Intergovernmental Twelfth Regional Environmentally

Sustainable Transport (EST) Forum in Asia

28-31 October 2019 Hanoi, Viet Nam

Achieving Smart and Resilient Cities Through Low-Carbon and Intelligent Transport System

Country Report

(Draft)

< Myanmar >

This country report was prepared by the Government of Myanmar as an input for the Twelfth Regional EST Forum in Asia. The views expressed herein do not necessarily reflect the views of the United Nations.

Country EST Report (covering from Mongolia EST Forum 2018 to Viet Nam EST Forum 2019) a) Name of the Country:

b) Name, Designation and Line Ministry/Agency Respondent:

c) List other Line Ministries/Agencies contributing to preparation of the Country Report:

d) Reporting period: 2018-2019

With the objective of demonstrating the renewed interest and commitment of Asian countries towards realizing a promising decade (2010-2020) of sustainable actions and measures for achieving safe, secure, affordable, efficient, and people and environment-friendly transport in rapidly urbanizing Asia, the participating countries of the Fifth Regional EST Forum in Asia discussed and agreed on a goodwill and voluntary declaration - **"Bangkok Declaration for 2020 – Sustainable Transport Goals for 2010-2020**." At the Seventh Regional EST Forum held in Bali in 2013, the participating countries adopted the **"Bali Declaration on Vision Three Zeros- Zero Congestion, Zero Pollution and Zero Accidents towards Next Generation Transport Systems in Asia**" reinforcing the implementation of Bangkok 2020 Declaration (2010-2020) with emphasis to zero tolerance towards congestion, pollution and road accidents in the transport policy, planning and development. Bali Vision Three Zeros calls for a paradigm shift in thinking on the role of motorization and mobility in realizing sustainable development in Asia. In the Eighth Regional EST Forum in Colombo, member countries adopted the **"Colombo Declaration"** for the promotion of next generation low-carbon transport solutions in Asia. Subsequently, EST Forum held in Vientiane, Lao PDR in 2017, the member countries adopted the **"Vientiane Declaration on Sustainable Rural Transport towards Achieving the 2030 Agenda for Sustainable Development.**"

Each member country of the Forum is kindly requested to prepare a consolidated country report (by <u>15 August 2019</u>) reflecting how EST trends and developments have taken place in the country from the Mongolia EST Forum 2018 to the Viet Nam EST Forum 2019 around the Goals of the Bangkok 2020 Declaration as an interim assessment following the below format. You are most welcome to add extra pages or sections to share any major on-going initiatives or future plans, including mega transport projects, transport master plans, special transport corridor development, expansion of railways and rail route developments, etc.

The objective of the country reporting is to share among international community the voluntary progress/achievements/initiatives include various challenges faced by countries in implementing each of the underlined goals of the Bangkok 2020 Declaration to realize the Bali Vision Three Zeros, the Colombo Declaration and the Vientiane Declaration. This would help development agencies, donors, development banks in assessing the sustainable transport needs and challenges to better devise their existing as well as future capacity building programs and operations in sustainable transport areas.

By email to: est@uncrd.or.jp

Goal	Goal Description	Voluntary Progress/Achievements/Majo	or Initiatives, including any transport master plans,
No.		development of special transport corrid	ors, in Implementing the Bangkok 2020 Declaration
		from the Mongolia EST Forum 2018 to	the Viet Nam EST Forum 2019.
I. Stra	tegies to <u>Avoid</u> unnecessary travel and reduce trip distances		
"Avoid" Strategy	Formally integrate land-use and transport planning processes and related institutional arrangements at the local, regional, and national levels	 □ Not yet √ □ Some progress (design – piloting) □ Largely in Place □ Fully Completed (Please Check the box) Please add few specific examples of initiat developed or under development (or) any pinclude websites where relevant. 	ww.unescap.org/sites/default/files) lan (YUTRA 2016-2040)

Goal	Goal Description	Voluntary Progress/Achievements/Major Initiatives, including any transport master plans,
No.		development of special transport corridors, in Implementing the Bangkok 2020 Declaration
		from the Mongolia EST Forum 2018 to the Viet Nam EST Forum 2019.
	Examples of important actions that you plan to carry out in next year	
		Yangon Elevated Expressway Public Private Partnership Project
		What importance does this particular EST Goal attach in your country's on-going efforts in
		achieving (a) the Sustainable Development Goals (SDGs), (b) New Urban Agenda, and (c) Paris
		Climate Agreement?
		• (a) the Sustainable Development Goals (SDGs)
		• (b) New Urban Agenda

Goal	Goal Description	Voluntary Progress/Achievements/Major Init	tiatives, including any transport master plans,
No.		development of special transport corridors, in	n Implementing the Bangkok 2020 Declaration
		from the Mongolia EST Forum 2018 to the Vi	iet Nam EST Forum 2019.
"Avoid" Strategy	Achieve mixed-use development and medium-to-high densities along key corridors within cities through appropriate land - use policies and provide people - oriented local access, and actively promote transit-oriented development (TOD) when introducing new public transport infrastructure	 √ □ Some progress (design – piloting) □ Largely in Place □ Fully Completed (Please Check the box) Please add few specific examples of initiative developed or under development (or) any major include websites where relevant. • Myanma Railway is planning to developed or under developed.	 Barriers/Challenges faced in implementation: At present, Myanma Railways (MR) is trying to enhance the capacity building and rail infrastructure such as upgrading the major rail line connectivity to get the international standardization. In very near future, the MR will keep abreast with ASEAN countries and neighboring countries in railway transport sector. s, pilot projects, major policies or programmes or investment decisions. Please attach reports or pop the Pazundaung Railway Station area as rail and comprehensive development as mixed-use

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		from the Mongolia EST Forum 2018 to the Viet Nam EST Forum 2019.	
Examples of important actions that you plan to		an to carry out in next year	
		• Myanma Railways expects to take	e prefeasibility or fully scale study this project in next
		year.	
		What importance does this particular EST Goal attach in your country's on-going e	
	achieving (a) the Sustainable Development Goals (SDGs), (b) New Urban A		
		Climate Agreement?	
		• (a) the Sustainable Development G	oals (SDGs)
3	Institute policies, programmes, and	Any action had been taken so far?	Barriers/Challenges faced in implementation:
	projects supporting Information and	\Box Not yet	• Technology
	Communications Technologies	\Box Some progress (design – piloting)	• Infrastructure
	(ICT), such as internet access,	\checkmark \Box Largely in Place	Budget constraint
	teleconferencing, and telecommuting,	□ Fully Completed	
	as a means to reduce unneeded travel	(Please Check the box)	

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		from the Mongolia EST Forum 2018 to the Viet Nam EST Forum 2019.
		 Please add few specific examples of initiatives, pilot projects, major policies or programmes developed or under development (or) any major investment decisions. Please attach reports or include websites where relevant. E-government Master Plan
		 At present, four operators run telecommunication services in Myanmar such as MPT, Telenor, Ooredoo and Mytel Telecommunication Law and Rules were enacted Largely use of mobile banking system Use of mobile payment system
		 Examples of important actions that you plan to carry out in next year Pilot project at four cities with the World Bank's loan aiming at providing the need of telecommunication of the people nationwide

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			from the Mongolia EST Forum 2018 to	the Viet Nam EST Forum 2019.	
			1 1	ST Goal attach in your country's on-going efforts in	
			Climate Agreement?	t Goals (SDGs), (b) New Urban Agenda, and (c) Paris	
			• (a) the Sustainable Development G	Joals	
II. \$	Strate	egies to <u>Shift</u> towards more sustainable	e modes		
	4	Require Non-Motorized Transport	Any action had been taken so far?	Barriers/Challenges faced in implementation:	
gy		(NMT) components in transport	\Box Not yet	Rapid motorization	
rate		master plans in all major cities and	$\sqrt{\Box}$ Some progress (design –	• Increasing number of motorcycles and lesser	
° St		prioritize transport infrastructure	piloting)	bicycle users	
"Shift" Strategy		investments to NMT, including	□ Largely in Place	• Weakness in planning	
IS,,		wide-scale improvements to	□ Fully Completed	• Difficult to change people's behaviors	
		pedestrian and bicycle facilities,	(Please Check the box)		

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	development of facilities for intermodal connectivity, and adoption of complete street design standards, wherever feasible	 Please add few specific examples of initiatives, pilot projects, major policies or programmes developed or under development (or) any major investment decisions. Please attach reports or include websites where relevant. Construction of separate roads for bicycles in Mandalay City Construction of separate roads and over bridges for pedestrians in Yangon City, Mandalay City and Nay Pyi Taw City In Yangon City, which is the most populated city in Myanmar, pedestrian overpasses were built in twelve crowded areas. During 2019, two overpasses are being built for pedestrians.
		 Examples of important actions that you plan to carry out in next year What importance does this particular EST Goal attach in your country's on-going efforts in achieving (a) the Sustainable Development Goals (SDGs), (b) New Urban Agenda, and (c) Paris Climate Agreement? (a) the Sustainable Development Goals

Goal	Goal Description	Voluntary Progress/Achievements/Maj	jor Initiatives, including any transport master plans,
No.		development of special transport corri	dors, in Implementing the Bangkok 2020 Declaration
		from the Mongolia EST Forum 2018 to	o the Viet Nam EST Forum 2019.
"Shift" Strategy	Improve public transport services including high quality and affordable services on dedicated infrastructure along major arterial corridors in the city and connect with feeder services into residential communities	 Any action had been taken so far? □ Not yet □ Some progress (design – piloting) ✓ □ Largely in Place □ Fully Completed (Please Check the box) 	Barriers/Challenges faced in implementation: • Challenges of technology • Challenges of collaboration among concerned parties • Challenges of obeying rules and regulations nitiatives, pilot projects, major policies or programmes ny major investment decisions. Please attach reports or ead the old ones s and bus-stops lines and circular lines public transport buses

Goa	ıl	Goal Description	Voluntary Progress/Achievements/Majo	or Initiatives, including any transport master plans,
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			Examples of important actions that you pla	an to carry out in next year
			Introducing Yangon Payment Serv	ice (YPS)
			• Pilot project to upgrade bus service	es in Yangon
			1 1	ST Goal attach in your country's on-going efforts in nt Goals (SDGs), (b) New Urban Agenda, and (c) Paris
			 (a) the Sustainable Development G (b) New Urban Agenda 	Goals
	6	Reduce the urban transport mode	Any action had been taken so far?	Barriers/Challenges faced in implementation:
"Shift" Strategy		share of private motorized vehicles	\Box Not yet	
trat		through Transportation Demand	\checkmark \Box Some progress (design –	Budget constraint
î" S		Management (TDM) measures,	piloting)	Weakness of infrastructure
Shif		including pricing measures that	□ Largely in Place	
5,1		integrate congestion, safety, and	□ Fully Completed	
		pollution costs, aimed at gradually	(Please Check the box)	

Goal	Goal Description	Voluntary Progress/Achievements/Major Initiatives, including any transport master plans,	
No. development of special transpo		development of special transport corridors, in Implementing the Bangkok 2020 Declaration	
		from the Mongolia EST Forum 2018 to the Viet Nam EST Forum 2019.	
	reducing price distortions that directly	Please add few specific examples of initiatives, pilot projects, major policies or programmes	
	or indirectly encourage driving,	developed or under development (or) any major investment decisions. Please attach reports or	
	motorization, and sprawl	include websites where relevant.	
		• Upgrading taxi services	
		Introducing school bus system	
		• Upgrading facilities of bus-stands and bus-stops	
		Upgrading circular railways lines	
		Examples of important actions that you plan to carry out in next year	
		What importance does this particular EST Goal attach in your country's on-going efforts in	
		achieving (a) the Sustainable Development Goals (SDGs), (b) New Urban Agenda, and (c) Paris	
		Climate Agreement?	
		• (a) the Sustainable Development Goals	

Goal		Goal Description	Voluntary Progress/Achievements/Majo	or Initiatives, including any transport master plans,	
No.			development of special transport corridors, in Implementing the Bangkok 2020 Declaration		
			from the Mongolia EST Forum 2018 to	the Viet Nam EST Forum 2019.	
	7	Achieve significant shifts to more	Any action had been taken so far?	Barriers/Challenges faced in implementation:	
		sustainable modes of inter-city	\Box Not yet	• Myanmar has already proposed to UNESCAP	
		passenger and goods transport,	$$ \square Some progress (design –	eight potential places for international	
gy		including priority for high-quality	piloting)	importance on dry port, and already signed on	
Strategy		long distance bus, inland water	\Box Largely in Place	an intergovernmental agreement in Bangkok,	
"St		transport, high-speed rail over car and	□ Fully Completed	2012. But among the eight potential dry ports,	
"Shift"		air passenger travel, and priority for	(Please Check the box)	Yangon and Mandalay regions are	
S,,		train and barge freight over truck and		implementing under PPP scheme. Most of	
		air freight by building supporting		locomotive and container wagons are able to	
		infrastructure such as dry inland ports		carry the limited amount to operate	
				containerization.	

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		 Please add few specific examples of initiatives, pilot projects, major policies or programmes developed or under development (or) any major investment decisions. Please attach reports or include websites where relevant. Myanmar has already proposed eight potential dry port. Out of eight, two dry ports: Ywathargyi that is near with Yangon and Myitnge that is near with Mandalay, are being implemented under PPP scheme. Two developers such as Kerry Logistic Company and Resources Group Logistics Company are still operating containerization in rail sector.
		• Regarding intercity inland water transport, Yangon water bus operation has been lunched since 6 October 2017 which have achieved more interest of people gradually.
		Examples of important actions that you plan to carry out in next year
		• Myanma Railway expect to take prefeasibility or fully scale study for another remained important potential dry ports in Myanmar.

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			from the Mongolia EST Forum 2018 to	from the Mongolia EST Forum 2018 to the Viet Nam EST Forum 2019.	
			What importance does this particular ES	ST Goal attach in your country's on-going efforts in	
			achieving (a) the Sustainable Developmen	tt Goals (SDGs), (b) New Urban Agenda, and (c) Paris	
			Climate Agreement?		
			• (a) The Sustainable Development C	Goals (SDGs)	
III.	Strat	tegies to <u>Improve</u> transport practices a	ind technologies		
	8	Diversify towards more sustainable	Any action had been taken so far?	Barriers/Challenges faced in implementation:	
tegy		transport fuels and technologies,	\Box Not yet	• Insufficient Natural Gas (NG) from onshore	
Stra		including greater market penetration	🖌 🗌 Some progress (design –	blocks	
/e" ;		of options such as vehicles operating	piloting)	• High cost of offshore natural gas	
prov		on electricity generated from	\Box Largely in Place	• Difficult to change people's behaviors and	
"Improve" Strategy		renewable sources, hybrid	□ Fully Completed	awareness	
		technology, and natural gas	(Please Check the box)		

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		Please add few specific examples of initiatives, pilot projects, major policies or programmes
		developed or under development (or) any major investment decisions. Please attach reports or
		include websites where relevant.
		• Increase the numbers of public transport buses which are CNG-used vehicles
		• Increase the numbers of airport shuttle buses which are CNG-used vehicles
		Replace new and modernized machines in some CNG stations
		Maintenance of CNG pipelines and compressors
		• Testing CNG containers for the safety of the passengers
		• Safety training for the CNG-used vehicles' drivers
		Examples of important actions that you plan to carry out in next year
		• Planning to move some CNG filling stations for more convenience of public transport
		buses

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		· ·	ST Goal attach in your country's on-going efforts in nt Goals (SDGs), (b) New Urban Agenda, and (c) Paris Goals (SDGs)
"Improve" Strategy 6	Set progressive, appropriate, and affordable standards for fuel quality, fuel efficiency, and tailpipe emissions for all vehicle types, including new and in-use vehicles		Barriers/Challenges faced in implementation: tiatives, pilot projects, major policies or programmes y major investment decisions. Please attach reports or

Goa	al	Goal Description	Voluntary Progress/Achievements/Majo	r Initiatives, including any transport master plans,	
No.			development of special transport corridors, in Implementing the Bangkok 2020 Declaration		
			from the Mongolia EST Forum 2018 to the Viet Nam EST Forum 2019.		
Examples of important actions that you plan to carry out in		an to carry out in next year			
				T Goal attach in your country's on-going efforts in t Goals (SDGs), (b) New Urban Agenda, and (c) Paris	
e" Strategy	10	Establish effective vehicle testing and compliance regimes, including formal vehicle registration systems and	 Not yet Some progress (design – piloting) 	Barriers/Challenges faced in implementation: Budget constraint Technology 	
"Improve"		appropriate periodic vehicle	\checkmark \Box Largely in Place	• Lack of research	
		inspection and maintenance (I/M)	□ Fully Completed	Capacity	
5		requirements, with particular	(Please Check the box)		

Goal	Goal Description	Voluntary Progress/Achievements/Major Initiatives, including any transport master plans,	
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		from the Mongolia EST Forum 2018 to the Viet Nam EST Forum 2019.	
	emphasis on commercial vehicles, to	Please add few specific examples of initiatives, pilot projects, major policies or programmes	
	enforce progressive emission and	developed or under development (or) any major investment decisions. Please attach reports or	
	safety standards, resulting in older	include websites where relevant.	
	polluting commercial vehicles being	• Installing vehicle testing lanes in big cities for both cars and motorcycles	
	gradually phased-out from the vehicle	Practicing periodic vehicle inspection for vehicles' renewal registration	
	fleet, as well as testing and	Conducting End-of-Life vehicle scrubbing program	
	compliance regimes for vessels	Modifying Motor Vehicle Laws	
		Initiating RFID system	
		Applying ASEAN's Technical Requirements for Vehicles	
		Examples of important actions that you plan to carry out in next year	
		To release Road Safety and Vehicle Management Law	
		What importance does this particular EST Goal attach in your country's on-going efforts in	
		achieving (a) the Sustainable Development Goals (SDGs), (b) New Urban Agenda, and (c) Paris	
		Climate Agreement?	
		• The Sustainable Development Goals (SDGs)	

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			from the Mongolia EST Forum 2018 to	the Viet Nam EST Forum 2019.	
	11	Adopt Intelligent Transportation	Any action had been taken so far?	Barriers/Challenges faced in implementation:	
tegy		Systems (ITS), such as electronic fare	\Box Not yet	• Weakness in soft and hard infrastructures	
Strategy		and road user charging systems,	$\sqrt{-1}$ Some progress (design –	Budget constraint	
		transport control centres, and	piloting)		
prov		real-time user information, when	\Box Largely in Place		
"Improve"		applicable	□ Fully Completed		
,			(Please Check the box)		

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No.		development of special transport corridors, in Implementing the Bangkok 2020 Declaration
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		Please add few specific examples of initiatives, pilot projects, major policies or programmes
		developed or under development (or) any major investment decisions. Please attach reports or
		include websites where relevant.
		• Electric Toll Collection System has been started in Yangon-Mandalay Expressway since
		2018.
		• A Traffic Control Center was established in Yangon and the following functions are
		being undertaken:
		- Intelligent monitoring
		- E-police system
		- Checkpoint System
		- Variable Message Signs
		- Illegal parking controlling
		• In Mandalay, SCATS (Sydney Coordinated Adaptive Traffic System) and IVMS-8600
		Platform have been deployed.
		• Telematics system has been installed on the express buses and trucks which are running on Yangon-Mandalay highway.
		• For fleet management and control & command on the operation of city buses in Yangon,
		all the buses which are running in Yangon and allowed for public transport services were installed telematic devices.

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			from the Mongolia EST Forum 2018 to the Viet Nam EST Forum 2019.	
Examples of it			Examples of important actions that you pla	an to carry out in next year
				ST Goal attach in your country's on-going efforts in at Goals (SDGs), (b) New Urban Agenda, and (c) Paris
	12	Achieve improved freight transport	Any action had been taken so far?	Barriers/Challenges faced in implementation:
v		efficiency, including road, rail, air,	\Box Not yet	• Myanma Railways is facing up the old age of
ateg		and water, through policies,	$\sqrt{\Box}$ Some progress (design –	rolling stock and freight operation capability
, Sti		programmes, and projects that	piloting)	of wagons number is getting lower. The MR
"Improve" Strategy		modernize the freight vehicle	□ Largely in Place	is difficult to solve the problem of different
		technology, implement fleet control	□ Fully Completed	coupler type (Auto coupler type are high and
ιĮ,,		and management systems, and	(Please Check the box)	low type and ABC type of coupler wagons.)
		support better logistics and supply		

Goal Description	Voluntary Progress/Achievements/Major Initiatives, including any transport master plans,
	development of special transport corridors, in Implementing the Bangkok 2020 Declaration
	from the Mongolia EST Forum 2018 to the Viet Nam EST Forum 2019.
chain management	Please add few specific examples of initiatives, pilot projects, major policies or programmes
	developed or under development (or) any major investment decisions. Please attach reports or
	include websites where relevant.
	• To solve the current difficulties, the MR cooperates with private companies for purchasing new general cargo wagons and container wagons. This project is under negotiation to sign contract.
	Examples of important actions that you plan to carry out in next year
	• Myanma Railways will invite 'Expression of Interest' for the purchasing of new cargo wagons and container wagons in this year.
	What importance does this particular EST Goal attach in your country's on-going efforts in
	achieving the Sustainable Development Goals (SDGs) under the 2030 Agenda for Sustainable
	Development?
	• (a) The Sustainable Development Goals (SDGs)

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			from the Mongolia EST Forum 2018 to	the Viet Nam EST Forum 2019.	
IV.	Cross	<u>-cutting</u> strategies			
	13	Adopt a zero-fatality policy with	Any action had been taken so far?	Barriers/Challenges faced in implementation:	
		respect to road, rail, and waterway	\Box Not yet	• Difficult to change some behaviors of people	
ço,		safety and implement appropriate	\Box Some progress (design – piloting)	• Rapid motorization especially the increased	
Ittin		speed control, traffic calming	\checkmark \Box Largely in Place	numbers of motorcycle	
-C		strategies, strict driver licensing,	□ Fully Completed	Capacity building	
"Cross-Cutting"		motor vehicle registration, insurance	(Please Check the box	Budget constraint	
Ç,		requirements, and better post-accident		Collaboration among concerned parties	
		care oriented to significant reductions		• Weakness of interest of private sectors	
		in accidents and injuries			

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		Please add few specific examples of initiatives, pilot projects, major policies or programmes
		developed or under development (or) any major investment decisions. Please attach reports or
		include websites where relevant.
		• Active leadership of the National Road Safety Council and participation of local Road
		Safety Councils
		• Implementation of the Myanmar National Road Safety Action Plan
		• Implementation of road safety measures focusing on vulnerable road users
		Modifying Motor Vehicle Law
		Introducing ITS in major cities like Yangon and Mandalay
		Applying telematic system for fleet control
		• Accelerating educative programs and stricter enforcement for road safety
		Introducing school bus system in Yangon
		• Promoting the collaboration and coordination among government's organizations, people,
		NGOs and INGOs
		• Assessing 1968 Vienna Convention on Road Traffic & 1968 Vienna Convention on Road
		Signs and Signals

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		Examples of important actions that you plan to carry out in next year
		To introduce mandatory child-restraint
		• To practice 1968 Vienna Convention on Road Traffic & 1968 Vienna Convention on
		Road Signs and Signals
		What importance does this nerticular EST Cool attach in your country's on soing offerts in
		What importance does this particular EST Goal attach in your country's on-going efforts in
		achieving (a) the Sustainable Development Goals (SDGs), (b) New Urban Agenda, and (c) Paris
		Climate Agreement?
		• (a) The Sustainable Development Goals (SDGs)

Goal	Goal Description	Voluntary Progress/Achievements/Majo	or Initiatives, including any transport master plans,	
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"Cross-Cutting" Strategy	Promote monitoring of the health impacts from transport emissions and noise, especially with regard to incidences of asthma, other pulmonary diseases, and heart disease in major cities, assess the economic impacts of air pollution and noise, and devise mitigation strategies, especially aiding sensitive populations near high traffic concentrations	 Any action had been taken so far? Not yet ✓ Some progress (design – piloting) Largely in Place Fully Completed (Please Check the box) It is under implementation status for inferential analysis on the association between air pollution and health impact under Climate Change and Health Adaptation Project (2019- 2022) with the support from Global Environmental Facility (GEF) fund. For Ministry of Health and Sports, health education topic is included in Basic Health Staff message book in order to improve the health knowledge on air pollution among communities.	 Barriers/Challenges faced in implementation: Currently, air quality monitoring data is hard to represent as national data for air pollution because it is measured regularly only in Yangon and Nay Pyi Taw territories. There are many risk factors for respiratory diseases and therefore, it is difficult to recognize that air pollution is definite cause. It is still needed to elaborate the association between air pollution and health impact through researchers. 	

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developed or unde		Please add few specific examples of initiatives, pilot projects, major policies or programmes developed or under development (or) any major investment decisions. Please attach reports or include websites where relevant.
		• Occupational and Environmental Health Division (OEHD) is implementing Regional Plan of Action for Implementing the WHO Global Strategy for Health, Environment and Climate Change (2020-2030) with the collaboration with WHO.
		 Examples of important actions that you plan to carry out in next year Occupational and Environmental Health Division (OEHD) is getting technical support and capacity building from WHO under GEF fund.
		What importance does this particular EST Goal attach in your country's on-going efforts in achieving (a) the Sustainable Development Goals (SDGs), (b) New Urban Agenda, and (c) Paris Climate Agreement?
		• Current effort and implementation on air pollution measure by OEHD is highly related to the SDGs goals.

Go	al	Goal Description	Voluntary Progress/Achievements/Major Initiatives, including any transport master plans,			
No	•		development of special transport corrid	development of special transport corridors, in Implementing the Bangkok 2020 Declaration		
			from the Mongolia EST Forum 2018 to	from the Mongolia EST Forum 2018 to the Viet Nam EST Forum 2019.		
	15	Establish country-specific,	Any action had been taken so far?	Barriers/Challenges faced in implementation:		
ag		progressive, health-based,	\Box Not yet	Technical assistance		
Ittin		cost-effective, and enforceable air	$\sqrt{\Box}$ Some progress (design –	Comprehensive Environmental Quality		
"Cross-Cutting"		quality and noise standards, also	piloting)	Monitoring System		
ross		taking into account the WHO	□ Largely in Place	• Capacities Building Training for Air Quality		
ç		guidelines, and mandate monitoring	□ Fully Completed	Monitoring		
		and reporting in order to reduce the	(Please Check the box)			

Goal	Goal Description	Voluntary Progress/Achievements/Major Initiatives, including any transport master plans,	
No.		development of special transport corridors, in Implementing the Bangkok 2020 Declaration	
		from the Mongolia EST Forum 2018 to the Viet Nam EST Forum 2019.	
	occurrence of days in which pollutant levels of particulate matter, nitrogen oxides, sulphur oxides, carbon monoxide, and ground-level ozone exceed the national standards or zones where noise levels exceed the national standards, especially with regard to environments near high traffic concentrations	 Please add few specific examples of initiatives, pilot projects, major policies or programmes developed or under development (or) any major investment decisions. Please attach reports or include websites where relevant. National Environmental Quality (Emission) Guidelines (December 2015) Websites: ecd.gov.mm/?q=policy&page=2 The project concept proposal is approved the Economic Affairs Committee Meeting of Union Government on 14 December 2017 Ministry of Foreign Affairs of Myanmar sent the Project Concept Proposal to the Government of Japan through Japan Embassy of Myanmar for the implementation of the project During the project, Air Quality Monitoring Station (Fixed type) and Air Quality Monitoring Station (Mobile type) will be established in Nay Pyi Taw, Yangon Region, Mandalay Region, Sagaing Region and Shan State. 	
		 Examples of important actions that you plan to carry out in next year Adoption National Air Quality Standards The Project for Improvement of Capability of Air Quality Monitoring in Myanmar w be developed from 2018 to 2020. 	

Goa	Goal Goal Description Voluntary Progress/Achievements/Major Initiatives, including any transpo		or Initiatives, including any transport master plans,		
No.			development of special transport corridors, in Implementing the Bangkok 2020 Declaration		
			from the Mongolia EST Forum 2018 to	the Viet Nam EST Forum 2019.	
			 What importance does this particular EST Goal attach in your country's on-go achieving (a) the Sustainable Development Goals (SDGs), (b) New Urban Agenda, Climate Agreement? (a) The Sustainable Development Goals (SDGs) 		
	16	Implement sustainable low-carbon	Any action had been taken so far?	Barriers/Challenges faced in implementation:	
	10	transport initiatives to mitigate the	$\sqrt{\Box}$ Not yet	Awareness of Policy makers and	
ing"		causes of global climate change and	\Box Some progress (design – piloting)	government's high level	
Cutti		to fortify national energy security,	č i	Capacity building	
)-ss		and to report the inventory of all	\Box Fully Completed	Research and Development	
"Cross-Cutting"		greenhouse gases emitted from the transport sector in the National	(Please Check the box)	Data sharing	

Goal Description	Voluntary Progress/Achievements/Major Initiatives, including any transport master plans,	
	development of special transport corridors, in Implementing the Bangkok 2020 Declaration	
	from the Mongolia EST Forum 2018 to the Viet Nam EST Forum 2019.	
Communication to the UNFCCC	 Please add few specific examples of initiatives, pilot projects, major policies or programmes developed or under development (or) any major investment decisions. Please attach reports or include websites where relevant. In Second National Communication, reference material we used are UNFCCC (COP Decision, Reporting guidelines, etc.). We used IPCC 2006 Guidelines and Emission Factor Data Based (EFDB) for calculating greenhouse gases emission. Some of the data we can get from International Energy Agency and Energy Statistic which has been submitted from the Ministry of Energy and Electricity in 2019. Mobile sources are Civil aviation, Road Transportation (cars, light trucks, heavy duty trucks and buses, motorcycles), Railways and Navigation To identify kilometer vehicle under development (emission controls (catalysts) on vehicles can increase the rate of N₂O generation depending on driving practices (i.e. Number of cold starts), type and age of the catalyst that can be significantly emit for countries with a high penetration of vehicles with catalyst. 	

Goa	al	Goal Description	Voluntary Progress/Achievements/Majo	or Initiatives, including any transport master plans,	
No.			development of special transport corridors, in Implementing the Bangkok 2020 Declaration		
			from the Mongolia EST Forum 2018 to	the Viet Nam EST Forum 2019.	
			Examples of important actions that you pla	an to carry out in next year	
			• Fuel taxes		
			• To conduct catalyst on vehicle for	reducing nitrous oxide and methane emission	
			• Sustainable management for traffic	v/vehicle for urban area	
			Mass transport system in Yangon		
			What importance does this particular ES	ST Goal attach in your country's on-going efforts in	
achieving (a) the Sustain			t Goals (SDGs), (b) New Urban Agenda, and (c) Paris		
			Climate Agreement?		
			• (a) The Sustainable Development (Goals (SDGs)	
			• (b) Paris Climate Agreement		
	17	Adopt social equity as a planning and	Any action had been taken so far?	Barriers/Challenges faced in implementation:	
að		design criteria in the development	\Box Not yet	• Culture	
"Cross-Cutting"		and implementation of transport	🖌 🗌 Some progress (design –	Capacity	
S-CL		initiatives, leading to improved	piloting)	• Planning	
ros		quality, safety and security for all and	\Box Largely in Place		
ļ,		especially for women, universal	□ Fully Completed		
		accessibility of streets and public	(Please Check the box)		

Goal	Goal Description	Voluntary Progress/Achievements/Major Initiatives, including any transport master plans,
No.		development of special transport corridors, in Implementing the Bangkok 2020 Declaration
		from the Mongolia EST Forum 2018 to the Viet Nam EST Forum 2019.
	transport systems for persons with disabilities and elderly, affordability of transport systems for low-income groups, and up-gradation, modernization and integration of intermediate public transport	 Please add few specific examples of initiatives, pilot projects, major policies or programmes developed or under development (or) any major investment decisions. Please attach reports or include websites where relevant. Involvement of women in transport sector development such as women entrepreneurs, women taxi drivers, women transport operators Introduction of public buses that are easily accessible for the invalid and senior citizens in Yangon
		Examples of important actions that you plan to carry out in next year
		What importance does this particular EST Goal attach in your country's on-going efforts in achieving (a) the Sustainable Development Goals (SDGs), (b) New Urban Agenda, and (c) Paris Climate Agreement?
		• (a) The Sustainable Development Goals (SDGs)

Goal Goal D		Goal Description	Voluntary Progress/Achievements/Major Initiatives, including any transport master plans,	
No.			development of special transport corridors, in Implementing the Bangkok 2020 Declaration	
			from the Mongolia EST Forum 2018 to the Viet Nam EST Forum 2019.	
"Cross-Cutting" Strategy	18	Encourage innovative financing mechanisms for sustainable transport infrastructure and operations through measures, such as parking levies, fuel pricing, time-of-day automated road user charging, and public-private partnerships such as land value capture, including consideration of carbon markets, wherever feasible	 □ Not yet ✓ □ Some progress (design – piloting) □ Largely in Place □ Fully Completed (Please Check the box) Please add few specific examples of init developed or under development (or) any include websites where relevant. 	

Goal	Goal Description	Voluntary Progress/Achievements/Majo	or Initiatives, including any transport master plans,
No.		development of special transport corridors, in Implementing the Bangkok 2020 Declaration	
		from the Mongolia EST Forum 2018 to	the Viet Nam EST Forum 2019.
		ST Goal attach in your country's on-going efforts in at Goals (SDGs), (b) New Urban Agenda, and (c) Paris Goals (SDGs)	
19	Encourage widespread distribution of information and awareness on sustainable transport to all levels of government and to the public through outreach, promotional campaigns, timely reporting of monitored indicators, and participatory	 □ Not yet ✓ □ Some progress (design – piloting) □ Largely in Place □ Fully Completed 	 Barriers/Challenges faced in implementation: Weakness of collaboration and coordination Weakness of interests of people

Goal	Goal Description	Voluntary Progress/Achievements/Major Initiatives, including any transport master plans,	
No.		development of special transport corridors, in Implementing the Bangkok 2020 Declaration	
		from the Mongolia EST Forum 2018 to the Viet Nam EST Forum 2019.	
processes Please add few specific examples of initiatives, pi		Please add few specific examples of initiatives, pilot projects, major policies or programmes	
		developed or under development (or) any major investment decisions. Please attach reports or	
		include websites where relevant.	
		• Respective governmental organizations upload and update the information	
		For Ministry of Transport and Communications, see <u>https://www.motc.gov.mm/</u>	
		For Ministry of Natural Resources and Environmental Conservation, see	
		http://www.monrec.gov.mm/	
		For Ministry of Electricity and Energy, see https://www.moee.gov.mm	
		For Ministry of Health and Sports, see https://www.mohs.gov.mm/	
		• Educative programs have been undertaken by respective government's agencies	
		• The information which is necessary for people's acknowledgement are announced daily	
		news and newspapers	
		Examples of important actions that you plan to carry out in next year	

Go	al	Goal Description	Voluntary Progress/Achievements/Majo	or Initiatives, including any transport master plans,	
No.			development of special transport corridors, in Implementing the Bangkok 2020 Declaration		
			from the Mongolia EST Forum 2018 to	the Viet Nam EST Forum 2019.	
			What importance does this particular ES	ST Goal attach in your country's on-going efforts in	
			achieving (a) the Sustainable Development	tt Goals (SDGs), (b) New Urban Agenda, and (c) Paris	
			Climate Agreement?		
			• (a) The Sustainable Development Goals (SDGs)		
	20	Develop dedicated and funded	Any action had been taken so far?	Barriers/Challenges faced in implementation:	
tegy	(a)	institutions that address sustainable	\Box Not yet		
Strategy		transport-land use policies and	$\sqrt{\Box}$ Some progress (design –	• To date, we have no specific Environmental	
		implementation, including research	piloting)	Impact Assessment Guideline for Transport	
ing		and development on	\Box Largely in Place	Sector.	
Cutt		environmentally-sustainable	□ Fully Completed	• We have no Land Acquisition Guideline for	
)-SSC		transport, and promote good	(Please Check the box)	the Development Project.	
"Cross-Cutting"		governance through implementation			
		of environmental impact assessments			

Goal No.	Goal Description	Voluntary Progress/Achievements/Major Initiatives, including any transport master plans, development of special transport corridors, in Implementing the Bangkok 2020 Declaration from the Mongolia EST Forum 2018 to the Viet Nam EST Forum 2019.
	for major transport projects	 Please add few specific examples of initiatives, pilot projects, major policies or programmes developed or under development (or) any major investment decisions. Please attach reports or include websites where relevant. At present, in town planning processes, DUHD focused on Natural and Green transport such as prioritizing Bicycle ways and pedestrian way rather than traditional motorways.
		 Ministry of Natural Resources and Environmental Conservation issued Environmental Impact Assessment Procedure on 29 December 2015. All projects including transport sector must follow EIA procedures when they implement their projects. EIA section is undertaking the assessment reports EIA, IEE, EMP submitted by transport to give ECC – Environmental Compliance Certificate by reviewing organization and approving.
		 Examples of important actions that you plan to carry out in next year We continue the reviewing and approving process on the submitted assessment reports.

Goal	Goal Description	Voluntary Progress/Achievements/Major Initiatives, including any transport master plans,
No.		development of special transport corridors, in Implementing the Bangkok 2020 Declaration
		from the Mongolia EST Forum 2018 to the Viet Nam EST Forum 2019.
		What importance does this particular EST Goal attach in your country's on-going efforts in
		achieving (a) the Sustainable Development Goals (SDGs), (b) New Urban Agenda, and (c) Paris
		Climate Agreement?
		• (a) The Sustainable Development Goals (SDGs)
		• (b) New Urban Agenda

Major policy initiatives/projects/action plan to improve rural access:

2	20	Take policy initiatives to	List some of actions taken to improve Barriers/Challenges faced in improving rural]
((b)	improve rural access leading to	rural access in your country so far? connectivity:	
		improved quality, safety and	• Implementing with 15 years plan	
		security for all and especially for	for rural roads starting from • Limitation of government budget	
		women, disadvantaged groups	2015-2016 to 2030-2031 fiscal • Under planning for fuel tax or levy	
		persons with disabilities and	years • Limited support from development partners	
		elderly, low-income groups,	• Under the Ministry of	
		access to farms, agriculture	Construction, a new department	
		centers, education and health	was formed to implement rural	
			improvement affairs.	
			• In support of the Sustainable	
			Development Goals (SDGs), the	
			long-term development objective	
			of the Government of Myanmar is	
			to provide all-season access to all	
			villages in Myanmar. In support of	
			this long-term development	
			objectives, this National Strategy	
gy			for Rural Roads and Access targets	
Strategy			the next 15 years up to 2030,	
St			during which the GoM aims to	
"g			provide 90% of all registered	
oss-Cutting"			villages in each state and region	
S-CI			with road assess, including	
ros			all-season road access for at least	
"Cre			80% of the registered villages.	
			• The focus of the strategy will be	40
			on larger villages, providing	
			all-season road access to all	

Please add few specific examples of initiatives, pilot projects, major policies or programmes developed or under development (or) any major investment decisions to improve rural access. Please attach reports or include websites where relevant.
 Department of Rural Development has been preparing National Strategy for Rural Roads and Access. Core Rural Road Network has been implemented. Construction of Rural roads as follow during 2018-2019 fiscal year: Concrete 318-mile 1.78 furlong Bitumen 393-mile 0.58 furlong Macadam 447-mile 5.43 furlong Kanker 884-mile 6.51 furlong Earth 876-mile 0.43 furlong
 Examples of important actions that you plan to carry out in next year Upgrade the existing dry-season Core Rural Network roads to all-season road access to all registered villages with more than 1,000 people by 2020

Importance of improving rural access in your country's on-going efforts in achieving (a) the
Sustainable Development Goals (SDGs), (b) New Urban Agenda, and (c) Paris Climate
Agreement?
• (a) the Sustainable Development Goals