SSMLs deployment plans

Deliverable number: 2.2

Date: 31/05/2024

Version 1

Project website: https://reallocatemobility.eu/

This project has received funding from the European Union's Horizon Europe programme under grant agreement No 101103924. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Commission. Neither the European Union nor the granting authority can be held responsible for them.

Name of work package	WP2 Safe & Sustainable Mobility Labs
Dissemination level	PUB
Due delivery date	31/05/2024
Actual delivery date	31/05/2024
Lead beneficiary	FACTUAL
Contributing beneficiaries	REALLOCATE city representatives, REALLOCATE horizontal partners
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List of acronyms

3D	Three-dimensional
ABF	Architecte des Bâtiments de France (Architect of the Buildings of France)
AHA	A Human Approach to Future Mobility project
AI	Artificial Intelligence
AMB	Àrea Metropolitana de Barcelona (Barcelona Metropolitan Area)
ASCEND Project	Accelerate poSitive Clean ENergy Districts Project
BACC	Bicicleta Club De Catalunya (Bicycle Club Barcelona)
BKK	Budapesti Közlekedési Központ (Centre for Budapest Transport)
BSC	Barcelona Supercomputing Center
CCC	Climate City Contract
CERTH	Centre for Research and Technology-Hellas
CO_2	Carbon dioxide
COPIL	Comité de Pilotage (Steering Committee)
DBNV	Direction des Bâtiments et de la Vie de Quartier (Directorate of Buildings and Neighborhood Life)
DIEM	Direction de l'Innovation, de l'Entrepreneuriat et de la Métropole (Directorate of Innovation, Entrepreneurship, and the Metropolis)
DMU	Direction de la Mobilité Urbaine (Directorate of Urban Mobility)
DPEB	Direction de la Propreté et de l'Eau de Lyon (Directorate of Cleanliness and Water in Lyon)
DSITN	Direction des Systèmes d'Information et des Technologies Numériques (Directorate of Information Systems and Digital Technologies)
DT	Ditigal Twin
ECF	European Cyclist' Federation

EU	European Union
EUR	Euro
FIU	Fondazione Innovazione Urbana, Urban Innovation Foundation
FTTS	Faculty of Transport and Traffic Sciences
HUF	Hungarian Forint
IFP	International Federation of Pedestrians
IMPD	Instituto Municipal de Personas con Discapacidad (Municipal Institute for People with Disabilities)
IRIS	Incidencias, Reclamaciones y Sugerencias (Incidents, Complaints and Suggestions)
ITI	Informatics and Telematics Institute
KPI	Key Performance Indicator
LAET	Laboratoire Aménagement Économie Transports (Laboratory of Planning, Economics, and Transportation)
LiDAR	Light Detection and Ranging
MaaS	Mobility as a Service
MMV	Micromobility vehicles
NGO	Non-governmental organisation
NO	Nitrogen oxide
PM	Particulate Matter
PT	Public Transport
Q	Quarter
RGC	Réseau de Gestion de Crise (Crisis Management Network)
SDMIS	Service Départemental-Métropolitain d'Incendie et de Secours (Departmental-Metropolitan Fire and Rescue Service)
SSML	Safe and Sustainable Mobility Lan
SUMP	Sustainable Urban Mobility Plan
SYTRAL	Syndicat Mixte des Transports pour le Rhône et l'Agglomération Lyonnaise (Mixed Transport Union for the Rhône and Lyon Agglomeration)
UCD	University College Dublin
VR	Virtual Reality
VRU	Vulnerable Road User
VTT	Valtion teknillinen tutkimuskeskus (National Technical Research Centre)
ZDM	Zarząd Dróg Miejskich w Warszawie (Warsaw Municipal Road Administration)

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About REALLOCATE

REALLOCATE transforms streets into inclusive, green, safe and future-proof urban spaces, where communities live and thrive. The project enables researchers, mobility experts, urban planners and local citizens to collectively re-imagine our cities and redesign how we move from one place to another.

Executive summary

This deliverable presents comprehensive deployment plans and implementation strategies developed by each Safe and Sustainable Mobility Lab (SSML) leader for the Horizon Europe project. The preparation of this document involved cities collaborating to define management processes for the 15 SSMLs. For each of the SSMLs, actions are detailed, encompassing specific activities, infrastructure requirements, objectives, lead roles, timelines, and priorities.

The SSMLs address a range of common urban challenges, such as traffic congestion, pollution, and the need for improved safety and accessibility. Solutions include traffic calming measures, pedestrian prioritisation, enhancing the attractiveness of public spaces, and increasing accessibility. Each SSML tailors these solutions to its unique context, ensuring relevant and effective interventions.

The engagement of stakeholders and contributions from horizontal and local partners are highlighted, with their roles in specific actions clearly defined. Horizontal partners have been involved through workshops, allowing cities and partners to share needs and expertise. Based on input from Deliverable D2.1, stakeholders' roles have been defined and include public transport operators, residents' associations, environmental organisations, users' associations, universities, and local businesses.

Additionally, the document outlines key performance indicators (KPIs) and risk assessment and mitigation strategies, with detailed metrics to be provided in the WP5 deliverables (specifically D5.1). Gantt charts visualise the timelines for the SSMLs, offering a structured overview of their progression. These charts list the main SSML actions, including the organisation of workshops, data collection, deployment of measures, and monitoring of solutions, all within the timeframe of WP2.

This deliverable will be used as a reference for city representatives and project partners to keep track of the SSML activities and the interactions between partners and cities.

In summary, this deliverable provides a detailed, pilot-oriented overview of the REALLOCATE project's deployment and implementation strategies. It is designed not only for use by project partners but also as a public framework that can guide other projects or cities in managing their activities and stakeholder interactions. Through these efforts, the SSMLs aim to foster efficient urban mobility solutions, contributing to healthier, more liveable urban environments that align with the EU's long-term vision for sustainable cities.

1 Introduction

Scope and structure of the deliverable

Cities play a crucial role in steering the global trajectories towards climate neutrality by 2050. The European Green Deal sets ambitious targets, aiming to reduce emissions by 55% by 2030, while also promising cleaner air, safer transportation, and reduced congestion and noise in urban environments.

The REALLOCATE project focuses on harnessing the potential of cities to drive these transformative changes. This deliverable, D2.2 builds on the identified gaps and needs (D2.1) in the 15 Safe and Sustainable Mobility Labs (SSML) to develop detailed deployment plans and implementation strategies. This document outlines the actions and corresponding activities for each SSML, detailing the specific tasks to be undertaken.

For each SSML, we present a comprehensive overview that includes actions, activities, objectives, involved stakeholders and their roles, associated risks and mitigation strategies, and Key Performance Indicators (KPIs). Gantt charts illustrate the SSML timelines, highlighting the contributions of the project's horizontal partners (as defined below). Stakeholder charts identify the lead entity for each action and detail the thematic contributions of horizontal partners. They also specify the involvement of local project partners and other stakeholders consulted during each SSML phase. The KPIs are introduced broadly in this document, with a focus on those deemed relevant by the cities for the interventions. Detailed metrics and additional KPIs will be provided in a separate deliverable, specifically Work Package 5, Deliverable D5.1.

By focusing on these elements, this deliverable aims to provide a clear and structured roadmap for the successful implementation of the REALLOCATE activities, ensuring that all stakeholders (identified in Deliverable D2.1), horizontal partners, cities and local partners are aligned and prepared to achieve the SSML's goals.

Project partners involved in the deployment plans

Stakeholder engagement formed a key focus of this deliverable to inform responsibilities among horizontal partners, local partners, and other stakeholders. These roles have been refined during workshops at the General Assembly meeting in April 2024. 13 horizontal partners from REALLOCATE offer transdisciplinary assistance to the 15 SSMLs, ensuring the development of appropriate solutions. This support is equitably allocated across all SSMLs in terms of effort and commitment.

The 13 partners will provide two categories of support:

- Specific support tailored to the unique needs and circumstances of each SSML.
- Transversal support, evenly distributed among all SSMLs. This involves support by Factual, Fraunhofer, UCD (Geosurveys), Demos, Dekra, Ertico.

For better understanding, the following is a list of the horizontal partners and their expertise:

- UCD: Nature-based interventions, urban road safety overview, citizen science, co-creation, and stakeholder engagement.
- Factual: Mobility tools and innovation management.
- CERTH/ITI: Modelling and artificial intelligence.
- Fraunhofer: Transport economics, business models, and SUMPs.
- Nudgd: Behaviour and choice design.
- Ertico: Digital tools and new mobility services.
- Demos: Transformative governance and regenerative infrastructures.
- ECF: Cycling policy and urban road safety overview.
- BSC: Artificial intelligence, urban data science, and data visualisation.
- CEREMA: Safe system approach.
- ARUP: Urban design for streets and intersections.
- IFP: Sidewalk scanner and pedestrian-oriented tools, pedestrians, and inclusive design, urban road safety overview.
- DEKRA: Circularity, lifecycle, carbon footprint assessment, and Dekra Accident Research with safety auditing.

Relation to other tasks and deliverables

As the project advances, the deployment plans serve as a structured framework for monitoring progress and ensuring the timely execution of project activities. This deliverable forms the foundation for the execution of WP2.3, the actual implementation of the SSMLs. This is an iterative process, meaning that as the implementation of the SSMLs progresses, the deployment plans as described in this deliverable will be updated. Therefore, the information provided in this deliverable will serve as general guidelines, however having a tentative and subjective nature, that requires certain flexibility and adaptation while progressing in the project.

The insights and data generated will serve to inform and enrich the ongoing work across all work packages of the REALLOCATE project. This continuous exchange of information and collaboration is crucial for achieving the project's goals and aligning with the EU Mission '100 Climate-Neutral and Smart Cities by 2030'.

2 City-specific deployment plans

2.1 Gothenburg, Sweden

2.1.1 Gothenburg SSML 1 – Safe System Approach for children's active travel in peri-urban areas

SSML overview

Short description

In the neighbourhood of Bergum Gunnilse key mobility challenges concern insufficient lighting and a lack of pedestrian and bicycle paths; as a consequence, many prefer to move around by car.

Objectives

The SSML explores how to transition towards more sustainable modes of transport and enable children to safely travel to school, participate in hobbies and actively move around their community.

Location(s)

Within Bergum Gunnilse, a peri-urban area outside the city of Gothenburg, three locations have been selected: Bergum Elementary School P-9; Gunnilse Elementary School P-6; Bergum Football Field.

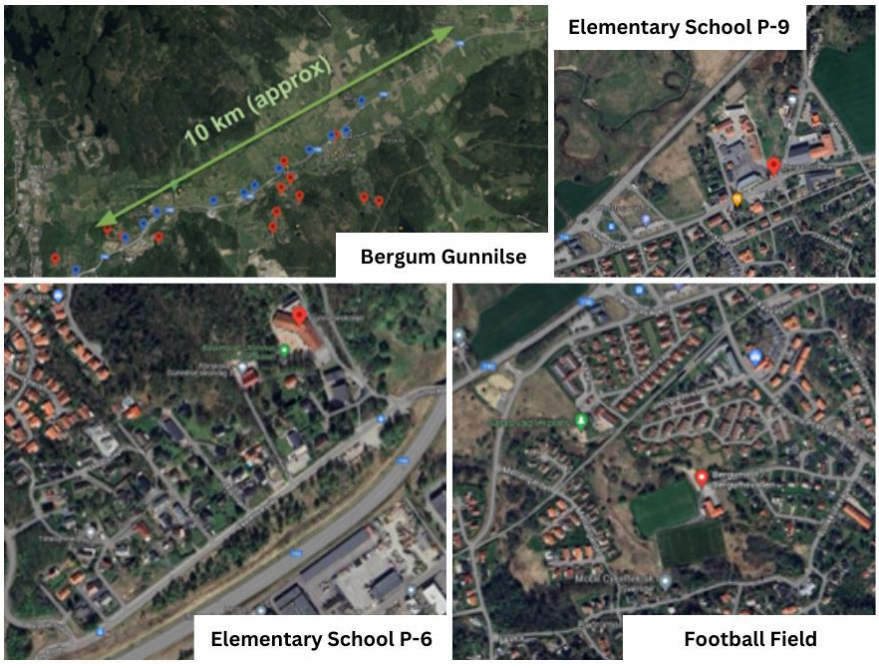

Figure 1. Locations of Gothenburg SSML 1. Source: Own elaboration based on city of Gothenburg 2024a.

Actions and activities

Table 1. Actions, activities and objectives of Gothenburg SSML 1.

Action	Activity	Objectives
Fieldwork and engagement	AHA analysis	Key findings from the AHA (A Human Approach to Future Mobility) project will be analysed to inform about the significance and meaning of autonomy in child travel, its benefits and components.
	Workshop and engagement	Workshops and co-creation sessions with relevant stakeholders to understand children's needs and how to promote independent mobility.
Co-creation and co-design	Workshops	Co-creating safety solutions and new ways to understand safety with residents
	Online tool	
	Stakeholder iteration	
Analysis and dissemination	Outcomes synthesis	Ensure that insights derived from analysis reach the intended recipients effectively, facilitating informed decision-making or understanding. Maximise the reach and impact of the results, fostering knowledge exchange, awareness, and enhancing transparency.
	Transversal analysis and perspectives	
	Dissemination of results	
	Public feedback	
Implementation, consolidation and city engagement	Suggest and test mobility solutions	A Safety System Approach (considering VRUs, road infrastructure, vehicles) to transition towards a more sustainable commute, to inform a '15-min village' concept - replicable to other peri-urban areas and the Archipelago
	Foster communication channels	
	Build expert networks	
Pilot management and horizontal collaboration	Management	Fostering collaboration between parallel initiatives within and outside REALLOCATE. Knowledge exchange and mutual learning for improved outcomes.
	Horizontal collaboration & twinning process	

Timeline

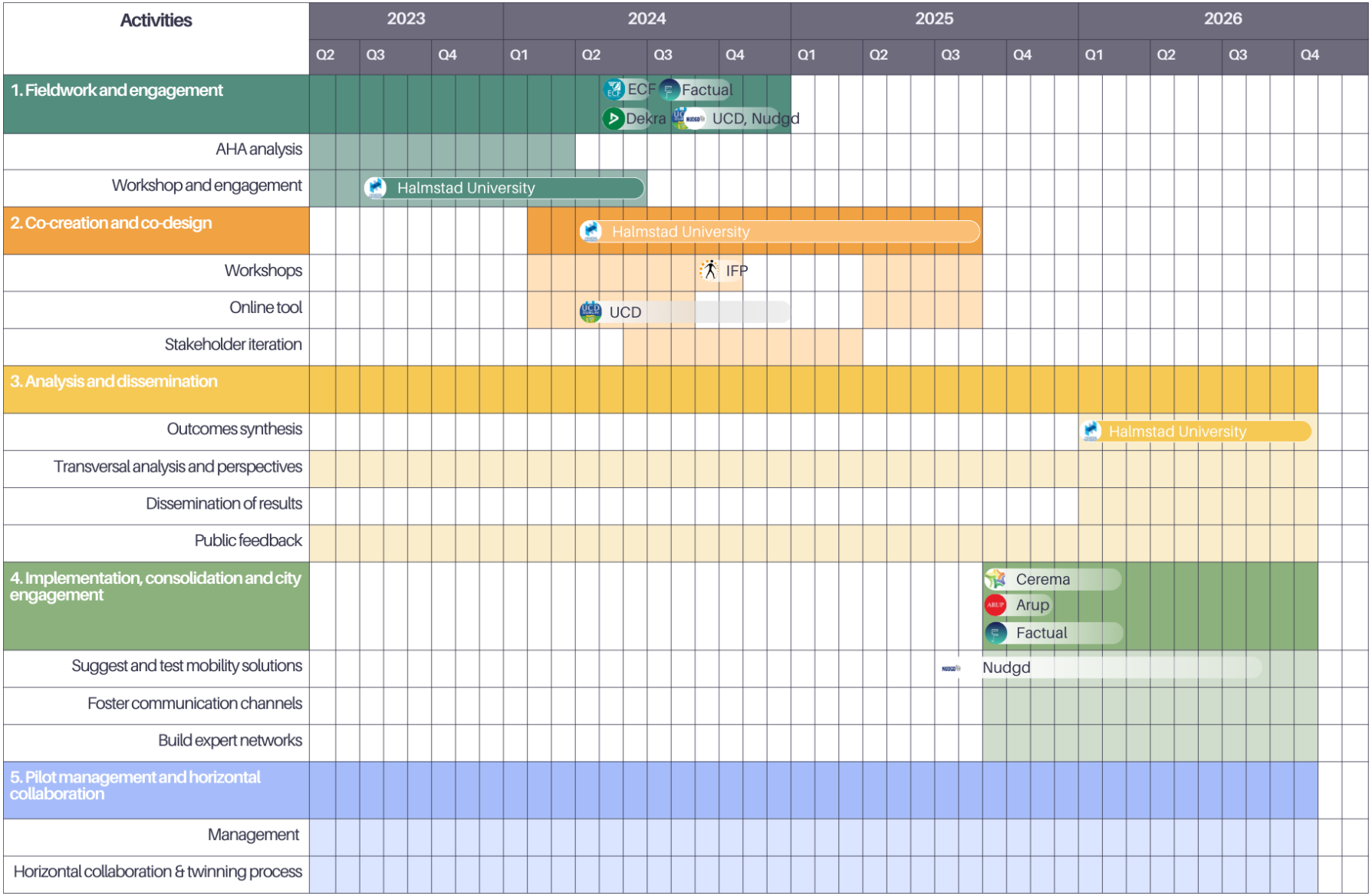

Figure 2. Gantt chart of Gothenburg SSML 1 with horizontal partner contributions.

Governance and stakeholder involvement

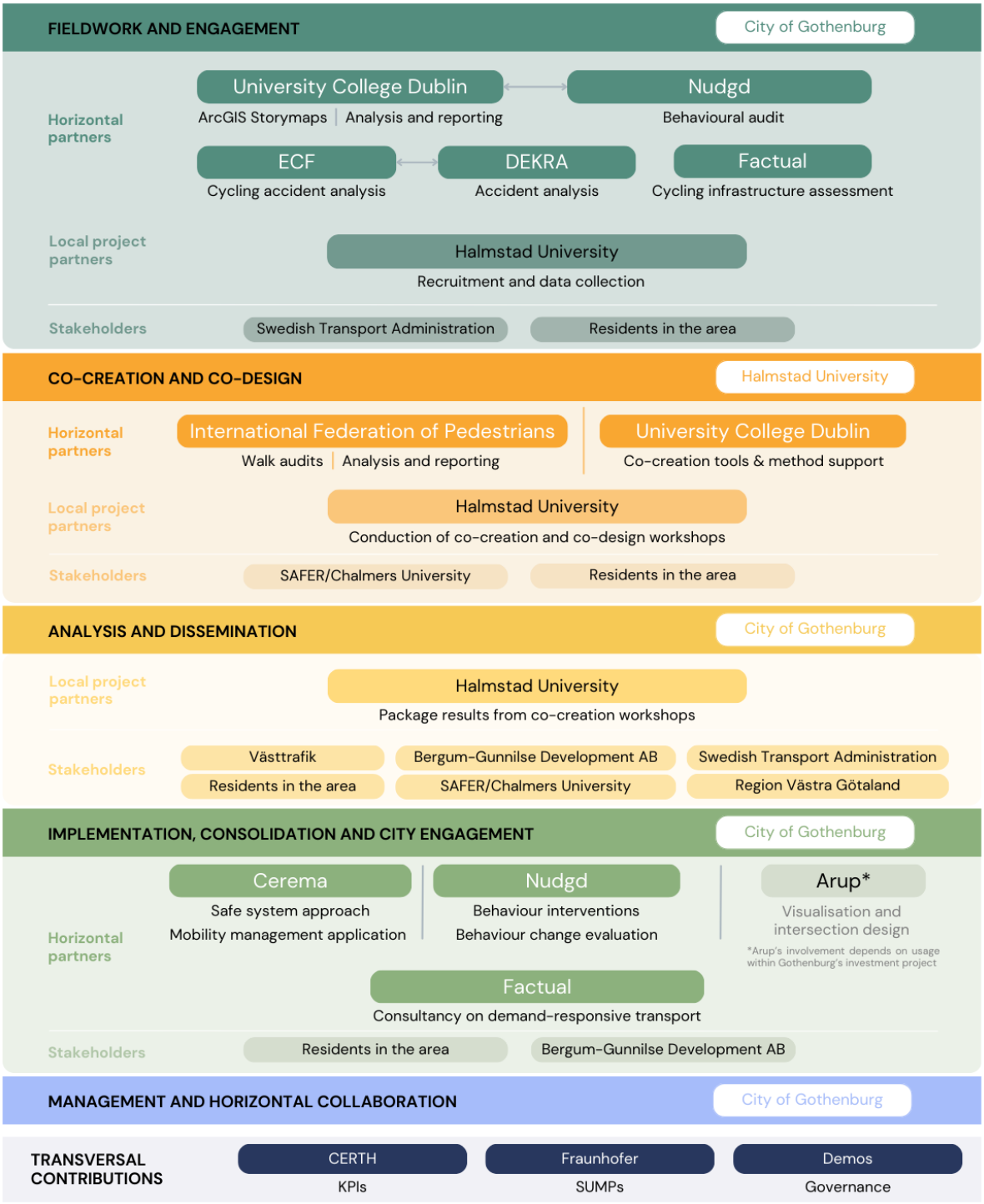

Figure 3. Stakeholder involvement in Gothenburg SSML 1.

Risks and mitigation actions

Table 2. Risks and mitigation actions identified for Gothenburg SSML 1.

Potential risks	Mitigation actions
Recruitment of participants from Bergum Gunnilse in workshops	Reuse contacts from the AHA project and the local association's website for communication
Too much focus on physical solutions where we do not have road maintenance responsibility	Structure the living lab's work so that virtual/digital solutions become relevant
Personnel resources and organisation within the city	Steering group with relevant managers started

KPIs

Table 3. Key Performance Indicators identified for Gothenburg SSML 1.

Environmental	
Reduced number of motorised trips	Increased proportion of sustainable trips

Conclusions

Gothenburg’s first SSML represents the city's effort to achieve climate neutrality by prioritising sustainable transportation and community welfare. Situated in a peri-urban area, the project aims to shift towards eco-friendly modes of travel, aligning with Gothenburg's ambitious climate goals. By creating safe routes for children to commute to school and engage in recreational activities, the initiative encourages active mobility and reduces the carbon emissions associated with transportation. Additionally, the project supports Gothenburg's Road Safety Plan, which aims to decrease traffic-related fatalities and injuries by 2030. Furthermore, SSML 1 complements the city's cycling program by improving cycling infrastructure, fostering a safer and more appealing environment for cyclists. Through the development of secure pedestrian and bike paths, SSML 1 facilitates the reduction of motorised road traffic, thereby contributing to Gothenburg's target of decreasing such traffic by 25% by 2030 compared to 2020.

2.1.2 Gothenburg SSML 2 – Harnessing digitalisation to foster safe and sustainable solutions in transformative urban mobility[1]

Short description

Gothenburg leverages its digitalisation capabilities and data resources to proactively improve sustainable transportation, traffic safety and enhance accessibility in a city undergoing major transformation.

Objectives

The SSML aims to improve roadwork management, promote sustainable transportation, and enhance accessibility, predictability, and safety through digital tools to reduce the share of motorised trips.

Location(s)

The SSML draws inspiration from conditions at Korsvägen and the event area as examples where these challenges are exacerbated. This area is an area frequented by visitors to Gothenburg, as it is one of Gothenburg´s larger event areas, but also a location where major constructions are currently taking place and will continue to do so for several years to come.

Figure 4. Korsvägen intersection (left) and event area (right). Source: Own elaboration based on city of Gothenburg 2024b.

Actions and activities

Table 4. Actions, activities and objectives of Gothenburg SSML 2.

Action	Activity	Objectives
Pilot initiation	Initiate the pilot	Official start of the project, clarification of the scope, conditions and project partners
Pilot planning	Prepare a project plan	Setting clear goals, defining key milestones, allocating resources, and establishing evaluation criteria
Pilot set up	Initiate system architect working group	Establish a robust foundation for the project's technical infrastructure and operational framework outlining responsibilities and stakeholder involvements. Ensure successful integration of digital arrangements, standardised data flow/formats, and effective visualisation tool.
	Digital arrangements	
	Identified data flow/formats and data regarding travel patterns within the area.	
	Test visualisation	
	Establish necessary integration	
	Initiate data analysis work group	
	Initiate communication/co creation work group	
Pilot execution	Digitise the city's temporary traffic design process	Enhance digital twin capabilities for temporary traffic arrangements, integrate georeferenced projects with 3D visualisation, quantify surface reallocation, simulate traffic flow using game engines.
	Mobility services for visitors	Provide mobility solutions and services to visitors of the Arena area, such as kiss and ride or demand-responsive transport.
	Co-creation with citizens	Use the 3D visualisation as a tool for citizen engagement, co-creation or improved communication to boost behavioural change.
	Use digital tools for visualisation	Utilise Gothenburg's digital twin to communicate area's future design and transportation with key stakeholders.
Monitoring and analysis	Monitoring of pilot impacts	Track progress, analyse data, inform decisions.
Feedback and results	Summarise project outcomes	Create a summary of results outlining feedback from relevant stakeholders.

[1] The SSML has changed its title to emphasise its focus on digitalisation and broader scope.

Timeline

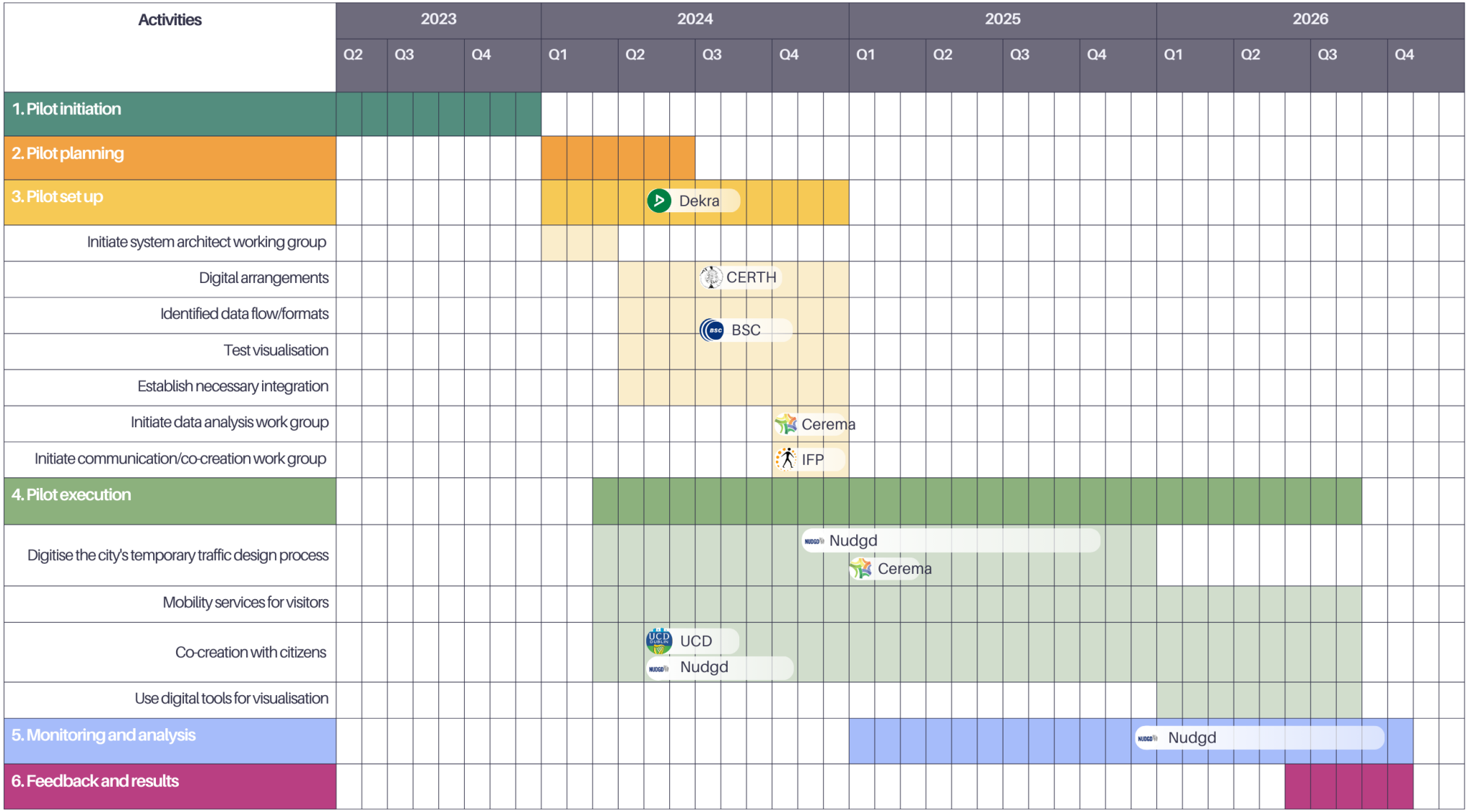

Figure 5. Gantt chart of Gothenburg SSML 2 with horizontal partner contributions.

Governance and stakeholder involvement

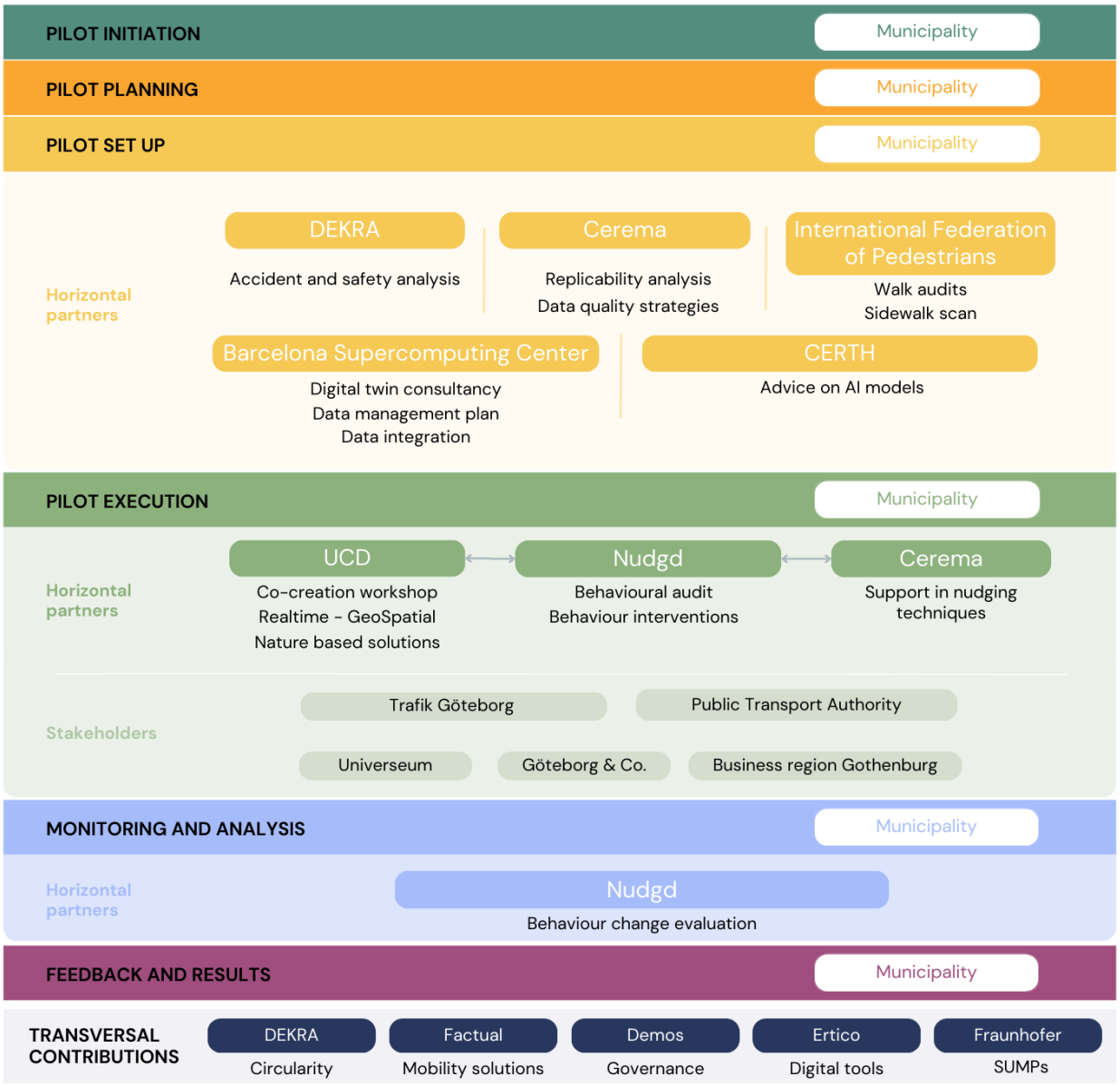

Figure 6. Stakeholder involvement in Gothenburg SSML 2.

Risks and mitigation actions

Table 5. Risks and mitigation actions identified for Gothenburg SSML 2.

Potential risks	Mitigation actions
Technical and financial obstacles in collecting 3rd party validation data	Adaptation of triggers, lower expectation of detail level
Technical issues in integrating different system components	Run them parallel to prove concept and functionality and invest in integration later on

Lack of developer resources	Use established software solutions, pick standardised formats, and use existing data sources as much as possible
Data overload	Identify desired output in close collaboration with process owners and establish hypothesis early
Limited capabilities in reaching out to interest groups/stakeholders, leading to limited engagement (externally)	Involve partners with expertise in citizen engagement early on, and plan for valuable cases to use in such settings
The assumption that visualisation will pave the way to build a new urban mobility proves wrong	Process in smaller tasks to understand benefits. If visualisation does not work, other alternative solutions will be provided
Longevity (the project deliverable ends up not being utilised)	Work closely with process owners and core stakeholders to make shore the product is useful and meets their demands
Local entities possibility to engage and work within the project	Seak ways to increase the possibility for local entities to have staff available to work within the project.
Low awareness of the customer segment visitors within these specific geographical locations. Studies that Gothenburg have are more broadly undertaken.	Work with horizontal partners to increase awareness of their perceived pains and gains from the specific target groups.
Limited possibility for others to access and utilise the digital twin	Keep the digital twin as a possible tool do export/import data to and from, but not as an integral integrated part of the process.
Project partners engagement/time is not prioritised	Involve steering committee and make shore that people allocate time, and that decision makers are on board.

KPIs

Table 6. Key Performance Indicators identified for Gothenburg SSML 2.

Environmental		
Increase the attractiveness for sustainable travel for the target group visitors to the event area. Safeguard better conditions for cyclists and pedestrians near construction sites	Modal change, increase of cycling, walking and public transport use	
Social		
Increased quality in temporary arrangement	Faster detection of deviations/flaws	Increased citizen engagement
Operational		

Enabling decision support system	Improved ability to examine permit requests	Data generation that allows us to better understand, control and predict

Conclusions

Gothenburg’s second SSLM, particularly at construction sites, demonstrates alignment with the city's regulations, policies, and goals. By adhering to Regulations for Temporary Traffic Arrangements set by the Urban Environment Department, the initiative optimises road functionalities while minimising disruptions and risks. Additionally, by promoting sustainable travel habits through digitalisation and nudging strategies, the initiative supports Gothenburg's environmental goals, aiming for a 90% reduction in climate impacts from transportation by 2030 compared to 2010.

2.2 Heidelberg, Germany

2.2.1 Heidelberg SSML 1 – Regional commuter plan for climate neutrality[2]

Short description

The first SSML intervention in Heidelberg is about a regional commuter plan for climate neutrality. To measure the impacts, Heidelberg's new traffic model, numerous traffic counting stations and parking observatory will aid the implementation.

Objectives

The SSML aims to initiate a regional planning approach to reach CO_2 mitigation goals. The city's SUMP/Climate Mobility Plan (in progress) and past studies highlight the need for planning beyond the city boundary since most CO_2-emissions stem from commuter traffic.

Location(s)

The SSML area encompasses a regional scope, including the city of Heidelberg and 29 surrounding municipalities.

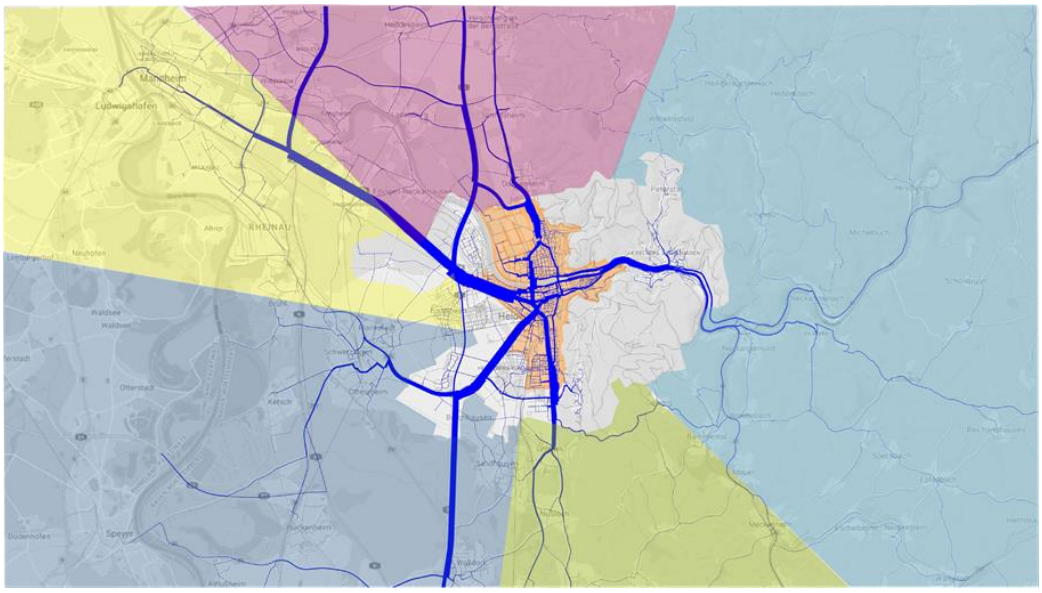

Figure 7. Car traffic with destination Heidelberg (based on VISUM traffic model) and clustering of surrounding municipalities. Source: City of Heidelberg 2024a.

[2] The first SSML in Heidelberg has adapted its title to better reflect the revised scope of the initiative. The SSML focuses on enhancing the communication and cooperation with adjoining communities. The city of Heidelberg identified that the goal of inducing a modal shift towards more sustainable modes requires a regional planning approach which will be elaborated and tested.

Actions and activities

Table 7. Actions, activities and objectives of Heidelberg SSML 1.

Action	Activity	Objectives
Workshops and co-creation	Testing planning format with selected stakeholders	Understanding of needs and challenges.
Engagement and collaboration with adjoining municipalities	Workshops with adjoining municipalities	Better understanding and communication between the city and surrounding municipalities on mobility issues. Identification of common challenges and setting common goals and projects.
Forum at county level	Conducting a forum at county level	Summarise and discuss outcomes of the workshops with municipalities in a bigger forum including the political leaders. Set up a regional dialogue forum.
Agreement on interventions	Public transport service level improvements	Implementation of a joint planning process as a necessity to reach climate mitigation goals. Reduction individual (motorised) commuter traffic. Reduction CO_2 and other emissions. Improvement of public transport access.
	Expansion and creation of mobility hubs	
	Public transport infrastructure improvements	

Timeline

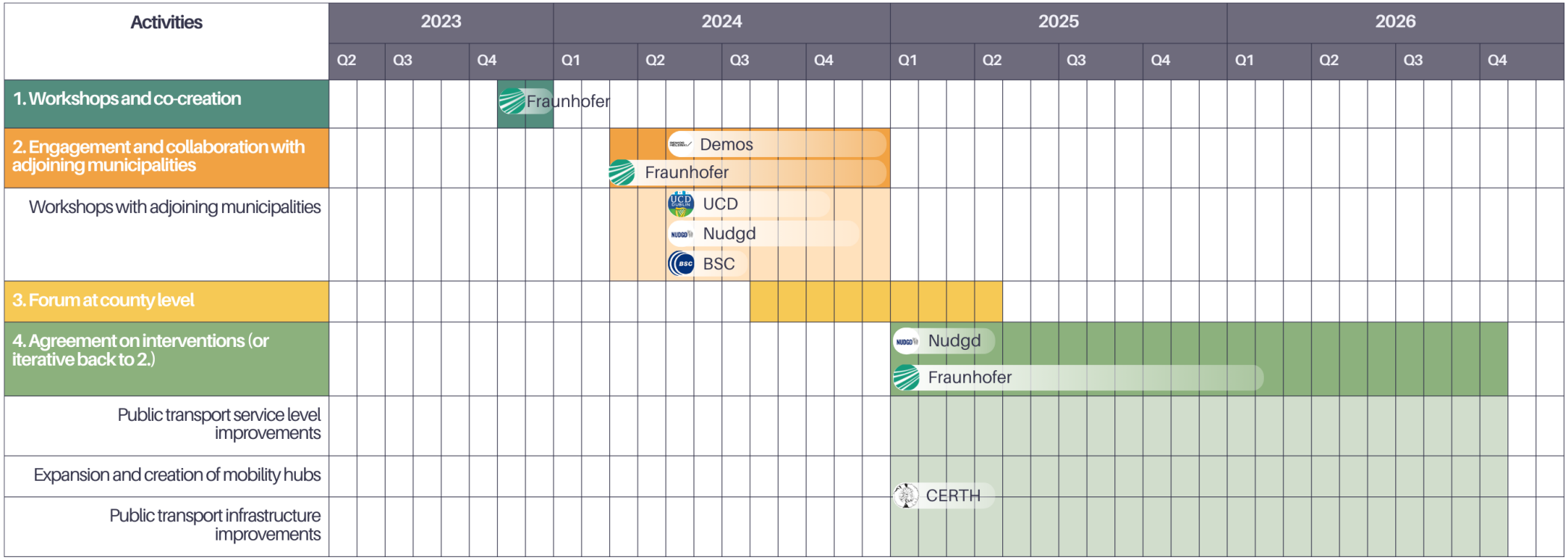

Figure 8. Gantt chart of Heidelberg SSML 1 with horizontal partner contributions.

Governance and stakeholder involvement

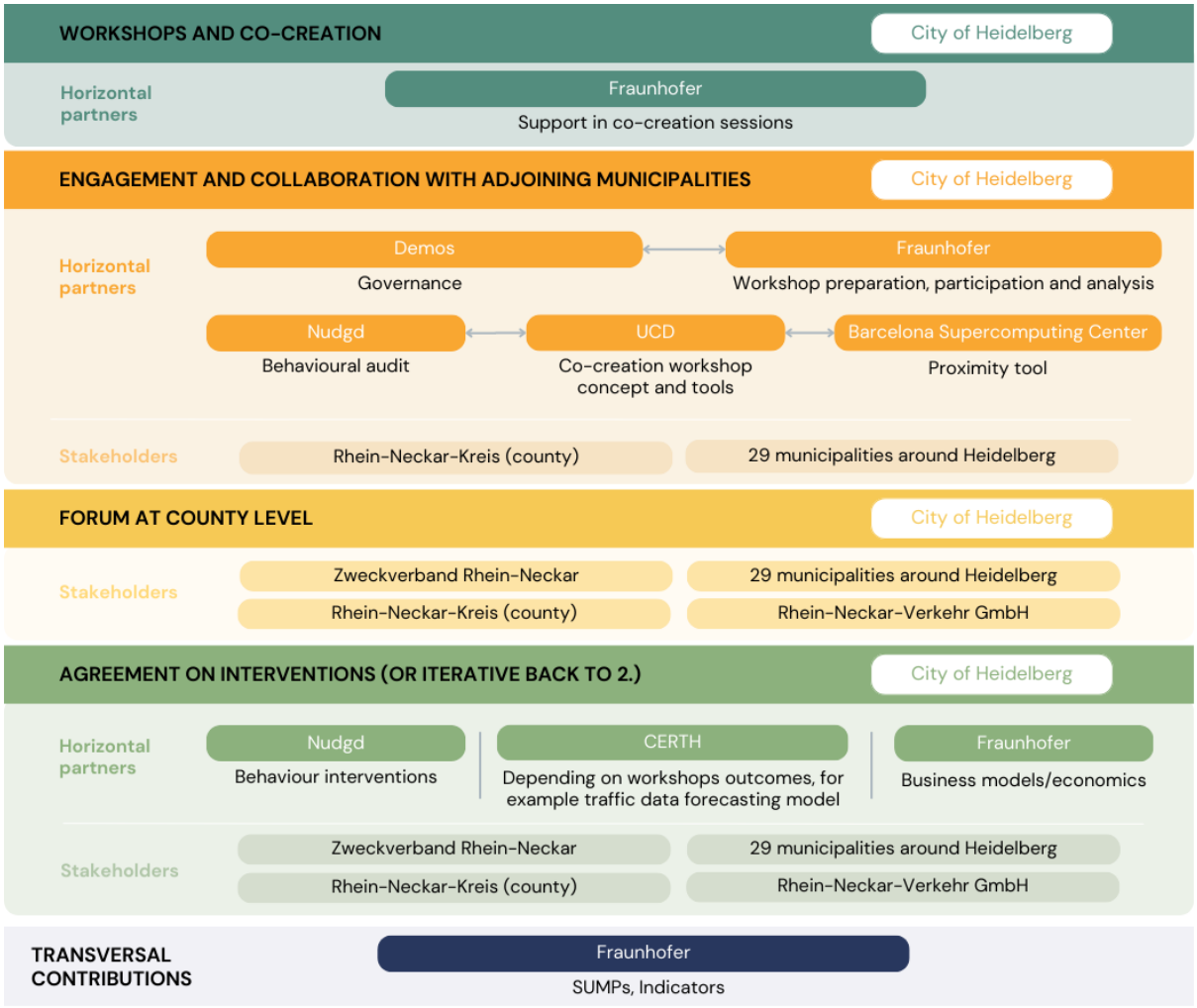

Figure 9. Stakeholder involvement in Heidelberg SSML 1.

Risks and mitigation actions

Table 8. Risks and mitigation actions identified for Heidelberg SSML 1.

Potential risks	Mitigation actions
Limited interest in cooperation from surrounding municipalities	Interventions will be planned with interested municipalities
Work capacity limitations and financial restrictions in surrounding municipalities	Budget shift towards subcontracting costs to offer support
SSML results are not measurable due to high construction/renewal activities resulting in road/rail closures and adjusted mobility patterns 2023-2027	Indicators will be selected accordingly. Focus on indicators on success of planning process with stakeholders. Indicators to measure success of implementation will be selected later for agreed projects.
Shortage in public transport drivers could results in service cuts	Service cuts are foreseen to be temporarily until spring 2024, and not all operators are affected

KPIs

Table 9. Key Performance Indicators identified for Heidelberg SSML 1.

Environmental	
Greenhouse Gas emissions	
Social	
Safety	Acceptability of planning process
Operational	
Multimodal integration	

Conclusions

The deployment plan for Heidelberg's SSML 1 in REALLOCATE represents a critical step forward for Heidelberg in its pursuit of climate neutrality. As outlined in the Masterplan 100% Klimaschutz and Climate Mobility Plan, this initiative holds significant impact to reach climate neutrality in the mobility sector. By addressing mobility impacts across municipal boundaries and fostering cooperation within the region the initiative responds to one key topic outlined in the Climate Mobility Plan (in progress). For that mission, the support of project horizontal partners during this initiative is valuable especially in terms of governance strategies, stakeholder engagement as well as conceptualisation of possible solutions.

2.2.2 Heidelberg SSML 2 – Contextual & tactical public space reallocation

Short description

In Heidelberg, homezone streets often fall short of expected standards for safety and vibrancy. The initiative utilises tactical elements like parklets and green infrastructure, along with adaptive land use strategies, to enhance the public quality of streets across diverse urban contexts.

Objectives

The SSML aims to transform selected homezone streets into vibrant, safe spaces by revitalising public areas and improving pedestrian and cycle experience. Anticipated outcomes include reduced traffic accidents, enhanced climate resilience, traffic calming, and increased vitality for local businesses.

Location(s)

The selected locations comprise five different streets (numbering as in images below):

1. Maaßstraße/ Wallstraße, Wieblingen
2. Quarter "Neuenheimer Markt", Neuenheim
3. Bergheimer Straße Ost, Bergheim
4. Kleingemünder Straße, Ziegelhausen
5. Blumenstraße, Weststadt (evaluation and update)

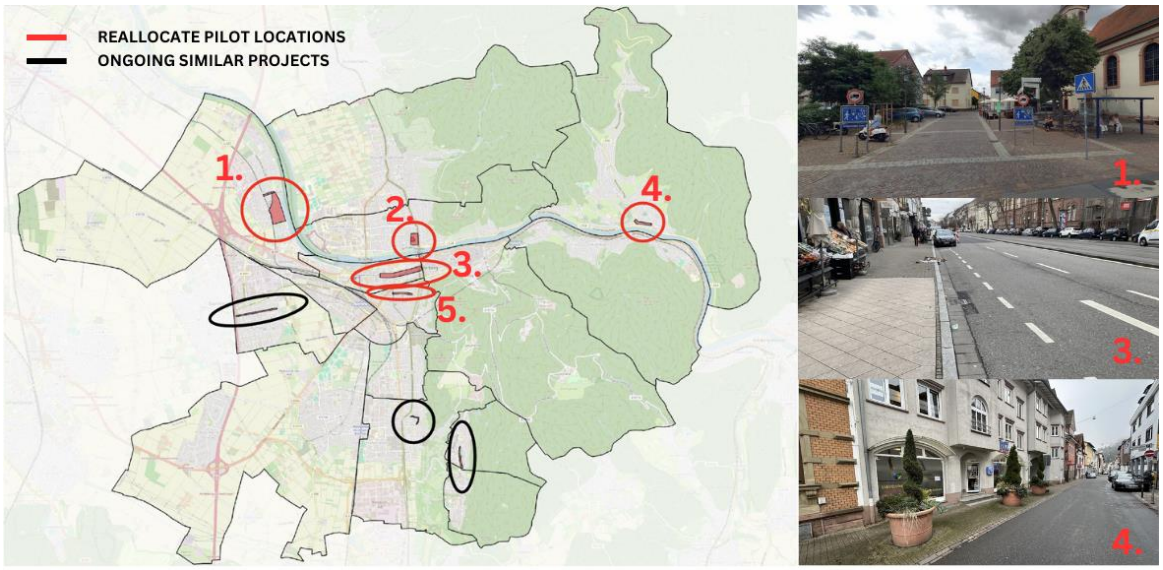

Figure 10. Locations of REALLOCATE interventions and similar projects. Source: Own elaboration based on city of Heidelberg 2024b.

Actions and activities

Table 10. Actions, activities and objectives of Heidelberg SSML 2.

Action	Activity	Objectives
Citizen engagement and co-creation	Co-creation to identify issues and sketch solutions for low-traffic areas	Co-creation sessions to understand local needs and conceptualise the meaning of vivid and slow traffic streets as well as contextual and tactical measures
	Co-creation of solutions for tactical urbanism	
Conceptual phase	Analysis of input data	Identify existing issues and areas for improvement in the selected locations
	Conceptual workshops with horizontal partners	Initiate and strengthen cooperation with horizontal partners. Experiencing and understanding the selected locations
	Evaluation of existing interventions	Identification of gaps and areas of improvements, lessons learnt
	Contracting environmental data calculation	Ensure good quality collection and analysis of environmental parameters
Design phase	Creation of different target-driven street-design ideas	Identify interventions with measurable effects on vibrancy and street use in SSML areas
Participation phase	Review of design by horizontal partners	Involvement of expert stakeholders as well as local citizens and SME for co-creating solutions for low-traffic areas and space reallocation to increase acceptance and inspire play and liveliness
	Stakeholder involvement and design discussion	
	Feedback evaluation	
Deployment phase	Design update	Finalising the intervention design
	Contracting of responsible department	Ensuring a smooth implementation of interventions
Assessment deployed solutions and acceptance monitoring	Traffic flow assessment	Positive climate-effects
	Public acceptance evaluation	Acceptance for and satisfaction with realised actions in local communities. Strong reduction of traffic accidents

Timeline[3]

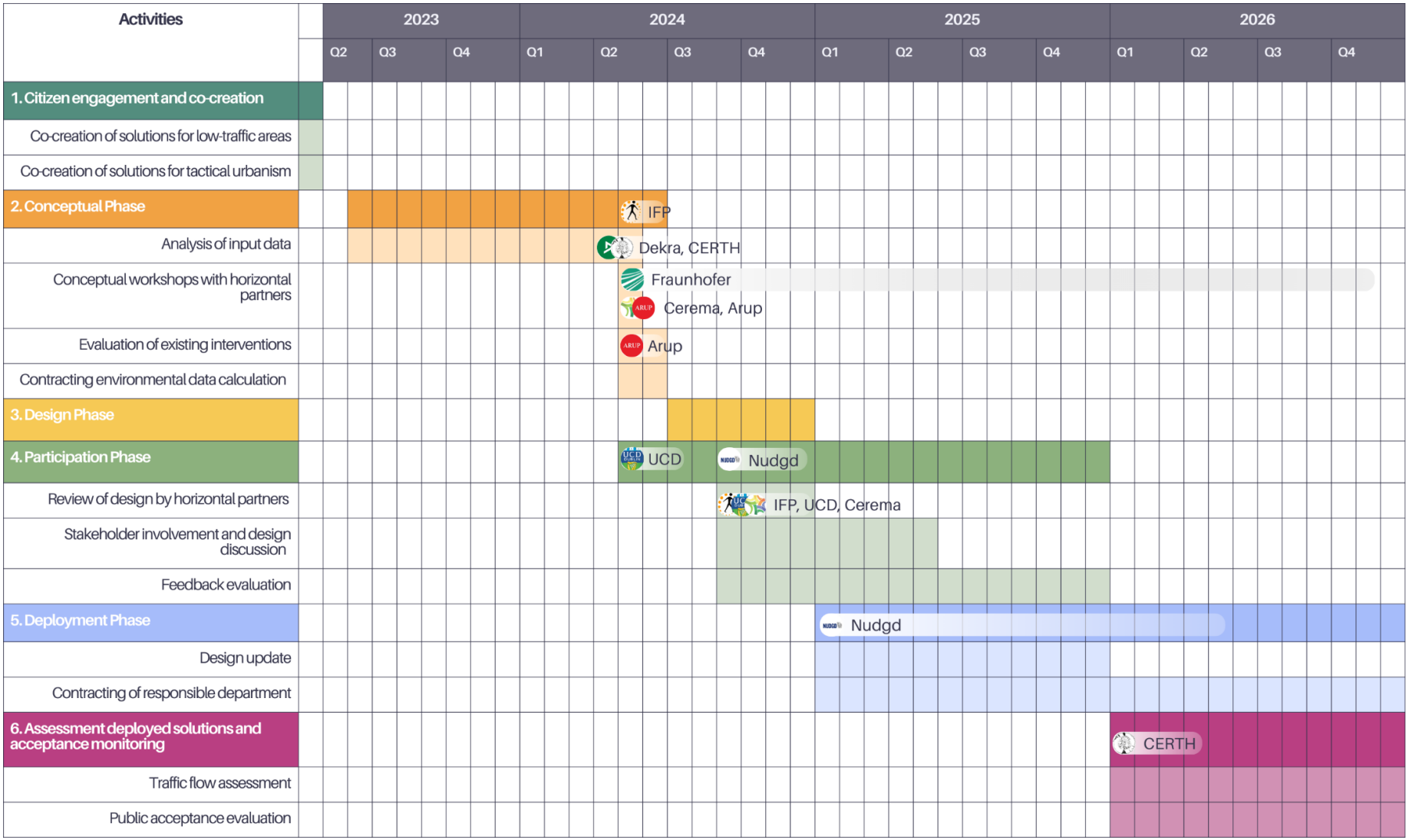

Figure 11. Gantt chart of Heidelberg SSML 2 with horizontal partner contributions.

[3] Fraunhofer continuously supports the Heidelberg SSML 1 and 2 throughout the duration of the project and contributes to various measures and activities.

Governance and stakeholder involvement

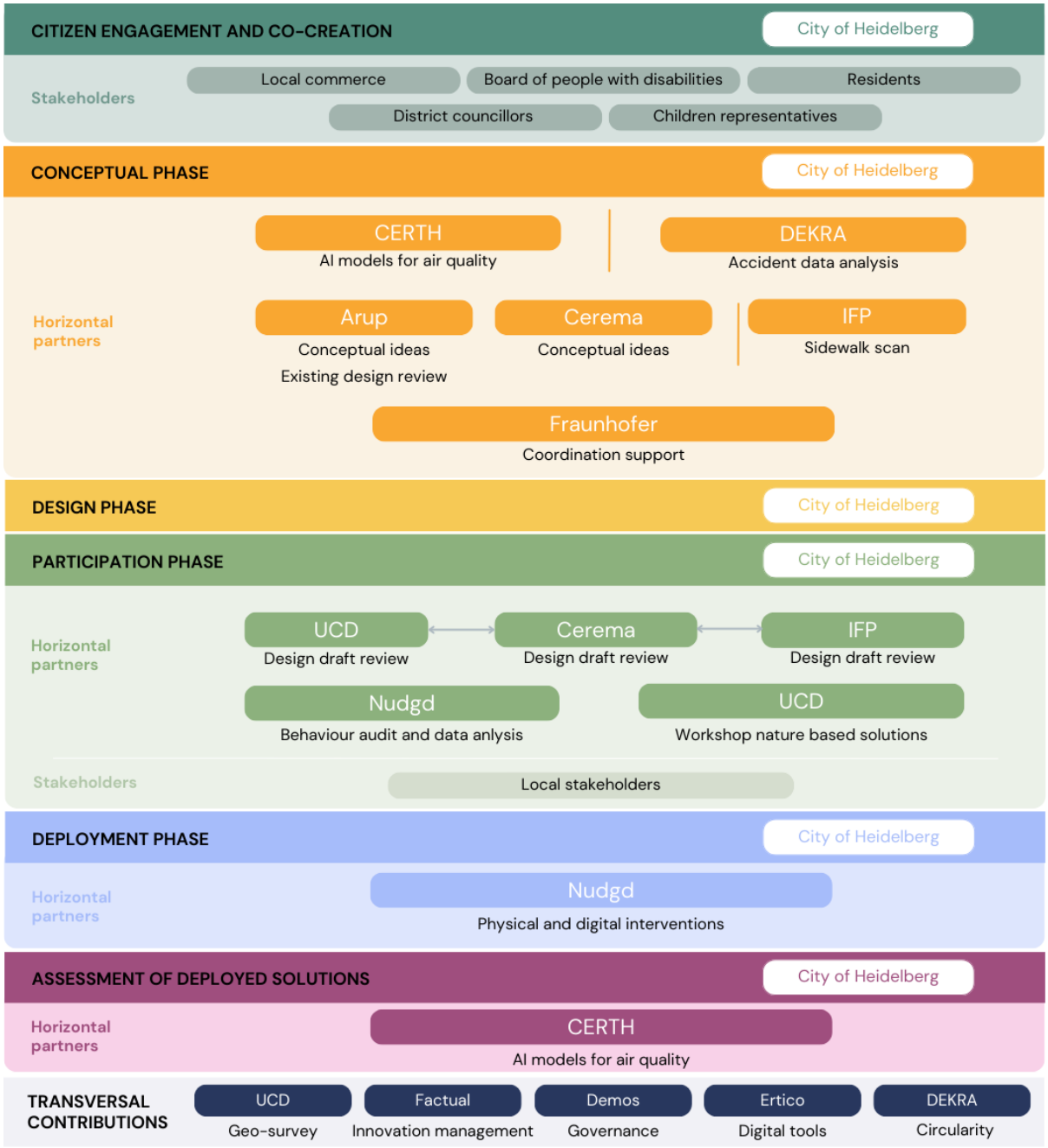

Figure 12. Stakeholder involvement in Heidelberg SSML 2.

Risks and mitigation actions

Table 11. Risks and mitigation actions identified for Heidelberg SSML 2.

Potential risks	Mitigation actions
Translating an EU-level project on diverse road sections to residents and officials	Focus communication on small-scale interventions, framing REALLOCATE within a broader context.

Resistance from local residents regarding reallocation of parking space	Conduct local needs assessments, enhance understanding of alternative solutions, engage stakeholders in creating widely accepted solutions.
Interfaces to private spaces	Address interface challenges during planning stages, activate stakeholders to foster collaboration and cooperation.
Binding nature of budget	Proactively engage stakeholders to ensure budget considerations are addressed in the planning phase.
Potential challenges in applying standardised approaches to diverse urban landscapes	Gather input from diverse partners to tailor solutions to specific urban contexts, avoiding a "one size fits all" approach. Seek input from horizontal partners
Very detailed and binding traffic codes and technical regulations could limit design and implementation	Utilise established tools and practices, communicate early with stakeholders and traffic authorities to ensure compliance with regulations and standards.

KPIs

Table 12. Key Performance Indicators identified for Heidelberg SSML 2.

Environmental		
Conversion of space	Trees planted	Emissions calculated based on traffic counting
Social		
Perception of space and safety (survey-based)		
Operational		
Reallocation of public space	Increase in pedestrians and cyclists	
Others		
Traffic safety	Urban functional diversity	

Conclusions

By prioritising safety and designing urban spaces with a focus on people rather than cars, the initiative plays a key role in advancing climate neutrality within the mobility sector, aligning closely with the city's Climate Mobility Plan and the goals outlined in the Masterplan 100% Klimaschutz. The expertise and contributions of horizontal partners are central to the initiative, particularly in the design and allocation of urban space, as well as expertise in urban road safety, crucial in areas such as homezones. Additionally, involving the public ensures that their ideas, expectations, and concerns are integrated into the project, enhancing its relevance and effectiveness.

2.3 Lyon, France

2.3.1 Lyon SSML 1 – Public space redesigning and enhancing road safety in the schools' surroundings

Short description

This initiative integrates a comprehensive qualitative and quantitative assessment, encompassing speed measurements, pedestrian, cyclist, and e-scooter counts, with the development of mobility plans for schools and targeted college interventions.

Objectives

The SSML aims to create safer, inclusive streets in Lyon by involving pupils in mobility planning and addressing their needs for privacy, autonomy, citizenship, and career orientation. It seeks to ensure welcoming streets for all residents, enhancing safety and liveability.

Location(s)

Several school locations within the urban area of Lyon have been selected:

- Dargent Middle School (street closure completed in 2023, new works underway)
- Condé school group (works planned for 2025)
- Etienne Dolet - St Sacrement school (works planned for summer 2024)
- 1 school to be defined for experimentation of the School Mobility Plan

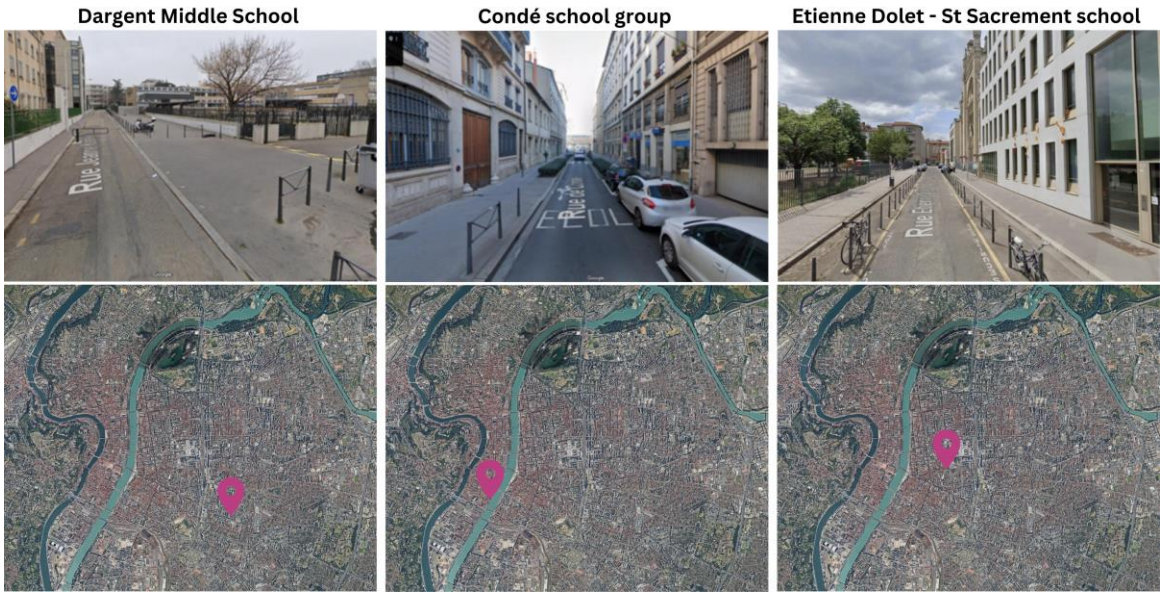

Figure 13. Locations and images of project school areas, Dargent School, Condé School and St Sacrament School. Source: Own elaboration based on Google Maps und Google Street View 2024.

Actions and activities

Table 13. Actions, activities and objectives of Lyon SSML 1.

Action	Activity	Objectives
Develop guidelines and vision "rues aux enfants"	Development of guidelines (and translation)	Develop guidelines, vision, principles to design safe urban spaces around schools, develop a specific and consistent identity. Better sharing of public space.
Collect catalogue of best practices	Best practice benchmark	Creation of a catalogue of children's streets in Lyon to show specificities of a children's street. Aimed at technicians and officials, as well as anyone interested.
Quantitative data collection and analysis	Traffic speed analysis	Use traffic cameras and speed monitoring equipment to quantitatively assess vehicle speeds in the school zones.
	Installation of counters and sensors	Install counters and sensors to collect data on the number of pedestrians, cyclists, and e-scooter users.
	Set up monitoring air quality stations & platform	Set up air quality monitoring stations (PM2.5, PM10, NO_2, among others). Test a platform to compare information.
	LiDAR Sidewalk scanner	Assess the quality of sidewalks.
Subjective data collection and analysis	User surveys	Conduct surveys with users, including children. Understand needs, concerns, and suggestions for improvements.
	Walkability and cyclability assessments	Evaluate sidewalks and cycle paths in terms of their suitability for children and other users with experts and urban planners.
	Organisation of workshops and focus groups	Discuss infrastructure quality and safety concerns with residents, parents, and school officials.
Deployment traffic calming solutions	Speed limits, Car-free zones, Superblocks	Introduce road calming measures to enhance safety and inclusivity.
	Parking reallocations	Remove on-street car parking spaces or convert them. This encourages alternative transport modes and reduces congestion.
	Greening initiatives	Introduce green infrastructure such as trees, shrubs, and greenery in the school area to improve air quality, aesthetics, and comfort for pedestrians and cyclists.
Monitoring of solutions deployed	Impact assessment	Assess the environmental, social and operational impact of deployed measures.

Timeline

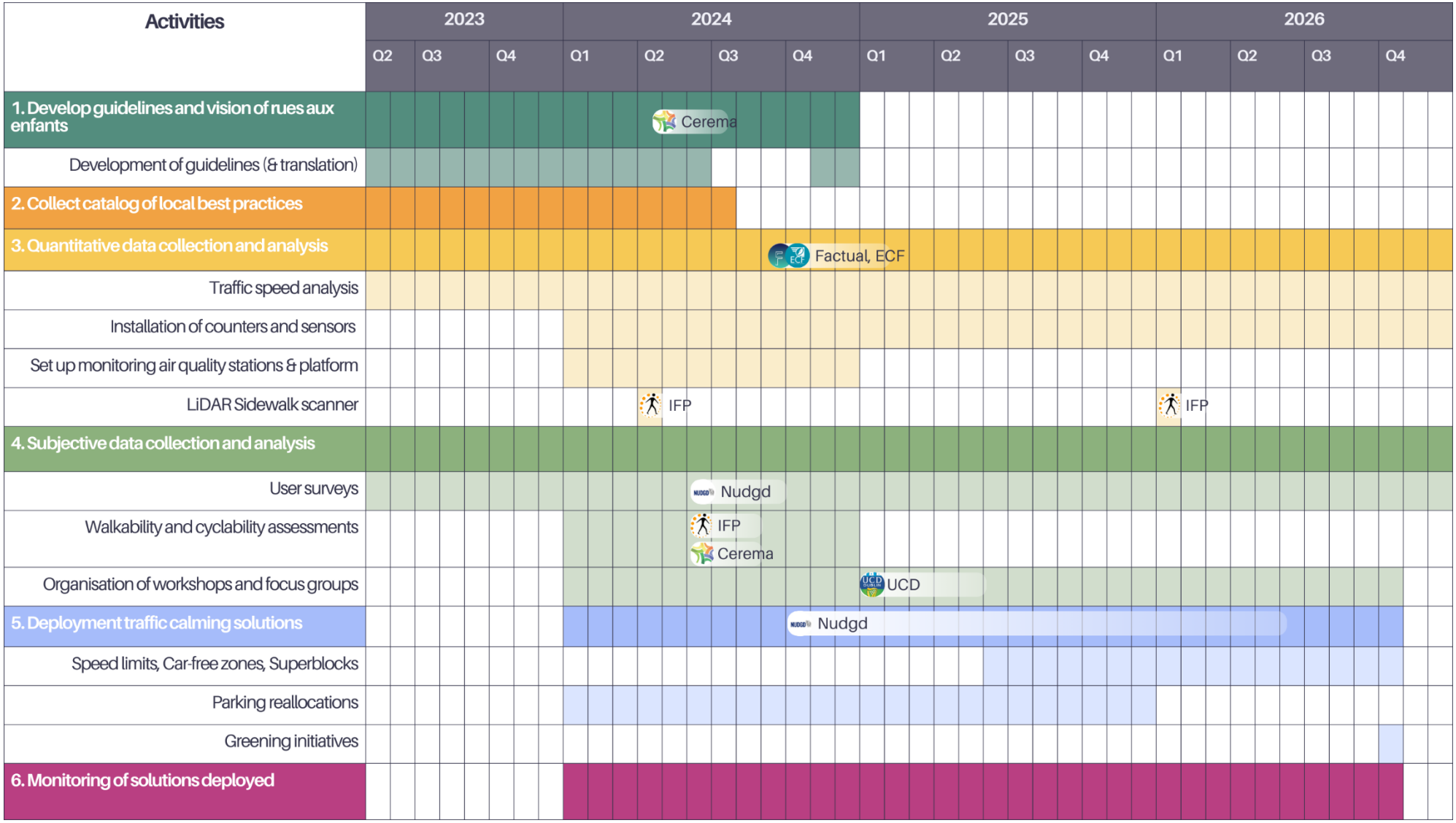

Figure 14. Gantt chart of Lyon SSML 1 with horizontal partner contributions.

Governance and stakeholder involvement

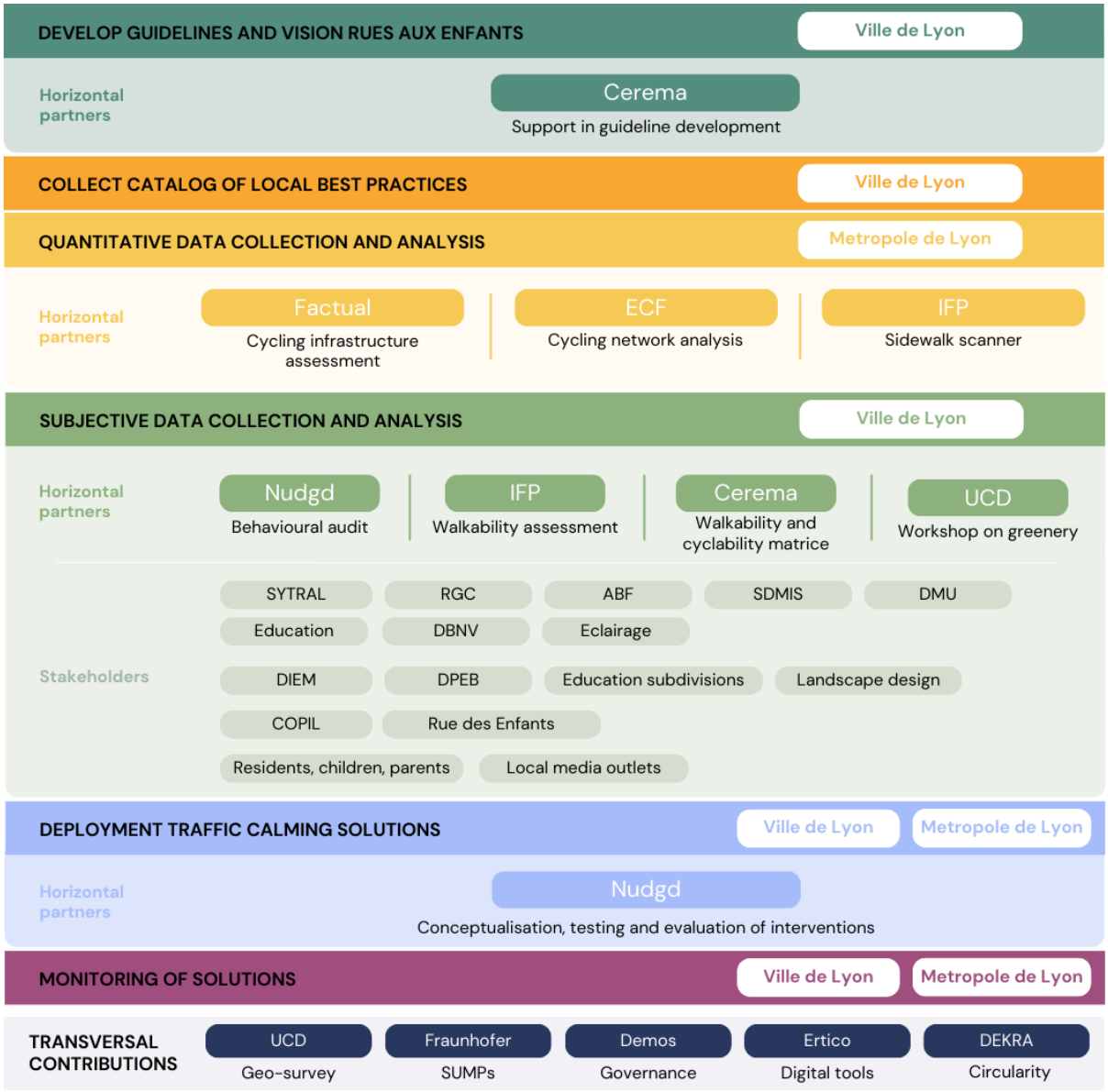

Figure 15. Stakeholder involvement in Lyon SSML 1.

Risks and mitigation actions

Table 14. Risks and mitigation actions identified for Lyon SSML 1.

Potential risks	Mitigation actions
Lack of data on 'before"	Utilise simulation tools for traffic analysis to compensate for data gaps.
Some data available over long periods (air pollution, etc.) or incomplete (accident data)	Compile data over extended periods and monitor the project's progress over several years to address data limitations.

Borough councils' decisions on project inclusion in roads programme	Engage with borough councils early in the planning process to ensure alignment and secure project inclusion.
Lack of time	Implement efficient project management strategies and prioritise tasks to mitigate time constraints.

KPIs

Table 15. Key Performance Indicators identified for Lyon SSML 1.

Environmental			
Green / planted surfaces	Improved air quality	Noise reduction	Modal shift
Social			
Qualitative survey of the public, before and after	Spatial reappropriation of public space	Data on accidents	
Operational			
Space allocated to pedestrians	Improved traffic flows	Parking spaces removed	

Conclusions

The REALLOCATE SSML 1 in Lyon plays a crucial role in the city's efforts to improve urban mobility and safety. It focuses on creating safer streets by reallocating space for pedestrians and children, aligning with Lyon's Vision Zero plan. This initiative also supports the goals set out in EU Mission '100 Climate-Neutral and Smart Cities by 2030' for Lyon. This includes Lyon more child-friendly, enhancing safety, promoting active transportation, and reducing motorised travel.

The collaboration with horizontal partners within the REALLOCATE project holds the opportunity to amplify its impact by providing specialised solutions and expertise in walkability and cycleability assessments, citizen engagement, and innovative design approaches such as urban design and green infrastructure implementation.

2.3.2 Lyon SSML 2 – Lyon's road safety tech & non-pollution parking policy

Short description

Lyon faces challenges such as road safety issues and pollution due to high motorised traffic levels. To address these, the city plans to manage traffic volumes, and discourage heavy vehicle usage through parking policies based on vehicle attributes.

Objectives

The SSML in Lyon aims to manage traffic effectively, improve road safety, and reduce pollution levels. Through innovative parking policies and data-driven solutions, the city seeks to promote active travel and sustainable transportation modes.

Location(s)

This SSML has a regional scope, including the city of Lyon and Métropole of Lyon (58 municipalities).

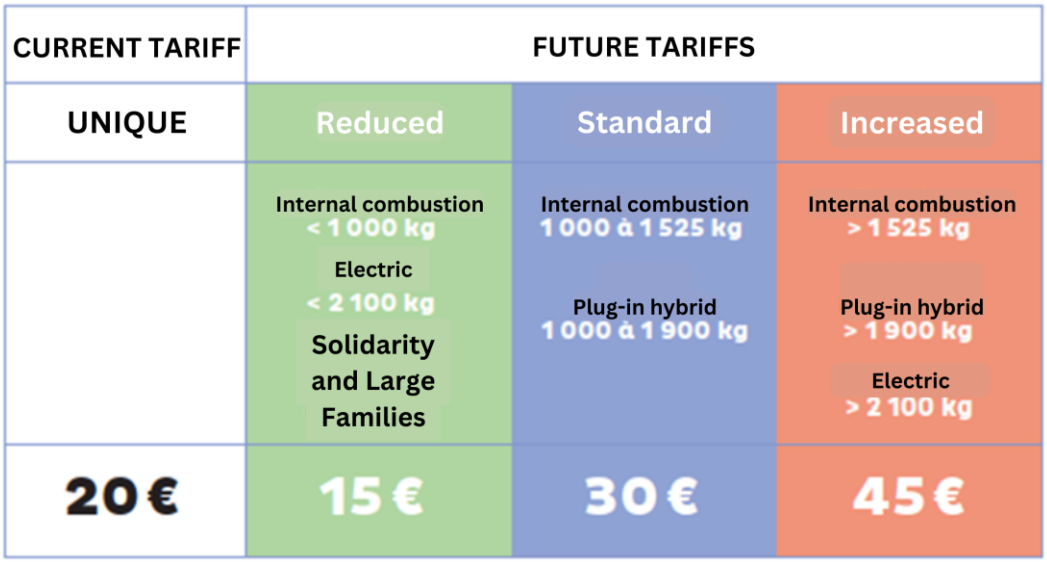

Figure 16. Tariff model of Lyon. Source: Translated from City of Lyon and Metropole de Lyon 2024.

Actions and activities

Table 16. Actions, activities and objectives of Lyon SSML 2.

Action	Activity	Objectives
Data collection & parking policy analysis	Collect and retrieve access to relevant data	Collect / get access to relevant data including registration plates, vehicle weight, energy, CO_2 emission, category vehicle
	Overall traffic accident analysis	Analysis of accident occurrence and severity regarding locations and vehicle types
Evaluation of current parking policy	Air pollution analysis	Evaluate vehicle attributes such as weight of vehicles as indicator for car crashes and pollution
	Accident analysis	
Deployment of AI technology	Identification of traffic safety hazards	Utilise AI technology for the identification of potential traffic safety hazards, employing real-time data collection and evaluation. Incorporate immediate warnings and behavioural nudges to enhance safety awareness.
	Real-time data collection and evaluation	
	Incorporation of nudges and warnings	
Usage of digital twin system	Set up of digital twin system	Establish a Digital Twin system to simulate user interactions on the streets, incorporating various safety solutions. Integrate this simulation into the decision-making process for effective urban planning.
	Simulation of user interactions	
Modification of parking policy	Enforcement of new policy and tariff tool	Modify parking policies in tandem with a parking tariff tool, taking into account the weight and fuel type of vehicles. Big families (more than 3 children), low-income households and particular local commerce will be eligible for reduced tariffs. This coordinated approach aims to incentivise responsible parking practices and aligns with broader efforts to improve road safety and sustainability. Internal communication and knowledge exchange with other French cities. Communication with the public especially before implementation and elections.
	Communication activities	
	Production of a manual	

Timeline

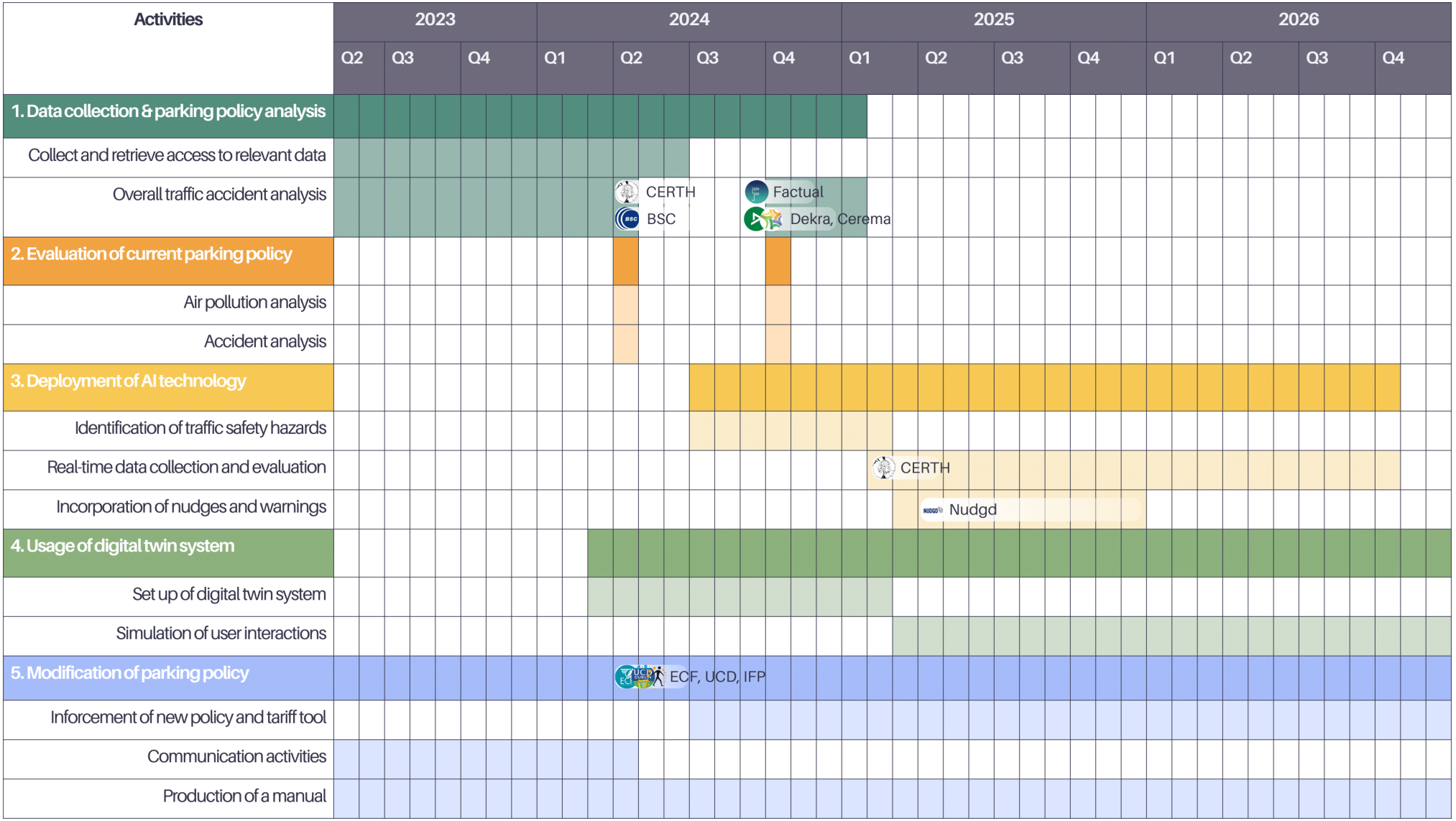

Figure 17. Gantt chart of Lyon SSML 2 with horizontal partner contributions.

Governance and stakeholder involvement

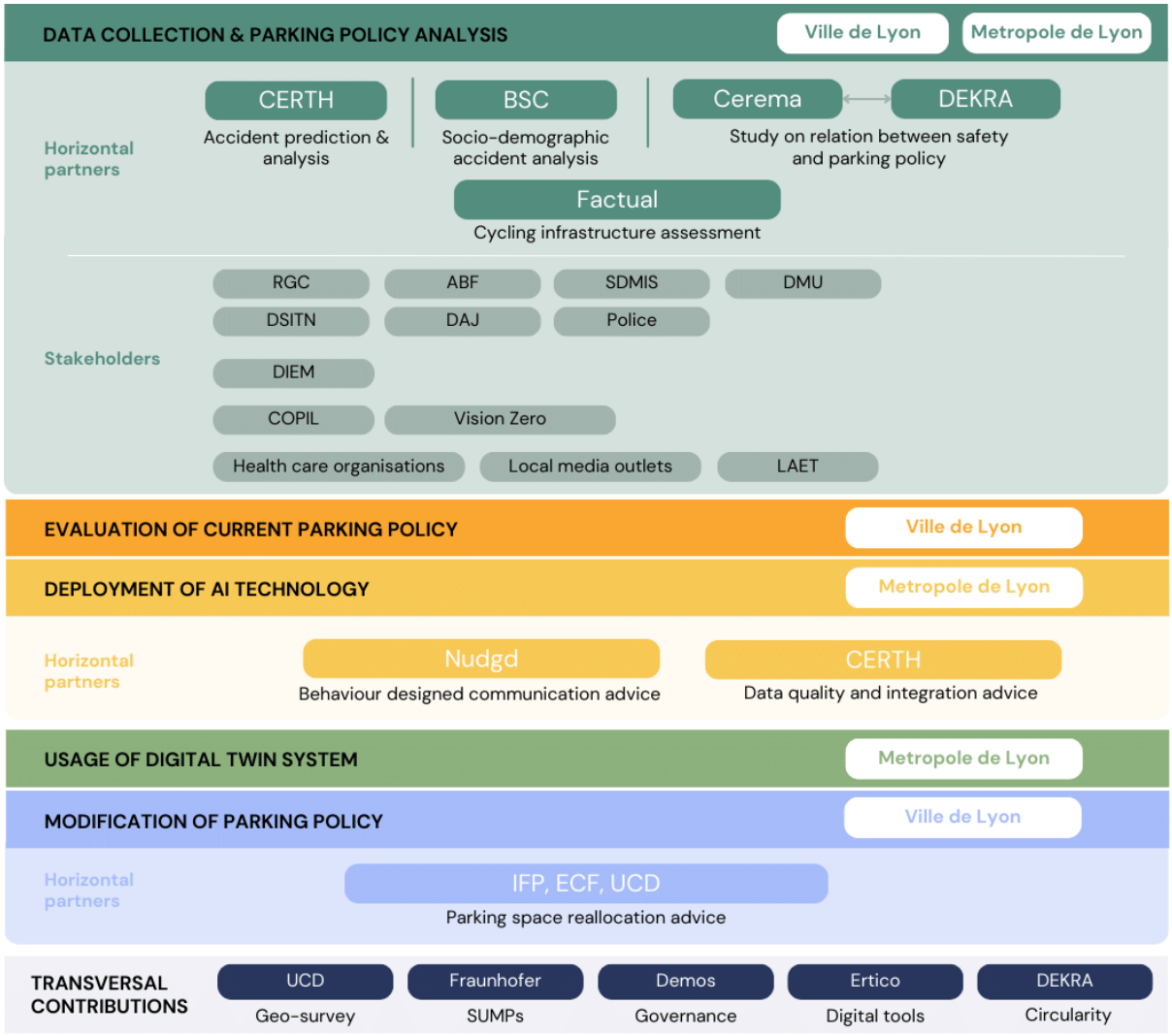

Figure 18. Stakeholder involvement in Lyon SSML 2.

Risks and mitigation actions

Table 17. Risks and mitigation actions identified for Lyon SSML 2.

Potential risks	Mitigation actions
Acceptance of new parking policy	Engage stakeholders early, provide clear communication
Legal risks	Ensure compliance with legal regulations and seek legal advice
Technical risks - adjustments, adaptations	Conduct thorough analysis and monitoring

KPIs

Table 18. Key Performance Indicators identified for Lyon SSML 2.

Environmental
Air pollution reduction (CO_2 and PM)
Social
Evaluation of acceptance by residents and non-residents
Operational
Reduction of heavy vehicles
Other
Reduction of car crash injuries

Conclusions

The second REALLOCATE SSML in Lyon introduces an innovative parking policy aimed at changing behaviour, aligning closely with the city's Sustainable Urban Mobility Plan (SUMP) action plan. This initiative also aligns with the objectives of EU Mission '100 Climate-Neutral and Smart Cities by 2030' particularly in promoting safety, health, and climate action. By imposing higher fees on big and heavy vehicles, the SSML seeks to reduce the risks and severity of road accidents associated with their use. Moreover, the parking policy incentivises the adoption of more environmentally friendly vehicles, thereby contributing to climate mitigation efforts. The engagement of horizontal partners brings valuable expertise in effective communication for facilitating behaviour change, data management, and road safety assessments, facilitating a more comprehensive evaluation of the policy's impact.

2.4 Budapest, Hungary

2.4.1 Budapest SSML 1 – Improving Traffic Safety in Budapest's Periurban Areas

Short description

In harmony with the upcoming Cycle Traffic Network Plan, the SSML will focus on traffic calming and modal shift that can be used in the periurban stress points of the city, to create safer and more controlled intersections.

Objectives

The SSML aims to create safer intersections, especially for Vulnerable Road Users (VRUs), and improve safety around schools. It seeks to increase public awareness of traffic-related issues and test dynamic interventions to optimise multi-modal traffic flow during peak hours.

Location(s)

The first SSML in Budapest addresses the intersection between Fóti road and Megyeri road in District IV.

Figure 19. Location of SSLM 1 in Budapest. Source: BKK 2024a.

Actions and activities

Table 19. Actions, activities and objectives of Budapest SSML 1.

Action	Activity	Objectives
Baseline & data collection	User surveys	Understanding perceptions of residents and users of the intersection.
	Placement of measurement equipment	Sending mobile measuring equipment to the intersection
Cycling infrastructure improvement	Rearrangement of kerbs and lane, painting	Changes in road lanes of the intersection, rerouting of the cycling lane onto the kerb, rearrangement of the curbs, street painting informed by best practices.
	Cycle lanes at intersections	
AI based traffic modelling and measurements	Implementation of monitoring stations	Implement monitoring stations for speed, complemented by smart camera devices and traffic detectors to gather extensive data.
	Data analysis	Identification of conflict points and peak times, providing real-time insights into travel times, Mobility as a Service (MaaS), and facilitating the development of a targeted traffic calming and road safety intervention package.
	Air and noise pollution modelling and monitoring	Monitor and model air and noise pollution at intersections.
	Apply AI algorithms to inform interventions	Utilise AI algorithms to guide intervention strategies
Space reallocation	Completing the missing section of the cycle network	Providing one-way cycle lanes on both sides. Realignment and reallocation of traffic lanes in the intersection. Cycling lanes through the intersection.
	Elimination of irregular parking in front of the school	Review of irregular parking at the school's service entrance. In coordination with the ASCEND project, to use the former school (future collective tenant model). Full planning area to be considered.
	Data from sky cross-sectional analysis	Traffic, near miss, speed, occupancy analysis with cameras.
	Explore further potential interventions	Measure can include for example the development of a reception area and micro mobility point, kiss and ride spaces, cycling signage, urban greenery, among others.

Timeline[4]

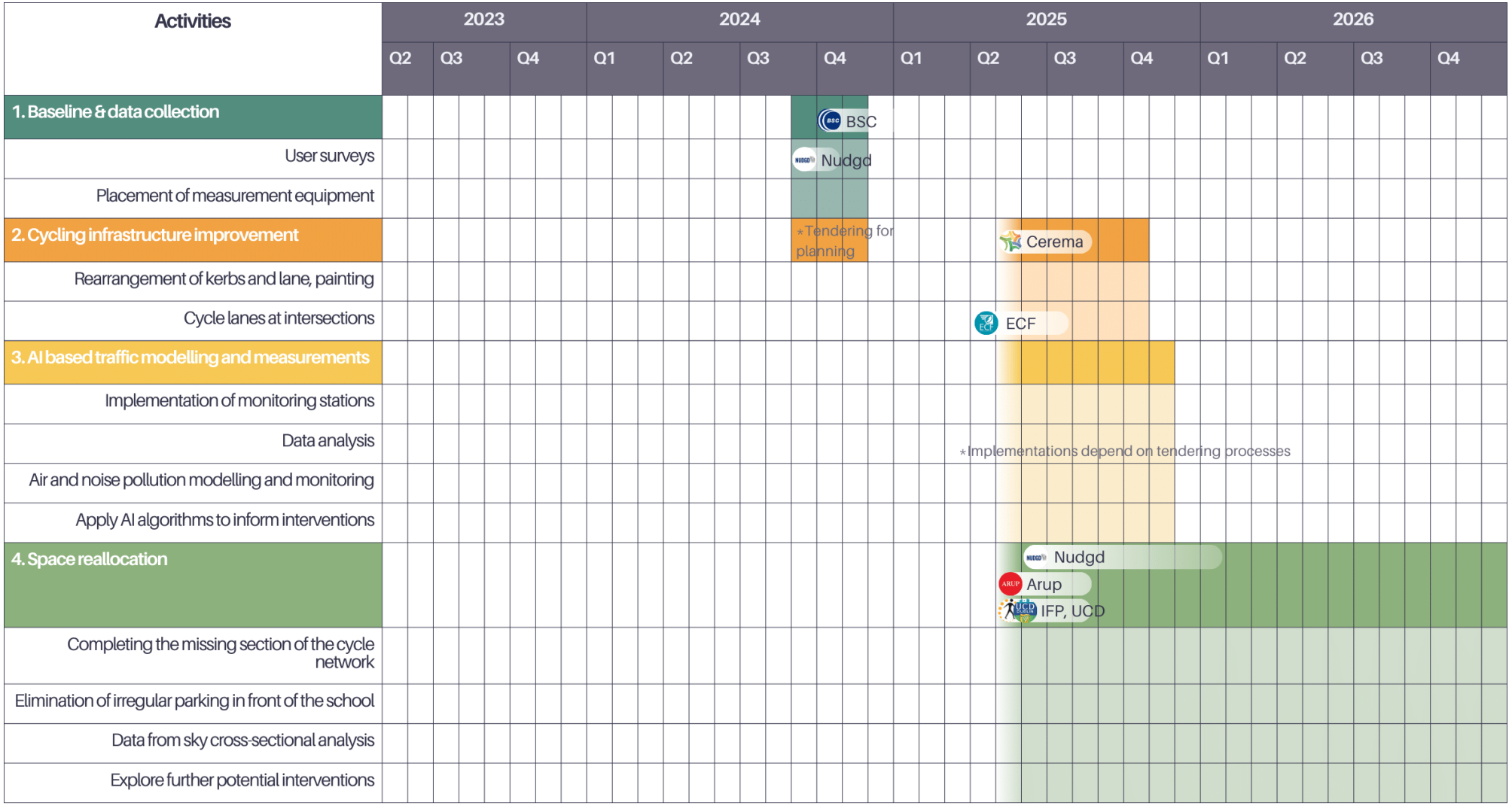

Figure 20. Gantt chart of Budapest SSML 1 with horizontal partner contributions.

[4] The timeline shows the most probable timing of the SSML. It depends heavily on the tendering processes, which cannot be firmly defined at this point.

Governance and stakeholder involvement

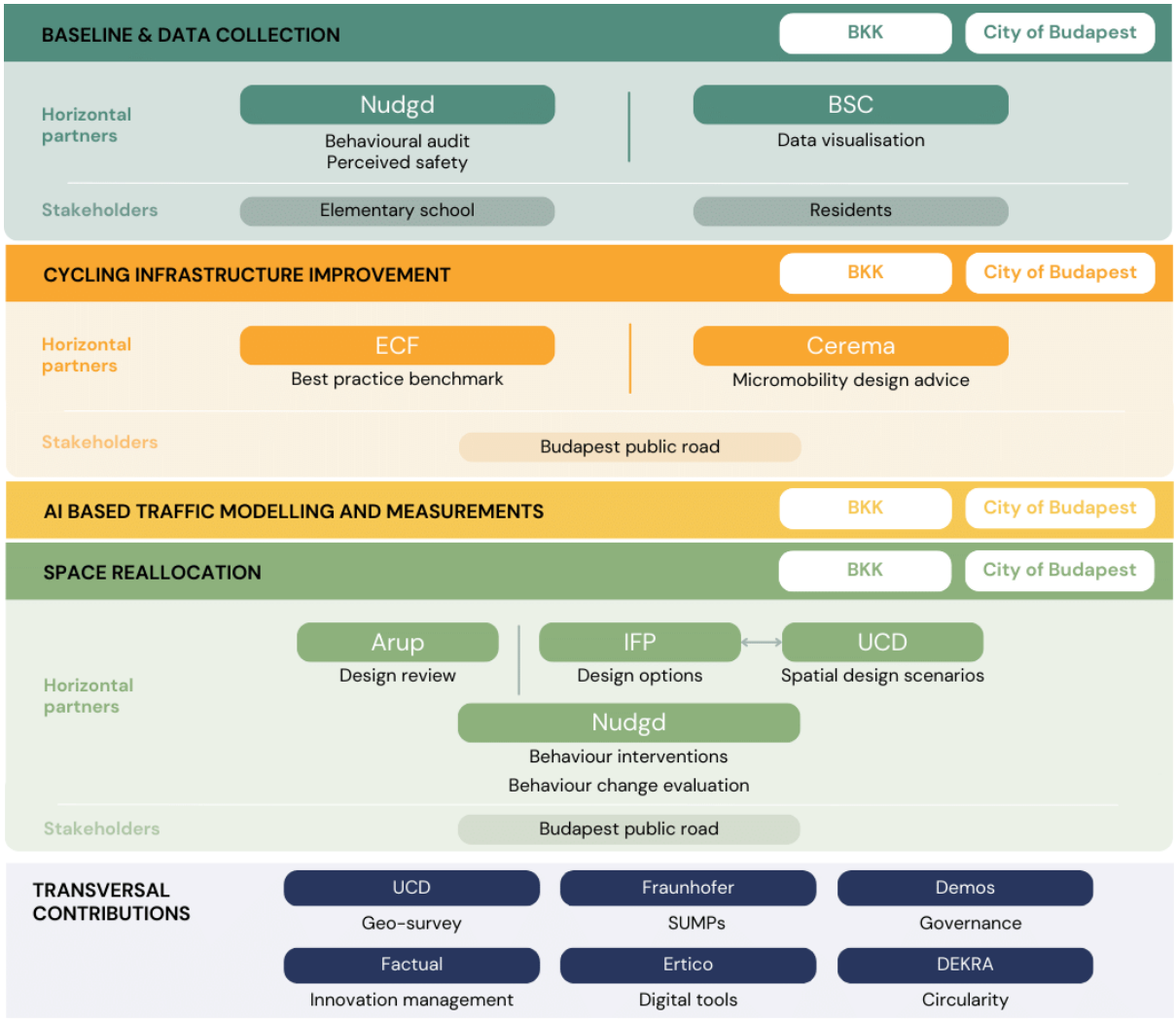

Figure 21. Stakeholder involvement in Budapest SSML 1.

Risks and mitigation actions

Table 20. Risks and mitigation actions identified for Budapest SSML 1.

Potential risks	Mitigation actions
Deeply rooted social habits	Awareness raising and open discussion from the beginning
Upcoming local government elections (Budapest – Districts relationship)	Engagement with the local administrations
Resources (budget + human resources)	Seeking for complementary funds
Long, complicated tendering and procurement processes	Engagement with the relevant departments of the municipality from an early stage
Unstable market, EUR/HUF changing prices	Effective budget and project planning

KPIs

Table 21. Key Performance Indicators identified for Budapest SSML 1.

Environmental			
Reduction in greenhouse gas emissions	Air pollution reduction	Noise reduction	
Social			
Improvement in the perception of accessibility in the area (especially from VRU)			
Operational			
Total number of conflict points	Average reduction in vehicle speeds	Number of bicycles and pedestrians	Extent of adapted street profiles and dynamically reallocated spaces
Percentage of cyclists using the newly designated cycling routes	Percentage change in the number of near misses	Percentage of trips made by active mobility modes	

Conclusions

Budapest has recently joined the EU Mission '100 Climate-Neutral and Smart Cities by 2030', advancing its sustainability goals through the development of a Climate City Contract (CCC). With a focus on transport and green infrastructure, the CCC aims to reduce emissions and enhance urban sustainability. The first REALLOCATE SSML in Budapest targets stress points like intersections to improve safety, particularly for Vulnerable Road Users, and promote sustainable transportation modes, contributing to emission reductions. This aligns with Budapest's Traffic Safety Strategy, aiming for a 50% reduction in traffic injuries and fatalities by 2030 and zero accidents by 2050. Horizontal partners provide expertise in urban design for cyclists and pedestrians, as well as visualisations and safety assessments, enhancing the initiative's effectiveness.

2.4.2 Budapest SSML 2 – Healthy Superblock

Short description

The second SSML in Budapest draws inspiration from London's healthy streets and Barcelona's super-blocks, emphasising traffic calming interventions with a preference for public transport and active mobility modes.

Objectives

The SSML aims to create a calm, attractive, and safe neighbourhood, aligning with the vision of achieving a 15-minute city. The focus is on fostering a family-friendly environment and promoting accessibility to community spaces over transport-centric public areas.

Location(s)

The second SSML in Budapest focuses on district VIII., specifically the Baross Street between Kálvin Square and the Grand Boulevard (József Körút).

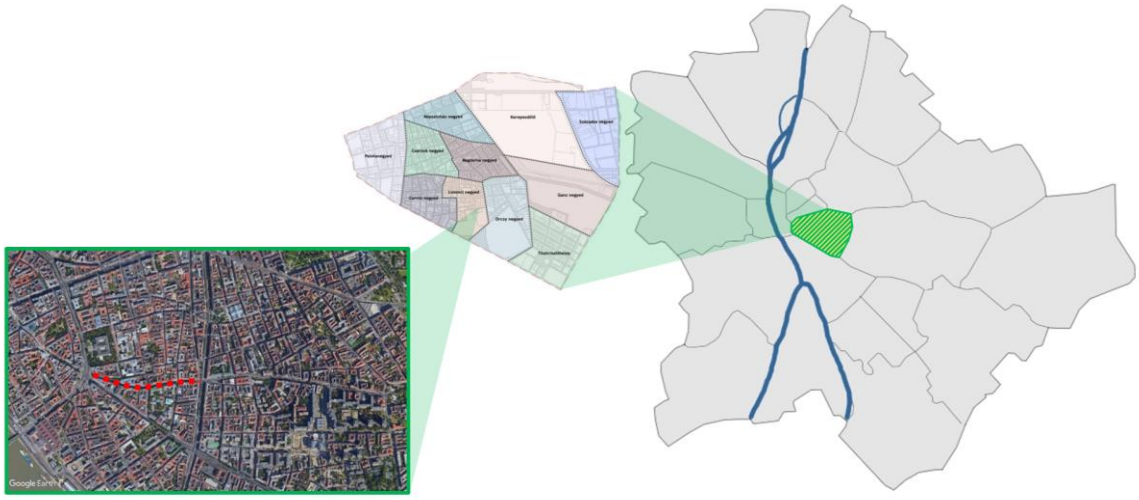

Figure 22. Location of Baross Street within Budapest. Source: BKK 2024b.

Actions and activities

Table 22. Actions, activities and objectives of Budapest SSML 2.

Action	Activity	Objectives
Baseline & data collection	Traffic management tools	Establish a baseline for current traffic conditions to identify areas for improvement
	Emission measurements	Collect and analyse emissions data related to mobility
Stakeholder engagement & co-creation	Co-creation and co-design	Collaboration with stakeholders is a priority, fostering synergies between local and city administrations, as well as engaging with non-governmental organisations (NGOs). Inclusive citizen participation and co-design processes will be integral to developing innovative solutions.
Implementation of measures	Completing cycling network	These initiatives aim to enhance safety for Vulnerable Road Users (VRUs) while contributing to a greener and more accessible urban environment. Achieve a more accessible and environmentally friendly area. Explore the applicability of other measures, including the creation of green spaces, Kiss and Ride spaces at the hospital or sidewalk widening.
	Education, awareness-raising measures	
	Examination of the traffic, modal split of Semmelweis Clinic	
	Examining Waze data for route selection	
	Implement dome cameras	
	Speed reduction with physical elements	
	Testing of loading bays	
	Data collection interventions	
	Explore further interventions	
Monitoring of implemented solutions	Impact assessment	Evaluate the effectiveness and outcomes of the implemented solutions to measure their overall impact.

Timeline[5]

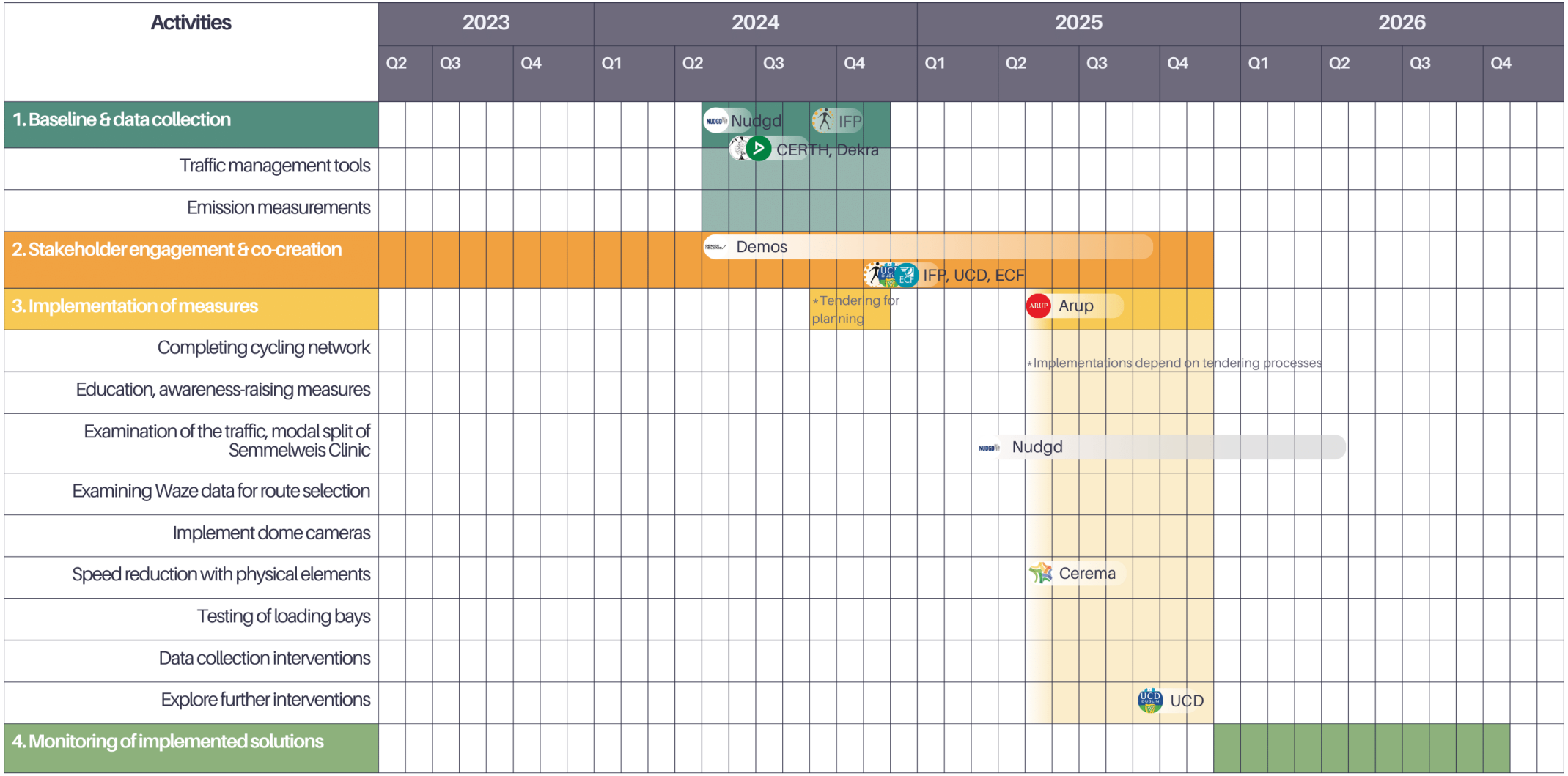

Figure 23. Gantt chart of Budapest SSML 2 with horizontal partner contributions.

[5] The timeline shows the most probable timing of the SSML. It depends heavily on the tendering processes, which cannot be firmly defined at this point.

Governance and stakeholder involvement

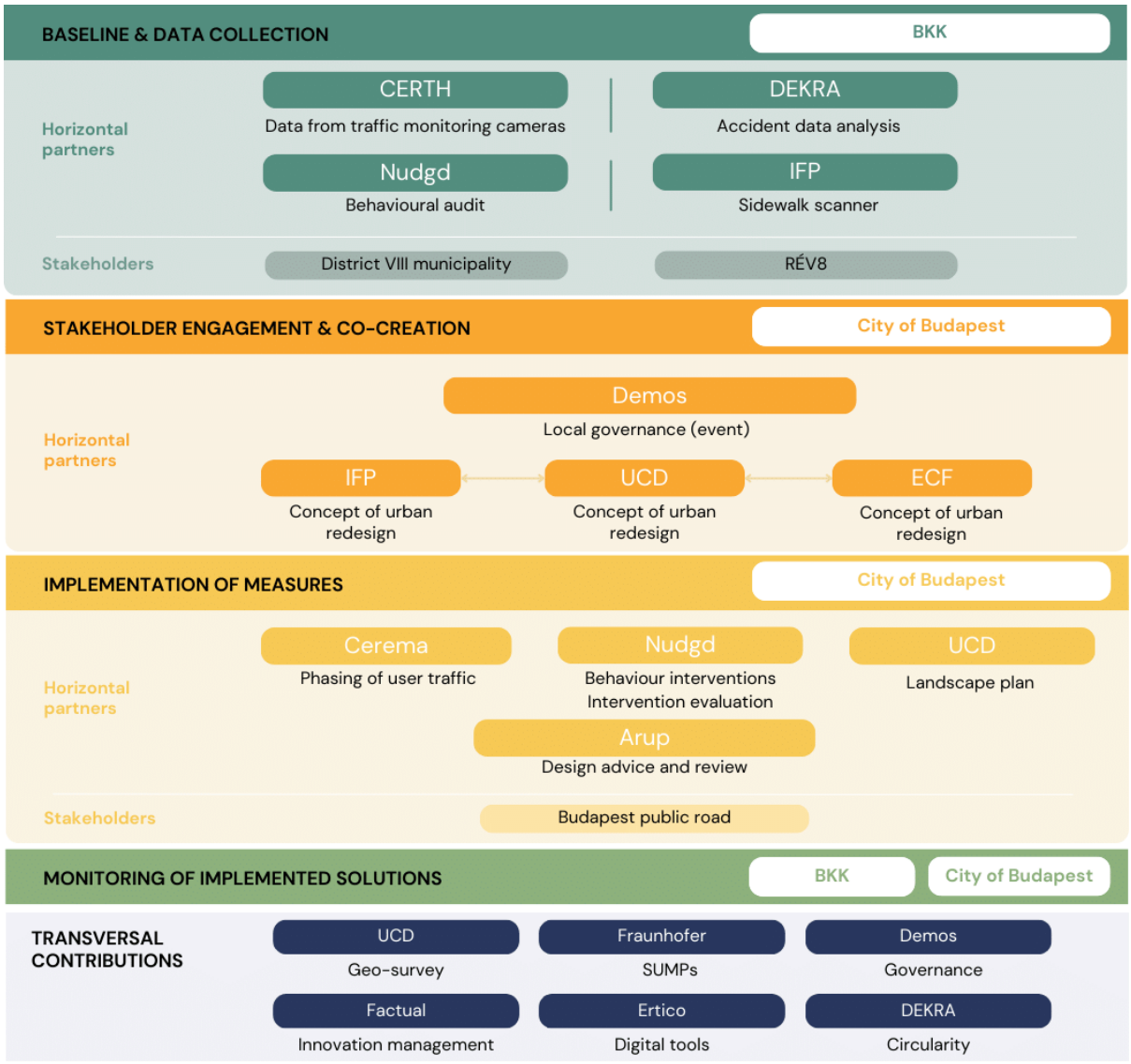

Figure 24. Stakeholder involvement in Budapest SSML 2.

Risks and mitigation actions

Table 23. Risks and mitigation actions identified for Budapest SSML 2.

Potential risks	Mitigation actions
Upcoming local government elections	Stakeholder engagement, participation plan
Resources (budget + human resources)	Seeking for complementary funds
Long, complicated tendering and procurement processes	Engagement with the relevant departments of the municipality from an early stage
Unstable market, EUR/HUF changing prices	Effective budget and project planning
Deeply rooted social habits	Awareness raising and open discussion from the beginning

KPIs

Table 24. Key Performance Indicators identified for Budapest SSML 2.

Environmental		
Greenhouse gas emissions reduction	Air pollution reduction	Noise pollution reduction
Social		
Perceived improvement in the accessibility	Perceived quality of public spaces	
Operational		
Extent of adapted street profiles and dynamically reallocated spaces	Total number of conflict points	Percentage of cyclists using the newly designated cycling routes
Improvement in travel times and reduced congestion	Increase in sidewalk width	Number of bicycles and pedestrians
Percentage of trips made by active mobility modes	Extent of parking restrictions	Percentage change in the length of motor vehicle lanes

Conclusions

The second REALLOCATE SSML in Budapest aims to transform neighbourhoods into calm, attractive, and safe spaces, aligning with the vision of achieving a 15-minute city. By prioritising community spaces and promoting public transport and active mobility modes, the initiative seeks to redesign urban areas and reallocate space to accommodate and prioritise these sustainable transportation options. This approach is expected to increase the adoption of public transport and active mobility modes, contributing to reductions in climate impact. The SSML aligns with the objectives of the Climate City Contract, which identifies transport and green infrastructure as key sectors for emissions reduction. Additionally, it reflects the Healthy Streets Approach, emphasising human-centered design to create better streets for people. With the support of horizontal partners specialising in human-centered street design, the initiative's perspective can be enhanced and diversified. These partners will also contribute to qualitative and quantitative assessments, as well as stakeholder engagement and governance structures within the SSML area.

2.5 Barcelona, Spain

2.5.1 Barcelona SSML 1 – Pedestrians, cyclists & MMV in shared spaces

Short description

Barcelona's first SSML studies factors affecting interactions between pedestrians, cyclists, and Micromobility Vehicles (MMV) in shared spaces like pedestrian priority streets or squares. It diagnoses conflicts and proposes solutions.

Objectives

The objective is to define measures and interventions to ease conflicts between users in shared spaces, enhancing the use of active modes and improving safety and a sense of belonging in these areas.

Location(s)

Several shared spaces with pedestrians' priority will be subject to the analysis. For the implementation one location will be selected.

- Green axis (Consell de Cent)
- Single level streets in old areas of the city
- Open Streets (temporarily closed to cars)
- Parc de les Glòries

Figure 25. Location of study areas in Barcelona SSML 1. Source: Own elaboration based on images from Barcelona City Council 2024.

Actions and activities

Table 25. Actions, activities and objectives of Barcelona SSML 1.

Action	Activity	Objectives
Data collection and analysis	Accident & mobility data	Understanding and identification of conflict points and characteristics between pedestrians, cyclists and MVV in different urban typologies, and getting a first overview of potential solutions. The analysis intends to be holistic, acknowledging the spatial, educational, psychological, pedagogic, and legal dimension
	Data on complains received from citizens (IRIS)	
	Perceived safety	
	Safety auditing	
	Behavioural analysis	
	Traffic counting	
	Spatial analysis	
	Legislation benchmark	
	Benchmark of current communication & educational measures	
	Overview of best practices	
Stakeholder and citizen engagement	Organise participatory activities to encourage citizen engagement. Seek input on existing issues, proposed solutions, desired outcomes	Gather insights from different perspectives to ensure inclusive designs (older people, people with disabilities)
Interventions for cyclist-pedestrian conflict resolution	This can include temporary measures, road signage and simple design solutions	Testing and evaluation of different solutions to avoid conflicts between active road users in shared spaces
Awareness campaign methodology	Develop a methodology for awareness campaigns	Address the cognitive dimension of conflicts, making people aware of their own behaviour and impact on others
Proposals of regulations of road sign changes	Collaborate with relevant authorities to review and amend regulations as necessary	Precise proposals to update existing regulations and road signage to accommodate the needs and safety of cyclists and pedestrians in shared spaces
Elaboration of guideline document	Guide of recommendations for physical and functional solutions in shared spaces, design criteria to improve relations between pedestrians, cyclists & MMV	Summarise the findings of the analytical and interventional phase of the project that can serve as a guiding document for other cities
Monitoring and corrective measures	Impact evaluation and intervention refinements	Evaluation the actual and potential impact of Interventions for cyclist-pedestrian conflict resolution leading to the refinement of measures and concepts.

Timeline

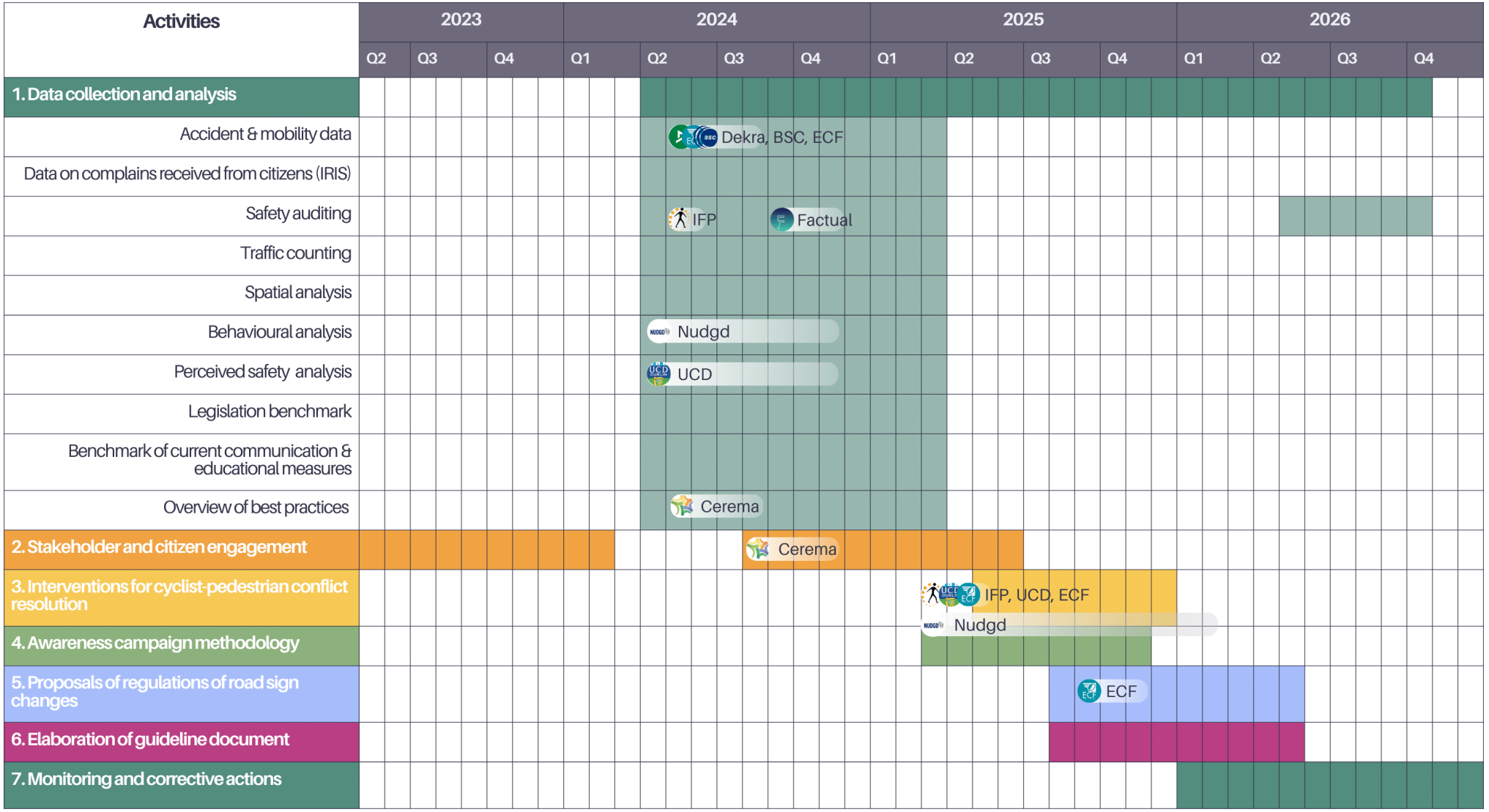

Figure 26. Gantt chart of Barcelona SSML 1 with horizontal partner contributions.

Governance and stakeholder involvement

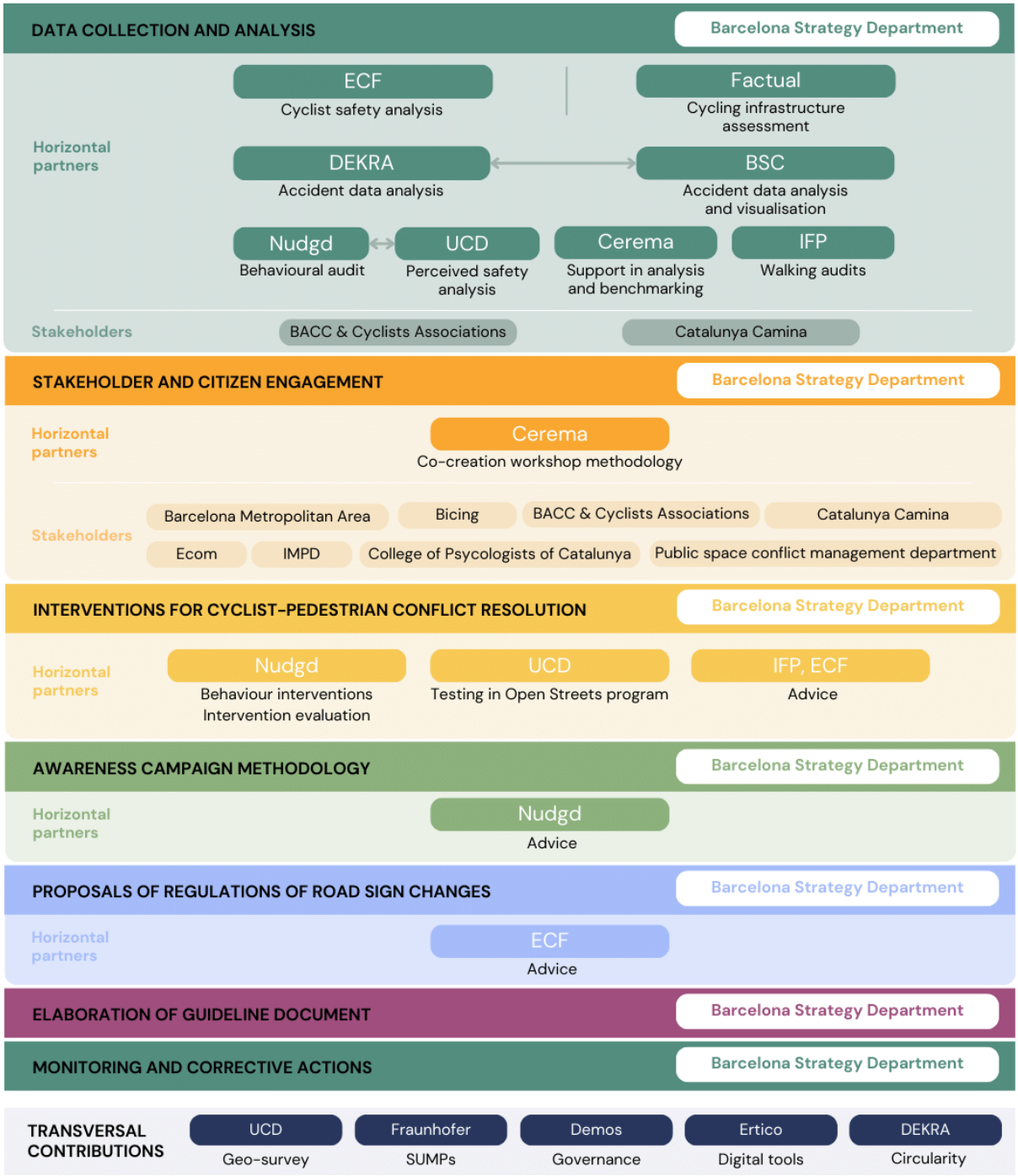

Figure 27. Stakeholder involvement in Barcelona SSML 1.

Risks and mitigation actions

Table 26. Risks and mitigation actions identified for Barcelona SSML 1.

Potential risks	Mitigation actions
Identify roles of horizontal partners	Clear communication

Technical complexity of applying the project to a particular case.	Provide implementation guidelines for future projects
Alignment and approval by local partners	Clear communication and planning with iteration processes
Subcontract part of the work not covered by horizontal partners	Clear communication

KPIs

Table 27. Key Performance Indicators identified for Barcelona SSML 1.

Environmental		
Air pollution	Noise pollution	CO_2 emissions
Social		
Perception of safety in shared spaces	Perception of belonging to the shared space	Knowledge of the functioning of the shared space
Operational		
Number of pedestrians, cyclists and MMV in shared spaces	Number of accidents between pedestrians, cyclists and MMV in shared spaces	Number of complaints received (IRIS)

Conclusions

The first REALLOCATE SSML in Barcelona promotes active mobility, aligning with the city's climate neutrality goals. By prioritising active transportation modes, it contributes to Barcelona's sustainable mobility objectives. The initiative aims to enhance urban space design for diverse users, fostering collaboration and shared use of public spaces. This approach increases visibility and awareness among active mobility users, supporting safer and more sustainable transportation choices. Horizontal partners bring expertise in active mobility, urban design, and road safety assessments combining quantitative and qualitative methodologies.

2.5.2 Barcelona SSML 2 – Increased and integrated public transport accessibility system for people with disabilities

Short description

Barcelona has a public door to door service for people with reduced mobility operating with a fleet of buses and taxis, providing programmed and sporadic journeys. However, the existing fleet struggles to meet the high demand for the service.

Objectives

The SSML aims to design a shared-vehicle scheme for the public door to door service for people with reduced mobility, aiming to increase service capacity, optimise vehicle usage, and improve social and environmental impacts.

Location(s)

The exact location of the SSML still needs to be defined, with options ranging from limiting service to specific city areas to providing citywide coverage.

Figure 28. Taxi service in Barcelona. Source: Barcelona City Council (2024b).

Actions and activities

Table 28. Actions, activities and objectives of Barcelona SSML 2.

Action	Activity	Objectives
Analysis of current service	Baseline	Evaluation of what part of the service could have been covered as a shared-journey modality. Research will examine different shared journey schemes taking into account limitations on waiting time, journey duration, etc.
	Historical data analysis	
	Stakeholder participation process	
Development of descriptive map	Qualitative analysis of the framework	Evaluation of the current situation of the model of special public transport in the city. The focus of the analysis will be stakeholders' roles and interests, legal and framework constraints, resources, and transport model.
Benchmarking of best practices	Best practice benchmark	Analysis of other models of transport for people with reduced mobility and door-to-door services: approach, costs, challenges.
Definition of shared journey scheme	Conclusions from analysis	Draw conclusions from the integrated analysis and develop the concept for the shared journey scheme based on the analysis of data and requirements. It will include participation of stakeholders.
	Stakeholder participation	
	Development of a shared journey scheme	
Use case drafting	Conceptualisation of use case	Use-case proposal with detailed information of stakeholders' roles, legal framework, needed infrastructure, resources and budget implications.
Feasibility test & implementation	Feasibility test	Concretise how this developed scheme can be tested in Barcelona in a specific use case. Evaluation of results.

Timeline

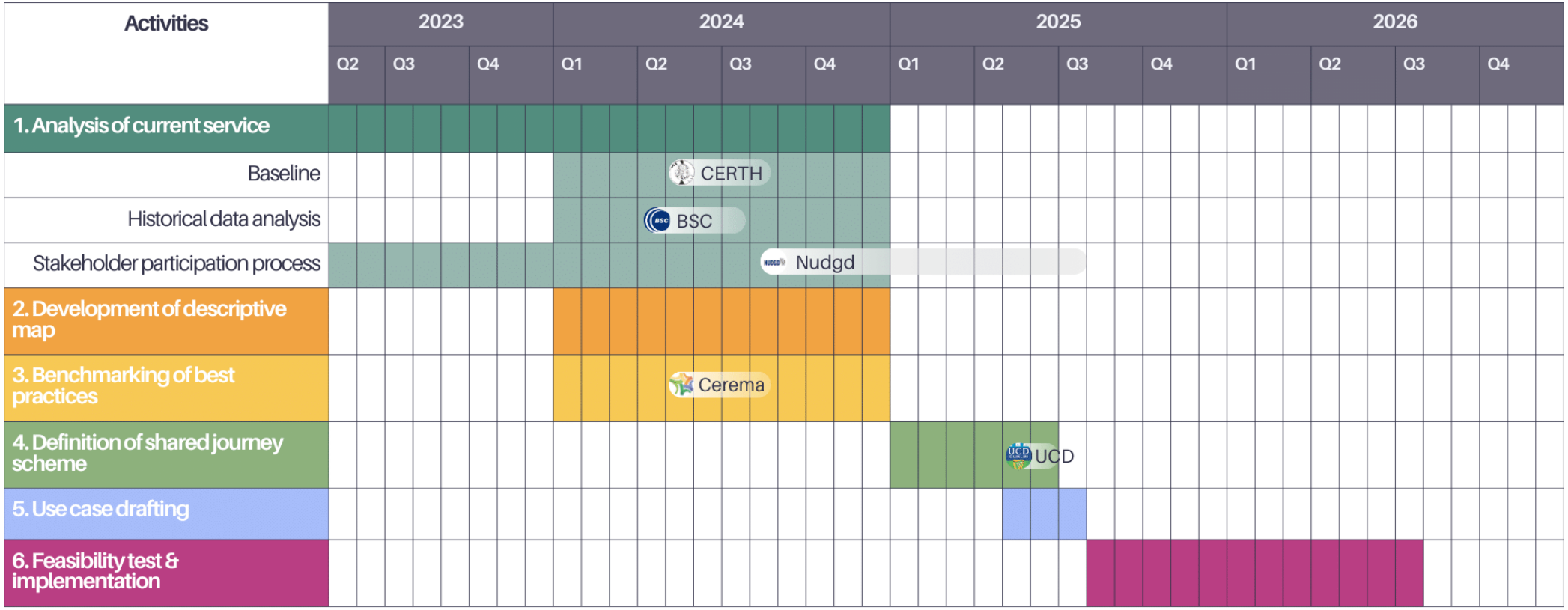

Figure 29. Gantt chart of Barcelona SSML 2 with horizontal partner contributions.

Governance and stakeholder involvement

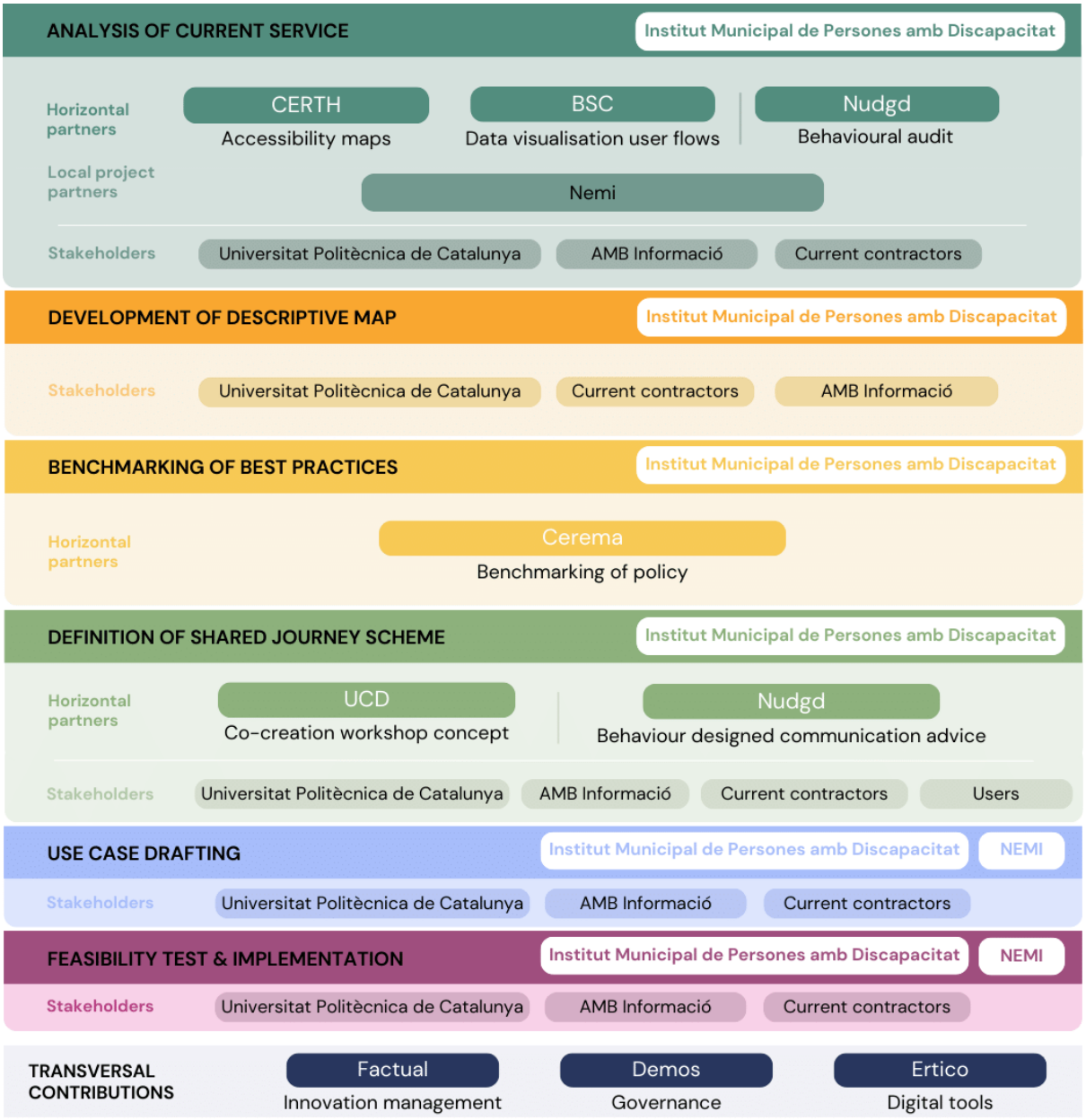

Figure 30. Stakeholder involvement in Barcelona SSML 2.

Risks and mitigation actions

Table 29. Risks and mitigation actions identified for Barcelona SSML 2.

Potential risks	Mitigation actions
Complexity of the current public door to door service: legal framework and budget constraints	Conduct thorough research and analysis to understand legal requirements and budget constraints.
Rather rare type of service which complicates identifying similar	Build a network and seek consortium involvement for knowledge sharing.

practices and achieving other cities involvement (knowledge sharing)	
Sensitivity of the topic and vulnerability of users make the step from theory to practice challenging.	Develop a comprehensive use-case draft proposal outlining stakeholder roles, infrastructure needs, and budget implications. Ensure consensus and agreement among stakeholders.
Sensitivity to change: users' expectation, interests of stakeholders	Foster participation and consultation to gauge and address concerns. Regularly communicate with stakeholders to manage expectations.
Define roles of horizontal partners	Facilitate communication through bilateral meetings to clarify roles and responsibilities.
The implementation of the SSML in real life poses the risk of exceeding the allocated budget and encountering resistance from stakeholders	Ensure clear communication throughout the process, particularly regarding subcontracting and budget allocation. Adhere to public tender processes to maintain transparency and fairness.

KPIs

Table 30. Key Performance Indicators identified for Barcelona SSML 2.

Environmental		
Kilometre travelled		
Social		
Number of served users	Cost savings	Number of available/used vehicles
Operational		
Time for demand	Journey duration	Shared journeys

Conclusions

The second REALLOCATE SSML in Barcelona focuses on increasing access to mobility and improving accessibility within the city, which are crucial factors in ensuring equitable transportation options for all residents. This initiative not only aims to enhance social impacts by addressing transportation barriers that disproportionately affect marginalised communities but also contributes to reducing environmental impacts by promoting shared vehicle usage, thus mitigating emissions. Horizontal partners play a pivotal role in supporting the SSML through data analysis, visualisation, and conceptual framework development for the service scheme. They also assist in effectively communicating with users to ensure the successful adoption of the new scheme by highlighting its benefits and encouraging participation.

2.6 Tampere, Finland

2.6.1 Tampere - AI for increased road safety, space reallocation & parametric design

Short description

The SSML focuses on road safety enhancements through an algorithm for identifying near-miss situations and safety hazards like harsh braking and cornering. It also includes implementing traffic calming measures and promoting sustainable mobility for school trips.

Objectives

The objectives include improving road safety, promoting sustainable transportation, encouraging walking and cycling to school, enhancing pedestrian safety perceptions, raising awareness of near-miss situations, and improving safety at pedestrian crossings.

Location(s)

Vuores is a new city district of Tampere, located 7–10 kilometres from city centre. Within Vuores two unsafe pedestrian crossings will be the focus of the SSML.

Figure 31. Location of Vuores in Tampere city region (left) and new traffic camera location within Vuores (right). Source: City of Tampere 2024.

Actions and activities

Table 31. Actions, activities and objectives of the Tampere SSML.

Action	Activity	Objectives
Hazardous Spot Identification	Accident analysis	Identify the types and locations of accidents involving pedestrians and cyclists
Data Collection from City Repositories	Data on traffic patterns	Identify the types and locations of accidents involving pedestrians and cyclists. Reviewing of recent surveys and questionnaires
	Data on accidents	
Historical Data Analysis	Analysis of historical data	Identify the types and locations of accidents involving pedestrians and cyclists
Detailed definition of traffic camera locations	Identification of suitable locations	Ensure the adequacy of location for building and implementation traffic cameras.
	Planning of installing	
Installation of AI-Cameras and Algorithm Testing	Installation of cameras	Identify near misses and safety hazard detections.
	Algorithm testing	
	Evaluation of algorithm	
Citizen Engagement	Workshops	Encourage citizens to safe traffic behaviour and sustainable school trips. Involvement of citizens in planning a safe environment
	Campaigns & Marketing	
Road Space Reallocation	Cultural and tactical urbanism measures	Identify which measures are effective to reduce near-miss situations
	Use of visualisation tools (e.g. VR)	
Data Monitoring and Implementation of Solutions	Impact analysis	Identify which measures are effective to reduce near-miss situations

Timeline

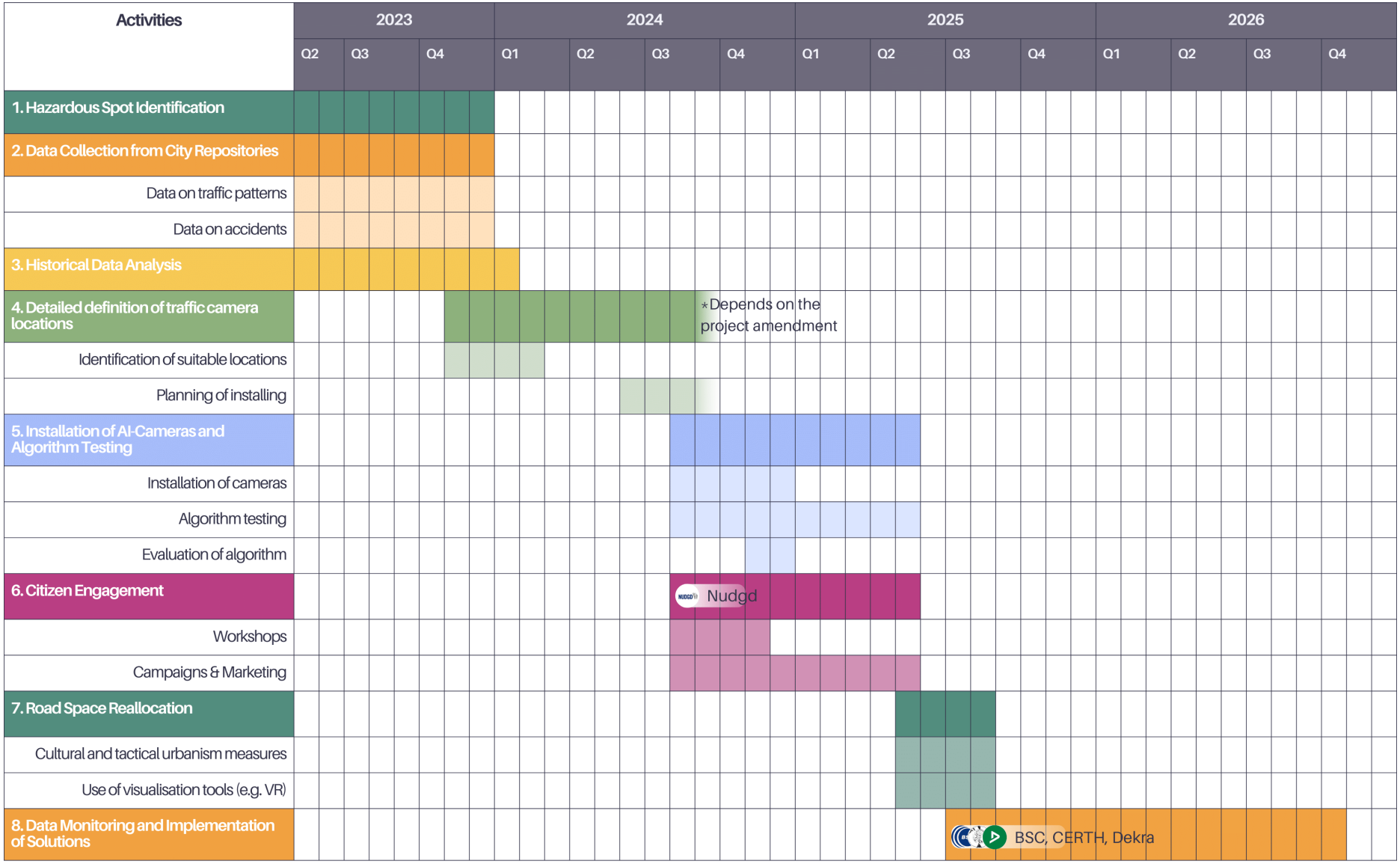

Figure 32. Gantt chart of Tampere SSML with horizontal partner contributions.

Governance and stakeholder involvement

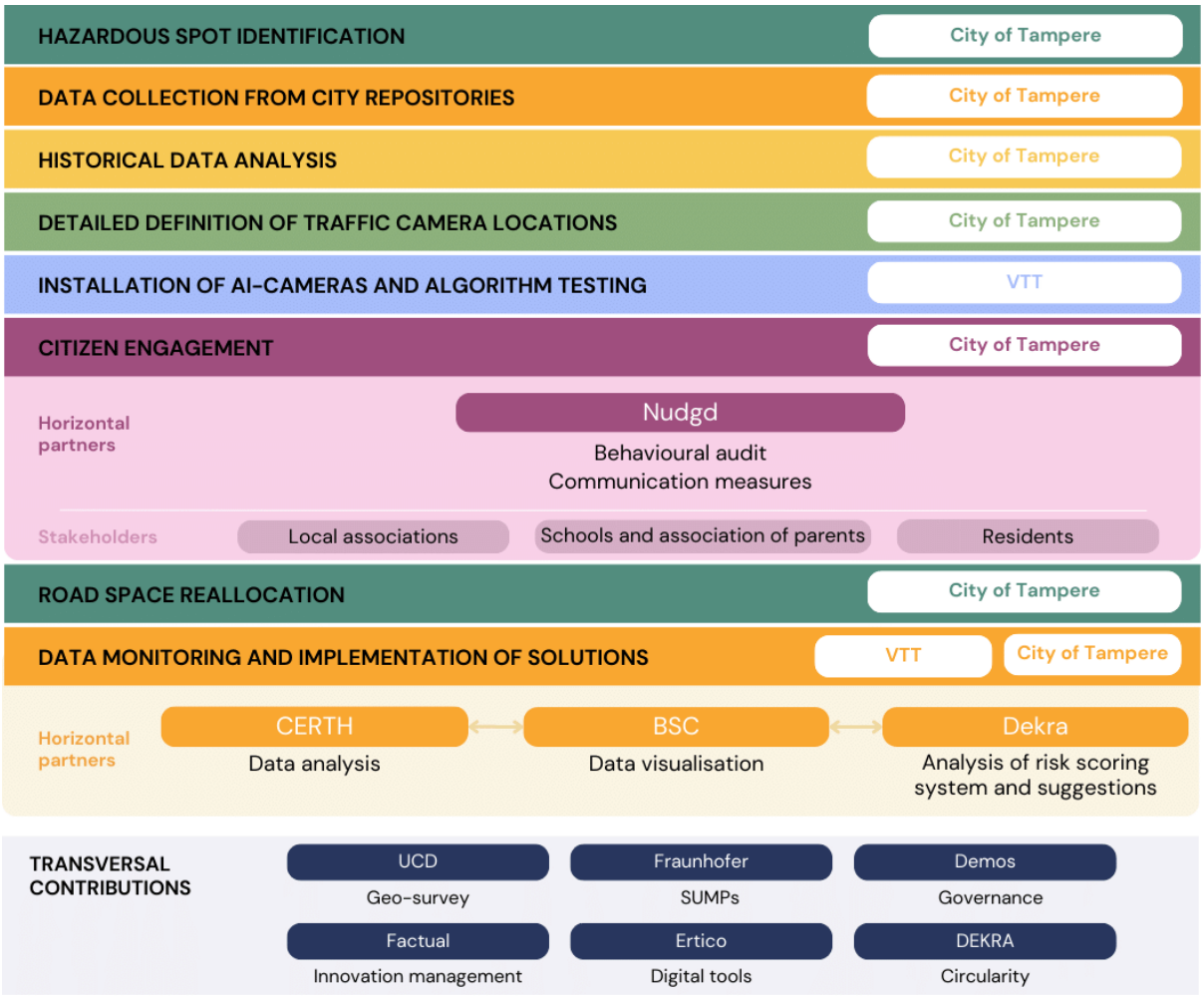

Figure 33. Stakeholder involvement in the Tampere SSML.

Risks and mitigation actions

Table 32. Risks and mitigation actions identified for the Tampere SSML.

Potential risks	Mitigation actions
Personnel resources	Job announcement of traffic safety expert
Budget resources	Smaller / fewer traffic calming measures
Occupational safety during tests	Ensure safe work in roadside environment, so that staff are adequately trained to work in the roadside environment.

KPIs

Table 33. Key Performance Indicators identified for the Tampere SSML.

Social

Feeling of safety (survey)			
Operational			
Time to collisions	Traffic volume	Algorithm accuracy	Safety index (risk of accident)
Number of near miss situations	Participating road users (number)	Number of participants in activities (number of survey respondents)	
Direction of participants (according to accident classification)	Number of pedestrians, bicyclists, scooters on crosswalks before/after	Number of campaigns and other mobility management measures	

Conclusions

The REALLOCATE SSML in Tampere aligns closely with the city's goals and plans for sustainable mobility and climate neutrality. Tampere aims to reduce accidents and promote sustainable transportation, targeting over 60% of urban trips to be made by foot, bike, or public transport by 2030. The SSML activities, in line with Tampere’s Sustainable Urban Mobility Plan, focus on empowering residents including school children to make healthier mobility choices and creating safer, more environmentally responsible transportation options. Implementing smart technology, such as an algorithm to identify near-miss situations and safety hazards, directly contributes to Tampere's efforts to foster sustainable and safe transportation options. Horizontal partners provide technical support in data evaluation and management, as well as road safety assessments.

2.7 Utrecht, Netherlands

2.7.1 Utrecht - Safety-proofing schools in vulnerable neighbourhoods, Utrecht

Short description

The SSML addresses community needs by improving traffic management, reducing pollution, and promoting sustainable transportation for enhanced safety and air quality. It focuses on fostering active mobility and safe transportation for residents.

Objectives

The objectives of the initiative are to make two primary school environments or routes safer and more attractive, increase the number of children and their parents walking or cycling to school, and develop a replicable method applicable to more school settings.

Location(s)

The SSML interventions in Utrecht will involve two school areas, firstly De Kaleidoskoop in Kanaleneiland neighbourhood and Marcusschool in Overvecht neighbourhood.

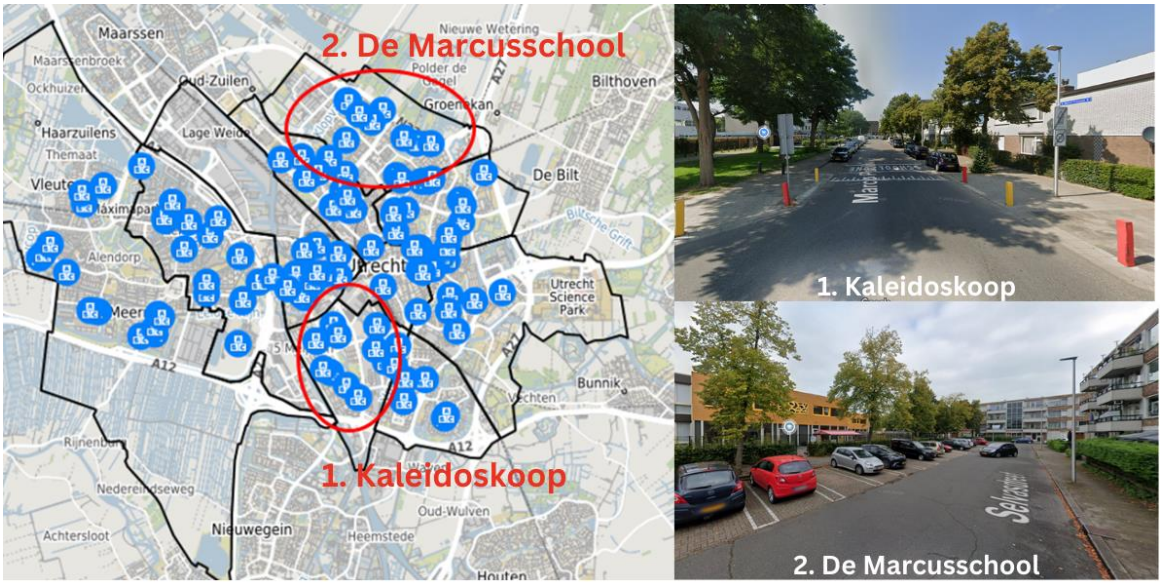

Figure 34. Location of Kaleidoskoop and De Marcussschool within Utrecht. Source: Own elaboration based on City of Utrecht 2024.

Actions and activities

Table 34. Actions, activities and objectives of the Utrecht SSML.

Action	Activity	Objectives
Area selection	Selection of participating schools	Making two primary school environments or routes safer and more attractive Collect data on near-misses and conflicts between pedestrians, cyclists, and e-scooters in the identified areas.
	Workshops with pupils & parents	
	Complementary data collection	
Setting the base	Input analysis	Establish a baseline using input from street users, including parent interviews and terminal walks with children.
	Observations utilising GoPro recordings	Utilise GoPro recording for detailed observations of children's bike rides.
	Customisation of the uCrowds / SimCrowds 3D application	Customise the uCrowds/SimCrowds 3D application based on gaming technology to predict and simulate cyclist and e-scooter behaviour in interaction with pedestrians.
Add extra data	Inflow/outflow, speeds, air & noise pollution	Collect supplementary data on traffic flows, speeds, and pollution levels
	2D & 3D technology for visualisation & simulation	Includes Digital Twin (DT), and electronic projections.
Participation and design	Co-design workshops with parents, children	Facilitate participation and co-design workshops with schools, parents, and children. Utilise VR technology and 3D digital boards to involve children in the process and identify solutions for bottlenecks on school routes.
	Use of VR technology and 3D digital boards	
Experimenting	Infrastructural adaptations (Parking, speed limits)	Conduct experiments such as reduced parking space and 30km/h speed limit. Simulate large-scale interventions in the Digital Twin and visualise them in 3D. Implement behavioural measures, including training programs, the use of crossing guards, and the introduction of a 'velo-theque' for flexible and affordable e-bike/cargo-bike sharing or renting based on specific needs. Develop a method that can be applied in more school settings
	Nature-based solutions	
	Behavioural measures (trainings, crossing guards...)	
	Digital large-scale interventions in DT	

Timeline

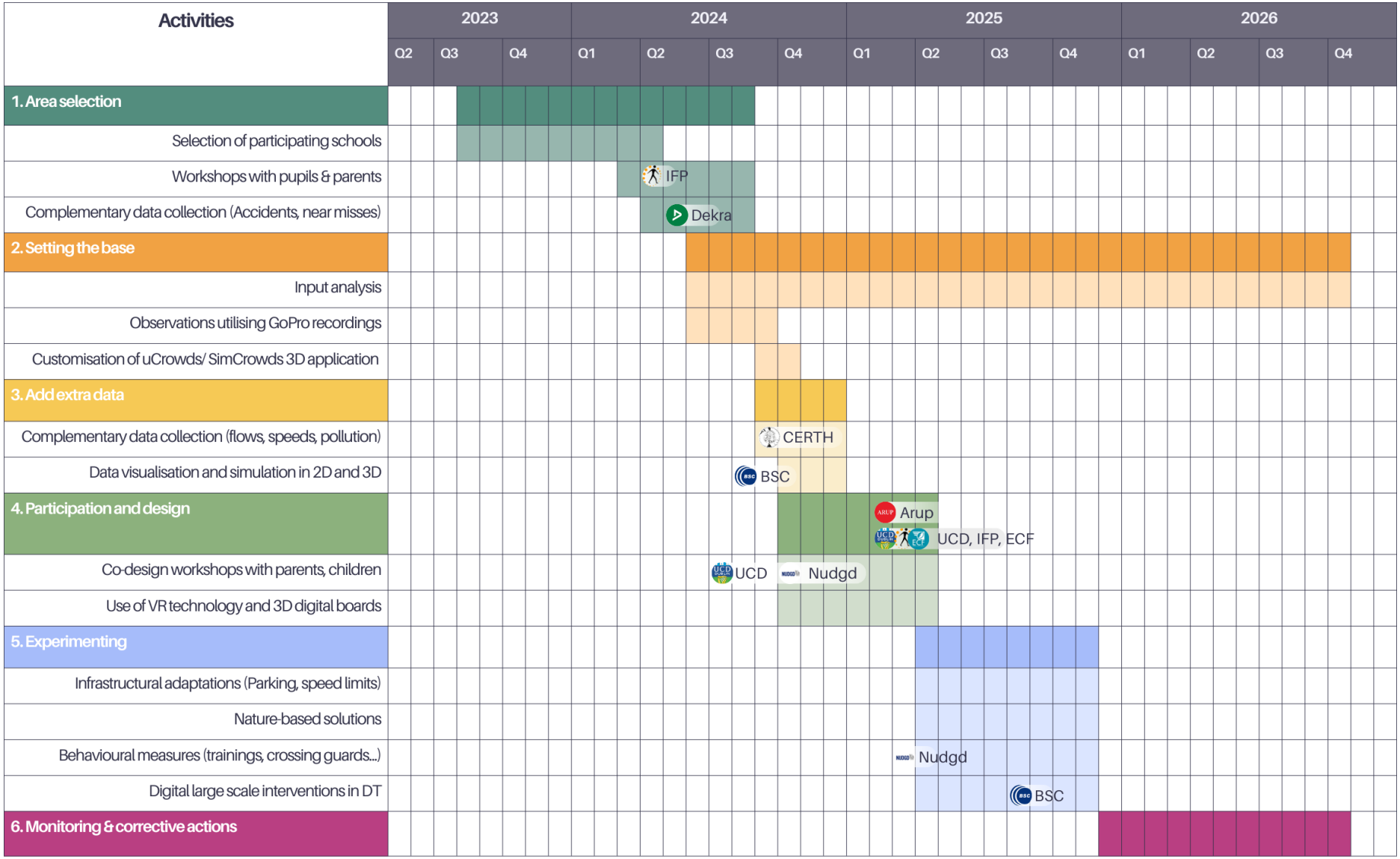

Figure 35. Gantt chart of Utrecht SSML with horizontal partner contributions.

Governance and stakeholder involvement

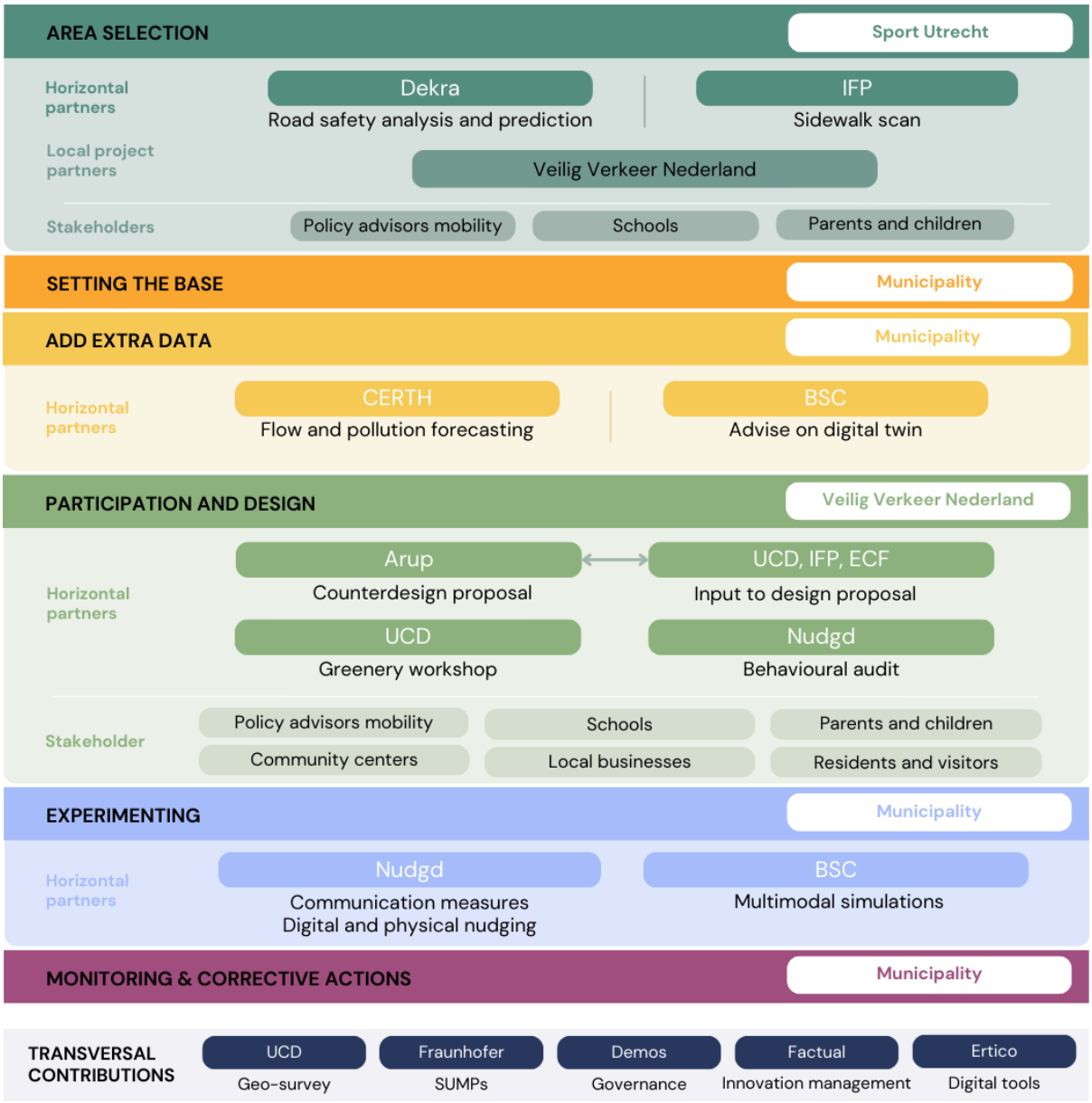

Figure 36. Stakeholder involvement in the Utrecht SSML.

Risks and mitigation actions

Table 35. Risks and mitigation actions identified for the SSML.

Potential risks	Mitigation actions
Stakeholder involvement	Engage stakeholders as soon as their involvement becomes necessary, fostering open communication and collaboration.
Estimated timeframe for implementation of measures	Prioritise and implement smaller measures promptly, while integrating major measures with redesigns to ensure efficiency.

Estimated cost of implementing measures	Allocate resources for smaller interventions, scheduling larger interventions over a longer timeframe to manage costs effectively.
Confliction interest of stakeholders	Foster open communication and engage stakeholders in a co-creation process to address conflicting interests collaboratively.

KPIs

Table 36. Key Performance Indicators identified for the SSML.

Environmental		
Amount of noise (nuisance) on the selected locations	Quality of the air at the chosen locations (CO_2, NOx)	
Social		
Feeling of safety of pedestrians and cyclists	Attractiveness (liveability) of the chosen location	
Operational		
Number of parents and children walking or biking to school	Number of parents and children commuting to school by car	Acceptance by schools/parents/children on this participatory approach
Speed of the different road users	Acceptance by schools/parents/children/residents on the final interventions	Number of (near) accidents between pedestrian-car; bicycle-car; bicycle-pedestrian

Conclusions

The REALLOCATE initiatives in Utrecht align closely with the city's Mobility Plan 2040, emphasising sustainable transportation modes and safer school routes. These measures aim to promote sustainable mobility, biodiversity, and climate adaptation, reflecting Utrecht's vision of creating climate-friendly neighbourhoods and reducing car traffic and traffic accidents. Horizontal partners provide crucial support in road safety assessments, urban design, and smart solutions, ensuring the effective implementation of REALLOCATE measures and contributing to Utrecht's goals for a healthier and more liveable city.

2.8 Warsaw, Poland

2.8.1 Warsaw - Warsaw's green & safe road to school

Short description

In Warsaw, with a high motorisation rate, efforts are focused on improving road safety, especially for vulnerable road users like children. The initiative aims to reclaim pedestrian space, making it safer and more appealing for all.

Objectives

The SSML aims to implement traffic calming measures, create safe and attractive spaces for the community, improve safety perceptions, foster a shift in mobility habits, and develop a replicable model for reallocating school surroundings.

Location(s)

The SSML focusses on a school area around the Primary School no. 303.

Figure 37. Primary School no. 303. Source: Public Roads Authority in Warsaw 2024.

Actions and activities

Table 37. Actions, activities and objectives of the Warsaw SSML.

Action	Activity	Objectives
Area selection & data collection	Road safety assessment	Conduct a thorough data analysis to determine the focus area for intervention. Consider road safety levels, audit pedestrian crossings, and assess air quality to identify priority zones.
	Pedestrian crossing audits	
	Citizens reports, observations and traffic analysis	
Citizen Science Engagement	Site audits	Learning about the area, collecting data, building understanding and engagement of the local community; preparing for co-creation process
	Climate data	
	Sensor measurements	
	Workshops with schools and citizens	
Children's Traffic Behaviour Survey and Monitoring	Survey with parents	Conduct a comprehensive survey on children's traffic behaviour. Utilise walking interviews with voluntary children and parents to monitor movement patterns and gather valuable insights.
	Walking interviews	
Analysis of Local Land Uses	Traffic measurements and analysis	Analyse local land uses to identify opportunities for increasing biologically active areas. Explore potential green spaces and biodiversity enhancements to improve the overall ecological balance
Co-Development of Safety Measures	2D and 3D visualisations	Creating ideas for change, building support for the change, prototyping ideas and solutions, preparing for the sustainable change by organising community around this change
	Workshops	
Implementation & monitoring of measures	Road space reallocation initiatives	Enhance both actual and perceived safety in the area. Monitor the impact of implemented measures on road safety, environmental quality, and community vitality.
	Climate adaptation measures	
	Monitoring	

Timeline

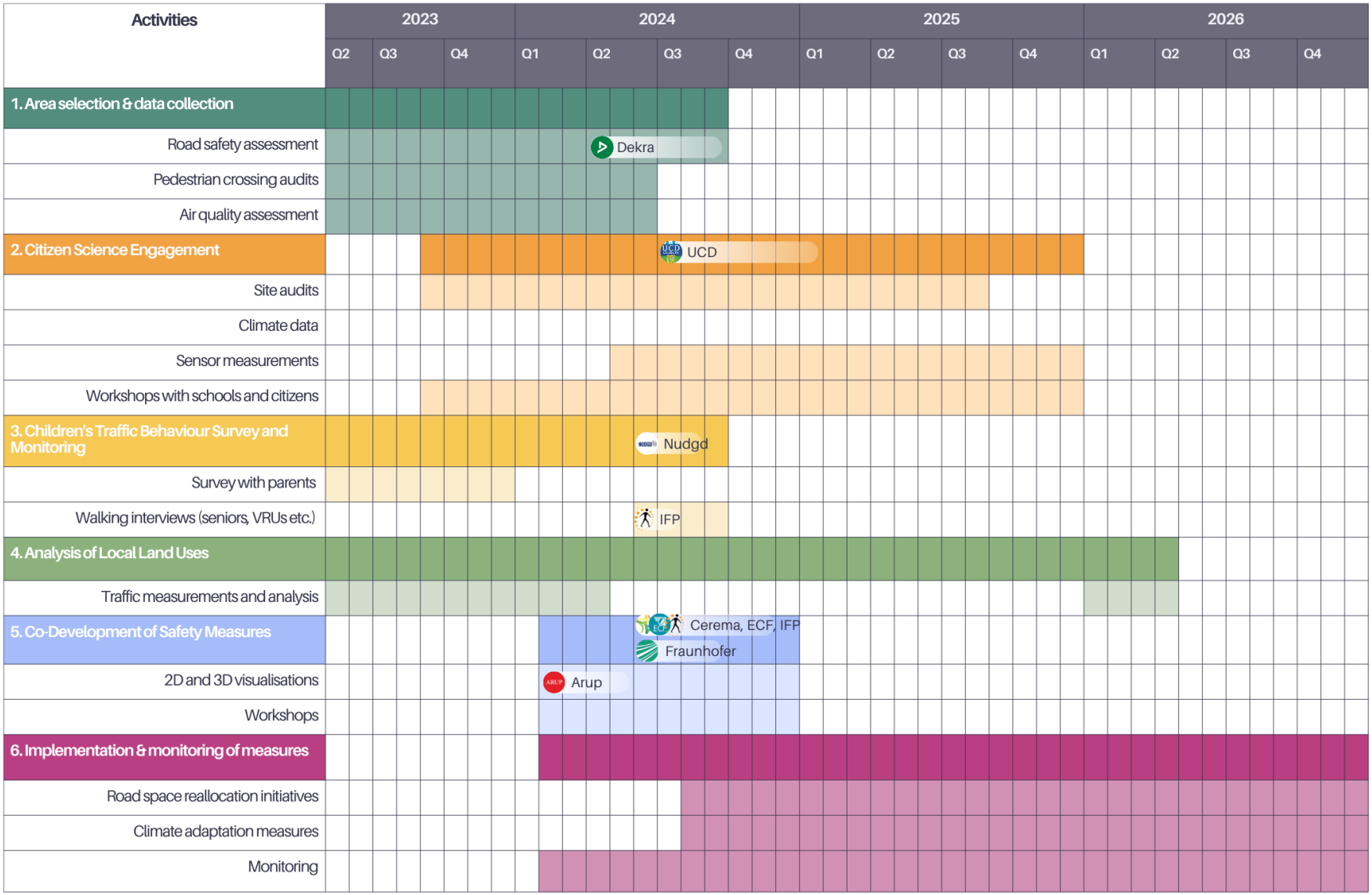

Figure 38. Gantt chart of Warsaw SSML with horizontal partner contributions.

Governance and stakeholder involvement

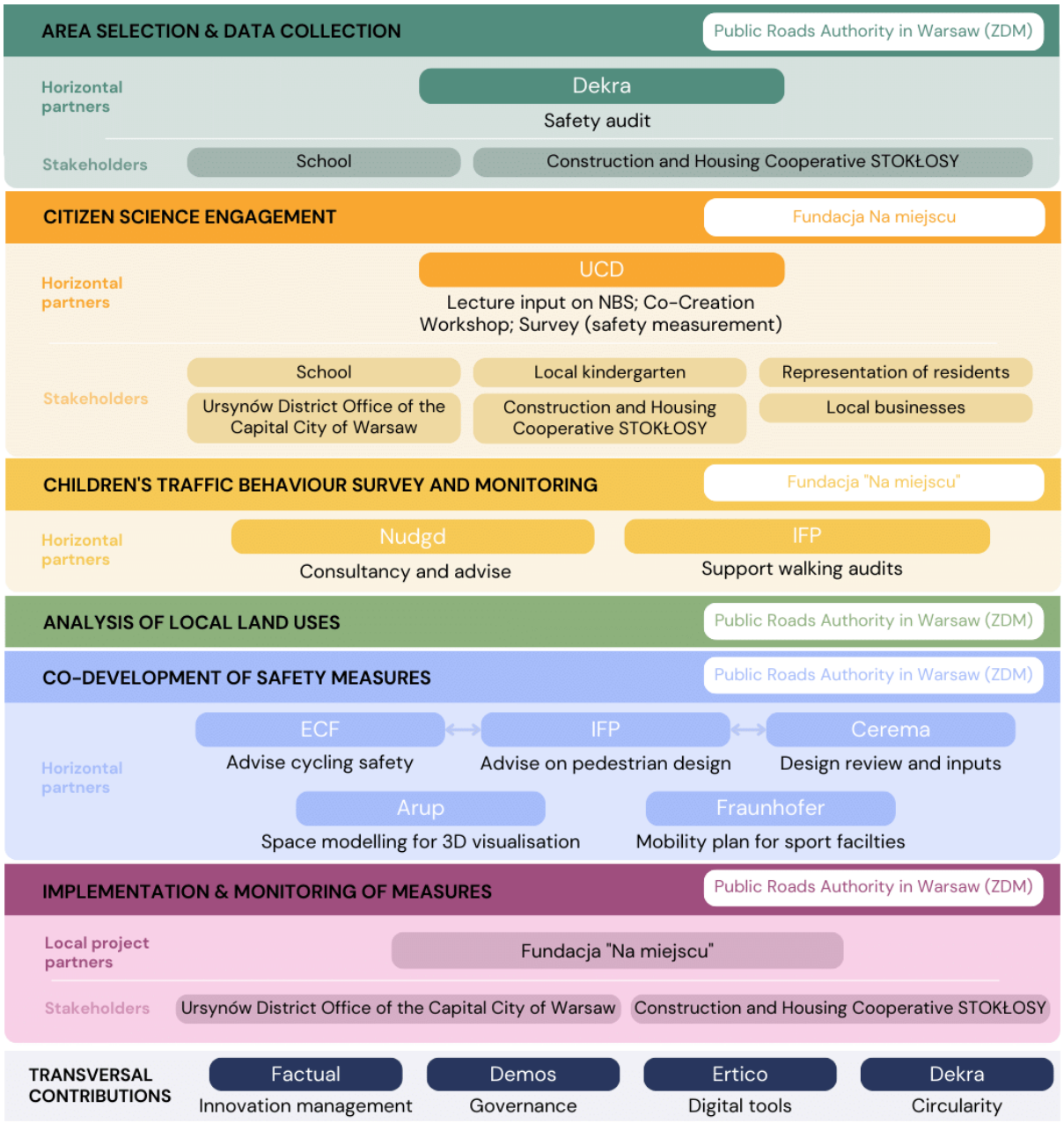

Figure 39. Stakeholder involvement in the Warsaw SSML.

Risks and mitigation actions

Table 38. Risks and mitigation actions identified for the Warsaw SSML.

Potential risks	Mitigation actions
Lack of cooperation	Issue a letter of intent.
Lack of decisions (key stakeholders)	Issue a letter of intent. Collaborate for consensus. Utilise lobbying efforts.
Conflicting interests of stakeholders	Foster open communication. Implement a co-creation process.

Tenants withdrawing	Implement a co-creation process. Develop a mobility plan.
Disappointment of stakeholders involved (pupils, citizens)	Implement the project in stages. Facilitate co-creation. Engage experts.

KPIs

Table 39. Key Performance Indicators identified for the Warsaw SSML.

Social	
Social acceptance	Involvement of the local community
Operational	
Change in traffic flows	Change in modal split

Conclusions

The main focus of the REALLOCATE SSML in Warsaw is to enhance road traffic safety and improve the quality of public spaces, particularly in selected school areas. This aligns closely with Warsaw's SUMP, which aims to increase road traffic safety and create pedestrian-friendly zones. Additionally, the SSML contributes to the city's mission of achieving climate neutrality by minimising car traffic, reducing air pollution, and promoting micro-mobility and eco-mobility.

Horizontal partners play a crucial role in supporting the SSML by enhancing co-creation with citizens and children, designing solutions with a human-centric approach, and promoting safe urban spaces for cyclists and pedestrians. Their expertise in effective communication and visualisation helps to inform and integrate residents in the planning process, ensuring that the initiative's objectives are aligned with the needs and aspirations of the community.

2.9 Zagreb, Croatia

2.9.1 Zagreb - Central traffic corridor holistic solutions

Short description

The SSML in Zagreb will target a densely populated urban area characterised by high volumes of vulnerable road users (VRUs), including pedestrians, cyclists, children, elderly individuals, and people with disabilities, alongside significant traffic congestion.

Objectives

The SSML aims to reduce delay for public transport and vulnerable road users, promote cycling and public transport, enhance pedestrian and cyclist safety, expand green areas, and reduce greenhouse gas emissions by 2030.

Location(s)

The SSML in Zagreb will focus on an intersection in a dense urban area connecting Selska and Horvaćanska Street.

Figure 40. Intersection Selska and Horvaćanska Street in Zagreb. Source: Own elaboration based on Google Maps and University of Zagreb 2024.

Actions and activities

Table 40. Actions, activities and objectives of the Zagreb SSML.

Action	Activity	Objectives
Peak hour investigation	Analyse peak hour data	Develop an automated system to acknowledge priority to different street users based on real-time data.
	Traffic volume counts	
Smart traffic lights and mobility solutions	Camera and signal controllers' installation	Installation of the video cameras, new signal controllers, new algorithms for traffic adaptive signal plan (public transport (PT) priority)
	Traffic adaptive signal plan	
	Algorithm development	
Microsimulation of intersection	Survey with parents	Integrate microsimulation analysis with parent surveys to evaluate intersection scenarios
Urban redesign solutions	Sidewalk, crossings and intersection design	Sidewalk Design, New Bike Lanes, Intersection Redesign & Traffic-Calming, Raised Intersections/Crossings, Accessibility and Safety Enhancement, Climate-Friendly Spaces
	Bicycle lane extension	
	Traffic calming measures	
	Accessibility and safety enhancement	
	Climate measures	
Public engagement	Survey preparation	Engage the public in the planning and implementation process. Seek input from residents, businesses, and road users to ensure the solutions align with community needs.
	Workshops & walking audits	
Monitoring and evaluation	Impact evaluation	Continuously collect data on traffic patterns, safety indicators, and user satisfaction to inform future adjustments.
Collaboration with stakeholders	Stakeholder coordination	Facilitate ongoing communication and collaboration to address emerging challenges and opportunities.

Timeline

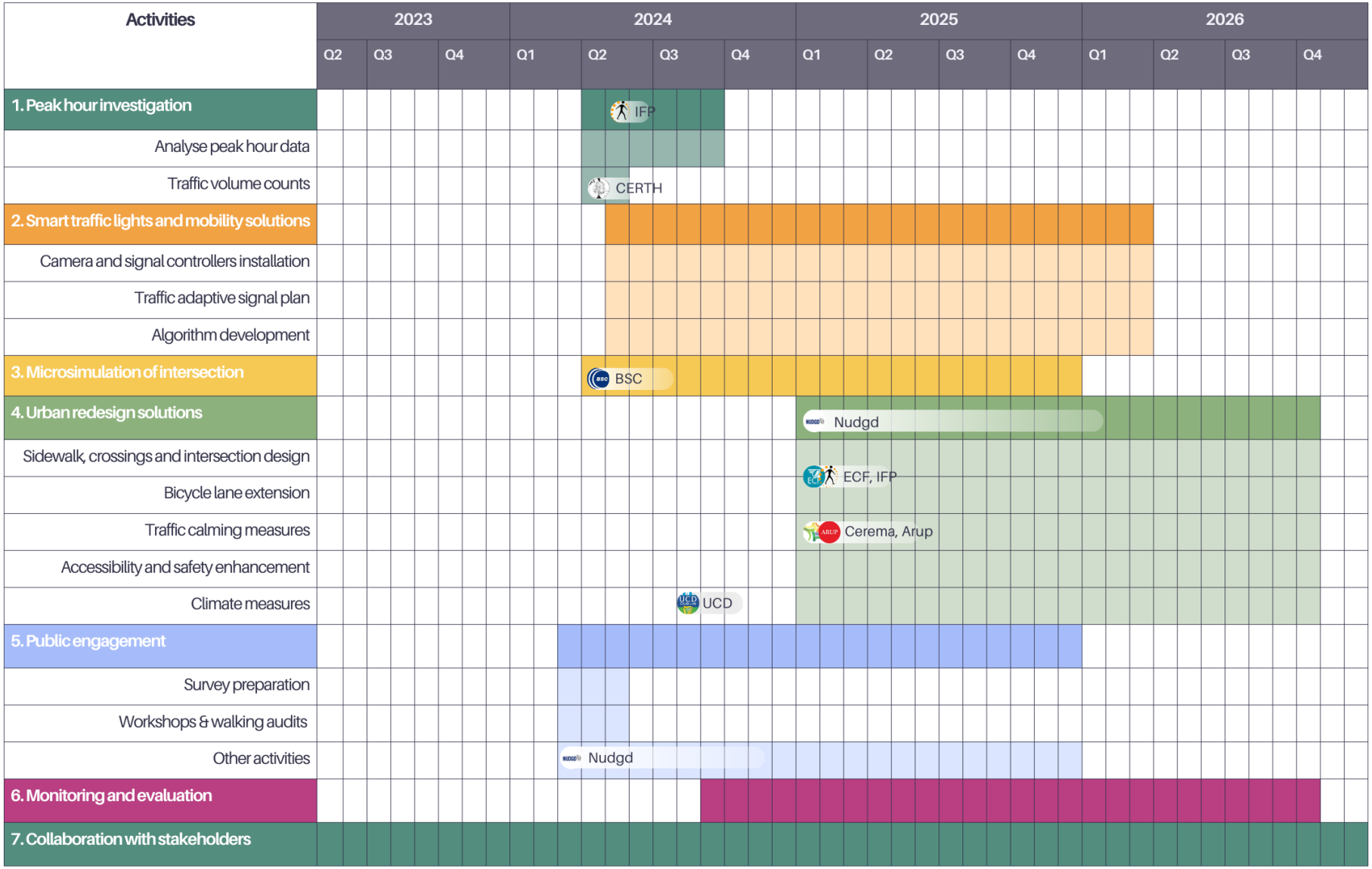

Figure 41. Gantt chart of Zagreb SSML with horizontal partner contributions.

Governance and stakeholder involvement

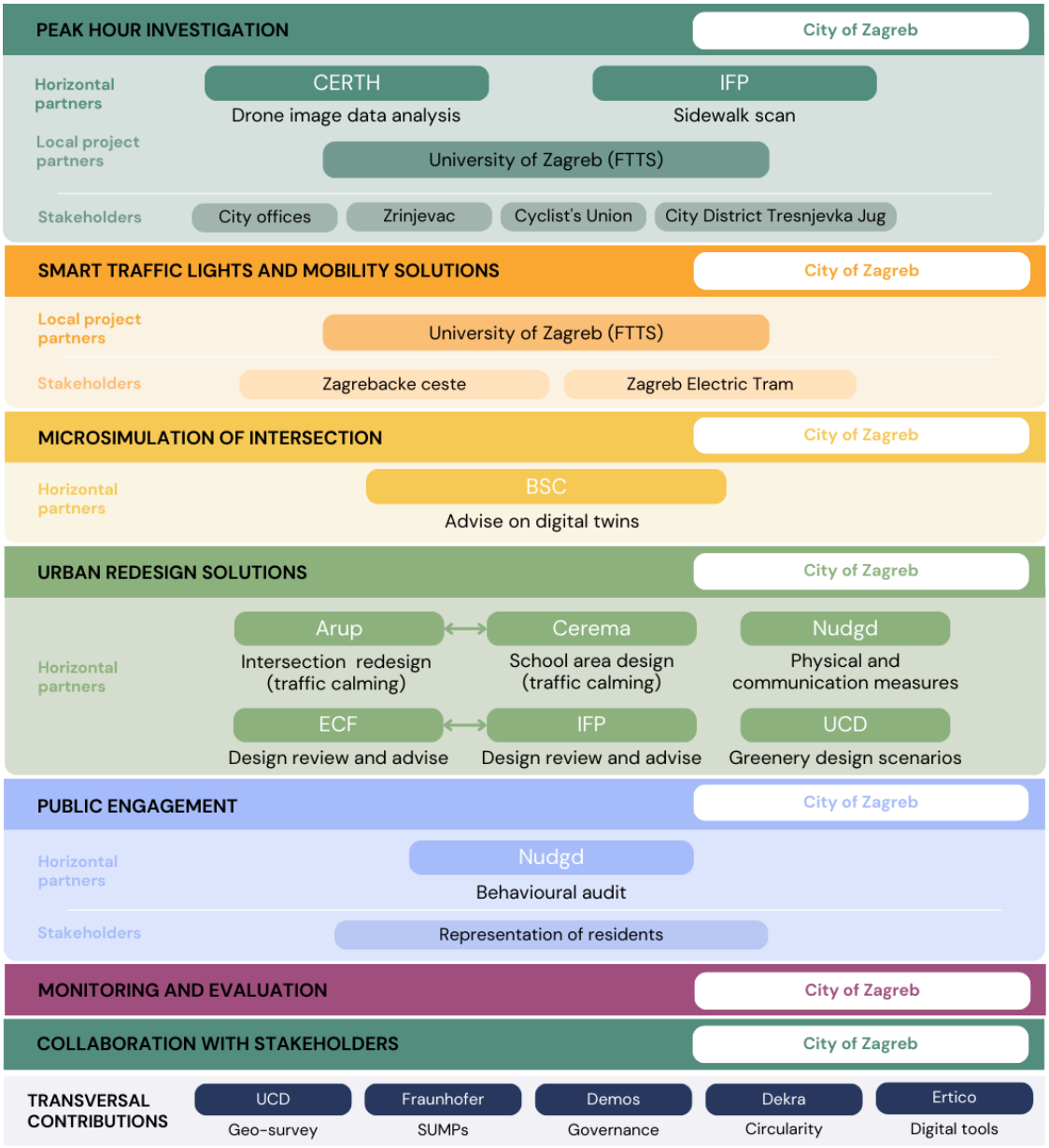

Figure 42. Stakeholder involvement in the Zagreb SSML.

Risks and mitigation actions

Table 41. Risks and mitigation actions identified for the Zagreb SSML.

Potential risks	Mitigation actions
Lack of historical data about road users	Conduct intensive traffic counting and data collection to gather comprehensive historical data.
Poor communication and coordination between city offices	Establish and maintain constant communication channels between city offices.
Difficulty in engaging stakeholders and maintaining their engagement	Implement a comprehensive stakeholder engagement plan including regular updates

Financial constraints	Seek financing from the city budget and explore alternative funding sources.
Lengthy tender procedures for implementing PT and VRU priority	Start tender procedures in 2024 to streamline the process and expedite project implementation.
Resistance from residents due to increased vehicle delays and lack of parking spaces	Maintain constant communication with residents, and involve them in decision-making processes.
Challenges in prioritising both PT and VRU simultaneously	Prioritise initiatives based on intensive traffic counting and stakeholder consultation to balance the needs of PT and VRU users effectively.

KPIs

Table 42. Key Performance Indicators identified for the Zagreb SSML.

Environmental			
Increase of percentage of green areas	Shade coverage	Trees planted	Reduction of greenhouse gases
Social			
Increase of safety index for VRU		Number of traffic calming measures	
Operational			
Reduction of waiting times for VRU	Priority PT	Increase of number of VRU at intersection	
Modal split change	Increase of cycling paths	Increase in bicycle parking lots	
Other: Potential of replication of measures on other sites in Zagreb			

Conclusions

The REALLOCATE SSML in Zagreb aims to align with the city's goal of reducing greenhouse gas emissions by 40% by 2030. It prioritises public transport and VRU at intersections, reallocates car-oriented space, greens intersection zones, and implements traffic safety measures. By reducing delays for public transport, promoting cycling and public transport, enhancing pedestrian and cyclist safety, expanding green areas, and lowering emissions the SSML directly contributes to Zagreb's Sustainable Energy and Climate Action Plan, its Transport System Master Plan and cities climate mission. Horizontal partners support the SSML by redesigning intersections with a focus on traffic calming and active mobility infrastructures, along with integrating urban greenery and addressing behavioural aspects.

2.10 Bologna, Italy

2.10.1 Bologna - Neutral, safe and sustainable school district along the Knowledge Path

Short description

The aim of Bologna's SSML is to implement the public space of the school district in collaboration with the school, students and local stakeholders in order to make it neutral and comfortable to encourage a sustainable, safe and autonomous daily home-school mobility.

Objectives

The intervention seeks to construct via Gobetti school square, along the Knowledge Path (Via della Conoscenza), is more than a bike path: it's an urban reappropriation of a public space for the local communities. It integrates public spaces, promotes sustainable mobility, and strengthens district identities through thematic clusters.

Location(s)

The SSML will focus on Parcheggio Scuole elementari Grosso, where via Gobetti school square will rise, along the Knowledge Path (Via della Conoscenza).

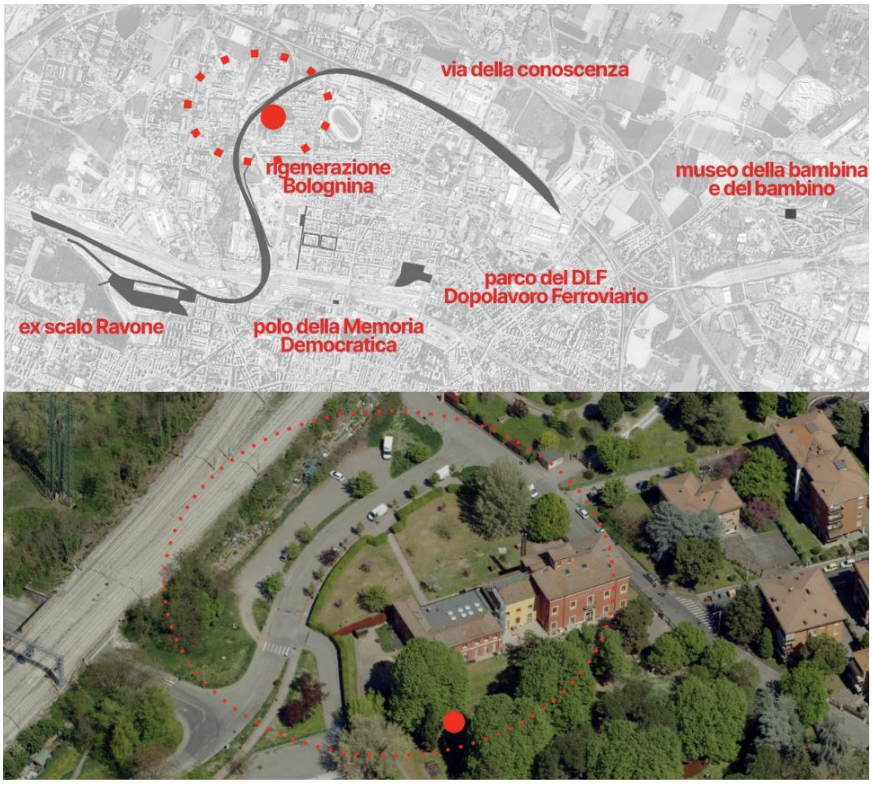

Figure 43. Knowledge path (top) and Gobetti school square (bottom). Source: Comune di Bologna and Fondazione Innovazione Urbana 2024.

Actions and activities

Table 43. Actions, activities and objectives of the Bologna SSML.

Action	Activity	Objectives
Co-creation and stakeholder engagement	Co-creation sessions and workshops	Workshops to identify challenges and needs of the SSML area. Identification of priorities and potential interventions.
	Data analysis and sharing	
Behavioural and Choice Design Interventions	Awareness campaigns	Introduction of awareness campaigns promoting the benefits of sustainable and active commuting. Increase the number children and parents moving on feet/by bike
Active Mobility Infrastructure Deployment	Input from the SSML to the creation of sustainable school mobility guidelines	Creation of dedicated lanes, paths, and crossings to facilitate seamless and secure active mobility, in relation with the Knowledge Path and Scientific Pole (University and CNR). Reduce the car traffic, increase safety and sustainable and autonomous for children
	Creation of active mobility concept for at the district scale	
Cycling-walking-Focused Signage and Amenities	Communication and information tools for cyclists and pedestrians	Installing cycling-focused signage along the Knowledge Path to guide and inform cyclists and pedestrians about the transformation. Make the Knowledge path a more accessible and recognisable
Customised Safety Auditing Procedures	Implementation of design features	Implementing design features that enhance visibility and prioritise safety for all road users. Encourage children's autonomy in the home-school journey
Immaterial Interventions - Foot and Bicycle Buses	Scheduling and routing	Implement efficient scheduling and routes to optimise the effectiveness of foot and bicycle buses. Encourage children's autonomy in the home-school journey
Community Engagement Programs	School accessibility planning	Involving the local community in the decision-making process, ensuring that solutions align with their needs and preferences. Encourage residents to use bikes and walking instead of cars for city commutes
	Co-design phase with citizens	
Monitoring and Evaluation	Impact assessment	Collecting data on commuting patterns, safety metrics, and community perception and satisfaction for continuous improvements. Improve current routes around Park Grosso

Timeline

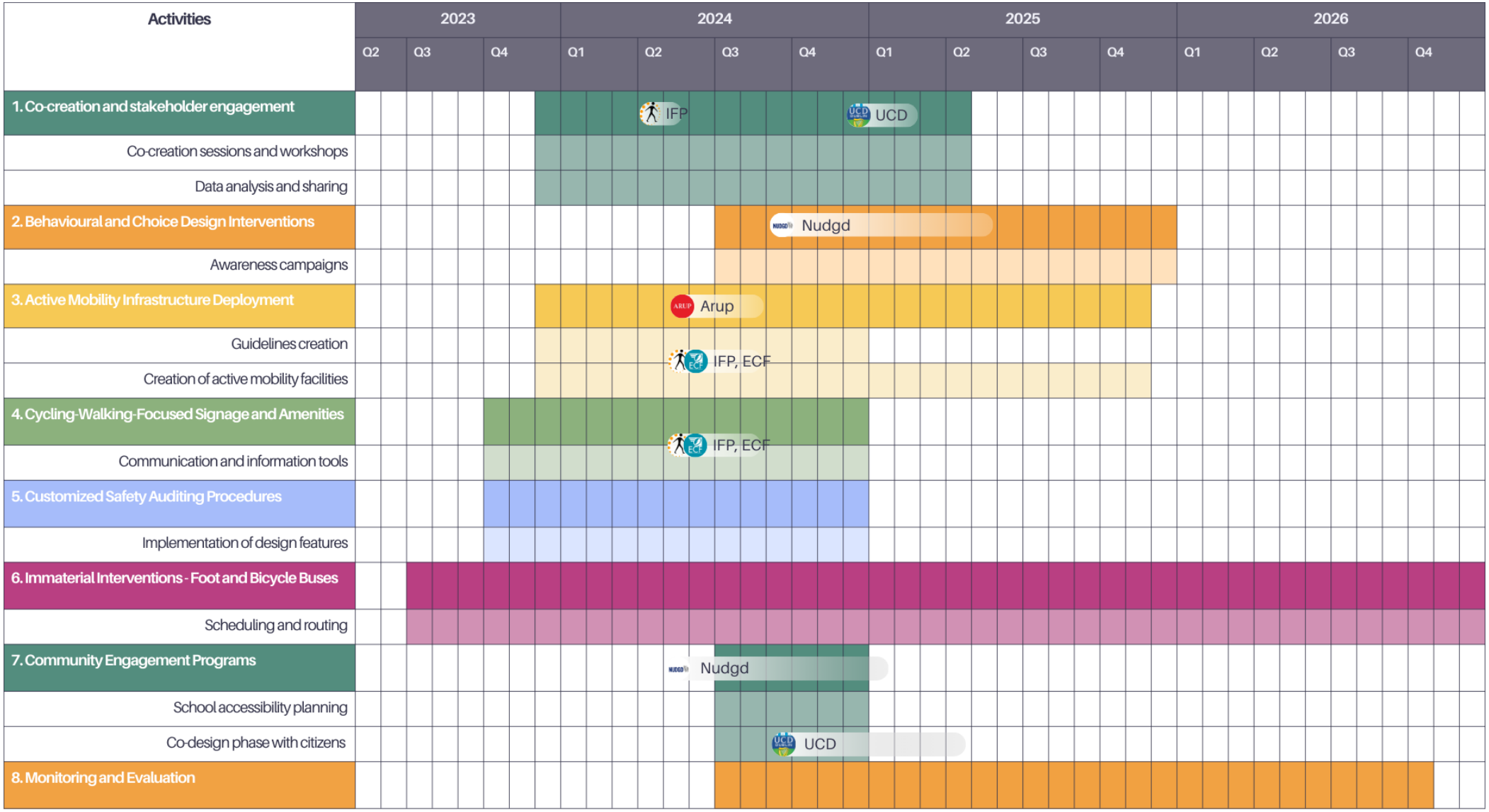

Figure 44. Gantt chart of Bologna SSML with horizontal partner contributions.

Governance and stakeholder involvement

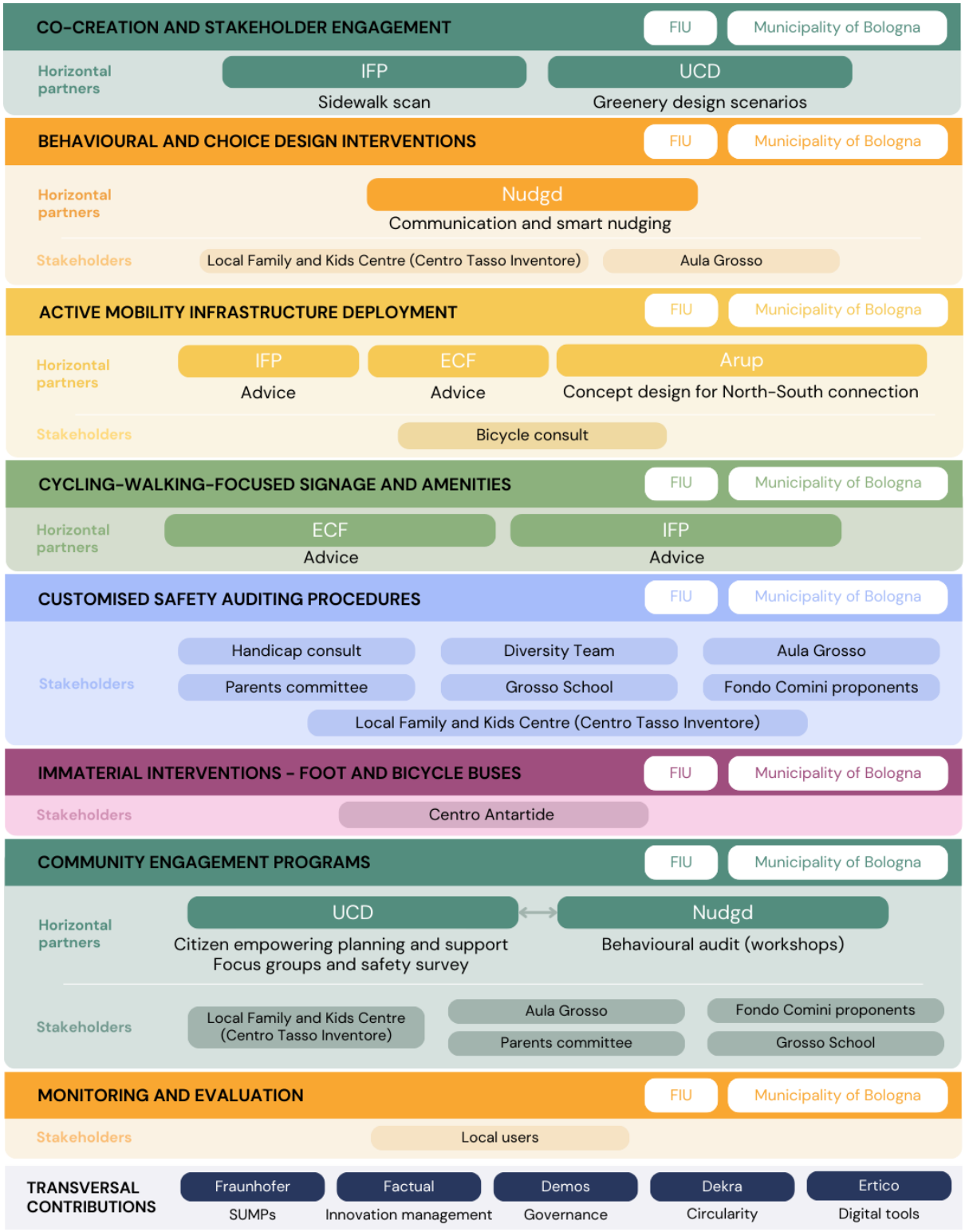

Figure 45. Stakeholder involvement in the Bologna SSML.

Risks and mitigation actions

Table 44. Risks and mitigation actions identified for the Bologna SSML.

Potential risks	Mitigation actions
Creation of interventions not in line with the needs of the communities on site	Designing activities of engagement in the territory
Creation of conflicts between various road users	Involvement of all users in the participation process
Not identifying the correct target of the information signs making signage ineffective	Focus on the topic during the living lab
Not identifying the needs of all road users	Targeted meetings with specialised local associations and bodies
Existing infrastructures are difficult to flex and equipped to accommodate changes in Foot and Bicycle busses paths	Carry out small and timely interventions to make up for infrastructural deficiencies
Parent communities that are against interventions in the area	Monitoring during engagement meeting in the territory
Defining aspects too early which then turn out to be complex to monitor	Gradually define the aspects to monitor based on project progress

KPIs

Table 45. Key Performance Indicators identified for the Bologna SSML.

Environmental			
Total area converted to permeable surfaces	Total trees planted	Enhanced cycling and pedestrian paths	
Social			
User satisfaction with active mobility interventions	Community perception of safety and security	Participation in co-creation workshops	Satisfaction with active mobility infrastructure
Satisfaction of pedestrians and cyclists with public spaces and intersections	Perception of pedestrian and cyclist comfort and safety	Ideas generated and implemented from workshops	
Operational			
Usage of new active mobility infrastructure	Increase in intersection visibility	Decrease in motorised vehicle trips	Safety incidents reported before and after audits
Increase in walkability and accessibility	Increase in shade availability for pedestrians	Increase in bike parking spaces	Convenience and accessibility of cycling infrastructure

Conclusions

The REALLOCATE SSML in Bologna focuses on enhancing security and reducing reliance on private carbon-fuelled vehicles by promoting active mobility. The SSML will reconfigure a school area to improve access for bicycles and pedestrians, benefiting the entire surrounding community. These actions align with Bologna's mission for climate neutrality and its Sustainable Urban Mobility Plan (SUMP), which aims to reduce CO_2 emissions by 2030. By incentivising active mobility, REALLOCATE supports these objectives while also contributing to the city's Climate Plan through greening activities. Horizontal partners bring expertise in active mobility and urban design to promote usage, citizen engagement, and behaviour influence, enhancing the initiative's impact.

3 Conclusions

The deliverable offers an overview of the deployment plans and implementation strategies for the 15 urban and peri urban SSMLs within the REALLOCATE project. It provides a description of each SSML, outlining their respective deployment plans, including specific action, activities, objectives, timing and involved stakeholder.

A significant component of this deliverable is the identification of risks faced by cities in deploying the SSML activities and the strategies devised to mitigate those risks. It highlights the importance of stakeholder engagement, resource allocation, and infrastructure enhancement as key elements for successful deployment.

The deliverable also presents the main Key Performance Indicators (KPIs) and Gantt charts developed for each SSML, serving as a structured framework for monitoring progress and ensuring timely execution of activities. This framework will be updated periodically to reflect the evolving nature of the project and the insights gained from the implementation phase. However, it is important to note that these findings are tentative and subject of changes which might arise during the task 2.3, the implementation of the SSML activities.

With the formulation of comprehensive plans and strategies for the implementation, this deliverable also points out changes that have been made to the SSMLs. For instance, Heidelberg SSML 1 sets its focus on developing a regional planning process with adjoining municipalities to reduce commuter emissions. Depending on this process, interventions will be specified. Gothenburg SSML 2 broadens its scope by considering the adjacent Arena area, comprising sports events, expositions, and other activities. The SSML, therefore, aims to transform visitors’ mobility commuting to this area. Lastly, Barcelona SSML 1 focuses on

the relationship between bicycles, pedestrians, and micromobility vehicle users in shared spaces. It will be investigated from a holistic perspective, including cognitive, spatial, and regulatory aspects.

Overall, this deliverable provides a comprehensive, SSML-oriented overview of the REALLOCATE project's deployment and implementation strategies. The information collected will also serve for further discussion and clarification about the actions that will be tested and assessed during the project activities. While the deployment plans provide a structured framework, they must also remain adaptable to accommodate potential changes during implementation. Such flexibility is crucial to address variations in project partner contributions and unforeseen challenges. For instance, if certain project resources or data are insufficient or unavailable, partner support strategies will be adjusted accordingly.

As such, we expect the deliverable to be used by all project partners, particularly the cities and partners involved in their activities. However, as this deliverable is public, it also aims to serve as a framework or example for other projects or cities to keep track of their project activities and stakeholder actions.

Finally, the successful implementation of these 15 SSMLs, covering a variety of topics such as safety and sustainability around schools, traffic reorganisation in peri-urban and central areas, space reallocation, and hi-tech solutions for safety and accessibility, is expected to positively impact public spaces and encourage sustainable travel behaviour. These outcomes align with the broader city and EU strategies. By fostering efficient urban mobility solutions while rebalancing street/public space allocation, these SSMLs will contribute to creating healthier and more liveable urban environments, aligning with the EU's long-term vision for sustainable cities.

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