

Sustainable Mobility in Metropolitan Regions (SMMR Phase II)

Making Sustainable Mobility more real in medium-sized metropolitan regions in ASEAN

The Challenge: Address metropolitan mobility challenges before they grow

50% of the 669 million ASEAN Member States citizens live in the region's rapidly growing cities. As a result, urban mobility needs are growing, and traffic is increasing. This creates metropolitan regions that are characterised by numerous functional interactions and dependencies between core cities, adjacent settlements, and the wider surrounding area. The transport sector today is responsible for around a quarter of total energy-related greenhouse gas emissions in the ASEAN region.

At the ASEAN level, the importance of sustainable transport and of integrated planning has been recognised by the Kuala Lumpur Transport Strategic Plan 2016-2025 and the ASEAN Regional Strategy on Sustainable Land Transport. However, the challenges of metropolitan regions have not yet been explicitly addressed in existing strategies. Local decision-makers' understanding of sustainable mobility approaches needs to be enhanced, and models for cooperation across boundaries and government agencies be developed further.

The Sustainable Mobility in Metropolitan Regions (SMMR) project is being implemented by GFA Consulting Group GmbH & consortium partners on behalf of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, with the first project phase (SMMR I) between 2019 and 2021 and its second phase (SMMR II) since November 2021 (workplan approval pending).

Our Approach: The AVOID – SHIFT – IMPROVE (ASI) mobility strategy

On 11th November 2021, the 27th ASEAN Transport Ministers Meeting has issued the *Phnom Penh Declaration on Sustainable Urban Mobility* supporting the implementation of the AVOID–SHIFT–IMPROVE approach:

- AVOID the need for transportation over long distances for everyday social, economic and recreational activities, through integrated land use and transport planning;
- SHIFT mobility to the most efficient and sustainable transport modes depending on location and purpose, through regulations and incentives for the provision of convenient, good-quality, energy and emission efficient as well as environmentally friendly transport services;
- IMPROVE transport technologies, to make each transport mode and supporting ecosystem less harmful, more effective, efficient, and accessible.

Project name	Sustainable Design of Urban Mobility in Middle-Sized Metropolitan Regions in ASEAN (SMMR)
Commissioned by	Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung (BMZ)
Project region	ASEAN, all member states, with focus on Cambodia (host country), Lao PDR, Thailand, and Vietnam
Lead executing agency	Association of Southeast Asian Nations (ASEAN) Land Transport Working Group (LTWG)
Duration	01.11.2021 – 31.10.2024

The Benefits on 4 Levels

The SMMR Project supports local, national, and international transport policy makers, experts, operators, and stakeholders in implementing AVOID–SHIFT–IMPROVE strategy, on 4 levels:

- ASEAN policy papers guiding the implementation of the Kuala Lumpur Transport Strategic Plan and Regional Strategy on Sustainable Land Transport in greater detail;
- Thematic networks and common projects among metropolitan regions in ASEAN Member States that translate these policies into action;
- Lighthouse projects in focus regions that provide good practice reference for innovative sustainable transport systems and new forms of cooperation among stakeholders;
- Capacity building in theory and practice.



ASEAN policy papers

With the support of SMMR Phase I, ASEAN has issued two policy documents aimed at assisting national and local authorities in developing new forms of metropolitan scale institutional cooperation and of participatory integrated planning. These documents are available for download in English, and in translations into Indonesian, Khmer, Lao, Thai and Vietnamese languages, from the ASEAN and the www.smmr.asia websites.

Toolbox for the Establishment of Metropolitan Transport Executives (MTE)

MTE is a generic term to designate purpose-built agencies that have in common to effectively coordinate and execute on a tactical level the sustainable transport strategies decided and supported by all the responsible political authorities. The MTE Toolbox provides responsible authorities with tools to find their way out of the institutional labyrinth and finally enable themselves to design and implement adequate sustainable transport policies following ASI strategies. The ASEAN Transport Ministers encourage the development of MTE, including the participation of all stakeholders in the transport ecosystem.

Guidelines for the Development of Sustainable Urban Mobility Plans (SUMP)

SUMP introduce participatory and interdisciplinary methods into transport planning. The guidelines present the four phases of the SUMP process tailored to current planning practices and resources, as well as its main outputs. For each phase, the Guidelines provide common definitions, examples, lessons learnt, best practices and recommendations on different aspects of the planning process while considering different institutional, environmental, and social contexts and conditions. The ASEAN Transport Ministers encourage the development of SUMP at national, metropolitan and city levels.

SMMR Phase II will support ASEAN in the development of two additional policy papers that address the challenges of two critical elements of urban transport policy to be developed and implemented by MTE, using SUMP processes:

Green Freight and Urban Logistics Strategy

Similarly to people mobility, the transport of goods in cities is a growing challenge that can be met by a growing array of modern solutions. A guideline for environmentally and climate-friendly freight and logistics in metropolitan regions will be elaborated taking into account ASEAN digitalisation and decarbonisation strategy.

Electric Vehicles Strategy

All modes of urban transport are subject to the trend of electrification. ASEAN cities make intensive use of light vehicles for individual mobility, community transport and urban logistics. Their electrification has already begun. ASEAN guidelines for practical implementation in national, metropolitan, and local authorities for Light Electric Vehicles can promote the wider adoption of the Electric Vehicles and decisively accelerate the electrification of urban transport in ASEAN and as well as strengthen ASEAN Member States' national industries in this field.

One of many electric Jeepney designed for Community Transport in the Philippines

Thematic Networks and common projects in metropolitan regions in ASEAN Member States

Making sustainable mobility more real through AVOID–SHIFT–IMPROVE strategies supported by ASEAN strategies, plans, and guidelines is a common effort of many stakeholders across all boundaries. SMMR Phase II supports this effort through the creation of thematic networks around common approaches and projects involving public authorities, private partners, academia, and civil society.

AVOID gridlock through effective planning

The Thematic Network under the AVOID theme addresses questions of long-term integrated planning and policy. It proposes capacity building activities and community of practice referring to the MTE toolbox and SUMP guidelines. This includes, but is not limited to, the common project of establishing Sustainable Urban Transport Index reports with the participating metropolitan regions from all ASEAN Member States, as to establish a common framework and baseline for evaluation and comparison of mobility systems.

SHIFT to sustainable mobility and logistics

The Thematic Network under the SHIFT theme brings together stakeholders involved in the design, implementation, and operation of private and public transport systems and proposes variety of capacity building activities on specific aspects of Sustainable Urban Mobility Plans, Intelligent Transportation Systems, as well as projects related to public transport route mapping and scheduling.

IMPROVE light electric vehicle technology & design

The thematic network under the IMPROVE theme will concentrate on electrification of light vehicles in their respective categories: individual vehicles with 2, 3 or 4 wheels, for mobility services and logistics; and buses for community transport. In all ASEAN member states, many initiatives have explored opportunities for designing and efficiently deploying fleets of such vehicles. Capacity building activities and common projects will contribute to develop excellence of ASEAN in Light Electric Vehicles regulation, technology, and operation.



Examples of Lighthouse projects and work programmes in focus regions

Making Sustainable Mobility more real requires the design and implementation of full-scale projects capable of demonstrating real life innovation leading to governance, public and private investments and mobility practices that are more sustainable economically, socially, and environmentally than previous car-dependent development models.

With its partners in 3 Focus regions and other members of the SMMR Thematic networks and additional third-party support, SMMR strives to design, implement, evaluate, and further develop such innovative lighthouse projects that are also part of larger ASEAN plans and strategies on implementation of AVOID–SHIFT–IMPROVE transport, ASEAN Connectivity, Digitalisation and Covid-19 recovery.

Cross-border cable car between Vientiane (Lao PDR) - Nong Khai (Thailand)

With support of SMMR I, local and national authorities have conducted a visioning process exploring the possibilities for improving cross-border mobility and elaborated the concept of complementing the existing Thai-Lao Friendship Bridge with a cross-border cable car for passenger transport that would achieve several strategic objectives:

- Quickly increase the border crossing capacity across the river Mekong capable of meeting the increased demand generated by the Vientiane – Kunming railway, while
- Improving the quality of service and maintaining a high modal share for public transport in cross-border travel, and
- Creating a significant landmark and tourist attraction that will boost local and international tourism.



Riding the shuttle bus across the Lao-Thai Friendship Bridge



In 2022, the Cities Development Initiative Asia (CDIA) will conduct a project preparation study for the cross-border cable car. SMMR II will accompany the study and develop additional, complementary activities with the partners in the Focus region, such as establishing baseline studies of cross-border traffic following the re-opening of the Thai-Lao Friendship Bridge and start of operations of the Kunming – Vientiane rail link for freight and passengers; analysing the local, regional and long distance bus and coach services available for cross-border travel; developing a concept for the electrification and up-scaling of community transport in Nong Khai and Thanaleng and promoting active mobility along the River Mekong and adjacent districts.

Inter-provincial quality bus corridor between Can Tho City and neighbouring provinces in the Mekong Delta

With support of SMMR I, Can Tho City and neighbouring provinces have explored the possibilities for improving inter-provincial public transport. This led to the formulation of a concept of creating long distance bus corridors drawing on solutions proven in the context of Bus Rapid Transit (BRT) and public-private mutual commitments toward quality infrastructure and operations. These corridors would:

- Focus on vehicle improvements, tactical infrastructure interventions, and Intelligent Transport Systems solutions for improved service quality,
- Establish small, medium, and large intermodal interchange hubs to interconnect with rural and urban mobility services along the corridor,
- Coordinate with Land Use Planning departments to implement Transit Oriented Development to maintain decentralised settlement patterns.

In 2022, the Cities Development Initiative Asia (CDIA) will conduct a project preparation study for the inter-provincial quality bus corridor. SMMR II will accompany the study and develop additional, complementary activities with the partners in the focus region, such as establishing baseline studies, analysing rural and urban community transport in the entire Mekong Delta region.



Electric scooter sharing in Phnom Penh

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Implementing the Phnom Penh Declaration on Sustainable Urban Mobility in Cambodia

Cambodia is the host country of the SMMR Project and was country chair of the 27th ASEAN Transport Ministers meeting on 11th November 2021 that has adopted the *Phnom Penh Declaration on Sustainable Mobility*. Based on pilot activities during SMMR I, SMMR II will support the Ministry of Public Works and Transport (MPWT) and all stakeholders in measures and projects in the implementation of the Phnom Penh Declaration on Sustainable Urban Mobility recommendations and active participation in the ASEAN wide thematic networks and common projects.

In 2022 and following years, SMMR II will be instrumental in:

- Creating a legal framework for the implementation of the Phnom Penh Urban Transport Board in Phnom Penh and metropolitan transport executives (MTE) in other metropolitan cities;
- Elaborating a Sustainable Urban Mobility Plan (SUMP) in the Phnom Penh district of Chbar Ampov (in coordination with the project Build4People, financed by the German Federal Ministry of Education and Research);
- Promoting active mobility at all levels of infrastructure design, traffic safety and social support, through schools and civil society organisations in urban, sub-urban and rural settings;
- Supporting the MPWT Intelligent Transport Systems strategy, namely through the developPPP project Improving Road Safety and Air Quality (IRSAQ) with DKT GmbH;
- Building the Cambodian platform for the promotion of electric vehicles and an action plan for the excellence of electric mobility.

Traffic modeling training of MPWT staff by SMMR

Success Factor: Capacity building in theory and practice

Capacity building is the key to innovation and sustainable improvements. The SMMR Project includes capacity building modules in all its activities:

- Workshops on ASEAN policy papers topics and recommendations with stakeholder working groups in metropolitan regions, co-prepared with local experts and project leaders.
- Peer-to-peer learning in thematic networks among SMMR correspondents and larger communities of practice in the larger networks of UNESCAP, MobiliseYourCity and TUMI, among others.
- Learning by doing associated with Lighthouse projects in Focus Regions and Common Projects among thematic network members, revolving about data acquisition, transport and traffic modelling, service planning, participatory processes, infrastructure, and vehicle design.



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