAAJ&hI=fi



LOI'S - LETTERS OF INTENTION



Kista, 12th of June, 2022

Digital Futures ISPP project Prof Vania Ceccato Department of urban planning and environment KTH Royal Institute of Technology Teknikringen 10 A, 100 44 Stockholm, Sweden Mobile: 073-6649070 Senseable Stockholm Lab Docent Anne Håkansson Electrum, Kistagången 16 164 40 Kista

To whom it may concern,

This is a Letter of Intent (LOI) supporting the research project "Sensoring safety perceptions in and around Kista: A temporal perspective of place users" to be submitted in the Call DIGITAL FUTURES ISPP PROJECT/ 13th June 2022.

The main goal of the research project is to obtain knowledge about peoples' assessment of safety in the Kista area and how safety perceptions relate to the quality of the physical and social environment of the area. This is important since it helps the planning of the Kista area in the future and to create safe environments in cities. In addition, this research offers a range of people the opportunity to be involved in research activities, which is of interest to Senseable Stockholm Lab.

In case of funding, Senseable Stockholm Lab organization will give support to the funding and research activities as part of the reference group. In addition, we are happy to assist with the dissemination of the project results.

Concretely, the Senseable Stockholm Lab can contribute to this research project by:

- Providing funding support to the project. In the case of funding through the Senseable Stockholm Lab, proposals can also leverage potential funding to be decided later by SSL/City of Stockholm.
- Participating in the reference group and supporting researchers with the dissemination of results.

 Disseminating results via Senseable Stockholm Lab Kista premises and websites, as well as contacts with partners, such as Stockholm Stad and MIT Boston, USA.

We are looking forward to a fruitful interchange between the research team and the Senseable Stockholm Lab.

Sincerely,

Anne Höki Anne Håkansson

Anne Hakansson Docent and Scientific director of Senseable Stockholm Lab KTH The Royal Institute of Technology Email: annehak@kth.se

SEL

To: Digital Futures ISPP project || Prof Vania Ceccato Department of urban planning and environment || KTH Royal Institute of Technology Teknikringen 10 A, 100 44 Stockholm, Sweden

Cambridge, MA, June 8, 2022

Letter of Intent (LOI) to support the Digital Futures research project "SSP-Kista"

To whom it may concern,

On behalf of Senseable City Laboratory, at the Massachusetts Institute of Technology, I hereby express our commitment to support the research project

"Sensoring safety perceptions in and around Kista area: The perspective of place users"

to be submitted in the Call DIGITAL FUTURES ISPP PROJECT/ 13th June 2022.

The projects' key objective is to facilitate and ease mobility and travel processes for various user groups, especially for vulnerable-to-exclusion citizens. This will be reached by supporting various transport service providers, stakeholders and policy-makers to implement measures aiming to ensure that all members of society can benefit from digitised transport systems.

The project can achieve important improvements concerning the safety of the area and help support the planning of the Kista area in the future. The project is clearly aligned with the agenda of 2030s SDGs (see objectives 11 in particular, but also 5,10, 16 and 17). This knowledge base has potential to make the area safer and more attractive to local residents, daily users, and visitors.

In case of funding, MIT Senseable City Lab is very interested in partaking in the project led by professor Vania Cecatto. Moreover, my organisation will support the project team with our professional expertise and by networking the team with relevant stakeholders and policy-makers. In addition, we are happy in assisting with the application and dissemination of the project information and results.

Thus, we wish to contribute to the project by

Contributing supervision data collection

Sharing knowledge about the use of data analytics and visual articial intelligence models to assess safety
perception

- Participating to a stakeholders meetings
- Providing feedback to the analysis of innovative digital transport solutions meeting citizens' needs
- Co-author scientific papers

Please do not hesitate to contact me if you would like any additional information.

Fábio Duarte Principal Research Scientist | MIT Senseable City Laboratory 77 Massachusetts Avenue 9-216 Cambridge, MA 02139 USA



To: Digital Futures ISPP project Prof Vania Ceccato Department of urban planning and environment KTH Royal Institute of Technology Teknikringen 10 A, 100 44 Stockholm, Sweden Mobile: 073-6649070

Stockholm, June 10th, 2021

Letter of Intent (LOI) to support the Digital Futures research project

To whom it may concern,

On behalf of Rinkeby-Kista district administration, I hereby express our commitment to support the research project

"Sensoring safety perceptions in and around Kista: A temporal perspective of place users"

to be submitted in the Call DIGITAL FUTURES ISPP PROJECT/ 13th June 2022.

This project is unique because it aims at obtaining knowledge about safety in the area from a variety of users, which is important when making safety interventions and helping support the planning of the Kista area in the future. More importantly, this research offers young people the opportunity to be involved in research activities, show their local knowledge and experiences, and consequently, make them feel empowered by the different types of technologies that they will be using to answer surveys and Apps. Moreover, the project is clearly aligned with the agenda of 2030s SDGs (see objectives 11 in particular, but also 5,10, 16 and 17).

In case of funding, my organisation is giving support to the research activities as part of the reference group, linking researchers to young people through youth organizations (Ungdomsgård and Framtidshus) as well as relevant stakeholders. In addition, we are happy in assisting with the dissemination of the project results.

Concretely, the Rinkeby-Kista district administration can contribute to this research project by:

- Reaching out to the target group of young people in the age group 13-15 years through the four youth
 organizations in Kista, Husby, Akalla and Rinkeby. Reaching out young people in the age group 16-19
 years through Framtidens hus in Rinkeby and Husby.
- · Participating in reference group and informing researchers of any relevant information to the research.
- Disseminating results via our contacts with local partners in civil society such as mosques, local
 organizations and local associations. Thus, we wish to contribute to the project by

We are looking forward to a fruitful interchange between the Rinkeby-Kista district administration and the SSP research team.

Kindest regards,

Toni Mellblom Stadsdelsdirektör i Rinkeby-Kista stadsdelsförvaltning/District administration Stadsdelarna Kista, Rinkeby, Husby och Akalla Stockholmstad/Stockholm municipality toni.mellblom@stockholm.se

Att: Prof Vania Ceccato Digital Futures ISPP project Department of urban planning and environment KTH Royal Institute of Technology Teknikringen 10 A, 100 44 Stockholm, Sweden Mobile: 073-6649070

/ Copenhagen, June 8, 2022

Gehl Architects ApS Vesterbrogade 24, 5th floor 1620 Copenhagen V Denmark

gehlpeople.com mail@gehlpeople.com

+45 32 950 951 CVR nr. 25 30 95 29 To whom it may concern,

On behalf of Gehl Architects, I hereby express our commitment to support the research project "Sensoring safety perceptions in and around Kista area: The perspective of place users" to be submitted in the Call Digital Futures ISPP project/ 13th June 2022.

The aim of this study is to understand how people assess safety in a particular area of Stockholm, more specifically, how people's safety perceptions relate to the quality of the physical and social environment of the area.

The project can achieve important improvements concerning the safety of the area and help support the planning of the Kista area in the future. The project is clearly aligned with the agenda of 2030s SDGs (see objectives 11 in particular, but also 5,10, 16 and 17). This knowledge base has potential to make the area safer and more attractive to local residents, daily users, and visitors.

In case of funding, my organisation is very interested in partaking in the project by making our tool "Eye Level City app" accessible and integrated in the process. Moreover, my organisation will support the project team with our professional expertise and knowledge about the Kista area to connect the research to the planning process.

Thus, we wish to contribute to the project by:

- Making the Eye level app accessible with the goal to collect qualitative data about people's perceived feeling of safety
- Taking a lead in the visualization of data that has been collected with the app
- Participating in a co-creation workshop with focus on how to work and unfold safety
 Supporting the project team when establishing contacts with end-users and vulnerable-to-exclusion citizens.
- Reflecting and discussing results and recommendations developed in the project, in a research forum.

We are looking forward to a fruitful interchange between Gehl Architects and the SSP-Kista project team.

Kindest regards,

Silon Juli

Liselott Stenfeldt Team Director, Head of R&D

Mapita Oy Fredrikinkatu 55 a 2 (2nd floor) 00100 Helsinki, Finland

Omaptionnaire

To: Digital Futures ISPP project Prof Vania Ceccato Department of urban planning and environment KTH Royal Institute of Technology Teknikringen 10 A, 100 44 Stockholm, Sweden Mobile: 073-6649070

Helsinki, June 10th, 2022

Letter of Intent (LOI) to support the Digital Futures research project "SSP-Kista"

To whom it may concern,

On behalf of Mapita Oy (developers of Maptionnaire), I hereby express our commitment to support the research project

"Sensoring safety perceptions in and around Kista area: The perspective of place users" to be submitted in the Call DIGITAL FUTURES ISPP PROJECT/13th June 2022.

The projects' key objective is to facilitate and ease mobility and travel processes for various user groups, especially for vulnerable-to-exclusion citizens. This will be reached by supporting various transport service providers, stakeholders and policy-makers to implement measures aiming to ensure that all members of society can benefit from digitised transport systems.

The project can achieve important improvements concerning the safety of the area and help support the planning of the Kista area in the future. The project is clearly aligned with the agenda of 2030s SDGs (see objectives 11 in particular, but also 5,10, 16 and 17). This knowledge base has potential to make the area safer and more attractive to local residents, daily users, and visitors.

Mapita Oy participation in the project is contingent on Mapita receiving 100,000 SEK of the project funding. My organisation will support the project team with our professional expertise and by networking the team with relevant stakeholders and policy-makers. In addition, we are happy in assisting with the application and dissemination of the project information and results.

Thus, we wish to contribute to the project by

- Contributing by designing and implementing one (1) map-based data collection questionnaire
- Supporting data collection by planning and organising necessary community outreach and communication via digital channels
- Analysing and reporting results based on the collected data
- participating to selected and agreed stakeholder committee/to stakeholder dialogue events online.
- networking the team with relevant stakeholders and policy-makers.
 supporting the project team when establishing contacts with end-users and vulnerable-to-exclusion
- supporting the project team when establishing contacts with end-users and vulnerable-to-excitision citizens.
- Provide results and recommendations developed in the project.

We are looking forward to a fruitful interchange between Mapita Oy and the SSP-Kista project team.

Kindest regards, Maarit Kahila CEO

Digital Futures, Osquars Backe 5, floor 2, 100 44 Stockholm, Sweden



A D D R E S S BOX 1073 164 25 KISTA O F F I C E NOD-HUSET BORGARFJORDSGATAN 12 WWW.KISTA.COM

To: Digital Futures ISPP project Prof Vania Ceccato Department of urban planning and environment KTH Royal Institute of Technology Teknikringen 10 A, 100 44 Stockholm, Sweden Mobile: 073-6649070

Stockholm, June 8th, 2021

Letter of Intent (LOI) to support the Digital Futures research project "SSP-Kista"

To whom it may concern,

On behalf of name of organisation, I hereby express our commitment to support the research project "Sensoring safety perceptions in and around Kista area: The perspective of place users" to be submitted in the Call DIGITAL FUTURES ISPP PROJECT/ 13th June 2022.

The projects' key objective is to facilitate and ease mobility and travel processes for various user groups, especially for vulnerable-to-exclusion citizens. This will be reached by supporting various transport service providers, stakeholders and policy-makers to implement measures aiming to ensure that all members of society can benefit from digitised transport systems. The project can achieve important improvements concerning the safety of the area and help support the planning of the Kista area in the future. The project is clearly aligned with the agenda of 2030s SDGs (see objectives 11 in particular, but also 5,10, 16 and 17). This knowledge base has potential to make the area safer and more attractive to local residents, daily users, and visitors.

Kista Science City will support the project team with our professional expertise, in depth knowledge of the physical area and its inhabitants and by networking the team with relevant stakeholders and policy-makers. In addition, we are happy in assisting with the application and dissemination of the project information and results. Thus, we wish to contribute to the project by

- Contributing by data collection
- participating to a stakeholder committee/to stakeholder dialogue.
- networking the team with relevant stakeholders and policy-makers.
- providing feedback to the supporting the analysis of innovative digital transport solutions meeting citizens' needs.
- results and recommendations developed in the project.
- disseminating project results.

We are looking forward to a fruitful interchange between name of organisation and the SSP-Kista project team.

Kindest regards,

Karin Bengtsson CPO, Kista Science City