TWIN2EXPAND

Working Group Studio B3

WORKING GROUP STUDIO B3 - Research Excellence
7.04.2025 - 9.04.2025
CHALMERS UNIVERSITY, GOTHENBURG, SWEDEN

twinning towards
research excellence
in evidence-based planning
and urban design

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Document Description: This document provides a summary of discussions and panels that took place over the course of the 3rd Working Group Studio B 3 (WGSB3) that was held in April 2025 at Chalmers University of Technology, organised by the Spatial Morphology Group (SMoG), Department of Architecture Department of Architecture and Civil Engineering.
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Version Control Sheet

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Working Group Studio B – introduction

WGS B - research excellence (Chalmers); these activities focus on the project's scientific impact and raising the research profile of UCY and its staff. These studios bring together experts and professionals from various strands of EBDP (design theory, spatial analysis, spatial planning, urban analytics, integrated urban modelling, urban design, sustainable development). The aim is to establish a unified conceptual framework of EBDP, open avenues for methodological development and inform the project's research activities, producing the scientific outputs (papers, conceptual model, comparative evidence) which will have an important impact on the broader scientific community.
After the completion of each studio, there is a period of testing and implementation of the agreed model and tools through the research work, serving as a proof of concept to demonstrate empirically the value and significance of the proposed framework and methods. This approach will increase the scientific impact of the network [MS4, D2.1, D3.1, D3.2, D4.1, D4.2, D4.3, D4.4]

Working Group Studio B 3

WGS B3 (WGSB3) took place on 7-9 April 2025 at Chalmers University of Technology, Gothenburg, Sweden. It was organised by the Spatial Morphology Group (SMoG, Chalmers). 11 team members from all partners participated on site, including the 2025 Placement Holder, Effrosyni Roussou. 4 more participated online. 5 external guests presented, 1 of which was from academia, 2 from the public sector and 2 from non-profit organisations. See the detailed list of participants in Appendix 1.

Following the aims of the Working Group Studio B, which is to focus on research excellence, inform the project's research activities and raise the research profile of UCY and its staff, the 3-day sessions facilitated the meeting of the team members with experts, academics and professionals from various strands of EBDP based in Sweden (design theory, spatial analysis, spatial planning, urban analytics, integrated urban modelling, urban design, sustainable development).

Working Group Studio B3 (WGS_B3) focused, first, on the social-ecological direction of the project, integrating the green layer into evidence-based design and planning (EBDP); and second on the final deliverables of WP4.

A description of the separate sessions follows. For the overall agenda, please see Appendix 2.

1. Working Group Studio B 3- Day 1

1.1. Session A1 – Results of Task 4.2 of WP4 (research project). UCY and UCL

WGSB3 kicked off with a welcome note by Meta Berghauser Pont.
The first session was a joint presentation focusing on the ongoing research activities of WP4 that are led by UCY and UCL and are linked to the Research project: 'Expanding the application of Evidence-Based Design and Planning (EBDP) using comparative data models across different contexts'.

Walid S. Abdeldayem, Post-doctoral researcher in UCY presented the status of Task 4.2 named 'Applicability of EBDP in different planning contexts and scales'. The research investigates the applicability of existing EBDP models in different geographic and planning contexts and in projects of different scales (e.g., neighbourhood, district, city, region) with different data availability and institutional capacity. As this Task is coming to an end, Walid presented the final developments, as well as various applications of the data models created for Cyprus as part of the research. He also outlined the upcoming scientific publications and other outputs (e.g. Policy briefs) related to this work.

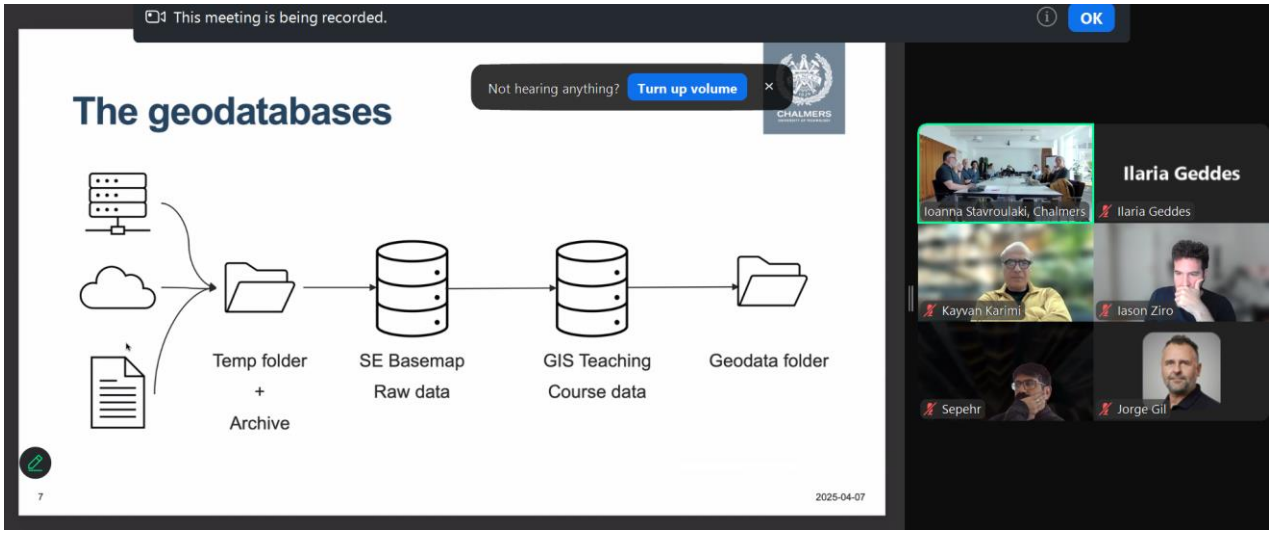
Following Walid, UCL research fellow Gareth Simons presented the status of the SOAR data model. SOAR is a Scalable, Open, Automated, and Reproducible urban data model for the EU created by UCL within Task 4.2. The SOAR model was also developed for Cyprus in close collaboration with UCY. Using Cyprus as a case study, UCY and UCL investigated the accuracy of EBDP models in different situations of data availability, comparing models that

are data-intensive and models that are less data-intensive such as the SOAR. This Task was considered complete by the consortium, and the related publications to present the results were discussed.

The joint session between UCY and UCL focusing on Task 4.2. was followed by a discussion about the upcoming scientific publications and other outputs, including related Policy briefs. The partners also discussed the use of the data models and workflows created in the upcoming Summer school 2025, a discussion that was followed up in the 3rd day of WGS B3.

1.2 Session A2 – Creating a geodatabase for teaching. Jorge Gil from Chalmers

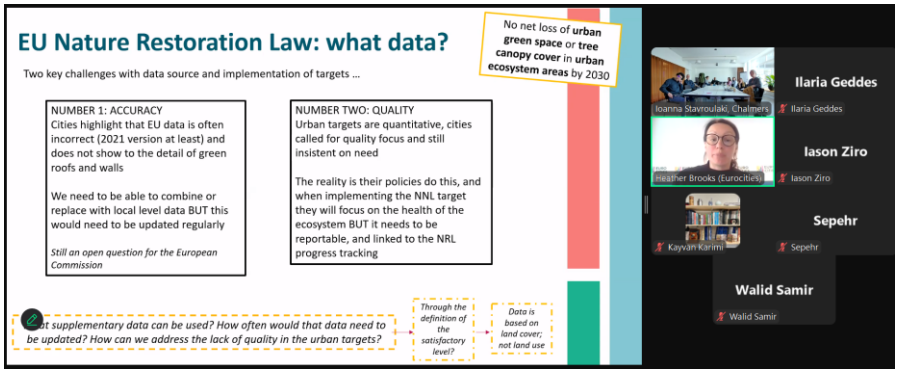
Jorge Gil, Associate professor of Urban analytics and Head of Urban design and planning division at Chalmers presented a strategy for handling datasets used in education, a topic particularly useful for the SURF lab in UCY. Jorge gave a thorough presentation not only on a practical level (e.g. appropriate data formats, written tutorials, servers, user access), but also on a more principal level that concerns the educational aims and priorities of such a data infrastructure. The priority was primarily placed on the students understanding *how* to use and analyse the data in a specific site and for a specific problem in a responsible and informed way. Secondarily the students need to understand how the data was created and how they can manipulate it. This balance depends on the level of education with older students needing to be more informed about the second aspect. The discussion concluded with the issue of bridging the gap between high theoretical expertise and high technical expertise which is crucial for the sustainability of research labs such as SURF.



1.3 Session A3 – Urban nature restoration: the need for compatible local and EU level data. Heather Brooks from Eurocities

Environment policy advisor in Eurocities (www.eurocities.eu) Heather Brooks informed the consortium about the new EU Urban Nature Restoration Law. She explained the new targets exemplifying what they mean for the cities, and which are the obligations they need to fulfil. Especially relevant for the T2E project was the discussion on how to measure these targets across EU countries in a comparable and feasible way and what are the available data that can be utilised for this purpose. A data audit was presented (e.g. Copernicus) outlining the challenges, such as data disparity and discrepancies between the coverage and accuracy in different countries and different cities. Heather raised the need to identify local datasets that are compatible with the Copernicus datasets and can supplement them by adding more context-specific information, especially in areas that are underrepresented.

A particular focus was placed on datasets that represent the green infrastructure, such as land cover data and data on tree canopy cover; both of which are needed to measure targets such as 'No net loss of urban green space and tree canopy cover in urban ecosystem areas by 2023'. The presentation was followed by a discussion about the role of EBDP in monitoring how green space is maintained through development in cities, as well as the data needed to represent the 'green layer' in a way that can support EBDP in meeting the targets of the Urban nature restoration law.



1.4. Session A4 – Deliverable 4.4. Research report. Chalmers

The first day of WGS B3 concluded with a consortium discussion on the production of the Research report (Deliverable 4.4.). Since Chalmers leads WP4, Ioanna Stavroulaki presented a first outline and timetable. It was agreed that Ioanna will collect all relevant written output from the participants in WP4 (e.g. scientific publications, conference presentations, working papers, interim reports) and create the first draft of the report that will be shared to the partners for comments.

At the end of the day the participants had dinner at 'Taverna Averna' restaurant in a centre of Gothenburg.

2. Working Group Studio B3 - Day 2

2.1. Session B1 – Results of Task 4.3 of WP4 (research project). Chalmers

The second day of WGS B3 started with a presentation from Ahmed Eldesoky, post-doctoral researcher at Chalmers, responsible for the sub-project related to WP4_Task4.3. The sub-project led by Chalmers aims to expand the conceptual and methodological framework of EBDP to include the socio-ecological impacts of urban development, especially important to tackle contemporary urban challenges within the current climate emergency that has multidimensional implications for humans and nature (e.g. biodiversity, human health and wellbeing). Ahmed presented the findings of the large-scale passive acoustic study monitoring birds in central Gothenburg, Sweden, that aimed to provide evidence to answer the question 'Can we build dense urban forms without jeopardizing biodiversity?'. Ahmed presented the empirical results of the study, and outlined the upcoming outputs, such as the publication of the open-source dataset produced and the website for disseminating the results to a larger audience. He also discussed the preparation of the joint scientific paper presenting the main results with the partners.

The session ended with outlining how the data, methods and results created within Task4.3. would be utilised and transferred, first, to the staff of SURF Lab, via a similar pilot study in Nicosia where the researchers would get hands-on training and, second, to students and junior researchers via the 2nd Summer school in June 2025.

2.2.Session B2 – C/O City. Helena Jeppsson from C/O City

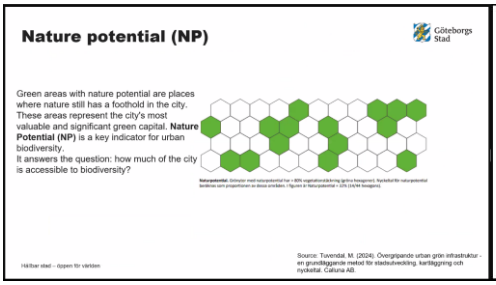
The second session of the day continued on the social-ecological theme. Helena Jeppsson, chair of the C/O City (www.cocity.se), a non-profit organisation focusing on urban ecosystems and nature-based solutions, presented. She described the association behind C/O City and the knowledge platform created. The purpose of the association is to manage and further develop knowledge in the field of urban ecosystems services, both nationally and internationally. The ambition is to increase the knowledge among all stakeholders in the community building sector, such as construction companies, consultants and architects, property owners, trade associations, municipalities, academia and government agencies. Their long-term goal is to contribute to the integration of ecosystem services in all community building, in order to contribute to more sustainable urban development and to meet the UN's sustainability goals.

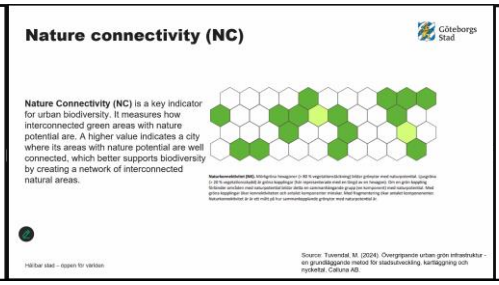
Helena also described how the association originated in a project (C/O City) carried out in 2011-2018, when the City of Stockholm led a collaboration with partners from all over Sweden and various stakeholders in urban planning. This discussion was particularly interesting for the T2E consortium and the SURF lab in UCY, since the T2E project is coming to an end but the intention is to create a knowledge hub on EBDP that will outlive the project.

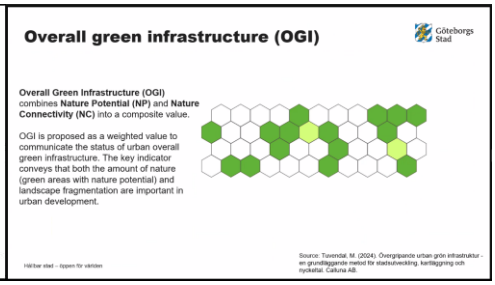
2.3.Session B3 – Green strategy in Gothenburg municipality. Johan Rehngren & Tyko Lang

The afternoon sessions of the 2nd day started with guest presenters from Gothenburg municipality working with green infrastructure. First, Johan Rehngren, landscape architect presented the green plan of the municipality and the strategies to achieve their general aim, that is to preserve and develop the city's ecosystem services. He distinguished two types of strategies: first, the quantitative and structuring strategies, such as 'to strengthen and develop green/blue streaks' or to 'ensure good access to green and natural areas' and, second, the qualitative and substantive strategies, such as to 'created varied content is parks and natural areas' and to 'inform, involve and activate'. Johan stressed the need to visualise ecosystem services in the city in an informative way and develop measurable indicators to assess the green infrastructure and evaluate different planning proposals in relation to their impact to ecosystem services. He also highlighted the current problem of not addressing systemic issues in small-scale projects, which is a missed opportunity.

Tyko Lang, strategic environmental planner, followed up this discussion describing the steps taken in the municipality to develop a methodology to visualise ecosystem services using available data, stressing the need for appropriate datasets representing the green infrastructure. He also presented the green indicators used in the municipality, such as 'Nature potential (NP)', 'Nature connectivity (NC)' and 'Overall green infrastructure (OGI)' used for evaluation.
Both presenters emphasised the need to provide concrete evidence, including measurable indicators that assess development projects and policies, to influence political decisions.







2.4. Session B4 – Deliverable 4.3. EBDP matrix. Meta Berghauser Pont

The final session of the day was dedicated to Deliverable 4.3 EBDP matrix. Meta Berghauser Pont, leader of WP4, presented a draft of the Matrix followed by a discussion among the partners. The timeline to gather comments and contributions from all partners and for the finalisation of the matrix was agreed.

3. Working Group Studio B 3- Day 3

The 3rd day of WGS B3 was dedicated to discussions among the partners in relation to upcoming deliverables and activities.

3.1. Session C1 – Deliverable 4.5. Policy briefs. UCY. Nadia Charalampous

T2E project leader Nadia Charalampous from UCY led the session on Policy Briefs, deliverable 4.5 of WP4. Nadia presented two drafts of policy briefs:

- advocacy brief: use evidence to argue for policies or strategies
- evidence-focused brief: support decision-making with concrete recommendation based on evidence

She presented ideas for possible policy briefs that use evidence produced by the T2E project:

- 1st brief to utilise the findings of WP4. Task 4.2. *Tentative title: SUSTAINABLE LOCATION STRATEGIES FOR CITIZENS' SERVICES*

- 2nd brief to utilise the findings of WP4, Task 4.3. *Tentative title: 'GREENER FOR WHOM? How Accessibility and Amenities Proximity Shape Inclusive Urban Green Space in Cyprus.'*

The timeline to share the first drafts, gather contributions from all partners and finalise the briefs was agreed.

3.2. Session C2 – Summer school. 2025 UCY. Ilaria Geddes

The last session of the WGS B3 focused on the preparation of the 2nd Summer school in Nicosia in June 2025. Ilaria Geddes from UCY led the discussion. Ahmed Eldesoky from Chalmers and Gareth Simons from UCL, main responsible for the training, followed up. The Social-ecological theme of the Summer school was exemplified with concrete activities, including lectures, tutorials and exercises. Ahmed explained how a pilot bioacoustics study in the Pedieos linear park will offer hands-on training to the participants and the SURF lab staff, ranging from setting up the study to processing and analysing the collected data. Gareth described activities that follow up the Summer school 2024 training and provide more advanced python skills. He also informed about the status of preparing python cookbooks to share with participants. The core urban design project of the summer school was decided as well as the partners who will take part in lecturing and supervising the students. The

consortium finally discussed the evaluation of the student work and the exhibition of the Summer School outcomes.

4. Social activities and informal networking meetings

During the 3-day WGS B3, the partners of the consortium had the chance to meet with other researchers from the Spatial Morphology Group, the division of Urban Design and Planning at Chalmers and practitioners from Gothenburg municipality. They interacted more informally during lunch time, afterwork and coffee breaks. At the end of the first day, the team enjoyed a walk in the city center followed by dinner at a local restaurant. On the second day a more informal 'afterwork' was organized at the Chalmers student pub.

Appendix 1. Project Participants.

Chalmers. Spatial Morphology Group (SMoG), Division of Urban Design and Planning

- Meta Berghauser Pont, Professor (leader of WP4)
- Ioanna Stavroulaki, Associate professor
- Ahmed Hazem Eldesoky, Post-doctoral researcher

University of Cyprus (UCY). Society and Urban Form research lab (SURF)

- Ilaria Geddes, Senior researcher
- Walid S. Abdeldayem, Post-doctoral researcher
- Effrosyni Rossou, 2025 Placement Holder, PhD candidate
- Nadia Charalambous, Project coordinator, Associate professor (online)
- Iason Giraud, PhD candidate (online)
- Frixos Petrou, PhD candidate (online)

UCL. Bartlett school of Architecture. Space Syntax Lab.

- Kayvan Karimi, Professor (leader of WP3), director of Space Syntax Limited
- Gareth Simons, Research fellow
- Sepehr Zhang, Research fellow (online)

Politecnico di Torino (PoliTo)

- Marco Trisciuoglio, Professor

- Martina Crapolicchio, Research fellow
- Ezgi Nur Güngör, PhD candidate

Guest presenters

- Heather Brooks, Environment policy advisor, Eurocities (online)
- Helena Jeppsson, Chairman, C/O City (online)
- Johan Rehngren, Stadsträdgårdsmästare (Landscape architect), Gothenburg municipality
- Tyko Lang, Strategisk miljöplanerare (Strategic planner for green), Gothenburg municipality
- Jorge Gil, Associate professor in Urban Analytics, Head of Urban design and planning division, Chalmers, Sweden

Appendix 2. Agenda

MON April 7th	WGS B: BUILDING RESEARCH EXCELLENCE	Room SB-S393
10:00-10:15CET	Opening session > Scope and aim of WGSb > Agenda	Intro by: Meta Berghauser Pont
10.30-11:50 CET	Research project _ UCL + UCY ➢ Research project update ➢ Scientific papers, other outputs ➢ Remaining work	Presentations by UCL: Gareth Simons & UCY: Walid Samir Abdeldayem
12.00-13.00 CET	*Lunch break*	
13:10-14:30 CET	Creating a geodatabase for teaching	Presentation by Jorge Gil, Ass. Professor, Urban analytics
14:30-15:45 CET	Urban nature restoration: the need for compatible local and EU level data	Presentation by Heather Brooks, Environment policy advisor, Eurocities
15:45-16:00	*Coffee break*	
16.00-17.30 CET	Deliverable discussion: Research report (D4.4)	Session led by Ioanna Stavroulaki Group discussion
17:30-19:30	*free time*	
19:30 -	*DINNER* *Taverna Averna, Tredje Långgatan 9, Gothenburg*	
TUE April 8th	**WGS B: BUILDING RESEARCH EXCELLENCE**	**Room SB-S393**
10:00-11:15 CET	Research project _ CHALMERS ➢ Research project update. Study results ➢ Scientific papers, other outputs ➢ Remaining work	Presentation by CHALMERS: Ahmed Eldesoky
11:15-11:50 CET	C/O City	Presentation by Helena Jeppsson, Chairman, C/O City
12.00-13.00 CET	*Lunch break*	
13.15-15.15 CET	Input from practice. Gothenburg municipality ➢ Green strategy ➢ GIS data and analysis of green infrastructure	Presentations by Johan Rehngren, Stadsträdgårdsmästare & Tyko Lang, Strategisk miljöplanerare, Gothenburg municipality
15:15 – 15:30 CET	*Coffee break*	
15.30-17.00 CET	Deliverable discussion: EBDP matrix (D4.3)	Session led by: Meta Berghauser Pont

		Group Discussion
WED April 9th	**WGS B: BUILDING RESEARCH EXCELLENCE**	**Room SB-354**
10.00-11:50	Deliverable discussion: Policy briefs (D4.5)	Session led by Nadia Charalampous
12.00-13.15 CET	*Lunch break*	
13:15-15:00 CET	Planning coming activities > Summer school and pilot study in Nicosia > WGS c Closing session. Summary and final remarks	Session led by: Ilaria Geddes, UCY

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