























# Annex to the Regional Investment Framework 2022:

**First Progress Report** and Update

December 2018











Greater Mekong Subregion Economic Cooperation Program

Annex to the Regional Investment Framework 2022:

First Progress Report and Update

December 2018

#### **GMS SECRETARIAT**

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# Transport

## **Cambodia**

## **Investment Projects**

					<b>Cost Es</b> (\$ mi	timate llion)	Potential Source and (\$ mil	d Amount		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
Pro	jects in RIF 202	22										
1	Sihanoukville Port Access Road Improvements	Roads and bridges	Originally, the project will improve the final 9.5 kilometers (km) of National Road (NR) 4 leading to Sihanoukville port.  Due to the shortage of the budget, the proposed alignment has been changed and the distance is shortened from 9.5 km to 5 km	2017	40.0	5.0	TBD	Government of Cambodia (National Budget)—5.0	Completed.  (The original alignment is still considered for long term plan)	Sihanoukville SEC	5 km of NR4 leading to Sihanoukville port improved	Mr. SUON Sophal Office of GMS National Coordinator, Cambodia sophalsuon@ gmail.com
2	Road Network Improvement Project (formerly GMS: Deepening Connectivity of Southern Economic Corridor Project)	Roads and bridges	The originally proposed project name was GMS: Deepening Connectivity of Southern Economic Corridor, later on, it was changed to Second Road Asset Management Project (Second RAMP) and finally, the project title now is Road Network Improvement Project under ADB Loan 3576-CAM (COL) The project will improve about 147 km of floodprone and unsafe national roads through provision of periodic maintenance and rehabilitation on NR6 (50 km) and NR1 (97 km), respectively, with asphalt-concrete pavement (under a performance-based contract), which are high-priority roads connecting Cambodia with Thailand and Viet Nam.	2017	77.5	76.9	Asian Development Bank (ADB)— 70.0 Government of Cambodia—7.5	ADB—70.00  Government of Cambodia— 6.94	Ongoing.  Recruitment of supervision consultant firm and procurement of civil work contractors are ongoing	Prey Veng, Siem Reap and Svay Rieng Provinces SEC	Safer and climate resilient national roads delivered     Axle load control enhanced     Wassurance for civil works in MPWT strengthened     Road safety enforcement in project communes improved	Ministry of Public Works and Transport PSOVICHEANO@ ONLINE.COM.KH Phnom Penh, Cambodia

				Versi		stimate illion)	<b>Potential</b> <b>Source an</b> (\$ mi	d Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Measurable Outputs	Project Contact
3	Phnom Penh– Sihanoukville Expressway Project (formerly Phnom Penh–Sihanoukville Highway Corridor Improvements)	Roads and bridges	This is an approximately 191 km expressway project to be built on a new alignment. A build- operate- transfer (BOT) model with a 50-years concession period was approved. The expressway will provide a high- capacity road link between Phnom Penh and the port city of Sihanoukville, and to the Greater Mekong Subregion (GMS) Southern Coastal Corridor.	2016	1,600.0	1,900.0	People's Republic of China (PRC) Private sector—1,600.0	People's Republic of China (PRC) Private sector—1,900.00	Ongoing.  The Concession Agreement was signed in January 2018. Land Acquisition and Resettlement is ongoing, Construction is expected to start at the end of 2018 and completed at the end of 2022.	Link between Capital City of Phnom Penh to Deep sea port of Sihanoukville. It is also a part of the Southern Central Corridor.	191 km expressway built	Mr. SUON Sophal Office of GMS National Coordinator, Cambodia sophalsuon@ gmail.com
4	Link road between NR5 and NR6 near Kampong Tralach, north of Phnom Penh	Roads and bridges	The proposed new 21km road, including 1km bridge across Tonle Sap Lake, will shorten the distance between NR5 and NR6 from 64 km to 22km. The link will facilitate the movement of traffic between these major highways north of Phnom Penh and will reduce traffic congestion within Phnom Penh.	2019	60.0	60.0	TBD	TBD	Proposed.  Seeking funding No Progress	Kampong Tralach District SEC	21 km road and bridge constructed	Mr. SUON Sophal Office of GMS National Coordinator, Cambodia sophalsuon@ gmail.com
5	Railway access to the new Phnom Penh Port (53 km)	Rail	This project is expected to provide the following benefits: (i) connecting two international ports, (ii) enhancing multimodal transport, (iii) reducing road accidents and traffic congestion, and (iv) reducing the cost and time of mass transit modes for containers.	TBD	200.0	200.0	TBD	TBD	Proposed.  Seeking funding No Progress	SEC	53 km railway constructed	Mr. SUON Sophal Office of GMS National Coordinator, Cambodia sophalsuon@ gmail.com

						stimate illion)	Potential Source an (\$ mi	d Amount		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
6	Southern Siem Reap bypass road (42.64 km)	Roads and bridges	The project will construct a road needed to bypass Siem Reap city to avoid traffic congestion in the city as one moves along the Southern Economic Corridor toward the border with Viet Nam. The road will also enable traffic to avoid the protected area around Angkor Wat.	TBD	200.0	128.0	TBD	DP—120.0 Government of Cambodia—8.0	Proposed.  F/S is completed by Korea Ministry of Public Works and Transportation is in the process of seeking Royal Government of Cambodia approval and discussing the financing model.	Southern Siem Reap SEC	42.64 km bypass road constructed	Mr. SUON Sophal Office of GMS National Coordinator, Cambodia sophalsuon@ gmail.com
7	Establishment of Bus/Truck Driving Test Center	Transport	The project involves the acquisition of equipment and/or construction of facilities. It may consist of a combination of a technical assistance project and an investment project, with the latter involving the actual setting up of the center. The reasons for this project are (i) the lack of testing facilities and equipment for bus and truck drivers; (ii) lack of professional drivers of heavy vehicles, especially cross-border vehicles; and (iii) need to reduce the frequency of road accidents.	TBD	10.0	5.0	TBD	Private Sector (SCG Thailand)/ Government of Cambodia—5.0	Completed. Ministry of Public Works and Transport (MPWT) has already secured buildings and testing field for the center. SCG Thailand supports Training of Trainers. The Center is planned be launched in initial stage in July 2018.	SEC	Bus/Truck Driving Test Center established	Mr. SUON Sophal Office of GMS National Coordinator, Cambodia sophalsuon@ gmail.com
8	Construction of Logistics Complex at Stung Bot (Poipet, Cambodia– Thailand border)	Other	In addition to reduce the overall logistics cost, the development of the Stung Bot Logistics Complex (SLC), located on the border with Thailand, along the Southern Economic Corridor, is expected to boost economic growth and improve trade within the region, especially with Thailand. The SLC will integrate all logistics services, such as ports, storage, and	TBD	50.0	50.0	TBD	TBD	Proposed.  Seeking funding. No progress	Stung Bot, Poipet SEC	Logistics Complex at Stung Bot constructed	Mr. SUON Sophal Office of GMS National Coordinator, Cambodia sophalsuon@ gmail.com

						stimate illion)	Potential Source and (\$ mil	d Amount		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
			transport networks; the collection and distribution of goods; and cross-border clearance arrangements along the Southern Economic Corridor. The SLC will be an integrated project, involving (i) land development, (ii) a multimodal logistics system, and (iii) a storage—consolidation—distribution system.									
9	Construction of Logistics Complex at Bavet (Bavet, Cambodia– Viet Nam Border)	Other	In addition to reducing the overall logistics cost, the development of the Bavet Logistics Complex (BLC), at the border with Viet Nam along the Southern Economic Corridor, is expected to boost economic growth and improve trade within the region, especially with Viet Nam. The BLC will integrate all logistics services, such as a port, storage, and transport network; the collection and distribution of goods; and cross-border clearance arrangements along the Southern Economic Corridor. The BLC will be an integrated project, involving (i) land development; (ii) a multimodal logistics system; and (iii) a storage—consolidation—distribution system.	TBD	50.0	50.0	TBD	TBD	Proposed.  Seeking funding.  No progress	Bavet SEC	Logistics complex at Bavet constructed	Mr. SUON Sophal Office of GMS National Coordinator, Cambodia sophalsuon@ gmail.com

				V.		stimate illion)	Potential Source and (\$ mil	d Amount		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
10	Strengthening Overload Control System	Other	The proposed project includes (i) capacity building, (ii) institutional strengthening, and (iii) the provision of overload control equipment and facilities. This was proposed by the Cambodian delegation at the 21st GMS Subregional Transport Forum (STF-21), in Luang Prabang, Lao People's Democratic Republic (Lao PDR).	TBD	5.0	5.0	TBD	TBD	Proposed.  Seeking funding No progress	SEC	See description.	Mr. SUON Sophal Office of GMS National Coordinator, Cambodia sophalsuon@ gmail.com
11	Cambodia: Poipet– Border Bridge/ Aranyaprathet (6.5 km)	Rail	This project will rehabilitate part of the GMS Rail Link1: Kunming–Ha Noi–Ho Chi Minh City (HCMC) to Phnom Penh–Bangkok (Singapore–Kunming Rail Link [SKRL] mainline)	2017	6.5	6.5	TBD	Government of Cambodia—6.5	Completed in April 2018. (Restoration of the existing railway line up to Phnom Penh is expected to be completed in early July 2018)	SKRL main line NSEC	6.5 railway rehabilitated	Mr. SUON Sophal Office of GMS National Coordinator, Cambodia sophalsuon@ gmail.com
	Subtotal (1	Transport Inv	estment Projects in RIF 2022	: Cambodia)	2,299.0	2,486.4						
Inves	stment project	ts propose	ed to be added in RII	F 2022								
12	Siem Reap to Rattanakkiri National Roads Upgrading Project (SRNRUP)	Roads and Bridges	The proposed project will develop and complete a National Road between Siem Reap and Rattanakkiri of about 390 km, in the North of Cambodia, an economic way between the North East and North West of Cambodia and a regional corridor needed to improve the interconnectivity between Thailand, Cambodia, Laos and Vietnam and other Southeast Asian Nations.  Justifications: Completing the economic corridor network and improving links with South Asia and Southeast Asia	TBD		450.0		DPs	Proposed. Submitted by Cambodia through STF-22	Northern Subcorridor, SEC	390 km national road upgraded 1.Speed up economic development, 2. coordinate regional economic Development 3. Improve social progress, 4.improve transportation in the North Corridor, connect national border crossings	PHENG Sovicheano, Secretary of State, MPWT
Subtot	al (Transport Investm		roposed to be added in RIF 202			450.0						
		Subtota	al (Transport Investment Projec	ts: Cambodia	2,299.0	2,936.4						

# **People's Republic of China**

## Investment Projects

					<b>Cost Esti</b> (\$ milli		Potential Source and (\$ mil	l Amount		Key locations and	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
Proj	ects in RIF 2022	2										
13	Rehabilitation of the Ninger– Jiangcheng–Longfu road (part of Yunnan Pu'er Regional Integrated Road Network Development Project )	Roads and bridges	This 234 km road runs from Ninger to the No.3 boundary marker (Longfu check point) along the border between PRC and Viet Nam, via Jiangcheng county. This road is an important route connecting southern Yunnan to Lao PDR and Viet Nam, and important, providing infrastructure to support trade and regional cooperation among the People's Republic of China (PRC), Lao People's Democratic Republic (Lao PDR), Myanmar, and Viet Nam.	2014	279.9	589.5	ADB—200.0 Government of the PRC—79.9	ADB—200.0 Government of the PRC—389.53	Ongoing. This project started in Oct. 2016. An accumulative investment of \$95.5 million has been fulfilled, which accounts for 33.05% of total estimated investment. The subgrade construction will be completed by April 2019, the bridge construction will be completed by September 2019; pavement and landscape construction will be completed by June 2020.	North-South Economic Corridor	234 kilometers of roads to be constructed or rehabilitated	Mr.Yang Yunfeng 13987093727 Yunnan Pu'er Municipal Government SMZFBEK@163. COM
14	Dali-Ruili Railway	Rail	This 330km railway from Dali to Ruili via Baoshan is connected with the Guangtong–Dali Railway, and is an important section of the western route of the Singapore–Kunming Rail Link (SKRL). It is essential for the completion of the SKRL's western route and for	2006	3,889.0	4,008.0	Government of the PRC—3,889.0	Government of the PRC—4,008.0	Ongoing. The adjustment of feasibility study was approved in 2014 by the NDRC and the estimated cost is \$ 4008 million.	North-South Economic Corridor	330 kilometers of railway built	Mr. Xu Jun 13769117987

					Cost Est (\$ mill		Potential Source and (\$ mil	d Amount		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
			the establishment of the Third Asia–Europe Continental Land Bridge. The line will be Class I, electrified, and with a maximum speed of 140 km per hour (km/h) for passenger trains.						The Dali-Baoshan section started in June 2008. The Baoshan-Ruili section commenced in December 2015 and will open to traffic by 2022. Up to April 2018, an accumulative investment of around \$1440 million had been fulfilled, which accounts for 35.59% of the total design.			
15	Further Maintenance and Improvement of the Upper Mekong River Navigation Channel from the PRC (at Landmark 243) and Myanmar to Luang Prabang, in the Lao PDR	Inland waterways	The project encompasses a 631km river section between PRC–Myanmar Boundary Marker 243 and Luang Prabang, in the Lao PDR. It includes the following activities: (i) the improvement and maintenance of 146 rapids and shoals, (iii) installation of 1,199 navigation aids, (iii) construction of five ports, (iv) building of three channel maintenance and emergency response bases in the above-mentioned five ports, and (v) construction of four emergency response and rescue ships of 15 meters in length. The training of crew and shore personnel will be carried out for the safe	2016	338.0	338.0	Government of the PRC—14.2  Balance (TBD)— 323.8	Government of the PRC—14.2 Balance (TBD)— 323.8	In April 2016, China, Laos, Myanmar and Thailand, with the funding from the Chinese side through China- ASEAN Maritime Cooperation Fund, jointly started the preliminary work of the navigation channel improvement project which includes field survey & investigation, environmental & social impact assessment, and project design.  By May of 2018, field survey has		The outputs of the preliminary work will lay a foundation for the implementation of navigation channel improvement project.	Mr Dou Chaowei, 0871-65305700

					<b>Cost Esti</b> (\$ milli		Potential Source and (\$ mil	d Amount		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
			operation of vessel and port. A ship monitoring and reporting system will be set up. The project will ensure the navigational safety of the Upper Mekong River navigation channel, promote the development of international navigation among the four countries, and enhance connectivity within the region.						been completed, and environmental & social impact assessment and project design are in process. At the 16 <sup>th</sup> JCCCN Meeting held in Bangkok, Thailand in February 2018, the four sides agreed to complete the preliminary work by 2018.			
16	Yuxi-Mohan Railway	Rail	The 507 km railway runs from Yuxi to Mohan via Xishuangbanna, linking with the Kunming–Yuxi Railway. Once it is connected to the railway currently under construction on the Lao PDR side, this route will be one of the most direct from the PRC to the Association of Southeast Asian Nations (ASEAN) countries. As a section of SKRI's middle route, this line is crucial to the establishment of an ASEAN–PRC Free Trade Agreement, the economic development of the GMS sub-region, and a modern integrated transport network. The line will be Class I, electrified, and with a maximum speed of 160 km/h for passenger trains; double track from Yuxi to Xishuangbanna; and single track from Xishuangbanna to Mohan, while reserved for upgrade to double track.	2014		8,062.5	Government of the PRC—7,649.0 ADB—150.0	Government of the PRC—7,912.5 ADB—150.0	Ongoing.  This project commenced in April 2016 and will open to traffic by 2021.  Up to April 2018, an accumulative investment of \$3.03 billion had been fulfilled, which accounts for 38.1% of total design.	Yuxi to Mohan, Yunnan Province NSEC	507 kilometers of railway built	Mr. Dong Haoyong +86 1051848407 China Railway Corporation (Formerly Ministry of Railways)

					<b>Cost Est</b> i (\$ milli		Potential Source and (\$ mil	d Amount		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
17	Jinghong–Daluo Expressway	Roads and bridges	The project is an important part of the north–south corridor (Kunming–Daluo–Tachilek–Chiang Rai), and has already been incorporated into the PRC's Planning for the National Expressway Network (G8512), including a total length of 108.5km; 4 lanes; and the border control point at Menghai, the PRC. The existing road along the corridor links Daluo, the PRC; northern Myanmar; Tachilek, Myanmar; and Chiang Rai, Thailand. However, the road is in poor condition and in need of a renovation. The construction of a new road will improve transport connectivity among the PRC, Myanmar, and Thailand; and will boost the development of the economy, trade, tourism, etc. Meanwhile, the completed corridor will serve as a strong complement to the Kunming–Bangkok Highway, and will provide more options for the movement of people and cargo within the region.	2016	2,388.0	2,388.0	Government of PRC	Government of PRC	Proposed Planning for this project has already been completed under PRC's Planning for the National Expressway Network (G8512). However, it has not yet been included in the thirteenth Five-Year Plan. Implementation has not started yet.	Kunming-Daluo- Tachilek-Chian Rai NSEC	See project description.	Mr. LI Rui Office of the GMS National Coordinator, PRC Iiruimof@139.com

					<b>Cost Esti</b> (\$ milli		Potential Source and (\$ mil	d Amount		Key locations and	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
	Viet Nam: Lao Cai– Hekou (154 km) PRC: Hekou–Lao Cai (249 km)	Rail	The proposal regarding Rail Link 9—connecting Kunming, Ha Noi, HCMC, Phnom Penh, and Bangkok (SKRL main line)—is for a standard gauge track between the PRC and Viet Nam systems. Viet Nam is funding a feasibility study, and the PRC and Viet Nam are conducting bilateral discussions regarding the actual route and the points where the line would cross the border.	TBD	Cost estimate listed under Viet Nam to avoid double counting (33.6)	Cost estimate listed under Viet Nam to avoid double counting (33.6)	ADB	ADB	Proposed. The Preliminary Report for the planning of Rail from Lao Cai to Hanoi to Haiphong was finished in Jan 2018 by China and has already been submitted to Viet Nam.	Lao Cai -Hekou NSEC		Mr. LI Rui Office of the GMS National Coordinator, PRC Iiruimof@139.com
	S	ubtotal (Trans	port Investment Projects in R	IF 2022: PRC)	14,693.9	15,386.0						
Subt	Subtotal (Transport Investment Projects proposed to be added in RIF 2022: PRC					0.0						
		Sub	total (Transport Investment F	Projects: PRC)	14,693.9	15,386.0						

# **Lao People's Democratic Republic**

### Investment Projects

				Year	<b>Cost Est</b> (\$ mill		Potential Source and (\$ mil	d Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
Proje	ects in RIF 2022	<u> </u>										
18	Vang Tao Border– Crossing Point	Border- crossing facilities	This facility between Vang Tao and Chong Mek along National Road (NR) 16 is one of the border-crossing points between southernmost Lao PDR and Thailand. The border-crossing facility does not meet the implementation requirements of the GMS Cross-Border Transport Facilitation Agreement (CBTA).	2013	15.0	15.0	Provincial government budget—15.0	Government of Lao PDR—15.0	Ongoing.  Progress to date is 82%.  The project has got postponed to 2019 budget	Vang Tao, Lao PDR Chong Mek, Thailand Located aboutkm East from SEC	Vang Tao and Chong Mek Border facility upgraded per GMS CBTA requirements	Champasack DPWT; Mr. Kittisack, +856 20 23657222 Kt_tisack@gmail. com
19	NR13 Improvement and Maintenance Project (Vientiane to Phon Hong) NR 13 North, AH 12 and NR 13 South, AH 11	Roads and bridges	NR13 North (NR13N) connects Vientiane to the country's northern provinces, and NR13 South (NR13S) connects Vientiane to the southern provinces. Present and projected traffic demand requires an expansion of the road to four lanes in some sections and improvements in two other sections. The government has decided to start on the section of NR13N from Sikeut to Phon Hong, which totals 58 km. The project will be implemented using the Output- and Performance-Based Road Contracts (OPRC) approach.	2018	129.5	129.5	World Bank (International Development Association credit)—40.0  Nordic Development Fund (NDF)—9.5  Asian Infrastructure Investment Bank (AIIB)—40.0  Government of the Lao PDR—40.0	World Bank (International Development Association credit)—40.0  Nordic Development Fund(NDF)—9.5  Asian Infrastructure Investment Bank (AIIB)—40.0  Government of the Lao PDR— 40.0	Ongoing.  The Project has been approved by WB and NDF board in May 2018.  The loan signing is expected to be done June 2018.  The construction is expected to commence in Jan 2019.  Lao PDR now is receiving grant from AllB to conduct a full fs on NR 13 South.	Vientiane to Phon Hong Located on NSEC	58 km road expanded to 4 lanes in some sections and improved in 2 other sections  Key Outcomes:  1. Yeilding Economic benefits from reduced vehicle operating cost  2. Helping reduce traffic injury & fatality risks as well as enhancing safety of pedestrians  3. Road infrastructure which is more resilient to climate events	Department of Roads, MPWT Mr. Latsamy Aliyavongsing, Project Director +856 20 22205713 sithasali@gmail. com

				Year	<b>Cost Est</b> (\$ mill		Potential Source an (\$ mi	d Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
	Mekong Bridge at Bungkan– Paksan (with Thailand)	Roads and bridges	The bridge will facilitate the transport of goods and passengers from northeastern Thailand through central Lao PDR and central Viet Nam via NR8.	2018	Cost estimate listed under Thailand to avoid double counting	Cost estimate listed under Thailand to avoid double counting	NEDA Thailand—36.0	TBD	Proposed.  Detailed design of the Bridge has been approved by the two govts.  Technical Taskforce has just been completed a meeting and come up with Action Plan prior to the construction commencement in the beginning of 2019.	Bungkan Province, Thailand and Bolikhamxay Province, Lao PDR NSEC Located in a close proximity to NSEC	Outputs listed under Thailand to avoid double counting	Department of Roads, MPWT, Mr. Laythong, Deputy Director of Division +856 20 22240630 lphommavong@ gmail.com
20	Thanaleng Border-Crossing Infrastructure Improvement Project	Border- crossing facilities	The existing Thanaleng border crossing operates restrictively and inefficiently for both passenger and freight traffic, and this will become more severe as daily freight traffic grows beyond the present 300 trucks and 1,000 passenger cars and buses. There is also an urgent need to separate freight traffic from passenger traffic, and to significantly upgrade the road and other infrastructure.	2018	25.0	25.0	Seeking financing	Seeking financing	Proposed.  Only minor improvement carried out by a private company  Financing required for an FS.	Thanaleng, Lao PDR (border with Nong Khai, Thailand) NSEC	Thanaleng Border-Crossing Infrastructure improved	Mr. Chanthaly Chansompheng Office of the GMS National Coordinator, Lao PDR chansompheng@ yahoo.com

				Year		Potential Source and (\$ mil	d Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable		
No.	Project Title	Subsector	Description	of Approval			Original	Updates	Status Updates	Alignment	Outputs	Project Contact
21	Hongsa (Xayaboury)– Chomphet (Luang Prabang) Construction (114 km)	Roads and bridges	This road is part of the tourism corridor that includes Chiang Rai, Chiang Mai, Luang Prabang (Chiang Thong), and Vientiane. The section's construction will promote trade, investment, and tourism.	2015	90.0	90.0	NEDA Thailand—90.0	NEDA Thailand—90.0	Ongoing.  Section 1, 42.3 km sees the progress up to April at 69.45%  Section 2, 71.65 km sees the progress up to April at 75.31%  Both sections are due to be completed in the end of 2018.	Hongsa, Xayaboury- Chompet (Luang Prabang), NSEC Linked with NSEC	114 km road constructed	Department of Roads, MPWT, Mr. Laythong, Deputy Director of Division +856 20 22240630 Iphommavong@ gmail.com
22	Upgrading of NR8 East-West Transport Route; ASEAN Highway AH15 (Ban Lao- Nam Phao)	Roads and bridges	NR8 branches off from NR13S at Ban Lao, passing through the districts of Khamkeut and Lak Sao before reaching the Lao PDR–Viet Nam border crossing point at Nam Phao–Cau Treo. After the point, it connects to Cua Lo seaport, in the city of Vinh, Viet Nam. The road does not meet ASEAN standards, but this portion of the road has been slated for upgrading under the Master Plan on ASEAN Connectivity.	2018	80.0	80.0	The Korea International Cooperation Agency (KOICA) is supporting the feasibility study	The Korea International Cooperation Agency (KOICA) is supporting the feasibility study	Proposed.  Final FS Report has been completed and presented to the Lao Govt on the 28 May 2018.  Project Roadshow workshop completed in the 1st week of June 2018.  Financing for construction required	NSEC	NR8 East–West Transport Route; ASEAN Highway AH15 upgraded to ASEAN standards	Department of Roads, MPWT Mr. Bouachanh, DDG, obouachanh@ yahoo.com

				Year	<b>Cost Est</b> (\$ mill		Potential Source and (\$ mil	d Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
23	Xiengkok River Port	Ports and waterways	Xiengkok, in Luang Namtha Province, is located on the Mekong River, and is a suitable location for a river port. Under the quadrilateral Lancang–Upper Mekong River Commercial Navigation Agreement (PRC, Lao PDR, Myanmar, and Thailand), Xiengkok River Port will be a checkpoint for downstream river traffic from the PRC to the Chiang Saen Port, in Thailand. The port will be equipped with cargo handling equipment, immigration and customs offices, and warehouses.	2018	15.0	15.0	Government of the PRC	Government of the PRC	Proposed  Construction Agreement has been signed with a Chinese firm since 2015.  Fund mobilization is expected in 2019	North of Laos, NSEC	Port will be equipped with cargo handling equipment, immigration and customs offices, and warehouses	Department of Waterways, MPWT Mr. Soukhaseum, Project Coordinator, +856 20 97129695 dalasane@gmail. com
24	Ban Mom River Port	Ports and waterways	Ban Mom, in Bokeo Province, is situated on the Mekong River. Under the Agreement on Commercial Navigation on Lacang-Mekong River (PRC, Lao PDR, Myanmar, and Thailand), Ban Mom Port will be a checkpoint for upstream river traffic from Chiang Saen Port (Thailand) to the PRC. The port will be equipped with cargo handling equipment, immigration and customs offices, and warehouses.	2017	12.0	12.0	Bokeo Provincial government, Private sector	Private sector/ Government of Lao PDR—12.0	Ongoing.  It's on the 2 <sup>nd</sup> year of PPP operating period & it sees the upgrading progress of the port at 1.5%.	North of Laos, NSEC	Port will be equipped with cargo handling equipment, immigration and customs offices, and warehouses	Mr. Chanthaly Chansompheng Office of the GMS National Coordinator, Lao PDR chansompheng@ yahoo.com
25	Lalay Border- Crossing Point (NR15)	Border- crossing facilities	This facility is located at the Lao PDR-Viet Nam border-crossing point on NR15 in Salavan Province. This road is a crucial link to the seaports in Viet Nam. The existing border-crossing facilities do not meet the requirements of the GMS CBTA.	2018	10.0	10.0	Seeking financing	Seeking financing	Proposed.	South of Laos in a close proximity to the SEC	Lalay Border- Crossing Point facilities upgraded to meet GMS CBTA requirements	Salavan DPWT, Mr. Viengxay, Project Coordinator +856 20 5544883

				Year	<b>Cost Es</b> t (\$ mil		Potential Source an (\$ mi	d Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
26	Na Phao Border- Crossing Point (NR12)	Border- crossing facilities	This facility is located at the Lao PDR-Viet Nam border crossing point on NR12 in Khammouane Province. After the Third Thai-Lao Friendship Bridge was opened, transit traffic through Thailand, the Lao PDR, and Viet Nam, increased considerably. The existing border- crossing facilities do not meet the requirements of the GMS CBTA.	2018	10.0	TBD	NEDA Thailand—10.0	Seeking Financing	Proposed.	Na Phao, Khammouane Province, NSEC	Na Phao Border- Crossing facilities upgraded per GMS CBTA requirements	Mr. Chanthaly Chansompheng Office of the GMS National Coordinator, Lao PDR chansompheng@ yahoo.com
27	Luang Namtha– Xiengkok– Lao–Myanmar Friendship Bridge (NR17)	Roads and bridges	NR17 starts from Luang Namtha town, in Luang Namtha Province, passes through Muang Sing and Muang Long, and connects with the Lao–Myanmar Friendship Bridge, in Xiengkok. This road is part of the ASEAN–India transport corridor. This section also falls in the North East–West Transport Corridor, or ASEAN Highway (AH) 13.	2018	150.0	150.0	TBD	Seeking Financing	Proposed.	Luang Namtha to Xiengkok NSEC	TBD	Mr. Chanthaly Chansompheng Office of the GMS National Coordinator, Lao PDR chansompheng@ yahoo.com
28	Vientiane–Boten Railway Project (427.2 km) <sup>1</sup>	Rail	The Vientiane-Boten Railway Project will connect the Chinese railway in the north of Lao PDR at the Chinese border to Vientiane, and can potentially connect soon to the Thai rail line via Nong Khai in the near future. This standard gauge railway with a speed of 160 km/h for passenger train and 120 km/h for freight train will form part of the substantial 3,000 km Singapore-Kunming Rail Link.	2016	5,800.0	5,800.0	Government of the PRC—5,800.0	Government of the PRC—5,800.0	Ongoing. The overall progress up to May 2018 is at 33.8%.	Vientiane to Boten, NSEC	427.2 km railway constructed  1. Reduce transport costs  2. Increase peopleto-people visits  3. Enhance trade and promote cultural exchanges	Lao National Railway Company

				Year	Cost Est (\$ mill		Potential Source and (\$ mil	d Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
<b>No.</b> 29	Project Title  Luang Prabang-	Subsector Roads and	Description This will provide the shortest	of Approval TBD	Original 54.6	Updated 148.0	Original ADB—20.0	<b>Updates</b> TBD	Status Updates Proposed.	Alignment Linked to NSEC	Outputs 165 km road	Project Contact  Department of
29	Phonexay District- Viengtong District (NR4B)	bridges	link between Luang Prabang and Sam Neua Province, which can link Thailand from Nan Province through Luang Prabang And Sam Neua to Viet Nam province of Thanh Hoa. This will be another crucial tourism and logistic corridor among the three countries.	И	34.0	148.0	Government of the PRC—13.6  Organization of the Petroleum Exporting Countries  Fund for International Development —21.0	IBU	Financing required for this new alignment FS and construction.	Linked to NSEC	constructed	Department of Roads, MPWT, Mr. Souksakhone, NR6 Project Manager, +856 20 55628049 ssoutannouvong@ yahoo.com
30	Luang Prabang– Dien Bien Phu (107 km - section Phu Thit Pheung – Na Sone/Lao-Vietnam Border)	Roads and bridges	Luang Prabang and Dien Bien Phu are both historic sites and tourist attractions. Providing road connections will promote tourism between the two countries.	2018	90.0	90.0	Government of Viet Nam	Government of Viet Nam	Proposed.	Luang Prabang, Lao PDR – Dien Bien Phu, Viet Nam NSEC	107 km of road constructed	Mr. Chanthaly Chansompheng Office of the GMS National Coordinator, Lao PDR chansompheng@ yahoo.com
31	Phiafay–Attapeu: NR18A (106 km) (Parts of AH 132 ) East–West Transport Route	Roads and bridges	NR18 comprises NR18A and NR18B. NR18A branches offin Phiafay, starting from the junction with NR13S, and ending in Muong Samakheexay, the capital of Attapeu Province. NR18B starts from Muong Samakheexay and passes through the Lao PDR-Viet Namborder-crossing point at Phou Kuea - Beu Ee.	2013	130.0	130.0	Private sector—130.0	Seeking Financing	Proposed  Private Sector Investment has been put on hold  Financing required for further construction	Attapeu Province, Lao PDR to Beu Ee, Viet Nam SEC	TBD	Mr. Chanthaly Chansompheng Office of the GMS National Coordinator, Lao PDR chansompheng@ yahoo.com

				Year	<b>Cost Est</b> (\$ milli		Potential Source and (\$ mil	d Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
32	Vientiane – Thakhek – Mu Gia Railway Project (450 km) Mu Gia – Vung Ang (119 km)	Rail	The Vientiane–Thakhek–Mu Gia Railway Project covers a portion of the spur line of the SKRL. This spur line will connect the Thai railway network to the Vietnamese railway network. The Republic of Korea assisted with a feasibility study.	2018	4,402.0	6,025.0	KOICA feasibility study completed in 2017	for possible PPP	Proposed.  Govt. proposing The Korean Govt to allow a private sector involving in conducting a full FS.  This will pave way for the PPP investment (section Thakhek, Laos - Mugia, Vietnam (Border) - Vung Ang, Vietnam.	Vientiane- Thakehek-Mu Gia, Lao PDR to Vung Ang, Viet Nam NSEC	569 km railway constructed  1. Promoting economic growth by securing railway lines for export and import  2. Creating employment by establishing mass transportation system  3. Promoting tourism industry by developing leisure sports industry	Department of Railways, MPWT, Mr. Ketsana, Project Coordinator, +586 20 22588889 ketsanasouk khamthath@ rocketmail.com
33	Thanalaeng–Nong Khai Railway Extension Project (7 km)	Rail	The construction of section one, with support from NEDA, was completed in April 2016. The extension from Thanaleng to Vientiane Station (section 2) is ongoing.	2016	28.5	28.5	NEDA Thailand—28.5	NEDA Thailand—28.5	Ongoing.  Bidding of construction company is being processed. The construction is expected to commence in the beginning of 2019 and completed in 2021.	Thanalaeng, Lao PDR to Nong Khai, Thailand NSEC	7 km of railway constructed from Thanalaeng, Lao PDR to Nong Khai, Thailand	Department of Railways, MPWT, Mr. Hinphet, Project Coordinator, +586 20 55908179 hinlakhonvong@ yahoo.com
34	Savannakhet-Lao Bao Railway Project (220 km)	Rail	The Government of the Lao PDR signed an agreement with a Malaysian company to develop the Savannakhet–Lao Bao Railway Project as a build–own– operate–transfer (BOOT) scheme.	2018	4,200.0	4,200.0	BOOT-Giant Group Ltd., based in Malaysia	Seeking Financing for FS	Proposed.  Seeking the government approval to terminate the current concessionaire.	Savannakhet, Lao PDR to Lao Bao, Viet Nam EWEC	220 km railway constructed	Department of Railways, MPWT, Mr. Ketsana, Project Coordinator, +586 20 22588889 ketsanasouk khamthath@ rocketmail.com

				Year	<b>Cost Est</b> (\$ milli		Potential Source and (\$ mil	d Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
<b>No.</b> 35	Project Title  Mekong Bridge at	Subsector Roads and	Description  The project will develop a	of Approval 2018	Original 65.0	Updated TBD after	Original  Government of the	<b>Updates</b> NEDA	Status Updates Proposed.	Alignment NSEC	Outputs	Project Contact  Department of
	Luang Prabang	bridges	tourism corridor between the Lao PDR and Thailand, in particular from Chiang Rai to Chiang Mai, Luang Prabang, and the capital city, Vientiane. The road project from Muong Ngeune to Luang Prabang, which crosses the Mekong Bridge at Luang Prabang, is part of this initiative.			an FS	Netherlands	Thailand	Propose NEDA for TA financing of FS in 2019.			Planning and Cooperation, MPWT, Mr. Kita, Coordinator +856 20 55534551 khamsavong 1999@ gmail.com
36	Selamphao Bridge, at the end of NR14A between the Lao PDR and Cambodia	Roads and bridges	This bridge project is located at the end point of NR14A, which runs from Pakse to Wat Phou, in Champassak Province (World Heritage Site), and to the Lao-Cambodian border. NR14A could connect to Angkor Wat, in Siem Reap, if a bridge across the Selamphao River were in place. Both the Lao PDR and Cambodia are considering the most suitable border- crossing points, and will jointly construct a bridge across Selamphao River.	2018	30.0	30.0	Joint 50:50 investment by the governments of Cambodia and the Lao PDR	Joint 50:50 investment by the governments of Cambodia and the Lao PDR	Proposed.	Wat Phou, Champassak Province to Cambodia border crossing point NSEC	Selampahao bridge constructed	Mr. Chanthaly Chansompheng Office of the GMS National Coordinator, Lao PDR chansompheng@ yahoo.com
37	Mekong Bridge for Thanalaeng-Nong Khai Railway Project	Rail	Under a Sino-Lao cooperation scheme, a railway bridge will be built to accommodate the standard gauge at Thanalaeng–Nong Khai. The site for the bridge has been selected by officials from both countries.	2018	TBD	TBD	Government of the PRC (Under Sino-Lao cooperation scheme	Government of the PRC (Under Sino-Lao cooperation scheme	Proposed.  Locations of the Bridge has been determined by both technical teams.  The FS scope has been included in the Thai-China Railway Project FS.	Thanaleng, Lao PDR to Nong Khai, Thailand NSEC	railway bridge built to accommodate the standard gauge at Thanaleng-Nong Khai	Department of Railways, MPWT, Mr. Hinphet, Project Coordinator, +586 20 55908179 hinlakhonvong@ yahoo.com

				Year	<b>Cost Est</b> (\$ mill		Potential Source an (\$ mi	d Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
38	Dak Chung Border- Crossing Point (NR16)	Border- crossing facilities	These facilities are located at the Lao PDR–Viet Nam border-crossing points on NR16 in Sekong Province. The existing border-crossing facilities do not meet the implementation requirements of the GMS CBTA.	2018	10.0	10.0	TBD	Seeking Financing	Proposed.	Sekong Province, Lao PDR SEC?	Dak Chung Border-Crossing facilities upgraded to meet GMS CBTA requirements	Mr. Chanthaly Chansompheng Office of the GMS National Coordinator, Lao PDR chansompheng@ yahoo.com
39	Houei Sai River Port	Ports and waterways	As inland transport is becoming more important, especially for tourism, building this river port is necessary.	2018	13.0	13.0	TBD	Seeking Financing	Proposed.	Houei Sai, Lao PDR NSEC	Huuei Sai river port built	Mr. Chanthaly Chansompheng Office of the GMS National Coordinator, Lao PDR chansompheng@ yahoo.com
40	Pakbeng River Port (Oudomxay Province)	Ports and waterways	The town of Pakbeng is situated on the Mekong River, on NR2. It is also on the border between Sayabouly and Oudomxay provinces, at the midpoint between Bokeo and Luang Prabang. As inland transport is becoming more important, especially for tourism, building this river port is necessary.	2018	13.0	13.0	Government of the PRC	Government of the PRC	Proposed.  Construction Agreement has been signed with a Chinese firm since 2015.  Fund mobilization is expected in 2019	Pakbeng, Oudomxay Province Lao PDR NSEC	TBD	Department of Waterways, MPWT Mr. Soukhaseum, Project Coordinator, +856 20 97129695 dalasane@gmail. com
41	Khokchong River Port (same as Luang Prabang River Port)	Ports and waterways	Inland water transport traffic between Bokeo and Luang Prabang, in terms of goods and passengers, is growing steadily. There is an urgent need to construct a good river port in Luang Prabang that will have the necessary handling equipment and warehouses.	2018	15.0	15.0	Government of the PRC	Government of the PRC	Proposed.  Construction Agreement has been signed with a Chinese firm since 2015.  Fund mobilization is expected in 2019	Luang Prabang, Lao PDR NSEC	TBD	Department of Waterways, MPWT Mr. Soukhaseum, Project Coordinator, +856 20 97129695 dalasane@gmail. com

				Year	<b>Cost Est</b> i (\$ milli		Potential Source and (\$ mil	d Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
42	Vientiane—Ha Noi Expressway Project (Portion from Vientiane to Nam On: 335 km)	Roads and bridges	This is the first expressway project linking the two capitals, and it is the top priority project under the Lao PDR and Viet Nam national investment plans.	TBD	3,500.0	3,500.0	JICA	JICA	Proposed.  JICA team has conducted a preliminary data collection and completed in April 2018.  A finding report is being prepared and will be presented to the Lao & Viet Nam Govt in July 2018.	Closely parallel with NSEC	335 km Expressway from Vientiane to Ha Noi constructed	Department of Planning and Cooperation, Mr. Chao Yang, Coordinator, +856 20 54762416 jaoyang@gmail. com
43	Upgrading 13S (portion from Savannakhet Province to Bolikhamxay) (253 km)	Roads and bridges	This will link the East–West Economic Corridor (EWEC), also known as NR9 (or AH16), and the two newly established economic corridors: NR12 (or AH131) and NR8 (or AH15). It will also provide the foundation for a connection between the Kunming–Luang Prabang–Vientiane–Paksan– Thakhek–Savannakhet stretch of the North–South Economic Corridor (NSEC) and connecting Cambodia, up to Savannakhet, via the Southern Economic Corridor (SEC).	TBD	TBD	TBD	Seeking financing	Seeking financing	Proposed.  An FS funded by government budget will be conducted for the section Khammouane to Savannakhet Province 102 Km.  Financing for construction is required.	Joining of NSEC, EWEC & SEC	253 km road (portion from Savannakhet Province to Bolikhamxay) upgraded	Department of Roads, MPWT  Mr. Bouachanh, DDG,  obouachanh@ yahoo.com
44	Navigation Channel Improvements: Lower Mekong from Luang Prabang to Savannakhet (Mekong River Commission)	Ports and waterways	The project will carry out a site investigation and survey the free-flow section of the hydropower dam for installation of aid for navigation and channel improvement.	2019	12.2	12.2	TBD	TBD	Proposed.	N/A	N/A	Mr. Chanthaly Chansompheng Office of the GMS National Coordinator, Lao PDR chansompheng@ yahoo.com

				Year	Cost Est (\$ mill		Potential Source and (\$ mill	l Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
<b>No.</b> 45	Project Title Port Construction	Subsector  Ports and	Description The capital city, Vientiane, is	of Approval 2020	Original 19.4	Updated 19.4	Original TBD	<b>Updates</b> TBD	Status Updates Proposed.	Alignment NSEC	Outputs N/A	Project Contact  Department of
	and Improvement from Vientiane to Savannakhet (Vientiane Port; Paksan Port; Thakek Port and Savannakhet Port)	waterways	the political, economic, and transport center of the Lao PDR. The existing 4 km-long port is located downtown, and it can no longer accommodate the growing quantity of cargo and passengers. This location will be renovated as a registration and inspection center. This port must move downstream, near the industrial economic zone and containeryard, around 40 km from the capital.  Paksan, in Bolikhamxay Province, is located between Vientiane, Thakhek, and Savannakhet. In the future, the Vientiane—Hanoi expressway will link Bolikhamxay Province with the two capital cities. The existing Paksan Port is not suitable for expansion, so it should be moved to the special economic zone (SEZ) that is next to the new Thai—Lao Friendship Bridge, where it can connect to roads R8, R12, R13; the railway network; and the Vientiane—Hanoi expressway.  Similar to Paksan Port, Thakhek Port cannot berth a big vessel and load or unload its cargo. The new location should be farther upstream, next to the Thai—Lao Friendship Bridge and the SEZ, where it could also connect to the railway and to roads R8, R12, R13.	2020	12.7				Troposeu.	NOC		Waterways, MPWT Mr. Soukhaseum, Project Coordinator, +856 20 97129695 dalasane@gmail. com

				Year	<b>Cost Estimate</b> (\$ million)		Potential Funding Source and Amount (\$ million)			Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
			Savannakhet is in a very important location, and it could be a second-rank transportation hub for the Lao PDR. Savannakhet is a conjunction of roads R9 and R13, the railway, and air traffic. The existing Kengkabao Port is no longer suitable for use as a port terminal, so the provincial government has allowed a local investor to renovate this port and adapt it for other purposes.									
	Subtotal (Transport Investment Projects in RIF 2022: Lao PDR)				18,927.2	20,560.6						
Subto	tal (Transport Investr	ment Projects p	proposed to be added in RIF 20		0.0							
		Subtota	al (Transport Investment Proje	cts: Lao PDR)	18,927.2	20.560.6						

# **Myanmar**Investment Projects

				Year	Cost Estimate (\$ million)		Potential Source an (\$ mi	d Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
Proj	ects in RIF 20	)22										
46	East-West Economic Corridor Eindu- Kawkareik Road Improvement Project	Roads and bridges	The project will improve 66.4 km of road between Eindu and Kawkareik. It is in Myanmar's Kayin State, which borders on Thailand.	2016	121.8	121.8	ADB—100.0 ASEAN  Infrastructure Fund—20.0 Government of Myanmar—1.8	ADB—100.0 ASEAN  Infrastructure Fund—20.0 Government of Myanmar—1.8	As ICB-1 the length of road from 0+000 km to 40+440 km, the bridges and culvert on that road are being implemented and the completion of the whole project is 18.7% resulted from the end of April 2018.  As ICB-2 the length of road from 42+160 km to 66+455 km, the bridges and culvert on that road are being implemented and the completion of the whole project is 15.8% resulted from the end of April 2018.	Kayin State, Myanmar EWEC	66.4 km of upgraded road	Daw Phyu Phyu, Deputy Director PMU Section, Department of Highways 09-5143832 edkkrpmu@ gmail.com

				Year	<b>Cost Est</b> i (\$ milli		Potential Source an (\$ mi	d Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
	Mae Sot- Myawady Border Crossing Project and Infrastructure Improvements (with Thailand)	Border- crossing facilities	The project involves a new bypass road and bridge to the north of the existing border crossing at Mae Sot (Thailand)—Myawady (Myanmar), which is in the congested area between the two cities. This new crossing will be dedicated to cross-border freight traffic. The bypass will link up with a newly envisioned special trade zone in Myanmar. The overall project will include about 16.9 km of a new four-lane divided highway (13.3 km in Thailand; 3.6 km in Myanmar), a 100-meter- long bridge across the Moei River at the border, and associated border-crossing facilities.	2015	Cost estimate listed under Thailand to avoid double counting	Cost estimate listed under Thailand to avoid double counting	Government of Thailand	Government of Thailand	Ongoing.  83% completed in April 2018	Kayin State, Myanmar EWEC	New 4 lanes on border line	U Kyaw Kaung Cho, Chief Engineer, Department of Bridge, Ministry of Construction +95 67 407465 kkcho73@ gmail. com
47	Improvement of Six Inland Ports	Ports and waterways	The project includes the establishment of six inland ports along the Ayeyarwaddy and Chindwin rivers. The feasibility study for Mandalay Port was completed in February 2014. To construct Mandalay port, the government is seeking financial support from JICA. The estimated implementation cost for	2018	38.0 25.0 21.0 36.0 35x2=70.0 Total190.0	159.5	JICA Government of Belgium Private sector	JICA—54.5 Private sector	Proposed.  For Mandalay Port, Exchange Notes was signed with JICA. Belgium fund was cancelled. DWIR submitted the project proposal for the construction of three Ports; Bamaw, Pakokku,	Mandalay Region Achin State Sagaing Region Magway Region NSEC	Inland port facilities will be upgraded and water way transport-ation mode will be improved	U Tun Naing Win Director, Directorate of Water Resources and Improvement of River System +95 9 2130258 +95 67 3411428 tunnaingwin73@ gmail. com

				Year	<b>Cost Est</b> (\$ milli		Potential Source and (\$ mil	d Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
			Mandalay Port is \$54.5 million, and the estimated implementation time is about 2 years. Pakokku Port (\$21 million) and Monywa Port (\$21 million) are proposed to be constructed with Belgium loans. Two other inland ports (Magway Port and Kalewa Port) are slated to be built with the support of private investors. Updated cost estimate breakdown:  54.5 21x3=63.0 21x2=42.0 Total159.5						and Monywa to Economic Committee. After approval of Economic Committee, DWIR will proceed to invite the private investors for port development. Other 2 ports Magwe and Kalawa are second priority and expected to construct in 2020 with private investment.			
48	Loilem– Kyaington Road Section (359 km) (GMS Road Section of R7 and Secondary Road of Corridor)	Roads and bridges	This is the road section of GMS route R7 and of the Asian and ASEAN highways. It will link with the NSEC and the Northern Economic Corridor as a secondary road. It must be upgraded to ASEAN Class III standards.	2018	359.0	359.0	TBD	TBD	Proposed.	Eastern and Southern Shan State, Myanmar. NSEC	359 km of upgraded road	U Yan Naing Zaw Director, Road Design Section Department of Highways 09-5016599 yannaingzaw.ce@ gmail.com

				Year	<b>Cost Est</b> (\$ mill		<b>Potential</b> <b>Source an</b> (\$ mi	d Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
49	Thaton– Payagyi Road Improvement Project	Roads and bridges	The expected components of this 151 km, two-lane road improvement project will primarily consist of road repairs and upgrading along most of the road's length, with major reconstruction and widening of the road sections running through the towns of Bilin, Kyaikto, and Payagyi, including a possible grade-separated interchange with NR1 at Payagyi.	2018	128.0	128.0	TBD	Private Sector  (BOT System)—128.0	Ongoing  Local BOT company is undertaking that road section to be 10.97-14.63m width according to the existing road alignment. It needs to implement bypass roads such as Thaton, Kyaikkaw, Theinsait and repair geometric design in some place for transport facilitation.	Mon State & Bago Region Myanmar. EWEC	151 km of upgraded road	Daw Thazin Khin Maung San Assistant Director BOT Section, Department of Highways 09-420724199 botsection@ gmail.com
50	Ruili (PRC)– Kyaukpyu (Myanmar) Highway	Roads and bridges	The road will promote connectivity between the PRC and Myanmar,and will improve the region's road network overall. The PRC and Myanmar have already had some technical discussions concerning the project.	2018	1,000.0	1,000.0	TBD	Private Sector (China Hobour Engineering Co.Ltd [CHEC])	Proposed.  It has already signed MoU with CHEC which was recommended by China Embassy and MOFA. It is implementing Pre-Feasibility Study. Project implementation will be processing after the FS report.	Northern Shan State, Mandalay Region, Nay Pyi Taw, Magway Region & Rakhine State, NSEC	New Expressway	U Yan Naing Zaw Director, Road Design Section Department of Highway 09-5016599 yannaingzaw.ce@ gmail.com

				Year	<b>Cost Est</b> i (\$ milli		Potential Source an (\$ mi	d Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
51	Daluo (PRC)– Tachilek (Myanmar) Highway	Roads and bridges	This project involves the improvement of an existing highway that is a part of the GMS NSEC (and of the Asian and ASEAN highways) in Myanmar, linking with the PRC to the north and Thailand to the south. This highway is also one of the major border trade routes between Myanmar and Thailand via Tachileik. The improvement will consist of upgrading the Kyaington– Mongla section (93 km) of this highway to ASEAN Class II standards.	2018	93.0	93.0	TBD	Public Private Partnership (BOT System)  Government of Myanmar—46.5  Private Sector—46.5	Ongoing  Ministry of Construction is undertaking Minelar- Kengtung road section (3.66 - 6.7 m) and local BOT company is undertaking Kengtung - Tachileik road section (9.14 m). It needs to repair geometric design in some place for transport facilitation.	Eastern Shan State NSEC	87.51 km of upgraded Mongla – Kyaington road 156.8 km of upgraded Kyaington- Tachileik road	U Yan Naing Zaw Director, Road Design Section Department of Highway 09-5016599 yannaingzaw.ce@ gmail.com
52	Bridge on the Kyaington– Lyainglin– Taunggyi Road (AH2)	Roads and bridges	The service life of the Tarkaw (Thanlwin) Bridge (bank- to-bank 900 feet) is about 40 years, and its load capacity is only HS-20. A new bridge of four lanes with an HS-25 load capacity has been proposed. The type of bridge will be specified after the feasibility study.	2018	15.8	15.8	TBD	Government of Myanmar—15.8	F.S completed in March 2018. Budget proposed for 2018-2019 fiscal year.	Eastern & Southern Shan State, Myanmar. NSEC	A new bridge with capacity of HS-25.	U Tin Myint Aung, Chief Engineer, Department of Bridge, Ministry of Construction +95 67407082
53	GMS EWEC Corridor Improvement I and II	Roads and bridges	The bridges and expenditure amounts involved in this project are: Attran Bridge (\$68.25 million), Gyaing (Kawkareik) Bridge (\$122.86 million), Gyaing (Zathapyin) Bridge (\$129.11 million), and Sittaung (Kyaikhto) Bridge (\$180.7 million, proposed for approval in 2020).	2017	560.9	550.22	JICA 560.9	JICA 550.22	Ongoing.  Gyaing (Kawkareik): Bidding Documents was commenced 10-5-2018 to 23-5-2018,	Mon State Kayin State EWEC	Four new 4-lane Bridges	U Paing, Chief Engineer, Department of Bridge, Ministry of Construction +95 67 407514 mr.paing.1959@ gmail.com

				Year	<b>Cost Est</b> i (\$ milli		<b>Potential</b> <b>Source an</b> (\$ mi	d Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
									Gyaing (Zathapyin) and Atran: Under Preparation of Detailed Design.  Sittaung (Kyaikhto) Bridge: F.S draft July 2016.			
54	Bago-Kyaikto Road	Roads and bridges	The project entails a new highway alignment on an extension of the EWEC, between Bago and Kyaikto, in order to provide easier access to Thilawa SEZ. This road is expected to be reconstructed as an asphalt-concrete, two-lane road of 7-meter in width, with 1.5-meter paved shoulders. The goal is to achieve a safer and more efficient movement of goods and people along the GMS EWEC and NSEC in Myanmar.	2020	200.0	164.3	ADB	ADB—164.3	Proposed.  The Project will be processing up to the FS report under the TA project	Bago Region and Kayin State EWEC	70 km new arterial highway between Bago and Kyaikto	UThet Zaw Win Director, Road Design Section, Department of Highways 09-5501772 tzwin14@gmail. com
55	Upgrading of Wan Pong Port with 500-ton container- handling facilities	Ports and waterways	The project will modernize the facilities at Wan Pong Port for handling shipping containers. It will thus help increase the trade in cargo between Myanmar and other GMS countries. Myanmar will be extensively involved in GMS trade, and will effectively use the Mekong River transport route to boost the country's economic development.	2018	50.0	50.0	Joint Committee on Coordination of Commercial Navigation	Joint Committee on Coordination of Commercial Navigation	Proposed USD 500,000 was approved by JCCCN for feasibility study of Wan-Pong port. Feasibility study will be started in October 2018 and the implementation of port construction is expected in 2019-2020 fiscal year.	Eastern Shan State NSEC	Wan Pong port will be improved and port handling capacity will be increased.	U Tun Naing Win Director, Directorate of Water Resources and Improvement of River System +95 9 2130258 +95 67 3411428 tunnaingwin73@ gmail. com

				Year	<b>Cost Est</b> (\$ mill		Potential Source an (\$ mi	d Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
56	Upgrading of Mawlamyine – Dawei – Htee khee Rail Link (452.58 km)	Rail	Mawlamyine-Dawei railway section (310.58 km) was constructed during 1994–1998. It is one of the most important branch lines of Myanmar Railways, not only for local railway transport but also for its link to Thailand and the ASEAN railway network. This project will improve railway transport for passengers and freight. This railway line is a part of the Trans-Asian Railway (TAR) southern corridor in Myanmar. It will be linked with the new Dawei– Htee khee line as a proposed spur line of the Singapore–Kunming Rail Link (SKRL) to Thailand.	2020	TBD	TBD	ADB  NEDA Thailand	ADB  NEDA Thailand	Proposed.	Mon State Tanintharyi Region SEC	Upgraded Rail Link and New spur line	Deputy General Manager (Planning) Planning & Administration Department, Myanma Railways +95 67 77084 dgm.planning. mr@gmail.com
57	Border Control Facilities at Border Crossing Points: Tachilek and Muse	Border- crossing facilities	These border control facilities are needed to facilitate cross- border transport with neighboring GMS member countries under the full GMS CBTA	2018	TBD	TBD	ADB,  NEDA Thailand	ADB, PRC, NEDA & Thailand	Proposed.  It needs to construct BCF at Tachilek and Muse BCPs.  Lao- Myanmar Friendship Bridge and BCF completed in May 2015.with Government of Myanmar funding of MMK 2,604.0 million	Eastern and Northern Shan State NSEC	Border Crossing Facilities constructed at Tachilek and Muse border crossing points.	FERD, Ministry of Planning and Investment ferdsection@ gmail.com

				Year	<b>Cost Est</b> (\$ mill		Potential Source an (\$ mi	d Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
58	GMS Highway Modernization Project`	Roads and bridges	The project will improve transport conditions along Myanmar's East-West Economic Corridor (EWEC) and North-South Economic Corridor (NSEC) by (i) improving about 99 km of GMS highways, (ii) improving the safety of the Yangon– Mandalay Expressway, and (ii) preparing detailed designs for other highway projects, also along GMS corridors.	2018	372.5	202.1	ADB—340.0  ASEAN  Infrastructure Fund—20.0  Government of Myanmar—12.5	ADB—200.0 Government of Myanmar—2.1	Ongoing  Highway Modernization Project was approved Hluttaw on 26.3.2018. ADB and MOPF are negotiating the loan on 3 Oct 2018.	Yangon Region, Mandalay Region Bago Region & Ayeyawaddy Region, Myanmar EWEC & NSEC	64 km of Yangon-Mandalay Expressway improved 99 km of Bago- Thanlyin road upgraded  Detailed engineering designs prepared for the improvement of Yangon- Pathein Highway (165 km) and new highway alignment between Bago and Kyaikto (70km)	Daw Zin Zin Htike Deputy Director PMU Section Department of Highways 09-5058066 edkkrpmu@ gmail.com
	Subtotal (Tra	ent Projects included in RIF 202	22: Myanmar)	3,091.0	2,843.7							
Sub	total (Transport Invest	tment Projects p	proposed to be added in RIF 202	22: Myanmar)		0.0						
		Subtota	al (Transport Investment Projec	ts: Myanmar)	3,091.0	2,843.7						

## **Thailand**

## **Investment Projects**

				Year	<b>Cost Est</b> (\$ mill		Potential Source an (\$ mi	d Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
Proje	cts in RIF 2022	2										
59	Bang Yai– Kanchanaburi Intercity Motorway Project (part of LaemChabang– Bangkok–Dawei [Myanmar] Corridor)	Roads and bridges	In addition to playing a strong national role, this expressway will be part of the LaemChabang—Bangkok–Dawei (Myanmar) highway corridor, linking the port at Laem Chabang with the proposed deepwater port at Dawei, and with Myanmar's highway network, connecting with Mawlamyine and Yangon. The proposed expressway is an important component of Thailand's National Highway Development Plan.	2015	2,000.0	1,600.0	Government of Thailand—2,000.0	Government of Thailand—1,600.0	Ongoing.  This project is under construction with estimated 13.215% progress.	SEC	96 km. of intercity motorway to be constructed.	Bureau of International Highways Cooperation, Department of Highways Tel: (+66) 2354 6901
60	Tak–Mae Sot Highway Improvement Project	Roads and bridges	The project will improve highway capacity on the EWEC in Thailand, specifically, the stretch of the corridor that connects with the Myanmar section at Myawaddy. It will upgrade the existing 86 km road from two to four lanes.	2008	90.0	100.0	Government of Thailand—90.0	Government of Thailand—100.0	Ongoing.  The first 59 km. construction has been completed.  The remaining 27 km. is under construction with estimated 63.25% progress.	EWEC	86 km. of road to be upgraded from two to four lanes.	Bureau of International Highways Cooperation, Department of Highways Tel: (+66) 2354 6901
61	Lomsak– Phetchabun Highway Improvement Project	Roads and bridges	The project will upgrade the existing 92 km road from two to four lanes. The government budgeted for 11 km in the fiscal year (FY) 2016. The upgrading of the remainder is envisaged in the next five-year plan.	2016	120.0	220.0	Government of Thailand—120.0	Government of Thailand—220.0	Ongoing.  The first 11 km. is under construction with estimated 96.27% progress. The remaining 81 km is awaiting approval.	EWEC	92 km. of road to be upgraded from two to four lanes.	Bureau of International Highways Cooperation, Department of Highways Tel: (+66) 2354 6901

				Year	<b>Cost Est</b> (\$ mill		<b>Potential</b> <b>Source an</b> (\$ mi	d Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
62	Kalasin–Nakrai– Kamcha I Highway Improvement Project	Roads and bridges	The project will improve highway capacity of the EWEC in Thailand between Kalasin and Kamcha I. It will upgrade the existing 107.7 km road from two to four lanes.	2016	140.0	170.0	Government of Thailand—140.0	Government of Thailand—170.0	Ongoing.  The Kalasin– Nakrai (71.4 km.) section is under construction with estimated 52.925% progress.  The Nakrai– Kamcha I (36.3 km.) is under construction with estimated 17.94% progress.	EWEC	107.7 km. of road to be upgraded from two to four lanes.	Bureau of International Highways Cooperation, Department of Highways Tel: (+66) 2354 6901
63	Chiang Rai-Chiang Khong Highway Improvement Project	Roads and bridges	The project will improve highway capacity of the NSEC in Thailand. It will upgrade the existing 109 km road from two to four lanes.	2015	80.0	90.0	Government of Thailand—80.0	Government of Thailand—90.0	Ongoing.  The first 61 km. construction has been completed.  The new alignment road project 48 km. from Chiang Rai - Khun Tan is under construction with estimated 7.93% progress.	NSEC	61 km. of road to be upgraded from two to four lanes and 48 km. will be constructed in the new alignment.	Bureau of International Highways Cooperation, Department of Highways Tel: (+66) 2354 6901
64	Mae Sot- Myawaddy Border Crossing Project and Infrastructure Improvements	Border- crossing facilities	The project will build a new bypass road and bridge to the north of the existing border crossing, currently located in the congested centers of the two border cities, Mae Sot and Myawaddy. This new crossing will be dedicated to crossborder freight traffic and will avoid the congested urban areas. The bypass will	2015	116.0	130.0	Government of Thailand—116.0	Government of Thailand—130.0	Ongoing.  The bridge part has been completed.  The road section in Thailand has been completed while the road in Myanmar is under	EWEC	Cross border bridge with border- crossing facilities and 21.4 km. of 4-lane highway.	Bureau of International Highways Cooperation, Department of Highways Tel: (+66) 2354 6901

				Year	<b>Cost Est</b> (\$ mill		Source an	Funding d Amount llion)		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
			link with a newly envisioned special trade zone on the Myanmar side. The overall project will consist of about 21.4 km of new four-lane divided highway (16.745 km in Thailand, 3.895 km in Myanmar), a 760-meter- long bridge across the Moei River at the border, and associated border-crossing facilities (BCF).						construction with 77.50% progress. The BCF is under construction with 80.51% progress in Thailand and 95.55% in Myanmar.			
65	Mekong Bridge at Bungkan–, Bolikhamxay (Thailand Part)	Roads and bridges	This bridge will connect Amphoe Muang, Bungkan Province (Thailand) and Muong Paksan, Bolikhamxay Province (Lao PDR). It will facilitate the transport of goods and passengers from northeastern Thailand to central Lao PDR and central Viet Nam via NR8.	TBD	110.0	80.0	NEDA	TBD	Proposed.  Detailed design has been completed.	Bungkan Province, Thailand and Bolikhamxay Province Lao PDR NSEC	16.18 km construction includes road and bridge.	Bureau of International Highways Cooperation, Department of Highways Tel: (+66) 2354 6901
66	Laem Chabang Port Development Project, Phase 3—	Ports and waterways	Projections of demand indicate that the total containers accommodated in Basin I and Basin II will exceed 10 million 20-foot equivalent units (TEUs) per year by 2018, while the maximum capacity of Basin I and Basin II together is approximately 11 million TEUs per year. Given these projections, the development of Basin III will be necessary to accommodate the increasing throughput and to strengthen the port'srole as a gateway to the GMS. The proposed study will present technical and other options regarding the expansion of the port.	2018	5.0	3,000.0	Government of Thailand—5.0	PPP  (Public Private Partnerships)  Private Sector—3,000.0	Ongoing.  On June 4,2018, the study report on environmental health impact assessment (EHIA) has been sent to National Environment Board for Consideration and the project is set to be approved by the end of the year.	Chonburi Province SEC	The development of Basin III. We forecast the container will exceed 9.1 million TEUs within 2050, and LCP Phase III can accommodate to 10.2 million TEUs.	Port Authority of Thailand (PAT) Laem Chabang Port (LCP)

				Year	<b>Cost Est</b> (\$ mill		Potential Source an (\$ mi	d Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates  The bidding for the private terminal operator of LCP phase 3 is set to take place in around November 2018.  The Megaproject construction LPC phase 3 will take place in  August 2019.	Alignment	Outputs	Project Contact
67	Single Rail Transfer Operator Development Project of Laem Chabang Port	Rail	Currently, approximately 88% of the transport from the Laem Chabang Port to the hinterland is via the road system, with the remainder by rail (9.5%) and inland waterway (2.5%). The proposed project will develop infrastructure and necessary facilities for serving the discharging and loading containers transported by rail to the port area. The project will facilitate rail transfer in response to the completion of the State Railway of Thailand's double-track construction project. It will increase the handling capacity of rail transport at the port from the current 500,000 TEUs/year to 1–2 million TEUs/year. The objective of the project is to increase the proportion of container traffic moved by rail from 9% of port throughput to 20%, in line with the government's policy of reducing logistics costs.	2018	90.0	90.0	Government of Thailand—90.0	Government of Thailand (PAT)— 90.0	Ongoing.  PAT has hired ITD-WH consortium, to construct the project and provide the lifting equipment. The duration of construction is expected to be completed and will be ready for operation in 2018. Currently, the project is under construction.	Chonburi Province SEC	The handling capacity of rail transport at the port from the current 500,000 TEUs/year to 1–2 million TEUs/year	Port Authority of Thailand (PAT) Laem Chabang Port (LCP)

			Year	<b>Cost Est</b> (\$ mill		<b>Potential</b> <b>Source an</b> (\$ mi			Key locations and GMS Economic Corridor	Expected/ Planned Measurable		
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
68	Aranyaprathet– Poipet New Road with Border- Crossing Facilities (Thailand part)	Roads and bridges	Recent discussions at the Prime Minister's office between representatives of Thailand and Cambodia have resulted in a general agreement regarding the location for a new Poipet-Aranyaprathet border crossing, this one specifically for freight traffic.  Passenger traffic will continue to use the existing border crossing. The construction of Thailand's part of this new facility will consist of a 4.7km bypass road and a bridge over the Prom Hrod Canal.	2015	26.4	30.0	Government of Thailand—26.4	Government of Thailand—30.0	Ongoing.  Ban Nong Ian- Stung Bot border crossing is under construction with estimated 77.04% progress.	SEC	4.7 km. bypass road and bridge.	Bureau of International Highways Cooperation, Department of Highways Tel: (+66) 2354 6901
69	The Construction of a New Railway Line from Den Chai to Chiang Rai and Chiang Khong	Rail	The construction of this new doubling track from Den Chai to Chiang Rai will diminish the country's logistics costs and fuel imports; enhance speed, convenience, and safety; and support integration with neighboring transport systems, such as those in the Lao PDR and southern PRC. It will also benefit development, especially in the northern provinces, such as Phayao, Phare, and Chiang Rai, which will lead to the country's overall economic growth.	2018	2,199.0	2,278.8	TBD	Government of Thailand — 2,278.8	Proposed.  The F/S and detailed design are already completed and the cabinet approved the project on 31 July 2018.	NSEC	326 km railway	Mr.Jaratphit Luangsopaphan State Railway of Thailand Email: Jaratphit053@ yahoo.com

				Year	<b>Cost Est</b> (\$ mill			l Funding ad Amount illion)		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
70	The Construction of a New Railway Line from Baan Pai (KhonKaen) to Mahasarakham, Roi Et, Mukdahan, and Nakhon Phanom	Rail	In 1989, the Government of Thailand decided to improve the nationwide rail network. One important network expansion was the Bua Yai– Mukdahan–Nakhon Phanom line on the GMS EWEC. Circumstances later resulted in the need for a feasibility study on the construction of a new railway line that would be integrated into the EWEC. This new, updated study was significant because it represented one of the milestones of rail infrastructure expansion in the EWEC. The study showed that this proposed route should be built as a doubling track on the new alignment for the Baan Pai (Khon Kaen)– Mahasarakham–Roi Et–Mukdahan–Nakhon Phanom line. For the time being, the State Railway of Thailand is carrying out a detailed design study on the new route alignment, which will be able to link with the Thai–Lao Friendship Bridge No. 2, in Mukdahan, and the Thai–Lao Friendship Bridge No.3, in Nakhon Phanom.	2018	1,724.0	1,708.9	TBD	Government of Thailand —1,708.9	Proposed.  The F/S and detailed design are already completed. Awaiting government approval of the project.	EWEC	355 km railway	Mr.Jaratphit Luangsopaphan State Railway of Thailand Email: Jaratphit053@ yahoo.com

				Year	<b>Cost Est</b> (\$ mill		Potential Source an (\$ mi	d Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
71	Coastal Terminal Development Project of Laem Chabang Port	Ports and waterways	This project will reduce the logistics costs for exporters, importers, and logistics providers. The coastal terminal will serve domestic waterway transport through Laem Chabang Port.	2018	58.5	58.5	TBD	Government of Thailand (PAT)—58.5	Completed.  Nawarat Patanakarn Public Company is the company hired by PAT to be responsible for construction of the project. The investment budget totaled 1,846.19 million THB.  PAT will invest in necessary infrastructure, including all key lifting equipment and oversee management.  The construction was completed. The operation will be tipped to perform by this year.	Chonburi Province SEC	The capacity of coastal terminal is 300,000 TEUs/year.	Port Authority of Thailand (PAT) Laem Chabang Port (LCP)
72	GMS Highway Expansion Phase 2 Project	Roads and bridges	The proposed project will (i) upgrade about 125 km. of a national highway in northeastern Thailand from a two-lane to a four- lane carriageway, and (ii) strengthen capacity in road safety management by introducing road safety audits and awareness training for the executing agency during project implementation.	2017	213.6	213.6	ADB—99.4  Government of Thailand—114.2	ADB—99.4 Government of Thailand—114.2	Ongoing.  The project has been issued Notice to Proceed on 1 October 2018.	National Highway (NH) 22 and NH 23 Northeast Thailand EWEC	125 km. of road to be upgraded from two to four lanes.	Bureau of International Highways Cooperation, Department of Highways KRISCHANGTRA KUL29@GMAIL. COM Tel: (+66) 2354

				Year	<b>Cost Est</b> (\$ mill		Potential Source and (\$ mil	d Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
			The project consists of  (i) A. Nong Han-A. Pang Khon  (ii) Sakon Nakhon-Nakhon Phanom  (iii) Roi Et – Yasothon									
73	National Railway Improvement	Rail	The proposed project will upgrade 2,476 km of a railway in Thailand from a single track to double track and eliminate all at-grade level crossing.	2018	3,500.0	12,192.3	ADB—300.0  Government of Thailand—3,200.0	Government of Thailand— 12,192.3	Ongoing.  The first section of 993 km. is under construction and the second section of 1,483 km. is awaiting government approval of the project.	NSEC EWEC	2,476 km. of double track railways	Mr.Jaratphit Luangsopaphan State Railway of Thailand Email: Jaratphit053@ yahoo.com
	Subtotal (Tran	sport Investme	ent Projects included in RIF 202	22: Thailand)	10,472.5	21,962.1						
Subtot	al (Transport Investn	nent Projects p	roposed to be added in RIF 202	22: Thailand)		0.0						
		Subtota	l (Transport Investment Projec	ts: Thailand)	10,472.5	21,962.1						

## **Viet Nam**

## **Investment Projects**

				Year	Cost Est (\$ mill		Source a	al Funding nd Amount nillion)		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
Proje	ects in RIF 202	2										
74	GMS Ben Luc-Long Thanh Expressway (Stage 2)	Roads and bridges	The project will construct a 57.1 km expressway between Ben Luc and Long Thanh, south of Ho Chi Minh City (HCMC). This is a section of the GMS Southern Economic Corridor (SEC).  This project will connect Ben Luc and Long Thanh in the southern region of Viet Nam. The expressway will be part of the Greater Mekong Subregion Southern Economic Corridor. It will improve transport efficiency and boost economic activities in the region.	2014	1,201.9	1,607.0	ADB—636.0  JICA—517.6  Government of Viet Nam—48.3	ADB—635.7  JICA—634.8  Government of Viet Nam— 336.9	Ongoing.  JICA part: J2 Package is completed; J1, J3 to be completed in 2019.  ADB part: Total Progress 60%.  The sections of JICA (package J1-J3) meet the progress schedule. The western section of ADB (package A1 - A4), if the Contractor fails to make the effort, it is difficult to complete the schedule; The East section of ADB (package A5-A7) is behind schedule	SEC	57.1 km expressway between Ben Luc and Long Thanh (connecting to the Cai Mep – Thi Vai Seaport)	Viet Nam Expressway Corporation (VEC)
75	GMS Ha Noi-Lang Son Expressway Project (Huu Nghi- Chi Lang Section)	Roads and bridges	This project will construct a 156.6 km expressway between Ha Noi and Huu Nghi, in Lang Son Province, on the border with the PRC's Guangxi Zhuang Autonomous Region.	2016	1,400.0	1,400.0	ADB—381.6 TBD— 1,018.4	Private Investors —1,400.0	Ongoing.  The project has completed the technical design.  Currently, the Prime Minister has directed the	NSEC	1. Ha Noi – Bac Giang: 45 km of expressway  2. Bac Giang – Lang Son: 64 km of expressway	Mr DUONG Hung Cuong Office of the GMS National Coordinator, Viet Nam cuongmpi@gmail. com

				Year	Cost Est (\$ mill		Source a	al Funding nd Amount nillion)		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
			This project will connect Ha Noi and Huu Nghi, Lang Son province, on the border with the PRC's Guangxi Zhuang Autonomous Region. Huu Nghi – Chi Lang section is about 43km						investment of this project in the form of BOT. Phasing into 2 BOT (Building – Operate – Transfer) Project:  - Ha Noi – Bac Giang: Completed in 2016 under BOT scheme.  - Bac Giang – Lang Son (including Chi Lang – Huu Nghi Border Gate): Under construction, expecting to be completed by Dec 2019. Change the Management Authority from MOT to Lang Son People Committee  - Lang Son – Huu Nghi Border Gate: Expecting to be completed by		3. Chi Lang – Huu Nghi Border Gate: 43 km of expressway	
76	Second GMS Southern Coastal Corridor (also known as SSCP2)	Roads and bridges	The project will (i) construct the remaining 84 km (between Ha Tien and Rach Gia) of National Route 80, or Quoc Lo 80 (QL80), in	TBD	373.0	326.2	TBD	ADB—326.2	2020.  Proposed.  Progress:  - Approval of Project Proposal: 2018	SEC	84 km of road bridge connecting Ha Tien and Rach Gia (National Highway No. 80) constructed	Cuu Long CIPM

				Year	<b>Cost Es</b> (\$ mil		Source a	al Funding and Amount million)		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
			Viet Nam (\$291.37 million); and (ii) upgrade the border-crossing facilities at HaTien (formerly XaXia) and streamline the procedures there—all via additional financing (\$ 18.81 million for border crossing upgrading and \$15.97 million for the HaTien Bridge).  In line with one of the strategies of the GMS Strategic Framework (2012–2022), the project is a precondition for promoting broader economic corridor development. It will also facilitate Viet Nam's plans for implementing the Association of Southeast Asian Nations (ASEAN) single-window bordercrossing mechanism by 2015. In addition, the project will seek to mainstream gender imbalances, prevent human trafficking and the spread of HIV/AIDS, mitigate and adapt to climate change impacts, strengthen institutional capacity, and facilitate regional cooperation between Cambodia and Viet Nam.						- Approval of Project Investment: 2018  - Selection of Technical Consultant: 2018  - Approval of Technical Design: 2018 – 2019  - Procedure on Loan Agreement for Construction Packages  - Implementation: 2020 - 2023  The loan for technical design was canceled.		2. Upgrading Ha Tien border - crossing facilities	

				Year	<b>Cost Est</b> (\$ mill		Source a	al Funding nd Amount nillion)		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No. 77	Project Title  Second Northern GMS Transport Network Improvement (Luang Prabang— Thanh Hoa)	Subsector  Roads and bridges	Description  This project aims to provide more efficient transport across the Lao PDR-Viet Nam border, as well as on the project road sections of the GMS northeastern corridor through the provinces of Thanh Hoa, in northern Viet Nam, and Houaphanh, in northeastern Lao PDR. It includes two components: (i) an upgrade to all-weather status of 196 km of Highway 217 in Viet Nam and of 143 km of routes 6, 6A, and 6B in the Lao PDR; and (ii) improvements in the safety of these road sections.	of Approval 2015	Original 175.2	Updated	Original  ADB—146.1  Government of Viet Nam— 29.1	Updates  ADB—71.13; Government of Viet Nam—6.7	Startus Updates Ongoing. Started by September 2017 To be completed by 31 Dec 2019	Alignment Than Hoa, Viet Nam and Houaphanh, Lao PDR NSEC	Outputs  1. Upgrade 45 km of National Highway No. 2017 from Cam Thuy to Ba Thuoc  2. Construction of new Ha Trung Flyover	Project Contact  Mr DUONG Hung Cuong Office of the GMS National Coordinator, Viet Nam cuongmpi@gmail. com
78	GMS Corridor Connectivity Enhancement Project	Roads and bridges	The project will finance improvement of international and national transport connectivity of underdeveloped provinces of Vietnam by improving accessibility to GMS corridors. The project aims to expand the benefits of the GMS corridors to the northwestern provinces, where high poverty incidence is reported, by enhancing the road connectivity between the Noi Bai-Lao Cai Expressway and the provinces of Lao Cai, Lai Chau and Yen Bai through rehabilitation of National Highway (NH) 279 and NH32 and upgrading of Provincial Road (PR)175 to an NH.	2018	180.0	180.0	ADB—120.0  Government of Viet Nam—60.0	ADB—120.0  Government of Viet Nam—60.0	Proposed.  In ADB pipeline for 2018	Noi Bai-Lao Cai Expressway and the provinces of Lao Cai, Lai Chau and Yen Bai NSEC	National Highway (NH) 279 and NH32 and upgrading of Provincial Road (PR)175 to an NH rehabilitated	Ministry of Transport 80 Tran Hung Dao Hanoi, Viet Nam

				Year	<b>Cost Est</b> (\$ mill		Source a	al Funding nd Amount nillion)		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
79	Central Region Connectivity Enhancement Project (NR 14D Improvement Project)	Roads and bridges	This is a highway connecting the west of Quang Nam province, Ho Chi Minh road to Tien Sa port (Da Nang province); it is also the link between the three GMS countries – Cambodia, Laos and Viet Nam.  National Highway 14D, submitted by Viet Nam for inclusion in Regional Investment Framework 2022, is covered by this proposed project.	2019	110.0	137.0	ADB—100.0 Government of Viet Nam— 10.0	ADB – 116.32; Government of Viet Nam 20.65	Proposed.  Consultation on environment protection from international organizations (WWF, IUCN)	EWEC	National Highway No. 14D upgraded	Thang Long Project Management Unit
80	Central Mekong Delta Connectivity	Roads and bridges	This investment project will improve connectivity between Viet Nam and the rest of the Mekong Delta region, and provide better access to the southern coastal region from HCMC by building two cable-stayed bridges across the Mekong River, and building associated roads.	2013	860.0	860.0	ADB—410.0  Government of Australia—134.0 Korea Export- Import Bank— 260.0  Government of Viet Nam—56.0	ADB—410.0  Government of Australia—134.0 Korea Export-Import Bank—260.0  Government of Viet Nam—56.0	Cao Lanh Bridge and Vam Cong - Cao Lanh connecting route were opened on 27 May 2018 Vam Cong Bridge Technical Issues: To be fully fixed by end of 2018.	SEC	New bridges and roads connecting Viet Nam to Mekong Delta Area	Cuu Long Corporation for Investment, Development and Project Management of Transportation Infrastructure (Cuu Long CIPM)
81	GMS Kunming– Haiphong Transport Corridor–Noi Bai– Lao Cai Highway (additional financing)	Roads and bridges	The project is designed to provide (i) a 244 km grade- separated and access-controlled highway, including 10 interchanges with toll booths and 5 service areas, starting at Noi Bai, near Ha Noi, and	2014	182.0	182.0	ADB—147.0 Government of Viet Nam—35.0	ADB—147.0 Government of Viet Nam—35.0	Ongoing.  Newly construct 2 more additional lanes of 25 km from Yen Bai to Lao Cai and upgrading of current safety system	Viet Nam - Huyen Soc Son, Lao Cai, Noi Bai, Thanh Pho Lao Cai	25 km of additional 2 lanes expressway	Ministry of Transport Mr. Pham Thanh Binh phamthanhbinh71@ gmail.com 80 Tran Hung Dao Hanoi, Viet Nam

				Year	<b>Cost Est</b> (\$ mil		Source a	al Funding nd Amount nillion)		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
			ending in Lao Cai on the border with the PRC in northwest Viet Nam; electric, communications, and tolling systems, and associated facilities, as well as the Vietnam Expressway Corporation's highway operation and maintenance (O&M) equipment and vehicles; and capacity building for the Corporation in project-implementation management, corporate-financing management, highway O&M, and safeguard planning and implementation.									
82	GMS Road Corridors Maintenance	Roads and bridges	The project will undertake frequent and periodic maintenance for selected GMS corridor sections. It will have two components: (i) maintenance of road sections, and (ii) construction of five or six weigh stations on selected road sections. The project aims to undertake the GMS corridor's network maintenance and GMS road asset management.	2018	120.0	120.0	TBD	TBD	Proposed.	TBD	TBD	Mr DUONG Hung Cuong Office of the GMS National Coordinator, Viet Nam cuongmpi@gmail. com

				Year	<b>Cost Est</b> (\$ mill		Source a	al Funding nd Amount nillion)		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
83	Ho Chi Minh City–Loc Ninh (Cambodia Border) Railway	Rail	The HCMC–Phnom Penh route (via Loc Ninh) is part of the Singapore–Kunming Rail Link (SKRL). The project will construct a new railway section of 128 km from HCMC to Loc Ninh.	2020	900.0	900.0	TBD	TBD	Proposed.  The feasibility study has been finalized in 2012 and Viet Nam has been seeking investors/funding, calling foreign partners (whether governmental loan or private investment) to construct this missing link section. Despite that, we still hope to execute its construction in the period 2016-2025.	SEC	128 km railway from HCMC to Loc Ninh	Mr DUONG Hung Cuong Office of the GMS National Coordinator, Viet Nam cuongmpi@gmail. com
84	Ben Luc–Long Thanh Expressway (Ring Road 0.3 Ho Chi Minh City)	Roads and bridges	The project aims to contribute to the socioeconomic development of the Southern Economic Region, exploiting the economic development of, and attracting investment and tourism to, HCMC. It also aims to reduce the pressure on and congestion of Highway 1.	2019	733.7	733.7	ADB—342.0  Cofinancing (TBD)—361.7  Government of Viet Nam—30.0	ADB—342.0  Cofinancing (TBD)—361.7  Government of Viet Nam—30.0	Proposed.  The Technical Assistance on surveying and F/S for National Highway No. 22 – Binh Chuan and Ben Luc – National Highway No. 22.	SEC		Vietnam Expressway Corporation Mr. Tran Xuan Sanh HCMC
85	Viet Nam: Lao Cai-Hekou (4.7km) PRC: Hekou-Lao Cai (03km)	Rail	The proposal is for standard gauge route between the PRC and Viet Nam rail systems, via GMS Rail Link 9: Kunming–Ha Noi–HCMC–Phnom Penh–Bangkok (SKRL main line). ADB will only finance it if a standard gauge link is provided as the connection.	TBD	33.6	33.6	ADB	ADB	Proposed.	NSEC		Mr DUONG Hung Cuong Office of the GMS National Coordinator, Viet Nam cuongmpi@gmail.

				Year	<b>Cost Es</b> i (\$ mil		Source a	al Funding nd Amount nillion)		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
			A feasibility study was conducted, funded by Viet Nam. There remain bilateral issues regarding the route alignment and the location where the line would cross the border.									
	Vientiane– Thakhek–Mu Gia Railway Project (450 km) Mu Gia-Vung Ang (F/S completion expected in 2017) 119 km	Rail	The project covers a portion of the spur line of the SKRL. This spur line will connect the Thai railway network to the Vietnamese railway network. The Republic of Korea has given assistance with a pre-feasibility study.	2018	Cost estimate is listed under Lao PDR to avoid double counting		TBD	TBD	Proposed.  Viet Nam has been seeking investors/funding, calling foreign partners (whether governmental loan or private investment) to construct this missing link section.	NSEC	Expected Outputs listed under Lao PDR to avoid duplication	
	Subto	tal (Transport I	nvestment Projects in RIF 2022	2: Viet Nam)	6,269.4	6,557.3						
Subtot	otal (Transport Investment Projects proposed for inclusion in RIF 2022: Viet N					0.0						
		Subtotal	(Transport Investment Projects	s: Viet Nam)	6,269.4	6,557.3						
			Total (Transport Investme	nt Projects)	56,203.0	70,246.5						

## **All Countries**

## Technical Assistance Projects

				Year	<b>Cost Est</b> i (\$ milli		Source a	al Funding and Amount nillion)		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
Proje	ects in RIF 202	2										
1	GMS Corridor Enhancement Project (formerly Project Preparatory Technical Assistance for National Highway 14D Improvement)	Viet Nam	The technical assistance (TA) will prepare a project to improve the national and international transport connectivity of underdeveloped provinces in Viet Nam by improving access to GMS corridors. The project comprises (i) improving National Highway 14D (NH14D) in Quang Nam Province, and three National Highways (NH32, N279 and upgraded PR175) in Yen Bai Province, Lai Chau Province and Lao Cai Province, and (ii) supporting the Department of Road Viet Nam (DRVN) in road asset management.	2016	1.8	1.8	ADB—1.8	ADB—1.8	Completed.	NSEC	Project to improve international and national transport connectivity of underdeveloped provinces of Vietnam prepared	
2	Proposed Hoa Lac-Hoa Binh City Expressway Public- Private Partnership Feasibility Study	Viet Nam	The Lang–Hoa Lac–Hoa Binh Expressway is one of the seven expressways connecting to Hanoi.The Lang–Hoa Lac section has been in operation since October 2010. The Hoa Lac– Hoa Binh section, 33.3 km in length, is in the preparatory stage.	TBD	1.0	1.0	TBD	Private Sector— 1.0	Completed.		Feasibility Study prepared	

				Year	<b>Cost Est</b> (\$ mill		Source	ial Funding and Amount million)		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
3	GMS Road Corridors Maintenance	All GMS Countries	The TA will provide institutional and operational strengthening of GMS road maintenance and road asset maintenance	TBD	1.2	TBD	Seeking financing	Seeking financing	Proposed.  Proposed by MOT of Viet Nam to ADB to undertake a survey on the need for road maintenance and road asset management on GMS corridors.			Ministry of Transport, Viet Nam
4	Strategic Study on the Development and Management of the GMS Motorway Network System	All GMS countries	The improvement and expansion of the existing motorway network system, raising it to an advanced standard with fully controlled access, is a key part of the strategic plan for the development of GMS highways to promote crossborder transport, including transit traffic. The GMS motorway network system will be the main point of road connectivity to other modes of transport, border areas, special economic zones (SEZs), and other high-potential development areas in the GMS countries. It will efficiently reduce travel time, improve road safety, and lower transport logistics costs. The strategic study will look at all the GMS corridors, and consider how they mesh with the GMS motorway network system.	TBD	TBD	TBD	Seeking financing	Seeking financing	Proposed			

				Year	<b>Cost Est</b> (\$ mill		Source a	ial Funding and Amount million)		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
5	Knowledge Transfer between Thailand and the Other GMS Member Countries on Highway and Bridge Standards and Specifications, including Transport Facilitation Facilities	All GMS countries	The objective of this TA is to enhance knowledge and experience sharing in the field of road engineering, and to brainstorm better engineering ideas for sustainable road development of Highways will fulfill its role of providing technical experts and training-center facilities, and of organizing the staff for various training courses in road and bridge engineering.	TBD	0.4	0.4	Seeking financing	Seeking financing	Proposed			
6	Study on Dry Port Development Plan along International Railway Lines Connecting Thailand with Cambodia, the Lao PDR, and Myanmar	Cambodia, Lao PDR, Myanmar, Thailand	Thailand aims to develop Laem Chabang Port as a gateway to neighboring countries in the GMS, and to promote a modal shift from road to rail transport.  Among the cross-border railway projects that are being emphasized by the GMS countries governments are: the Nong Khai- Thanaleng-Vientiane line, to connect with the Lao PDR; the Aranyaprathet-Klong Luk-Poipet line, to connect with Cambodia; and the Kanchanaburi- Dawei line, to connect with Myanmar.  Thailand seeks to formulate a clear development plan for dry ports, which function as cross-border facilities or inland container terminals and are connected via GMS economic corridors. The dry ports should also be maximized by considering	2018	0.5	0.5	Seeking financing	Government of Thailand—0.5	Ongoing.  Thailand already hired the consultant to study the project. The study will complete at the end of year 2018.	NSEC EWEC SEC		Mr.Jaratphit Luangsopaphan State Railway of Thailand Email: Jaratphit053@ yahoo.com

				Year	<b>Cost Est</b> (\$ mill		Source a	al Funding and Amount nillion)		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
			connections with other important ports in the GMS, such as Dawei, Myanmar; Sihanoukville, Cambodia; and HCMC, Viet Nam. The TA study will determine the need for dry ports at strategic rail locations on international borders.									
7	GMS Transport Database Capacity Development	All GMS countries	This is a project proposed by a transport and logistics assessment study conducted under the process for preparing the GMS Regional Investment Framework2022.  The project is intended to set up a systematic and coordinated approach to gathering (i) existing crossborder traffic and commodity data; and (ii) existing traffic data for major road corridors, including periodic traffic surveys. The TA project may be implemented in two steps: (ii) small-scale assistance in scoping out the required database (including individual country database activities), and a GMS secretariat and coordination function for a concept paper for large-scale capacity development; and (ii) a large-scale standardized and integrated database capacity-building assistance targeted at Cambodia, the Lao PDR, and Myanmar, but incorporating data from the PRC, Thailand, and Viet Nam.	TBD	TBD	TBD	Seeking financing	Seeking financing	Proposed			

				Year	<b>Cost Est</b> (\$ mill		Source a	al Funding and Amount million)		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
8	Feasibility Study on Upgrading of Mawlamyine- Dawei – Htikee Rail Link (452.58 km)	Myanmar	The railway section that is the focus of this feasibility study is one of the most important branch lines of Myanmar Railways, not only for local transport, but also for its links to Thailand and the railway network of the Association of Southeast Asian Nations (ASEAN).  However, the railway line is in poor condition. The project will contribute to the improvement of passenger, freight, and logistics transport on this line. Given that the line is part of the SKRL and Trans-Asian Railway (TAR) networks, Thailand has already conducted a full feasibility study on the Laem Chabang–Bangkok–Kanchanaburi–Ban Phu Nam Ron (border crossing) section. A feasibility study for Myanmar's Htikhee– Dawei missing link has not yet been done, however. The feasibility study for an extension of the Dawei–Mawlamyine section is expected to be conducted as soon as possible, to promote the continuity of the TAR corridor.	2018	TBD	TBD	TBD	TBD	Proposed	Mon State Tanintharyi Region SEC	Upgraded Rail Link and New spur line	Deputy General Manager Planning & Administration Department, Myanmar Railways +95 67 77084 dgm.planning.mr@ gmail.com

				Year	<b>Cost Est</b> (\$ mill		Source a	al Funding and Amount nillion)		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
9	Transport Sector Reform and Modernization (additional financing)	Myanmar	This TA project will support the next phase of ADB's participation in the development of Myanmar's road transport sector.	2017	2.0	2.0	ADB—2.0	ADB—2.0	Ongoing.  This TA was being implemented Pre-Feasibility Study (F.S) before HMP Project. Feasibility Study (F.S) was completed in Nov: 2017.			ADB
10	Various TA projects proposed by the Lao PDR Department of Waterways and Ministry of Public Works and Transport	All GMS countries	The TA projects are as follows: (i) regulatory TA to standardize the vessel and waterway classifications, set up a vessel inspection system, develop a short- and long-term fleet policy, and build a search-and-rescue center (timeline: 2020–2030, no cost estimate yet); (ii) feasibility studies for a multimodal transportation system and for an import-and-export logistics information system (timeline: 2018–2020, no cost estimate, Republic of Korea as source of funding); (iii) the formulation of a regional plan for developing inland waterway transport in the ASEAN countries (timeline: 2016–2018, \$100,000, to be carried out by the Korean Maritime Institute); (iv) a development plan for international navigation on the Lancang/Mekong River, 2015–2025 (timeline for the planning: 2015–2018, no cost estimate, to be carried out by the Joint Committee on Coordination of Commercial Navigation expert group);	2018	TBD	TBD	PRC Republic of Korea	PRC Republic of Korea	Proposed			

				Year	<b>Cost Est</b> (\$ milli		Source a	al Funding and Amount million)		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description  (v) the implementation of the Mekong River Commission Waterborne Transport Master Plan (timeline: 2016–2040, no cost estimate); and (vi) the implementation of the Sustainable Management of Dangerous Goods on Waterway Transport Plan (12 documents have been completed, but funding is needed for implementation, no cost estimate).	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
11	Greater Mekong Subregion East— West Economic Corridor Highway Development Project (formerly GMS EWEC Road Corridor Improvement II)	Myanmar	The project will develop a direct highway link between Bago and Kyaikto, along the Greater Mekong Subregion (GMS) East–West Economic Corridor (EWEC). The project will (i) improve connectivity between Myanmar and Thailand; compounding with ongoing ADB transport infrastructure and crossborder transport facilitation activities to enable more intense trade between Myanmar and Southeast Asia, (ii) enhance road access to Mon and Kayin state, demonstrating the government's commitment to improving the well-being of people in areas that have long been affected by conflict, (iii) provide a new high-class road access to Kyaikto, a major tourism and pilgrimage site, and (iv) build governments capacity to develop and manage high-class highways meeting international standards.	2017	2.0	2.0	ADB—2.0	ADB—2.0	Ongoing.  It is planning to perform traffic survey, topography survey, geotechnical investigation, environmental testing, inventory of loss & socioeconomic survey, poverty & social assessment data collection survey, biodiversity survey and give awareness to the people with local authorities on the new alignment.	Bago Region  Mon and Kayin State  EWEC	70 km- new road	ADB

		e Subsector Description	Year	<b>Cost Est</b> (\$ mill		Source a	al Funding and Amount nillion)		Key locations and GMS Economic Corridor	Expected/ Planned Measurable		
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
12	GMS Regional Transport Corridor Improvement I	Myanmar	The technical assistance project will prepare a project to upgrade sections of Myanmar's GMS North-South and East-West transport corridors.	2019	1.5	1.5	ADB—1.5	ADB—1.5	Proposed			ADB
		Subtota	l (Transport TA Projects in t	ne RIF 2022)	9.2	9.2						
Tech	nical Assistan	ce Transpo	ort projects propose	d to be a	dded in RI	F 2022						
13	Technical assistance to complete the draft Framework Agreement for  Cross-Border Railway Transport Connectivity in the GMS	All GMS countries	The draft Framework Agreement currently only draft the Main Text, which has many references to the Protocols, the Annexes (from Article 6 to Article 30). According to ADB Consultants, these documents will be developed later. To ensure the consistency and feasibility of the Framework Agreement, recommendations ADB should continue to support research and develop draft the Protocols and the Annexes.	2020		TBD		TBD	Proposed by MOT of Viet Nam			Ministry of Transport of Viet Nam

				Year	<b>Cost Est</b> (\$ mil		Source a	al Funding nd Amount nillion)		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
14	Road Safety for Highway Development in the Greater Mekong Subregion East-West Economic Corridor	Myanmar	This is a Transactional TA project with expected outcome of a more efficient and safer movement of goods and people between Bago and Kyaikto along the GMS EWEC.	2018		1.1		ADB (Trust Fund for Road Safety for Highway Development in GMS EWEC)—1.0 Government of Myanmar—0.06 (non-cash)	Proposed	Bago-Kyaikto section of EWEC	1. Road safety approach for existing Bago-Kyaikto road section established;  2. Government's capacity to collect and analyze road safety data improved;  3. Police capacity for traffic	Ministry of Construction  Department of Highways Office Building No. 11 Naypyitaw, Myanmar
	Subtotal (Transpo	ort TA Projects	proposed for inclusion in th	ne RIF 2022)		1.1						
	Subtotal (Transport TA Projects)			TA Projects)	10.4	10.3						
		Total	(Transport Investment and	TA Projects)	55,763.4	70,256.8						

# Energy

## **Investment Projects**

				Year		stimate illion)	Potential Source and (\$ mill	l Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
Pro	jects in RIF 20	022										
1	Lao PDR-Viet Nam Power Transmission Interconnection	Lao People's Democratic Republic (Lao PDR), Viet Nam	This project will (i) construct a 59-kilometer (km), 500-kilovolt (kV) transmission line and a 230 kV/500 kV substation in Hatxan, Lao PDR; and (ii) will construct a 94 km, 500 kV transmission line and expand the existing 220 kV/500 kV substation in Pleiku, Viet Nam. The project will enable the transmission of 3,157 gigawatt-hours/ year of electricity, to be produced by eight small hydropower plants (with a total capacity of 1,013 megawatts [MW]) in southern Lao PDR, to be developed by independent power producers.	2019	120.0	120.0	World Bank—40.0 Cofinancing (TBD)—80.0	World Bank— 40.0 Cofinancing (TBD)—80.0	Proposed	Hatxan, Lao PDR Pleiku, Viet Nam SEC	See description	Mr. Chanthaly Chansompheng Office of the GMS National Coordinator, Lao PDR chansompheng@ yahoo.com Mr DUONG Hung Cuong Office of the GMS National Coordinator, Viet Nam cuongmpi@gmail. com
2	Lao PDR- Thailand Nabong 500 kV Substation Transmission Facility	Lao PDR, Thailand	The project aims to construct a 500 kV line from Udon Thani (Thailand) to Nabong (Lao PDR) to transfer power from three hydropower projects in the Central-1 area of the Lao PDR to Thailand. The hydropower projects are Nam Ngum 2, NamTheun 1, and Nam Ngiep 1, which have a total capacity of over 1,500 MW, largely for export to Thailand.	2014	106.0	106.0	Nam Ngum 2 Power Company—106.0	Nam Ngum 2 Power Company—106.0	Ongoing	Nabong, Lao PDR Udon Thani, Thailand	See description	Mr. Chanthaly Chansompheng Office of the GMS National Coordinator, Lao PDR chansompheng@ yahoo.com Mr. Vudthidech Chamniku Office of GMS National Coordinator, Thailand vudthidech@nesdb. go.th

			Year		stimate illion)	Potential F Source and (\$ milli	Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No. Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
3 Continued Projects in Rural Electrification and Off-Grid Power Development in Northern Part of Lao PDR	Lao PDR	The project involves grid extension based on sound selection principles and the implementation of off- grid projects where grid extensions are not feasible. The new Greater Mekong Subregion (GMS) strategy calls for enhancing energy access, particularly to poor and remote areas, through the promotion of best practices in the GMS. Costs and scheduling are aligned with the completion report for the Lao PDR: Northern Area Rural Power Distribution Project, with some increases reflecting inflation. That project installed 268 km of a 115 kV line, along with distribution facilities, which connected over 30,000 households. (The scope of this project may have overlapped with that of the Northern Cross-Border Power Trade and Distribution Project.)	2019	50.0	50.0	TBD	TBD	Proposed	North and central part of Lao PDR: Phongsaly, Huaphanh and Xieng Khuang provinces NSEC	See description	Mr. Chanthaly Chansompheng Office of the GMS National Coordinator, Lao PDR chansompheng@ yahoo.com

				Year	<b>Cost E</b> s (\$ mi	stimate illion)	Potential I Source and (\$ mill	l Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No	. Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
4	Northern Cross-Border Power Trade and Distribution	Lao PDR	This project will expand the power distribution network in northern Lao PDR near border-crossing points. Components of the project include, among others: (i) a transmission interconnection from the Lao PDR (Luang Namtha) to Myanmar (Shan State, with a possible extension), and (ii) a transmission interconnection from the Lao PDR (Ton Pheung) to Thailand (Mae Chan).	2020	37.4	135.0	ADB—27.4  Government of the Lao PDR—10.0	ADB—80.0  Government of the Lao PDR—5.0  Indicative cofinancing: World Bank and AIIB —50.0	Proposed	Luang Namtha, Lao PDR  Shan State, Myanmar  Ton Pheun, Lao PDR  Mae Chan, Thailand  NSEC	The project will help address Lao PDR's need to: (i) expand access to low-cost, reliable power in rural areas and (ii) develop priority power interconnections between Lao PDR and its neighbors to increase power trade. The project will also support the national electric utility to (i) expand distribution lines and provide off-grid alternatives in the select provinces.	Mr. Chanthaly Chansompheng Office of the GMS National Coordinator, Lao PDR chansompheng@ yahoo.com
5	500 kV Line from Mawlamyine to the Main Grid	Myanmar	This will connect the isolated grid at Mawlamyine to the main grid, thereby bringing the 500 kV Myanmar system closer to the Thai grid for future interconnection. This will result in lower costs and improved reliability of the power supply in the  Mawlamyine area, which will be the western terminus of the GMS East— West Economic Corridor (EWEC). The costs are estimated based on 360 km of a single- circuit	2020	640.0	640.0	TBD	TBD	Proposed	Mawlamyine, Myanmar EWEC	See description	FERD, MPI Myanmar ferdsection@gmail. com

					Year		stimate illion)	Potential F Source and (\$ milli	Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
ı	No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
				500 kV line at \$1.5 million/ km and two 500 kV substations at \$50 million each. (Tentative routing: Mawlamyine–Thaton– Bago)									
	6	Demonstration of Second Generation Biofuel Technologies and Associated Biomass Value Chains	All GMS countries	This project will build pilot plants under a publicprivate partnership (PPP) that will aim to meet financial targets, successfully demonstrate feasible technologies, and create value chains. Upgrading biofuel technology will reduce conflicts over food security and will increase rural incomes through biomass value chains. The schedule will take into account the need for a careful consideration of technological issues and for the selection of private partners. Estimated cost is \$13.3 million per GMS member country.	2019	80.0	80.0	TBD	TBD	Proposed		See description	

				Year		stimate illion)	Potential F Source and (\$ mill	Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
No. 7	Extension of Energy Access in Myanmar from Nodes in Thailand and in the People's Republic of China (PRC)	Subsector Myanmar	This project involves a grid extension from Myanmar's borders with the PRC and Thailand using generation plants in those two countries, based on the regional experience in grid extension in Cambodia, the Lao PDR, andViet Nam.  Ideally, such a project would build on the successful build-operate-transfer (BOT) model of the transmission project in Cambodia. The costs will depend on the number of distribution facilities and household connections in the chosen areas. It is likely that there will be few or no distribution facilities, in which case the costs will be much higher, closer to those for a conventional renewable energy project. The schedule will allow for the negotiating process under the BOT model.  Estimated cost breakdown:  \$10.0 million for the connection to a local isolated grid; and \$60.0 million if the distribution and connection are to be	2019	70.0	70.0	Original TBD	Updates TBD	Status Updates Proposed	Alignment	Outputs See description	FERD, MPI Myanmar ferdsection@gmail. com

				Year		stimate illion)	Potential F Source and (\$ milli	Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
8	Transmission Interconnection Project from Lao PDR (Na Bong) to Thailand (Udon Thani 3)	Lao PDR, Thailand	The project is upgrading an existing 230 kV transmission line, designed for 500 kV transmission from the Lao PDR (Na Bong) to Thailand (Udon Thani 3. When completed, the line will be 107 km in length and have 1,800 MW peak capacity.	2014	60.0	60.0	TBD	TBD 60.0	Ongoing	Na Bong, Lao PDR  Udon Thani, Thailand  NSEC	See description	Mr. Chanthaly Chansompheng Office of the GMS National Coordinator, Lao PDR chansompheng@ yahoo.com  Mr. Vudthidech Chamniku Office of GMS National Coordinator, Thailand vudthidech@nesdb. go.th
9	Transmission Interconnection Project from Lao PDR (Ban Lak25) to Thailand (Ubon Ratchathani 3)	Lao PDR, Thailand	The project will construct a 500 kV transmission line that will initially be energized at 230 kV from the Lao PDR (Ban Lak25) to Thailand (Ubon Ratchathani 3). When completed, the line will be 150 km in length and have 1,400 MW peak capacity.	2019	90.0	90.0	ADB—15.0  Cofinancing 75.0	ADB—15.0 Cofinancing 75.0	Proposed	Ban Lak, Lao PDR  NSEC  Ubon Ratchathani,  Thailand  SEC	See description	Mr. Chanthaly Chansompheng Office of the GMS National Coordinator, Lao PDR chansompheng@ yahoo.com  Mr. Vudthidech Chamniku Office of GMS National Coordinator, Thailand vudthidech@nesdb. go.th

				Year		stimate illion)	Potential F Source and (\$ mill	Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
10	Transmission	Lao PDR, Thailand	The project will construct a 500 kV AC transmission line from the Lao PDR (Pak Beng or Pak Nguyen) to Thailand (Tha Wang Pha). When completed, it will be 120 km in length and have 800 MW peak capacity. This project is currently under consideration and subject to a power purchase agreement (PPA) approval by both sides.	TBD	TBD	TBD	TBD	TBD	Proposed	Pak Beng or Pak Nguyen, Lao PDR Tha Wang Pha, Thailand NSEC	See description	Mr. Chanthaly Chansompheng Office of the GMS National Coordinator, Lao PDR chansompheng@ yahoo.com  Mr. Vudthidech Chamniku Office of GMS National Coordinator, Thailand vudthidech@nesdb. go.th
11	Nam Ngiep 1 Hydropower Project	Lao PDR	The project involves the construction and operation of a 250 MW hydropower generation facility on a build-operate-transfer (BOT) arrangement at the Nam Ngiep River in the province of Bolikhamxay and Xaysomboun, Lao PDR.	2014	976.7	976.7	ADB—215.7 JBIC—197.0 Private Sector—564.0	ADB—215.7 JBIC—197.0 Private Sector—564.0	Ongoing; Under construction	Bolikhamxay and Xaysomboun, Lao PDR NSEC	See description	Samarendra Singh Portfolio Management Division,PSOD, ADB
Sub	total (Energy Inves	tment Projects incl	uded in RIF 2022)		2,230.1	2,327.7						
Sub	btotal (Energy Investment Projects proposed to be added in RIF 2022)					0.0						
Sub	total (Energy Inves	tment Projects incl	uded in RIF 2022)		2,230.1	2,327.7						

# Technical Assistance Projects

				Year		stimate illion)	Potential Source and (\$ mil	l Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
Pro	jects in RIF 20											
1	Harmonizing GMS Power Systems to Facilitate Regional Power Trade (formerly Support to RPTCC in the Completion of Performance Standards, Grid Codes, Market Rules, and Subregional Transmission Expansion Plan)	All GMS countries	The technical assistance (TA) supports the development of a clear basis for regional market rules that would comprise agreed rules and indicative planning of interconnections. It will result in a more functional regional market with genuine exchanges of electricity, leading to an improved reliability and quality of power supply and lower costs. A supplementary TA project was approved in 2017, the outcome of which will be a set of GMS performance standards and grid codes, and an enhanced regulatory framework. Additional output, among others, include feasibility studies for four new interconnection projects.	2014	3.5	3.5	ADB—2.5  PRC trust Fund—0.5 Agence Française de Développement (AFD)—0.5	ADB—2.5  PRC trust Fund— 0.5 Agence Française de Développement (AFD)—0.5	Ongoing		Regional Power Coordinating Center (RPCC) established and operations commenced through continued support to Regional Power Trade Coordination  Committee (RPTCC).  GMS performance standards and grid codes considered for implementation by the Working Group on Performance Standards and Grid Code (WGPG).  Guidelines for GMS regulatory framework proposed by the Working Group on Regulatory Issues (WGRI)	Bui, Duy-Thanh Southeast Asia Department (SERD) Energy Division, SERD
2	Ensuring Sustainability of Greater Mekong Subregion Regional Power Development (Phase 2)	All GMS countries	The TA will support the efforts of the Regional Power Trade Coordination Committee to forge agreements among the GMS countries on the technical, institutional, and operational aspects of the GMS regional power market, and ensure that these comply with environmental sustainability requirements.	2016	1.0	1.0	AFD—1.0	AFD—1.0	Ongoing			

#### Technical assistance projects in RIF 2022 continued

				Year		stimate illion)	Potential F Source and (\$ milli	Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
3	Development of GMS Coordination Center for Regional Power Trade	All GMS countries	The project will help set up the Regional Power Coordination Center (RPCC) and build the capacity of national and subregional bodies. These bodies will work with the RPCC in implementing and overseeing cross-border power exchanges; coordinating regional power planning; and developing transmission facilities of regional importance through (i) technical and equipment support and staffing, (ii) staff training, and (iii) support for specific studies (e.g., on tariff structures, operational standards, etc.) and activities (e.g., power planning, database maintenance, etc.).	To be determined (TBD)	3.0	3.0	TBD	TBD	Proposed			
4	Scoping Study on the Future of the Trans-ASEAN Gas Pipeline (TAGP)	All GMS countries	This project is specified in the Association of Southeast Asian Nations (ASEAN) Master Plan on Connectivity and aims to contribute to ASEAN's energy security. The study will lead to an agreed concept for the deployment of the TAGP in the future, with the critical investments identified.  This is a wide-ranging project that needs strong cooperation with the ASEAN Council on Petroleum (ASCOPE). It should be steered by a national	TBD	1.0	1.0	TBD	TBD	Proposed			

				Year	Cost Estimate (\$ million)		Potential I Source and (\$ mill	Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description  committee of experts and executed by a small part-time team of national experts, but also include funding for short-term studies on strategic issues (e.g., shale gas and coal bed methaneprospects, futureliquefied natural gas markets, carbon capture and storage, storage options, the role of gas as a backup for renewables, and future gas demand). Four meetings over 2 years will be sufficient. The budget must cover the participation of ASCOPE	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
5	Development of Coherent Energy- Efficiency Action Plans Across the Subregion	All GMS countries	experts.  This TA will entail preparing national energy efficiency action plans according to a common format, with stronger and better-targeted actions to promote energy efficiency.  This project is predicated on the supposition that the Subregional Energy Forum can act as a technical advisory body to policy makers, proposing policies that can support regional activities. It can be executed by a team of high-level national experts (supported by international and regional consultants) that reviews progress in energy efficiency across the subregion; conducts benchmarking; proposes aggressive targets, stronger	TBD	1.0	1.0	TBD	TBD	Proposed			

				Vear	Year (\$ million)		Potential Source and	Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	policies, and subregional convergence; and, where feasible, identifies sources of financial support (e.g., Clean Development Mechanism and post-Kyoto mechanisms). It should be an ongoing project funded initially for 3 years.	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
6	GMS: Renewable Energy Development (Phase 2)	All GMS countries	This TA will support follow-up activities from the Phase I regional technical assistance. It will include further propagation and preparation of policy manuals based on the pilot results of Phase I, covering GMS-appropriate practices in renewable energy and cleaner fuel promotion, continuing knowledge sharing and training, and laying the groundwork for investment projects in renewable energy.	TBD	2.0	2.0	TBD	TBD	Proposed			
7	GMS Northern Cross-Border Power Trade and Distribution	Lao PDR	The project will examine new potential cross-border power-transmission projects.	2018	1.0	1.0	ADB—1.0	ADB—1.0	Proposed			
8	Regional Action Plans for Sustainable Power Sector Development and Climate Change Mitigation	All GMS countries	The proposed TA aims to improve energy security and mitigate climate change in the GMS through strengthened regional power cooperation, with an increased use of clean energies, knowledge sharing in GMS power development, and better policy and business environments for promoting renewable and efficient energies.	2018	2.0	2.0	ADB—2.0	ADB—2.0	Proposed			

				Year	<b>Cost Es</b> (\$ mi	stimate illion)	Potential F Source and (\$ mill	Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	The TA will assist the GMS	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
			countries in adopting specific climate-mitigation									
			measures for the power interconnection projects;									
			establish measurable targets and action plans									
			for reducing greenhouse gas emissions resulting									
			from power sector development; adopt									
			measures for renewable-									
			energy and energy-efficiency improvements over time that									
			can be monitored against a well-defined baseline; and									
			to clearly define the public policy interventions under									
			the action plans. These									
			activities will all contribute to sustainable power sector									
			development and climate change mitigation									
	Subtotal (Energy TA Projects included in RIF 2022)				14.5	14.5						
	Subtotal (Energy TA Projects proposed to be added in RIF 2022)					0.0						
					2,230.1 2,244.6	14.5						
	Total (Energy Investment and TA Projects)					2,342.2						

# Agriculture

## **Investment Projects**

				V	Cost Estimate (\$ million)		Potential Source an (\$ mi	d Amount		Key locations and GMS Economic Corridor	Expected/ Planned	
No	. Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Measurable Outputs	Project Contact
Pi	ojects in RIF 2	022										
1	Greater Mekong Subregion Flood and Drought Risk Management and Mitigation Project	Lao PDR, Viet Nam	The Asian Development Bank (ADB) is helping the Lao People's Democratic Republic (Lao PDR) and Viet Nam reduce economic losses resulting from floods and droughts. The project will combine upgrades in water- management infrastructure with community-based disaster risk management and enhanced regional forecasting in order to improve disaster preparedness in the Greater Mekong Subregion (GMS).  The breakdown of the estimated costs in terms of millions of dollars is as follows:  Country Total ADB Government Cofinancing Lao PDR 37.1 36.5 0.6 0.0 Viet Nam 64.4 45.0 13.5 5.9  TOTAL 101.5 81.5 14.1 5.9	2013	101.5	101.5	ADB—81.5  Governmentsof the Lao PDRand VietNam—14.1 Cofinancing (Governmentof Australia)—5.9	ADB—81.5 Governments of the Lao PDR and VietNam—14.1 Cofinancing (Government of Australia)—5.9	Ongoing.  Activities on track.  Expected closing date: Sept 2019.	Viet Nam:  SEC  Lao PDR: Nationwide	1. Enhanced regional data, information, and knowledge base for the management of floods and droughts  2. Upgraded water management infrastructure  3. Enhanced capacity for CBDRM  4. Effective project implementation	Viet Nam: Mr. Pham Dinh Van, Director, Central Project Office Directorate of Water Resources, MARD Email: van_cpo@ yahoo.com.vn Tel: +84 -38253921 23 Hang Tre, Hanoi, Vietnam  Ho, Phong Le Senior Project Officer, ADB Viet Nam Resident Mission  Ministry of Agriculture and Forestry-Irrigation Dep DIDMONPD@ LAOTEL.COM DIDMP, Irrigation Department Ministry of Agriculture and Forestry P.O.Box 5192, Chao Anou Road

						i <b>stimate</b> nillion)	Source an	l Funding od Amount illion)		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
2	GMS Flood and Drought Risk Management and Mitigation Project (additional financing)	Lao PDR	ADB is helping the Lao PDR and Viet Nam reduce economic losses resulting from floods and droughts. The project will combine upgrades in water-management infrastructure with community-based disaster risk management and enhanced regional forecasting to improve GMS disaster preparedness.	2020	67.0	67.0	ADB—42.0  Government of the Lao PDR—5.0  Cofinancing—20.0	ADB—42.0  Government of the Lao PDR—5.0  Cofinancing—20.0	Proposed  Cofinancier sought	Lao PDR: Nationwide	1.Enhanced regional data, information, and knowledge base for the management of floods and droughts  2. Upgraded water management infrastructure  3. Enhanced capacity for CBDRM  4. Effective project implementation	LAO: (until 2020)  Dr. Khamphachan Vongsana  Department of Irrigation  Mobile: 020555546830 2055933585
3	Climate Friendly Agribusiness Value Chains Sector Project	Cambodia, Lao PDR, Myanmar	The project will promote activities under pillars 2 and 3 of the Core Agriculture Support Program (CASP) II, on climate-friendly agriculture and bioenergy. The project will invest in the development of climate-friendly pro-poor agribusiness value chains in the GMS. It will focus on rehabilitating critical production and post-harvest infrastructure offectively link farming communities and urban centers along the corridors by developing upstream and downstream linkages. Key infrastructure investments will include (i) efficient roads that provide access to markets; (ii) renewable bioenergy systems that can meet the growing energy needs of rural communities; and (iii) efficient storage, processing-andaggregation, grading, and marketing-and-logistics infrastructure to ensure the delivery of safequality food products.	2018	278.0	252.3	ADB—171.0  Cofinancing (Green Climate Fund or Global Agriculture Food Security Program- [GAFSP])—92.0  Governments of Cambodia, Lao PDR, and Myanmar—15.0	ADB—171.0  Cofinancing (Green Climate Fund or Global Agriculture Food Security Program- [GAFSP])—62.0  Governments of Cambodia, Lao PDR, and Myanmar—9.6  Beneficiaries—9.77	Approved for Cambodia on 29 June 2018: Grant from Green Climate Fund = 30.0; Loan from ADF = 90.0; Loan from Green Climate Fund = 10.0.  Total: 130.0. Cambodia Government \$7.38; Beneficiaries: 3.66  Approved for Lao PDR on 30 July 2018:	Cambodia SEC Lao PDR: NSEC Myanmar: NSEC	critical agribusiness value chain infrastructure improved and made  climate-resilient.  Climate-smart agriculture and agribusiness promoted.  Enabling environment for climate-friendly agribusiness enhanced.	Cambodia:  Dr. Sangha Sam Chom, Deputy Secretary General, Ministry of Agriculture, Forestry & Fisheries # 40 Norodom Blvd. Phnom Penh Cambodia  Lao PDR:  Mr. Khampong Vongpachan, Deputy Director, Department of Technical Extension

						stimate illion)	<b>Potentia</b> l <b>Source an</b> (\$ mi	d Amount		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
									ADF Grant \$40.50; Lao Govt \$0.75 Beneficiaries: \$5.12 Approved for Myanmar on 9 October 2018: ADF Grant: \$40.5 Global Agriculture Food Security Program—22.0 Govt: \$1.43 Beneficiaries: \$0.99			and Agro- Processing, Ministry of Agriculture and Forestry  Myanmar:  Mr. Aye Ko Ko Deputy Director General, Department of Agriculture, Ministry of Agriculture, Livestock & Irrigation
4	Agro-industrial zones (AIZs) to support promotion of safe and environment- friendly agro- based value chains	Cambodia, People's Republic of China (PRC), Lao PDR, Myanmar, Viet Nam	Each country designs its agro-industrial zone (AIZ) subprojects to promote safe and environment-friendly agriculture products (SEAPs) with a focus on (i) demonstrations for small and medium-sized enterprises (SMEs); (ii) processing, packaging, and labeling facilities, as well as common post-farm product facilities (cold storage and warehouses), laboratories, one-stop shops for inspection, and quarantine for SEAP products; (iii) strategic collection centers linked to common post-farm facilities that empower the farmers and community via access to quick and reliable testing; (iv) supply chain management; (v) aquaculture value chain development; (vi) tools to ensure quality assurance; (vii) capacity building and institution building, and research and development (R&D); promotion of participatory guarantee systems;	2022	286.0	286.0	ADB  Private sector Governments of the PRC, Lao PDR, Myanmar, and Viet Nam via public—private partnerships (PPPs	ADB  Private sector Governments of the PRC, Lao PDR, Myanmar, and Viet Nam via public—private partnerships (PPPs	Proposed  (Endorsed by the Second GMS Agriculture Ministers' Meeting, September 2017)	NSEC		GMS Working Group on Agriculture (WGA) Focal Points

				,		stimate illion)		l Funding ad Amount illion)		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
			integration into SEAP wholesale markets or organic retail markets; and (x) integration into biochar and waste management. The cost estimates by country in terms of millions of dollars are: Cambodia: 71; PRC: 50; Lao PDR: 45; Myanmar: 30; and Viet Nam: 90.									
5	Animal Disease Control Zone	Cambodia, PRC, Lao PDR, Myanmar	Subprojects in Cambodia will focus on (i) the development of quarantine zones, including border quarantine posts (12 along the Cambodia–Thailand border and 8 along the Cambodia–Viet Nam border); (ii) the development of a livestock identification and traceability system; (iii) R&D in disease control and prevention; (iv) capacity building; and (v) a surveillance system.  Livestock disease-control zones in key border areas of the PRC (Yunnan Province), Lao PDR, and Myanmar (towns of Muse and Myawaddy) will be set up to (i) mitigate and manage the risk of foot- and-mouth disease via cattle; (ii) control other key production and zoonotic diseases; and (iii) serve as a buffer zone for regulating livestock trade between the PRC and other GMS countries. The zone will house facilities for preventive measures such as animal identification (tagging), livestock movement management (e-traceability), quarantine, serological and pathological surveillance work, and vaccination facilities and services. Food-safety pathogen and residue testing can be added to the system once operational. It is also important to encourage the private sector to be involved in the zone	2021	150.0	150.0	ADB,  Private sector, Central and provincial governments of Cambodia, the PRC, Lao PDR, and Myanmar, Banks in the PRC	ADB,  Private sector, Central and provincial governments of Cambodia, the PRC, Lao PDR, and Myanmar, Banks in the PRC	Proposed  (Endorsed by the Second GMS  Agriculture Ministers' Meeting, September 2017)	East-West and North-South Corridors		GMS WGA Focal Points

				u.		stimate illion)	<b>Potential</b> <b>Source an</b> (\$ mi	d Amount		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
			and to set up modern slaughterhouses, meat processing, and biodigester facilities, as well as local feedlots, through PPP schemes.  The cost estimates by country in terms of millions of dollars are: Cambodia: 30; PRC: 50; Lao PDR: 25; Myanmar: 15; and Viet Nam: 30.									
6	Cluster and Value Chain Development for Geographical Indications related to SEAP	Cambodia, PRC, Lao PDR, Myanmar	Based on unique advantages of geography, resources, environment, and technology, the project will promote characteristic and advantageous agriculture and develop a series of agro-products with geographical indications (GI) to build industry clusters of characteristic and advantageous agriculture in the GMS. Main project components include (I) improvement of agricultural infrastructure construction for GI products; (ii) agricultural science and technology innovation and extension services for GI products; (iii) reform and innovation of management and operation of GI agriculture; (iv) capacity building and knowledge innovation; and (v) awareness raising and marketing.  The cost estimates by country in terms of millions of dollars are: Cambodia: 2; the PRC: 320; Lao PDR: 3; and Myanmar: 20.	2022	345.0	345.0	Agence Française de Développement (AFD), ADB, Food and Agriculture Organization of the United Nations (FAO), Private sector, Ministries of agriculture and commerce of Cambodia, the PRC, Lao PDR, and Myanmar	Agence Française de Développement (AFD), ADB, Food and Agriculture Organization of the United Nations (FAO), Private sector, Ministries of agriculture and commerce of Cambodia, the PRC, Lao PDR, and Myanmar	Proposed  (Endorsed by GMS Agriculture Ministers' Meeting, September 2017)	East-West and North-South Corridors		Myanmar: MOALI, Ministry of Education (MOE) and Ministry of Commerce (MOC)
7	GMS East–West Economic Corridor Agriculture Infrastructure Sector Project (additional financing)	Lao PDR	The project will continue to support the transformation of the East–West Economic Corridor (EWEC) into an inclusive economic growth corridor, and to target areas of good agricultural potential with existing irrigation schemes. It will regenerate, replace, and upgrade underdeveloped or outdated agricultural infrastructure, including	2022	67.0	67.0	ADB—42.0  Cofinancing—20.0  Government of the Lao PDR—5.0	ADB—42.0  Cofinancing—20.0  Government of the Lao PDR—5.0	Proposed	Khoueng Savannakhet, Salavan EWEC	Improved agriculture infrastructure      Increased capacity of farmers to manage and	David Salter dsalter@adb.org

				u.		stimate illion)	<b>Potentia</b> <b>Source an</b> (\$ mi	d Amount		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
			that concerned with irrigation and rural access. The project will also continue to support capacity development at the farm level for managing and using agriculture infrastructure efficiently and effectively, so as to optimize agricultural outputs and sustain agricultural practices and trade.								use agriculture infrastructure efficiently  3. Efficient project management	
8	Basic Infrastructure for Inclusive Growth in the Northeastern Provinces Sector Project (BIIG 1)	Viet Nam	BIIG 1, the proposed project, will (i) rehabilitate and upgrade about 265 kilometers (km) of roads in the four northeastern provinces; (ii) install 10 rural domestic water-supply schemes; (iii) provide infrastructure support for agricultural and rural value chains in Lang Son; and (iv) strengthen provincial-infrastructure-asset management.  The project is aligned with ADB's long-standing support for the GMS Economic Cooperation Program StrategicFramework2012–2022, which prioritizeslocal and regional economic development through multi-sector investments that require strong cross-sector linkages and integration, particularly with special economiczones and border areas.	2017	197.2	197.2	ADB—150.0  Government of Viet Nam—37.2  Cofinancing—10.0	ADB—150.0  Government of Viet Nam—37.2  Cofinancing—10.0	Ongoing.  Project agreements were signed in April 2018	Bac Kan, Cao Bang, Ha Giang, Lang Son NSEC	1. Road network connectivity improved 2. Rural water supply improved 3. Agriculture and rural value chain infrastructure in Lang Son province improved 4. Decentralized public asset management processes established	Mr: Ly Thai Hai Chairman Bac Can PPC vpubnd@backan. gov.vn Fax: +84- 02093871751  Mr. Nguyen Van Son, Chairman of Ha Giang province Fax: +84- 02193866204  Mr Pham Ngoc Thuong, Chairman of Lang Son province  vanphong@langson. gov.vn Fax: +84- 02053814302  Mr. Hoang Xuan Anh, Chairman, Cao Bang Province Email: vpubndtinh@ caobang.gov.vn Fax: +84- 0263852866

				V	Cost Estimate (\$ million)	Potential Source an (\$ mi	d Amount		Key locations and GMS Economic	Expected/ Planned		
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
9	Basic Infrastructure for Inclusive Growth in the North Central Provinces Sector Project (BIIG 2)	Viet Nam	The proposed project will accelerate the socioeconomic development of the four north central provinces. It will (i) rehabilitate and upgrade district and provincial roads in the north central provinces; (ii) support productive and business infrastructure, including water supply networks, sea and river protection, and drainage works with associated river transport infrastructure, and support flood and irrigation command areas; and (iii) establish decentralized public-asset-management processes, and build road, water-supply, and irrigation infrastructure.  The project is aligned with ADB's long-standing support to the GMS Cooperation Program Strategic Framework 2012–2022, which prioritizes local and regional economic development through multi-sector investments that require strong cross-sector linkages and integration, particularly with special economic zones and border areas.	2017	203.5	203.5	ADB—149.0 Government of Viet Nam—54.5	ADB—149.0 Government of Viet Nam—54.5	(Approved in December 2017)	Ha Tinh, Nghe An, Quang Binh, and Quang Tri North Central provinces along EWEC EWEC	Locally prioritized basic infrastructure subprojects implemented, including (i) upgrading district roads; (ii) improving productive and business infrastructure such as (a) rural domestic water supply schemes (RDWS), (b) coastal defenses and flood protection, (c) a river port, and (d) irrigation reservoirs; and (iii) establishing provincial public asset management systems.	1. Mr. Dang Quoc Khanh Chairman Tel (+84 239) 3855581 Email: vanphongu bndht@gmail.com No. 01 Nguyen Tat Thanh Street, Ha Tinh city, Ha Tinh Province  2. Nguyen Xuan Duong Chairman Tel: (+84 238) 3844859 Email: vpubnd@ nghean.gov.vn No. 03 Truong Thi street Vinh City, Nghe An Province  3. Mr Nguyen Huu Hoai Chairman, Quang Binh province Tel: (+84 232) 3813076 Email: nguyenhu uhoaiqb@gmail.com No. 6 Hung Vuong Street, Dong Hoi City, Quang Binh Province.

		Project Title Subsector Description	Year		stimate illion)	Source an	Funding d Amount llion)		Key locations and GMS Economic Corridor	Expected/ Planned Measurable		
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
												4. Nguyen Duc Chinh, Chairman Tel: (+84 913) 485 193 Email: vpubndt@ quangtri.gov.vn No. 45 Hung Vuong Street, Dong Ha City, Quang Tri Province. ADB Project Officer: khuc, huong thi lan, ADB Viet Nam Resident Mission kthuong@adb.org
	S	ubtotal (Agri	culture Investment Projects included	d in RIF 2022)	1,695.2	1,669.2						
Inv	estment Projects Proposed to be Added in RIF 2022											
10	Agricultural Value Chain Infrastructure Improvement Project	Cambodia	The project will improve value chains of selected key agricultural commodities in six contiguous target provinces in northern, central and eastern Cambodia in order to make these commodities more competitive for regional agriculture trade with neighboring Thailand, Lao PDR, and Viet Nam. The project impact will be value addition in agriculture sector enhanced. The project outcome will be value addition to selected agricultural products in the project area increased.	2020		76.0		ADB—70.0  Government of Cambodia—6.0	Proposed	Several provinces, some of which are along Southern Economic Corrdior	(ii) post-harvest and logistic facilities strengthened; (iii) agricultural production and service infrastructure improved; (iii) rural connectivity and disaster risk management capacity improved; and (iv) business partnership among value chain stakeholders enhanced	Takeshi Ueda, SERD/ ADB tueda@adb.org Ministry of Agriculture, Forestry and Fisheries, Cambodia
	Subtotal (Agric	ulture Invest	tment Projects Proposed to be Added			76.0						
			Subtotal (Agriculture Investm	ent Projects)	1,695.2	1,745.2						

## Technical Assistance Projects

				Year		stimate illion)	Source	ial Funding and Amount million)		Key locations and GMS Economic	Expected/ Planned Measurable		
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Outputs	Project Contact	Project Contact
Pro	jects in RIF 20	22											
1	Climate-Friendly Agribusiness Value Chains in the GMS	Cambodia, Lao PDR, Myanmar	The main outputs of the project preparatory technical assistance (PPTA) will include detailed reports on feasibility assessments, including technical, economic, and financial due diligence concerning priority agribusiness value chains in Cambodia, the Lao PDR, and Myanmar. The PPTA will produce an agreed project design in relation to the four outputs of the investment project (agribusiness value chain infrastructure, bioenergy use and sustainable biomass management, agribusiness policy and capacity-support services, and project implementation and knowledge management) with implementation arrangements suitable for each country. The PPTA will define the scope and cost of investments, subproject locations	2015	2.5	2.5		Canadian Climate Fund for the Private Sector—1.0 Asia Clean Energy Fund (ACEF)—1.5	Canadian Climate Fund for the Private Sector—1.0 Asia Clean Energy Fund (ACEF)—1.5	Completed on 30 September 2018.		Detailed reports on feasibility assessment (technical, economic and financial due diligence) of priority agribusiness value chains in CLM countries; agreed project design in relation to the four outputs (agribusiness value chain infrastructure, bio-energy use and sustainable biomass management,	Srinivasan Ancha, Environment, Natural Resources & Agriculture Division, t Southeast Asia Department, ADB asrinivasan@ adb.org
			and activities, financing plan, implementation arrangements, procurement strategy, technology issues, capacity development needs, and post-project operation and project maintenance arrangements.									agribusiness policy and capacity support services, and project implementation and knowledge management) with implementation arrangements suitable for each country.	

				Year		<b>stimate</b> illion)	Source	ial Funding and Amount million)		Key locations and GMS Economic	Expected/ Planned Measurable		
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Outputs	<b>Project Contact</b>	Project Contact
2	SEAP Strategy Implementation Support (formerly called "Implementing the Strategy on Agro- based Value Chain Investments in the GMS")	All GMS countries	This knowledge and support technical assistance will build on the successful pilots of the Core Agriculture Support Program Phase II, which is included in the 2018 pipeline of ADB's Environment, Natural Resources and Agriculture Division (SEER).	2019	10.0	10.0		Swedish International Development Cooperation Agency (Sida), Nordic Development Fund (NDF)	Nordic Development Fund (NDF) Other Donors (tbc)	Proposed.			GMS WGA Focal Points
3	Supporting Infrastructure Development of Agro- industrial Zones for SEAP	Cambodia, PRC, Myanmar	The project involves (i) facilitating and/or enabling farmer cooperatives to engage in contract farming with the private sector to promote SEAP cultivation (crops, horticulture, vegetables, industrial crops, livestock, and aquaculture); (ii) controlling and efficiently using acceptable pesticides and fertilizers to boost SEAP production; (iii) strengthening institutions and building the capacity of government officials to deliver services and manage agro- industrial zones (AIZs), and building the capacity of farmers to produce SEAPs for the AIZs; (iv) promoting appropriate	2020	25.0	25.0		ADB, Other donors, Private sector	ADB, Other donors, Private sector	Proposed			GMS WGA Focal Points in target countries
			technologies, such as Good Agricultural Practices (GAP), Good Animal Husbandry Practices (GAHP), Good Aquaculture Practices (GAQP), and Good Handling Practices (GHP), as well as Good Manufacturing Practices (GMP); and (iv) managing supplychains.										

				Year		stimate illion)	Source	ial Funding and Amount million)		Key locations and GMS Economic	Expected/ Planned Measurable		
<b>No.</b> 4	Project Title  Animal Disease Control Zone	Subsector Cambodia, PRC, Lao PDR, Myanmar	Description  The project includes (i) building an e-traceability system for tracking livestock movement along GMS borders to better control transboundary animal diseases; (ii) investigating animal movement along the borders between the PRC and the other GMS countries, and conducting research on the livestock product value chain; (iii) building capacity in related fields; (iv) establishing financing mechanisms for sustaining the zones; (v) developing surveillance and inspection systems; and (vi) fostering technical exchanges between animal disease laboratories in GMS countries.	of Approval 2020	Original 16.0	TBC	Original	ADB, Food and Agriculture Organization of the United Nations (FAO), World Health Organization (WHO), Private sector	ADB, Food and Agriculture Organization of the United Nations (FAO), World Health Organization (WHO), Private sector	Corridor Alignment Proposed	Outputs	Project Contact	Project Contact  GMS WGA Focal Points in target countries
5	Geographic Indications (GI) Value Chain Development and Brand Building	Cambodia, PRC, Viet Nam, Myanmar	The project includes (i) the development of value chain financing; (ii) promotion of public-private partnership (PPP) schemes; (iii) development of farmer organizations; (iv) establishment of GI processes and regulations; (v) capacity and institution building, including interministerial and public-private dialogue; (vi) incubator development (R&D to increase productivity); (vii) guidelines for responsible	2020	18.0	18.0		AFD, ADB, FAO, Private sector, Governments of Cambodia, PRC, and Viet Nam		Proposed			GMS WGA Focal Points in target countries
			agribusiness investments; (viii) R&D on production and processing; (ix) capacity building and cooperation with regard to brand research and brand evaluation; (x) capacity building in brand management for government officials; (xi) knowledge sharing concerning brand development; (xii) a study of export markets; and (xiii) studies of market and consumer preferences.										

				Year		stimate illion)	Source	ial Funding and Amount million)		Key locations and GMS Economic	Expected/ Planned Measurable		
No	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Outputs	Project Contact	Project Contact
6	Agribusiness Incubator Development	Cambodia, Lao PDR, Myanmar	Strengthening small and medium-sized enterprises (SMEs), forging links between SMEs and small holder farmers, and prioritizing farmers from agribusiness incubators and farmers dedicated to SEAPs.	2020	19.0	19.0		ADB, International Finance Corporation (IFC), Other donors, Private sector	ADB, International Finance Corporation (IFC), Other donors, Private sector	Proposed			
7	GMS East–West Economic Corridor Agriculture Infrastructure Sector Project (additional financing)	Lao PDR	This TA project will prepare the due diligence for additional financing to support the transformation of the EWEC into an inclusive economic corridor; and it will target areas with good agricultural potential by including them in existing irrigation schemes.	2018	1.0	1.0		ADB—1.0	ADB (Part of TA Facility)	Proposed	EWEC		David Salter dsalter@adb.org
8	Climate Change Adaptation in Highland Agriculture (formerly Enhancing Productivity and Competitiveness of Safe and Environment Friendly Agriculture)	Thailand	The TA will focus on enhancing competitiveness of highland agriculture by piloting models such as Kok Nang Na integrated farming systems that will change slash and burn practices to sustainable highland agriculture practices.	2019	2.0		2.0	Trust Fund—2.0		Proposed			
9	Economic Corridor Agribusiness Development	Myanmar	The project will support value chain development in priority economic corridors in Myanmar, building on the Climate-Friendly Agribusiness Value Chain Project and the Irrigated Agriculture Inclusive Development Project. It will seek to promote linkages with planned and ongoing transport investments in the ADB portfolio and will adopt an area-based approach to fostering agribusiness links.	2019	0.8		0.8	ADB—0.8	TBD	Proposed			

				Year		stimate illion)	Source a	ial Funding and Amount million)		Key locations and GMS Economic	Expected/ Planned Measurable		
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Outputs	Project Contact	Project Contact
10	Agricultural Value Chain Infrastructure Investment Project	Cambodia	The transaction technical assistance will (i) assist in the design of the Agricultural Value Chain Infrastructure Improvement Project which aims to tackle the core sector problem of low productivity, low value addition, and low resource efficiency of Cambodia's agriculture; (ii) conduct financial and integrity due diligence of the potential participating financial institutions; (iii) carry out technical, financial, economic, procurement, social, gender and environmental due diligence required by ADB and the government; (iv) propose the implementation arrangements; (v) ensure synergies and integration with other related interventions; and (vi) prepare the project documents according to ADB requirements. It will also provide support to incorporate climate change adaptation and mitigation measures in the design of value chain infrastructure and facilities.	2018	1.5	2.0		Japan Fund for Poverty Reduction —1.50 Project Readiness Improvement Trust Fund—\$0.50	Part of ADB TRTA Facility	Ongoing		Value chain analyses for selected agricultural products conducted.  Investment feasibility studies and due diligence prepared.  Design of agricultural value chain financing mechanisms developed.  Detailed engineering designs and bidding documents prepared	Takeshi Ueda, SERD/ADB tueda@adb.org
	Promote Lao PDR Products with Digital Technology System (for agriculture production)	Lao PDR	To develop 3 criteria such as: food/ agriculture supply chains, food safety and agriculture trade modernization. The digital technology system is a modality key to achieve those fundamental elements to support agriculture industry.	2020		Count and Cost estimate listed under ICT to avoid double counting			ADB, IFAD, FAO	Proposed by Lao PDR			Mr. Chanthaly Chansompheng Office of the GMS National Coordinator, Lao PDR chansompheng@ yahoo.com
	Subtotal (A	Agriculture T	echnical Assistance Projects included	d in RIF 2022)	95.8	80.3							
S	ubtotal (Agricultur	e Technical A	ssistance Projects proposed to be ac	lded in 2022)		0.0							
			ıbtotal (Agriculture Technical Assista	•	95.8	80.3							
	То	tal (Agricult	ure Investment and Technical Assista	nce Projects)	1,791.0	1,825.5							

## Environment

## **Investment Projects**

						stimate illion)	Source ar	l Funding nd Amount illion)		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
Pro	oject in RIF 20	22										
1	Global Environment Fund Regional Biodiversity and Forestry Program	All GMS countries	The program aims to enhance biodiversity and forest conservation in Greater Mekong Subregion (GMS) transboundary landscapes. Interventions will focus on the following four activities: i) increasing the capacity of GMS countries to manage transboundary landscapes, (ii) strengthening protected area management, (iii) promoting ecosystem-based climate change adaptation, and (iv) devising innovative ways to finance conservation.	2015	20.0	20.0	Global Environment Facility—20.0	Global Environment Facility—20.0	Ongoing		1. Capacity of GMS countries to manage transboundary landscapes increased  2. Protected area management strengthened  3. Ecosystembased climate change adaptation promoted  4. Innovative financing conservation devised	
2	Rural Environmental Management, Pollution Control, and Waste Management	All GMS countries	The project will help to improve the quality of the environment; reduce vulnerability to water, food, and health security; and subsequently boost market competitiveness (through the production of safe and environment-friendly agriculture products [SEAPs]), as well as the incomes of rural communities.  The project will also target the geographic nexus between rural and peri-urban areas along the GMS economic corridors, focusing on environmental quality issues arising from the flow of agriculture goods and services. It will work to enhance the environmental performance of	2022	300.0	300.0	Asian Development Bank (ADB), Green Climate Fund	TBD	Proposed  (Project is seeking cofinancing partners)  Has not been implemented / Under preparation for in-country consultation  Endorsed by 2017 Environment Ministerial Meeting	peri-urban and nearby rural areas of select corridor towns and agri- industrial zones (1 identified town or agri- industrial zone per country	Integrated pollution control measures in agriculture SMEs (e.g. pig and dairy farming),  Development of integrated environmentally sustainable aquaculture and Improved rural environment management regimes.	GMS WGE Focals

						i <b>stimate</b> nillion)	Source an	l Funding od Amount illion)		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
			the agriculture sector and of the development investments in small corridor towns specified in the Regional Investment Framework 2022. A few of the targeted ongoing and planned investment projects are as follows:  (i) GMS Corridor Town Development Project  (ii) Agro-industrial zones (AIZs) to support promotion of safe and environment-friendly agro-based value chains  (iii) Corridor Town Development Project  The cost estimates by country in terms of millions of dollars are: Cambodia: 40; People's Republic of China (PRC): 70; Lao People's Democratic Republic (Lao PDR): 35; Myanmar: 35; Thailand: 70; and Viet Nam: 50.									
3	Integrated Land Use Management for Sustainable Development	All GMS countries Cambodia (national level) and 4 Trans- boundary Landscapes	The project will promote a better allocation and management of land resources, and develop pro-poor, green commodities and services. A multidisciplinary value - chain approach will be adopted to enhance productivity and market linkages, and to reduce both environmental (degraded air, water, and soil quality) and climate-related risks.  In addition, the project will focus on critical agricultural landscapes in an effort to better manage vital ecosystems, and will offer provisioning and regulatory services to improve productivity and resiliency. The project will also support other planned or ongoing investment projects suchas:	2022	240.0	240.0	ADB, Green Climate Fund	TBD	Proposed  Has not been implemented / Under preparation for in-country consultation  Project is seeking co-financing partners		Strengthen land management,  Market development for green commodities and ecotourism,  Skills development for value addition and inclusion of rural	GMS WGE Focals

				Year		stimate illion)	Source an	I Funding ad Amount illion)		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
No.	Project Title	Subsector	(i) Climate-Friendly Agribusiness Value Chains in the GMS, and  (ii) Cluster and Value Chain Development for Geographic Indications.  It will build on proven investment models such as that used for the GMS Biodiversity Conservation Corridor Project, and will align with GMS transboundary biodiversity landscape management strategies that are currently under development.  (i) Strengthened land management:  (a) integrated spatial and landuse planning (delineation, demarcation, land management, protection, restoration, soil pollution control, and remediation); and recommendations of community-development initiatives to enhance livelihood options, provide food security, and reduce poverty;  (ii) market development for green commodities and ecotourism:  (a) certification and accreditation systems,  (b) a value chain approach to developing ecotourism, and  (c) market linkages through private sector participation;  (iii) skill development for value addition and for the inclusion of rural communities in green commodity value chains;	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	communities in green commodity value chains, and Financing for management of ecosystems services.	Project Contact

						stimate illion)	Source an	l Funding ad Amount illion)		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
			<ul> <li>(iv) financing to support the management of ecosystem services; and</li> <li>(v) analysis and design of compensation mechanisms for environmental services based on an ecosystems approach (including the development of a mechanism for payment for ecosystem services [PES]).</li> <li>The estimated costs by country in terms of millions of dollars are: Cambodia: 60; PRC: 40; Lao PDR: 40; Myanmar: 20; Thailand: 40; and Viet Nam: 40.</li> </ul>									
		Subto	tal (Environment Investment Projects	in RIF 2022)	560.0	560.0						
Pro	ojects propose	ed for inc	lusion in RIF 2022									
4	Climate Proofing of Rural Infrastructure and Risk Financing	Cambodia, Lao PDR, Myanmar and Viet Nam	The project will be regional in nature and focus on issues that require cross-border disaster risk management (DRM) efforts; aligned with regional DRM priorities of the GMS countries; introduce innovative solutions; promote community-based, gender-focused, and socially inclusive interventions on DRM; and support stronger engagement with civil society and the private sector	TBD		TBD		TBD	Proposed by Lao PDR		Climate proof rural supply chain infrastructure,  Strengthening disaster risk preparedness of vulnerable communities and SMEs, and  Investing in risk financing for communities and sustainable livelihoods.	Mr. Chanthaly Chansompheng Office of the GMS National Coordinator, Lao PDR chansompheng@ yahoo.com

## Investment projects proposed to be added in RIF 2022 continued

					Year		stimate illion)	Source an	I Funding ad Amount illion)		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
1	No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
5		Programmatic Support to Strengthen Environmental Management	All GMS countries		TBD		TBD		TBD	Proposed by Lao PDR		Identification of priority policy and legal instruments and development of detailed action plan to build compliance capacity applicable to air, water and soil pollution control and remediation,  Provision of policy and technical advisory services to formulate key policy and legal instruments,  Build technical and human resource capacity of pertinent institutions including providing budgetary support, and  Develop environmental safeguards and build requisite institutional and staff capacity.	Mr. Chanthaly Chansompheng Office of the GMS National Coordinator, Lao PDR chansompheng@ yahoo.com

## Investment projects proposed to be added in RIF 2022 continued

						istimate hillion)	Source an	l Funding nd Amount illion)		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
6	Greater  Mekong Subregion Biodiversity Conservation  Corridors Project	Cambodia, Lao PDR, Viet Nam	Overall, the Project will improve natural resource management by establishing GMS Biodiversity Conservation Corridors, a transboundary, forest ecosystem-based landscape approach for maintaining sustainably critical ecosystem services that benefit local livelihoods and downstream users. In this context, beneficiaries, most of whom are living in remote, mounainous, high poverty areas, and are from ethnic minority groups, will be provided with demand driven, and stakeholder prioritized livelihood improvement and small-scale infrastructure support in 69 selected villages.	2010		93.0		ADB—69.0 Strategic Climate Fund—20.24 GEF—3.79	Ongoing.  The project has been implemented approximately 31.5% of the plan (as of May 2018)		Institutional and Community Strengthening,  Biodiversity Corridor Restoration and Protection,  Livelihood Improvement and Small-scale Infrastructure support, and  Project management and support services.	Department of Forestry, MAF, Lao PDR
	Subtotal (Enviro	nment Inves	tment Projects proposed to be added	l in RIF 2022)		93.0						
			Subtotal (Environment Investm	ent Projects)	560.0	653.0						

## Technical Assistance Projects

						stimate illion)	Potential F Source and (\$ milli	Amount		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
Pro	jects in RIF 20	)22										
1	GMS Environment Service Facility (a.k.a. GMS Core Environment Program 2018–2022)	All GMS countries	A Knowledge and Support Technical Assistance (KSTA) entitled GMS Environment Service Facility is in the 2018 ADB-SEER pipeline.  CEP (2018–2022) aims to transform the GMS Environment Operation Center and National Support Units into a GMS environment services facility to provide the following services:  Policy and regulatory framework support, Investment project preparation support, and Knowledge capitalization and information management support.	2018	10.0	10.0	ADB—2.0  Regional Cooperation and Integration  Fund/PRC Regional Cooperation and Poverty Reduction Fund—6.0 TBD—2.0	Regional Cooperation and Integration Fund/PRC Regional Cooperation and Poverty Reduction Fund—6.0 TBD—2.0	Proposed  Has not been implemented /Under preparation for in-country consultation		Support to:  (i) policy and regulatory framework,  (ii) investment project preparation support, and  (iii) knowledge capitalization and information management.	GMS WGE Focals
2	Rural Environmental Management (GMS CEP Strategic Framework and Action Plan)	All GMS countries	This preparatory TA will assess the technical, financial, and institutional feasibility of the Rural Environmental Quality, Pollution Control, and potential Waste Management Projects.	2022	1.5	1.5	ADB	TBD	Proposed  Has not been implemented /Under preparation for in-country consultation			GMS WGE Focals
3	Integrated Land- use Management for Sustainable Development (GMS CEP Strategic Framework and Action Plan)	All GMS countries	This preparatory TA will assess the technical, financial, and institutional feasibility of Integrated land use management systems for sustainable development.	2022	1.5	1.5	ADB	TBD	Proposed  Has not been implemented /Under preparation for in-country consultation			GMS WGE Focals

				u.		stimate illion)	Potential F Source and (\$ milli	Amount		Key locations and GMS Economic	Expected/ Planned	
No	. Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
4	Capacity Building for the Management on Environmental Laboratory and Environmental Monitoring	Myanmar	The project activities consist of (i) the management of the environmental laboratory, (ii) measurement of the environmental-quality monitoring equipment, and (iii) maintenance of environmental-quality monitoring equipment.	2022	0.3	0.3	TBD	TBD	<b>Proposed</b> (by Myanmar)			FERD, MPI Myanmar ferdsection@ gmail.com
			Subtotal (Environment TA Projects	in RIF 2022)	13.3	13.3						
TA	Projects prop	osed to l	be added in the RIF 2022									
5.	Integration of Climate Change Mitigation and Adaptation Measures in Management of Transboundary Central Annamites Landscape	Viet Nam	The proposed project will focus on implementing initiatives related to biodiversity conservation and maintain ecosystem services in the Central Annamite Biodiversity Corridor, a prioritized landscape listed by the National Biodiversity Conservation Strategy and Master Plan toward 2020, including transboundary biosphere reserve,eEcosystem-based Adaptation, and PES.  The project will also contribute to implementation of the National Determined Contributions to Paris Agreement through setting up an early warning system, which provides ontime climate and weather information via mobile phone system, as well as demonstration of ecosystem and community-based adaptation measures, building a healthy ecosystem to help the rural people in their adaption to negative impacts of climate change The project will support the provinces to achieve various SDG goals.	2018		1.3		TBD	Proposed by Viet Nam	Quang Tri, Thua Thien Hue, and Quang Nam (Viet Nam) Savannakhet, Salavan, Xekong (Laos)	Improved resilience of the local people through provision of relevant and timely information on the occurrence of extreme events through an early warning system and mobile phone service providers,  Mainstreamed environmental and climate change issues in strategic reference documents in province (SEDP, and sectoral plans),  Improved resilience of the local people and ecosystems through the development	WWF Viet Nam

## Technical assistance projects proposed to be added in RIF 2022 continued

					Cost Estimate (\$ million)		Potential Funding Source and Amount (\$ million)			Key locations and GMS Economic	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
											of pilot green infrastructures,  Conduct of a vulnerability assessment for the whole landscape, develop and implement EBA and CBA measures to climate change impacts in selected areas  Use InVEST tool to quantify ecosystem services in the landscape and design PES schemes,  Establishment of a trans-boundary Biosphere Reserve with a cross-border cooperation management mechanism with agreement by two countries and local government authorities,  Sustainability of coping skills is ensured through mobilization of partners and their training programs to master the developed tools.	

## Technical assistance projects proposed to be added in RIF 2022 continued

						stimate illion)	Potential F Source and (\$ milli	Amount		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
6	Proposing Models on Rational Utilization of Natural Capital in Biodiversity Corridors in Greater Mekong Subregion	Viet Nam	Biodivesity corridors have typical functions as an increase in local populations through connectivity between the populations, spaces for animals and plants movement, social functions: recreation, aesthetic function, community and cultural connectivity. Projects on biodiversity corridors were managed by ADB to develop biodiversity corridors in Cambodia, Laos, Thailand, China, Viet Nam during 2006 – 2016. The projects got some results however challenges have been facing as planning and constructing hydrological power plants, agricultural cultivation, mining, enhancing roads, developing recreation and resident areas affect directly ecosystems, biodiveristy, water resources and people life in the region. Therefore, it is important for defining models on rational utilization of natural capital in biodiversity corridors. The models must undertake basic functions of biodiversity corridor because in order to develop successfully the corridor, the people livelihood must be sure.	2019		1.3		Grants	Proposed by Viet Nam		Review of results and disadvantages of the projects on biodiversity corridors,  Re-defining biodiversity corridors based on the method of a GIS weighted-distance and least-cost,  Survey of models on utilization of natural capital in some selected communes belonging to the defined biodiversity corridors,  Implementing some models in practice,  Developing criteria to assess effects of the models,  Assessment of economic, social, and environmental effects of the models, and  Propose models on rational utilization of natural capital for the biodiversity corridors.	ISPONRE Viet Nam
	Subtota	l (Environme	ent TA Projects proposed to be added	l in RIF 2022)		2.5						
			Subtotal (Environment	TA Projects)	13.3	15.8						
			Total (Environment Investment and	TA Projects)	573.3	668.8						

## Health and Other Human Reseource Development

## **Investment Projects**

						stimate illion)	<b>Potential</b> <b>Source an</b> (\$ mi	d Amount		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
Pro	jects in RIF 20	022										
1	GMS Health Security Project (formerly GMS Communicable Disease Control Project Phase III)	Cambodia, Lao People's Democratic Republic (Lao PDR), Myanmar, Viet Nam	The project aims to strengthen public health security in the face of emerging diseases and other communicable diseases relevant to the Greater Mekong Subregion (GMS) by improving publichealth security systems and Centers for Disease Control and Prevention (CDC) in border areas in Cambodia, the Lao PDR, Myanmar, and Viet Nam. It focuses mainly on mobile and migrant populations (MMPs), as well as on other vulnerable groups.	2016	132.2	132.2	Asian Development Bank (ADB)—125.0 Counterpart—7.2	Asian Development Bank (ADB)—125.0 Counterpart—7.2	Ongoing.  All loans and grant are effective. Inception missions were fielded in all countries. Project start-up activities were completed, e.g., PMU set-up, establishment of advance account, annual operation planning, initial procurement and recruitment activities.	Cambodia: SEC Lao PDR: NSEC, SEC Myanmar: NSEC Viet Nam: NSEC, EWEC, SEC	Project outputs include  (i) strengthened regional, cross-border, and intersectoral CDC services;  (ii) strengthened national disease surveillance and outbreak response; and  (iii) improved laboratory services and hospital infection prevention and control.	Azusa Sato, Health Specialist, SEHS, SERD asato@adb.org Stella Labayen Project Analyst SEHS, SERD slabayen@adb. org
2	Local Health Care Sector Development Program (LHCSDP) (formerly Strengthening Local Health Care Support Program)	Viet Nam	The project will enhance the delivery of primary health- care services in order to more effectively address the key challenges involved in the prevention and control of communicable and noncommunicable diseases, taking into account the overall health security of the region. The program's impact will include strengthened health systems, with the aim of achieving universal health coverage (UHC) and inclusive growth. The program's outcome will include a better quality of—and easier access	2018	20.0	100.6	ADB	ADB—100.6	Proposed.  For approval  4th Quarter 2018	Nationwide	Output 1: Public investment management for local health care strengthened.  Output 2: Service models of local health care network improved.  Output 3: Local health care	Gerard Servais Sr Health Specialist SEHS, SERD gservais@adb.org

				Year		stimate illion)	Source ar	Il Funding nd Amount illion)		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
N	o. Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
			to—local health services, especially for poor and vulnerable populations in disadvantaged, remote, mountainous, or border areas								workforce development and management strengthened	
3	Guangxi Modern Technical and Vocational Education and Training (TVET) Development Program (RBL)	PRC	The program will support the establishment of a modern technical and vocational education and training (TVET) system that provides graduates with better employment opportunities in industries in Guangxi Zhang Autonomous Region (GZAR) and ASEAN countries. The program outputs include (i) enhanced industry relevance of TVET; (ii) improved quality of TVET; (iii) increased inclusiveness of TVET; and (iv) expanded role of TVET in regional economic development. The attached TA aims to strengthen the capacity of the TVET system for enhancing the quality and relevance of TVET, and regional cooperation between TVET institutions and enterprises in GZAR and ASEAN countries.	2017	450.0	450.6	ADB loan—250.0 Kreditanstalt für Wiederaufbau (KfW)—200.0	ADB Ioan—250.0  ADB TA—0.6  Kreditanstalt für Wiederaufbau (KfW) —200.0	Ongoing.  Targets to promote/ enhance regional cooperation and integration are being achieved.  TVET institutions in GZAR have been selected as partners of ASEAN TVET institutions and/or enterprises. Plans for regional cooperation and partnership agreements are being prepared.	Guangxi	Number of participants in training programs between selected TVET institutions in GZAR and ASEAN TVET institutions and/ or enterprises increased to at least 10% over the 2018 number by 2020.  1,600 students from ASEAN countries received vocational education certificates annually from GZAR'S TVET institutions, of which 10% were female by 2020	Asako Maruyama, Education Specialist, EASS/ EARD amaruyama@ adb.org
		Sub	total (Health and other HRD Investm	ent Projects)	702.2	683.4						
Р	Projects proposed to be added in RIF 2022											
4.	GMS Universal Health Care (UHC)	Lao PDR, Myanmar, (THA, tbd)	Financing health care for migrants. Includes development of financing scheme, broadening UHC coverage to include migrants, developing and implementing service provision packages for migrants	2021		50.0		ADB—50.0	<b>Proposed.</b> MYA 36m. Lao 16m THA (tbc)			Azusa Sato, Health Specialist, SEHS, SERD asato@adb.org
	Subtotal (I	lealth Invest	ment Projects proposed to be added	l in RIF 2022)		50.0						
		Sub	total (Health and other HRD Investm	ent Projects)	702.2	733.4						

## Technical Assistance Projects

						stimate illion)	Source an	l Funding nd Amount illion)		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
Pro	jects in RIF 20	022										
1	Strengthening Resilience to Climate Change in the Health Sector in the Greater Mekong Subregion	Cambodia, Lao PDR, Viet Nam	This regional capacity development technical assistance (TA) will work with regional academic and research institutions, as well as with public health and environmental authorities, to build the scientific knowledge needed to address the health impact of climate change and quantify the additional burden of affected health outcomes. It will support workforce development by training a new generation of competent and experienced public health staff to respond to the threats posed by climate change and incorporate mainstream climate concerns into health policies and programs. It will increase awareness in the public and private sectors of the significance of climate change, and identify potential publicprivate partnerships (PPPs) for the implementation of adaptation measures, such as climate-proof infrastructure.	2015	4.5	4.41	ADB-4.4 Governments of Cambodia, Lao PDR and Viet Nam-0.1	Nordic Development Fund —4.36  Governments of Cambodia, Lao PDR, and Viet Nam —0.05	Ongoing.  Consulting firm was engaged to implement TA activities. National workshops and procurement of small-scale equipment, TOTs, training on IS-EWS, Climate Change and Human Health have been conducted in all 3 countries	Nationwide	Output 1: Knowledge and understanding of relationship between climate change and human health improved.  Output 2: Human resource skills in coping with climate change adaptation in the health sector strengthened.  Output 3: Knowledge products shared and advocacy promoted.	Ye Xu, Southeast Asia Department, ADB
2	Malaria and Communicable Diseases Control in the GMS	Cambodia, Lao PDR, Myanmar	This regional capacity development TA is expected to fill policy gaps by (i) targeting vulnerable groups, in particular MMPs; (ii) strengthening diagnostic and treatment capacity in remote districts; (iii) improving  disease surveillance and rapid response to epidemics; and (iv) involving the private sector in the delivery of health services targeting vulnerable groups.	2015	4.5	4.5	Trust Fund under Health Financing Partnership Facility—4.5	Trust Fund under Health Financing Partnership Facility—4.5	Completed on 25 June 2018. TA Completion Report being drafted		Output 1: malaria diagnostic capacities and training of relevant health staff in 2 regions and 5 townships in Myanmar.  Output 2: field-based activities in selected CLM districts done to assess MMPs malaria risks and develop pilot models.	Gerard Servais Sr Health Specialist SEHS, SERD gservais@adb. org

				W. co		stimate illion)	Source ar	l Funding ad Amount illion)		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
											Output 3: cross-border information sharing on malaria and communicable disease outbreaks. The TA also conducted regional activities to support regional health cooperation and improvement of IPC and laboratory services in the GMS (including Thailand and PRC).	
3	GMS HRD Strategic Framework and Action Plan 2013–2017, Phase 2	All GMS countries	The project focuses on the three of the seven strategic thrusts of the Strategic Framework and Action Plan 2013–2017, and it is generating the following outputs:  (i) improved cooperation regarding TVET, (ii) improved cooperation in higher education, and (iii) strengthened national implementation and monitoring of the strategic framework and action plan. The project also supports the annual meetings of the working group on human resource development (HRD), held to share knowledge and experiences concerning emerging HRD issues and to enhance regional networks and partnershipsin HRD.	2013	2.1	2.1	ADB—1.3 PRC Fund—0.5 Governments of the GMS countries —0.3	ADB—1.3 PRC Fund—0.5 Governments of the GMS countries —0.3	Completed			
4	Capacity Building in Labor Migration Management	Cambodia. Lao PDR, Myanmar, Viet Nam	The TA will train migration officials and labor attachés in Cambodia, the Lao PDR, Myanmar, and Viet Nam. The training will address vulnerabilities specific to men or women. The TA will be managed by the International Organization for Migration (IOM).	TBD	0.3	0.3	To be determined (TBD)	To be determined (TBD)	Proposed			

				Vers	Cost Estimate (\$ million)		Potential Funding Source and Amount (\$ million)			Key locations and GMS Economic Corridor	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Measurable Outputs	Project Contact
5	Strengthening Regional Health Cooperation in the Greater Mekong Subregion	All GMS countries	The TA will strengthen health cooperation in the GMS by developing a subregional framework and strategy for health cooperation, and by establishing  a working group on health cooperation to oversee the implementation of the strategy and ensure its effectiveness. The proposed TA will also promote knowledge exchange and capacity development.	2018	1.8	1.0	ADB—1.8	ADB—1.0	Ongoing		Expected outcome: regional health cooperation in GMS strengthened.  Output 1: GMS Working Group on Health Cooperation (WGHC) established.  Output 2: GMS Health Cooperation Strategy developed and implemented.  Output 3: Knowledge development and exchange promoted.	Azusa Sato Health Specialist SEHS, SERD asato@adb.org
6	TA facility: Support for Human and Social Development in Southeast Asia. Improving UHC Coverage in Border Areas for MMPs Project	Cambodia, Lao PDR, Myanmar, Thailand, Viet Nam	TA facility	.2019	TBD	2.0	ADB	ADB TASF—2.0	Awaiting TA approval in Q1 2019.			Azusa Sato Health Specialist SEHS, SERD asato@adb.org

						stimate illion)	Source an	l Funding nd Amount illion)		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
7	Poverty Reduction through Safe Migration, Skills Development and Enhanced Job Placement in Cambodia, Lao People's Democratic Republic and Thailand (PROMISE)	Cambodia, Lao PDR, Myanmar, Thailand	PROMISE is a new regional program led by the IOM that will strengthen the linkages between labor migration to Thailand and efforts to reduce poverty in the region, with a particular focus on engaging employers and training institutions in skill development, facilitating ethical recruitment and protection, and improving the safety of migration and the access of migrant workers to decent employment opportunities. PROMISE will establish partnerships between employers in Thailand and skill-development partners based in Cambodia, the Lao PDR, Myanmar, and Thailand to develop  market-driven and migrant-centered skillstraining, and promote ethical recruitment models that will improve the protection and employability of migrants. PROMISE will also facilitate greater cross-border exchanges, as well as bilateral and subregional collaboration on skill development and certification. In addition, the return and reintegration component will broaden the opportunities for returning migrants to utilize their skills and invest their social and financial capital productively upon their return. PROMISE will also build the capacity of migrant support services in Cambodia, the Lao PDR, and Myanmar to provide reintegration services and enhance the linkages of these services with employment offices, skills certification authorities, financial institutions, and professional associations. Finally, PROMISE will work to support migrant-protection frameworks at the national and subregional levels,	2017	8.3	8.3	Swiss Agency for Development and Cooperation (SDC), International Organization for Migration (IOM)	Swiss Agency for Development and Cooperation (SDC), International Organization for Migration (IOM)	Ongoing.  PROMISE completes first year of implementation by end August 2018. Progress achieved includes awareness-building and mobilization of manufacturing and hospitality employers in Thailand on migrant worker skills development and rights protection; operationalizing cross-border skills development schemes between training providers, implementing onthe-job trainings and workplace orientation for newcomers; consultations on development of regional soft skills guidelines for migrant worker skills development; improving skills circulation and validation upon return through job-matching services, improving the capacities of Migrant Resource Centres		Migrant workers provided training and information through Migrant Resource Centers on safe migration and soft skills; pre-departure/ post-arrival/ re-integration orientation; upskilling; and entrepreneurship.  Migrant workers assisted on job placement, job matching; participate in job fairs, and join migrant networks.  Employers and recruitment agencies understand business case and commit to ethical recruitment and skills development of migrant workers.  Policy development for mainstreaming migration through national development plans; enhanced regional dialogue and bilateral cooperation on	Ms. Anna Platonova, IOM Thailand aplatonova@ iom.int

				Year		stimate illion)	Source an	Funding d Amount llion)		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
			engaging in policy development and capacity building of governments and non-state actors (including the promotion of the employer-paid ethical recruitment model).						and promoting employer awareness in the countries of origin; supporting national policy design on migration and human resource development.		safe migration, skills recognition, ethical recruitment, and mobility; improved labor migration schemes.	
		Subto	tal (Health and other HRD TA Projects	s in RIF 2022)	21.5	22.6						
	S	ubtotal (Hea	Ith TA Projects proposed to be added	l in RIF 2022)		0.0						
	Subtotal (Health and other HRD TA Projects)			TA Projects)	21.5	22.6						
	Total (Health and other HRD Investment and TA Projects			d TA Projects	723.7	756.0						

# Urban Development

## **Investment Projects**

				V		stimate illion)	Source an	l Funding ad Amount illion)		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
Pro	jects in RIF 20	022										
1	Corridor Towns Development Project II	Cambodia, Lao PDR, Viet Nam	The Second Greater Mekong Subregion (GMS) Corridor Towns Development Project is being implemented in seven towns in Cambodia, the Lao People's Democratic Republic (Lao PDR), and Viet Nam. The project has been in operation since 2016 and is slated to end in 2021. It includes livelihood support, development of climate resilience, and institutional capacity building in public investment management. The expected impact of the project will be the transformation of the towns into centers of activity in the GMS economic corridors. The outcome will be improved urban infrastructure that supports economic linkages, strengthens the green-growth potential of participating GMS towns and corridors, and enhances the climate resilience of those towns and corridors.  The breakdown of the estimated costs in terms of millions of dollars is as follows:  Country Total ADB Govt. Cofinancing Cambodia 38.1 33.0 5.1 0.0 Lao PDR 52.0 37.0 5.0 10.0 Viet Nam 121.7 100.0 21.7 0.0 TOTAL 211.8 170.0 31.8 10.0	2015	211.8	211.8	Asian Development Bank (ADB)—170.0  Governments of Cambodia, the Lao PDR, and Viet Nam —31.8  Association of Southeast Asian Nations (ASEAN) Infrastructure Fund —10.0	Asian Development Bank (ADB)—170.0 Governments of Cambodia, the Lao PDR, and Viet Nam—31.8 Association of Southeast Asian Nations (ASEAN) Infrastructure Fund—10.0	Approved in 2015 and made effective in 2016  Cambodia: Comprises of four subprojects: (i) Kampot Wastewater Collection and Treatment and Urban Drainage, (ii) Kampot Solid Waste Landfill, (iii) Sihanoukville Urban Drainage and (iv) Sihanoukville Solid Waste Landfill. Contract awards are anticipated by December 2018 for two of the subprojects (Kampot WWTP and Urban Drainage and Sihanoukville Urban Drainage). Detailed designs for the Kampot and Sihanoukville landfill subprojects have not commenced. It is expected that the designs will be finalised in Q1, 2019 with contract award in Q2 2019.  Lao PDR: Topographic surveys and geotechnical investigations have been completed and detailed engineering design	Located on NSEC, SEC CAM: -Kampot -Sihanoukville LAO: -Houayxay -Luang Namtha VIE: -Bac Giang -Mong Cai -Sa Pa	Urban infrastructure improved in participating towns	CAM: Ministry of Public Works and Transport PSOVICHEANO@ ONLINE.COM.KH  LAO: Department of Housing and Urban Planning, Project Coordination Unit (PCU),  Malychanh SANANIKHOM, Director of PCU, +856 20 55526431, malychanhs@ gmail.com  VIE: Bac Giang Provincial People's Committee Lao Cai Provincial People's Committee People's Committee Quang Ninh's People's Committee Quang Ninh's People's Committee

					Year		stimate illion)	Source ar	l Funding nd Amount illion)		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
r	lo.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
										is ongoing. Contracts have been awarded for both Luang Namtha and Houayxay solid waste management packages, and Luang Namtha bridge package.  Viet Nam:  The overall project progress is about 30%. Construction of wastewater treatment plants in Mong Cai and roads in Sapa and Bac Giang are on-going. Construction of wastewater treatment plants in Sapa and bac Giang will start in 2019. Sapa and Bac Giang will start in 2019. Sapa and Bac Giang have adopted the Strategic Local Economic Development Plans. Trainings on project management and gender is on-going.			

				W. co		stimate illion)	Source ar	l Funding nd Amount illion)		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
2	Corridor Towns Development Project III	Myanmar	The Third GMS Corridor Towns Development Project will expand the geographic scope to include Myanmar. The project is anticipated to develop the cities of Mawlamyine, in Mon State, and Hpa-An and Myawaddy, in Kayin State, as competitive economic nodes along the GMS East–West Economic Corridor (EWEC). The expected impact of the project is increased activity along the GMS EWEC. The outcome will be improved access to sustainable urban services in the project cities.	2018	87.0	86.5	ADB—80.0  Government of Myanmar—7.0	ADB—80.0  Government of Myanmar—6.53	Ongoing.  ADB Loan approved 31 May 2018, signed 12 September 2018 and expected effectivity date is Q4 2018.  F5 completed in 2016  Myanmar Economic Committee's approval on (14.12.2017)  Cabinet's approval on (30.1.2018)  President Office's approval on (19.2.2018)  Parliament's approval on (19.3.2018)	Mawlamyine in Mon State and Hpa-An and Myawaddy in Kayin State EWEC	1. Urban planning improved; 2. Basic social infrastructure upgraded; and 3. Urban management capacity strengthened	Daw Aye Aye Myint Department of Urban and Housing Development, Ministry of Construction, 09448548951 ayengemmt@ gmail.com
3	Fourth Greater Mekong Subregion Corridor Towns Development Project	Cambodia, Lao PDR	The proposed project will support the governments of Cambodia and the Lao PDR in their efforts to enhance the competitiveness of towns along  GMS economic corridors. The project will result in improved urban services in the participating towns due to investments in basic urban infrastructure such as drainage, sanitation, solid waste management facilities; urban roads; river bank protection structures; and public gardens. The project will also enhance climate resilience and will be in line with ADB's "3 Es" of economy, environment, and equity, as outlined in its Urban Operational Plan.  The breakdown of the estimated costs in terms of millions of dollars is as follows:	2018	133.0	142.56	ADB—128.0 Government of Lao PDR—5.0	ADB—128.0  Government of Cambodia—8.0  Government of Lao PDR—6.06  Cofinancing—0.5	Ongoing.  ADB loan for Cambodia approved on 1 Aug 2018 while for Lao PDR was on 14 September 2018  Complete feasibility studies.	Cambodia -Kampong Cham -Kratie -Stung Treng SEC Lao PDR -Paksan -Thakhek NSEC	1. Adequate essential urban infrastructure and services in the project towns.  2. strengthened institutional capacities for urban development	Department of Housing and Urban Planning, Project Coordination Unit (PCU), Malychanh SANANIKHOM, Director of PCU, +856 20 55526431, malychanhs@ gmail.com

					<b>Cost Es</b> (\$ mi	s <b>timate</b> illion)	Source ar	l Funding nd Amount illion)		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
			Country         Total         ADB         Govt         Cofinancing           Cambodia         88.50         80.0         8.0         0.5           Lao PDR         54.32         48.0         6.06         0.0           TOTAL         142.82         128.0         14.06         0.5									
4	Second Mandalay Urban Services Improvement Project	Myanmar	The proposed project will improve the urban environment and public health conditions in Mandalay city through the improvement of urban infrastructure and services.	202	150.0	165.0	ADB—150.0	ADB—150.0 Cofinancing—15.0	Proposed	Mandalay NSEC	Urban infrastructure upgraded     Urban service management capacity strengthened	FERD, MPI ferdsection@ gmail.com
5	Fifth Greater Mekong Subregion Corridor Towns Development Project	Lao PDR, Cambodia	The project will help the governments of selected GMS countries to enhance the competitiveness of towns located along GMS economic corridors. It will result in improved urban services in the participating towns due to investments in basic urban infrastructure.	2021	240.0	240.0	ADB—240.0	ADB—240.0	Proposed			
6	Hekou Urban Infrastructure and Public Services Improvement Project	People's Republic of China (PRC)	The proposed project will improve urban infrastructure and public services in the border town of Hekou, in Yunnan Province, adjacent to the Vietnamese town of Lao Cai. In terms of linkages with national and/or regional strategies, the Hekou–Lao Cai Border Economic Zone is a critical node on the GMS North–South Economic Corridor (NSEC) and on the eastern branch of the Pan-Asia Railway Network; it is also one of the key border economic zones supported by the Chinese government. Hekou is a national land port, Yunnan's closest one to the Pacific Ocean. It is also the only land port in Yunnan Province with railway transportation.	2018	175.3	175.3	ADB Government of the PRC	ADB Government of the PRC	Proposed	Hekou, Yunnan Province NSEC	The outputs will include the construction and/ or rehabilitation of:  (i) infrastructure for 44 kilometers (km) of urban roads, (ii) four schools (a kindergarten, elementary, middle, and high school), (iii) a cultural exchange center, and (iv) a hospital.	Mr. LI Rui Office of the GMS National Coordinator, PRC liruimof@139. com

					Cost Es (\$ mi	s <b>timate</b> illion)	Source ar	l Funding nd Amount illion)		Key locations and GMS Economic	Expected/ Planned	
No	. Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
7	Yangon Urban Services Improvement Project	Myanmar	The proposed project will improve urban environment and public health conditions in Yangon City through improved urban infrastructure and strengthened urban management capacity.	2020	150.0	100.0	ADB—150.0	ADB—100.0	Proposed.	Yangon City EWEC	Raw water transmission system constructed Sewerage system constructed Urban management capacity strengthened	FERD, MPI ferdsection@ gmail.com
	S	ubtotal (Urb	an Development Investment Projects	in RIF 2022)	1,147.1	1,121.2						
	Subtotal (Urban Dev't. Investment Projects proposed for inclusion in RIF 202			in RIF 2022)		0.0						
		Su	ıbtotal (Urban Development Investm	ent Projects)	1,147.1	1,121.2						

## Technical Assistance Projects

					Cost Estimate (\$ million)	Source ar	l Funding nd Amount illion)		Key locations and GMS Economic	Expected/ Planned		
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
Pro	jects in RIF 20	022										
1	PPTA for Corridor Towns Development Project III	Myanmar	This project preparatory technical assistance (PPTA) is formulating the Third GMS Corridor Towns Development Project. The subprojects include feasibility studies, and assessment of all safeguard requirements. This project is helping the participating towns to consolidate their urban-planning and investment policies into a strategic local economic development plan. The PPTA is also preparing capacity development and training plans for the local or provincial authorities involved.	2014	1.5	1.475	ADB—1.1 Cofinancing—0.4	ADB—1.0  Cofinancing—0.475	Ongoing  Expected TA closing date is 30 April 2018	EWEC	Feasibility studies for Corridor Towns Development Project III subprojects	FERD, MPI ferdsection@ gmail.com
2	Greater Mekong Subregion: Capacity Development for Economic Zones in Border Areas	All GMS countries	The revised outcome of the technical assistance (TA) is strengthened capacity of border institutions to prepare for future GMS corridor towns development projects. This will improve the GMS approach to corridor town development, create a pipeline for such projects in the future, and facilitate the preparation of these projects.	2015	0.9	0.9	ADB—0.5 Cofinancing—0.4	ADB—0.5 Cofinancing—0.4	Ongoing  TA completion date is 31 December 2018.		1. Scoping study of potential border economic zone development in the GMS is completed.  2. Comprehensive institutional development and capacity development program is developed and implemented.  3. Flagship program for the Fifth GMS Corridor Towns development Project is defined and applied.	

				Year		stimate illion)	Source an	I Funding nd Amount illion)		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
3	Corridor Towns Development Project IV	Cambodia, Lao PDR	The TA is formulating the Fourth GMS Corridor Towns Development Project. The proposed subprojects include feasibility studies, and assessment of all safeguard requirements.	2016	1.8	1.8	ADB—1.8	ADB—1.8	Ongoing.  Progress to date is 100%.  Complete feasibility studies.  Signed MOU.	Located on SEC and NSEC	1 feasibility studies 2 assessment of all safeguard requirements	Department of Housing and Urban Planning, Project Coordination Unit (PCU), Malychanh SANANIKHOM, Director of PCU, +856 20 55526431, malychanhs@ gmail.com
4	PPTA for Second Mandalay Urban Services Improvement Project	Myanmar	The TA will prepare the proposed loan and grant project scheduled for ADB approval in 2019.	2017	1.0	0.975	ADB—0.8 AFD—0.2	ADB—0.75  Cofinancing (Urban Climate Change Resilience Trust Fund under the Urban Financing Partnership Facility) —0.225	Ongoing.  Approved on 20 Jul 2017 and scheduled to be completed 30 Sep 2019.	Mandalay	The TA outputs will be (i) sector and subsector analyses, (ii) MUSIP2 outputs prioritized and identified, (iii) feasibility of the proposed investments for priority infrastructure construction and improvements determined, and (iv) institutional capacity strengthening and public awareness programs prepared.	Mandalay Regional Government

				V.		stimate illion)	Source an	l Funding od Amount illion)		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	<b>Project Contact</b>
5	PPTA for Fifth Greater Mekong Subregion Corridor Towns Development Project	Select GMS countries	The TA will prepare the proposed Fifth GMS Corridor Towns Development Project, which is scheduled for ADB financing approval in 2020–2021.	2019	1.5	1.5	ADB—1.5	ADB—1.5	Proposed  Project preparation for the Fifth GMS Corridor Towns Development will be undertaken under the Southeast Asia Urban Services Facility (SURF). While a stand-alone PPTA will not be processed as of now, funds allocated here will be requested to be used to top-up SURF			
6	Yangon Urban Service Improvement Project – 1 (TA)	Myanmar	The technical assistance will help the Yangon City Development Committee (YCDC) improve its urban planning and management to support a resilient and inclusive growth trajectory for the city.	2018	3.0	3.0	ADB—1.0  Urban Financing Partnership Facility (UFPF)—2.0	ADB—1.0  Urban Financing Partnership Facility (UFPF)—2.0	Proposed  Project preparation study (\$.975 M) for the YUSIP will be supported by the Cities Development Initiative for Asia (CDIA) Trust Fund under the Urban Financing Partnership, and as required, will also be supported by the Southeast Asia Urban Services Facility (SURF). Funds allocated here will be requested to be used to top-up SURF.	Yangon, Myanmar NSEC		
	Subtotal (Urban Development TA in RIF 20				9.7	9.7						
	Subtotal (Urban Development TA Projects proposed to be added in RIF 202					0.0						
	Subtotal (Urban Development TAP roject:				9.7	9.7						
		Total (	Urban Development Investment and	TA Projects)	1,156.8	1,130.9						

# Other Multisector/Border Economic Zones

# **Investment Projects**

				V	Cost Estimate (\$ million)		Potential Source an (\$ mi	d Amount		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
Pro	jects in RIF 20	)22										
1	Guangxi Regional Cooperation and Integration Promotion Investment Program, MFF tranches 1–3 (formerly Joint PRC–Viet Nam Cross-Border Economic Zones)	People's Republic of China (PRC)	The program will help the Guangxi Zhuang Autonomous Region of the PRC implement its strategies and action plans for regional cooperation and integration with countries of  the Association of the Southeast Asian Nations (ASEAN), particularly those in the Greater Mekong Subregion (GMS). This multitranch financing facility (MFF) will generate five major outputs: (i) sustainable development of small and medium- sized enterprises (SMEs); (ii) cost-competitive, safe, and efficient cross-border financial transactions and investments; (iii) e-commerce to facilitate access to markets; (iv) key infrastructure- and trade-related services; (v) improved cross-border connectivity.  The breakdown of the cost estimates and years of approval is as follows:    Tranche   Year   Total   ADB   Govt.	2016	890.0	890.0	Asian Development Bank (ADB)— 450.0  Government of the PRC—440.0	Asian Development Bank (ADB)— 450.0  Government of the PRC—440.0	Ongoing.  Tranche 1 is under implementation since August 2017 and the inception mission was held on 20-27 Aug 2018 Under the Financial Intermediary Loan (FIL), a \$25m disbursement was made in February 2015. Under the investment loan, the bidding documents for all civil works packages are under preparation and expected to be advertised in Q4 2018; key goods and consultancy services packages are also under preparation Tranche 2 was approved on 4 April 2018, and loan signing	Nanning, Qinzhou, Fangchenggang, Chongzuo, Baise, NSEC	1.sustainable development of small and medium-sized enterprises (SMEs) enhanced;2. Cross-border financial trade and investment improved;3.cross-border e-commerce platform developed;4.cross-border economic cooperation, key infrastructure and commerce service for BEZs improved;5. cr—oss-border transportation, information connectivity and policy coordination enhanced.	Su Yayun  Mr. Wu Tiancheng, Division Director, Foreign Capital Utilization and Overseas Investment, Guangxi DRC. His email contact information is wzc4415@163. com

						stimate illion)	Potential Source and (\$ mi	d Amount		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
									date on 1 August 2018 and the inception mission is anticipated after loan effectiveness in Q4 2018. Tranche 3 is planned for approval in 2020 (Standby) under the COBP, 2018- 2020.			
2	Construction of a Phnom Penh New Port Special Economic Zone	Cambodia	The project will comprise the first phase of development of the Phnom Penh New Port Special Economic Zone (SEZ). It will involve an area of 143 hectares (ha), of which 106.0 ha will be allocated to long-term leases to manufacturers, 3.0 ha to apartments and shops, 2.7 ha to a logistics center, and the remainder to service facilities. The pilot phase is also intended to induce further SEZ development (more than 600 ha) as a means of attracting private sector investment.	TBD	60.0	60.0	To be determined (TBD)	TBD	Proposed	Phnom Penh SEC	Phnom Penh New Port Special Economic Zone constructed and developed	Mr. Suon Sophal Office of the GMS National Coordinator, Cambodia sophalsuon@ gmail.com
3	Yunnan-Lincang Border Economic Cooperation Zone Infrastructure Development	PRC	Lincang Border Economic Zone is a national border economic zone along the PRC-Myanmar border. The planned area covers 200 square kilometers, with Mengding Qingshuihe land port industrial park at the core, Zhenkang Nansan industrial park and Cangyuan Yonghe industrial park at both wings. The proposed project plans to construct the road, water supply and drainage, garbage disposal facilities within the three industrial parks mentioned above.	2018	385.0	385.0	ADB—250.0  Government of the PRC—135.0	ADB—250.0 Government of the PRC—135.0	Proposed.	Lincang, Yunnan Province NSEC	1. Cross border trade capacity improved  2. Integrated urban environment infra in Mengding and Qingshuihem National port areas improved  3. Social Infra and services improved  4. Institutional capacity of involved agencies improved.	Lincang Municipal Government No. 350, Shiji Road, Fengxiang Sub-district, Linxiang District, Lincang City, Yunnan Province

				Versi	<b>Cost E</b> s (\$ mi	stimate illion)	Potential Source and (\$ mi	d Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Measurable Outputs	Project Contact
4	PRC and Thailand Industrial Park Cooperation	PRC, Thailand	The establishment of this joint industrial park, which will straddle the territories of the PRC and Thailand, will contribute to industrial cooperation between the two countries. The proposed project will support (i) infrastructure construction in the park, (ii) the planning of subsequent construction there, and (iii) publications and investment invitations relating to the park.	TBD	TBD	TBD	TBD	TBD	Proposed		Joint industrial park established	Mr. LI Rui Office of the GMS National Coordinator, PRC liruimof@139. com Mr. Vudthidech CHAMNIKIJ Office of GMS NC Thailand vudthidech@ nesdb.go.th
5	Support to Border Areas Development Project	Viet Nam	The project is supporting the Cambodia–Laos–Viet Nam (CLV) Development Triangle Area objectives of facilitating the flow of goods, people, and investment capital; and of exploring agricultural, forestry, and tourism potential by accelerating economic growth within Viet Nam's Development Triangle Area (VDTA). Outputs will include (i) rehabilitated road infrastructure in five VDTA provinces; (ii) developed VDTA plans and facilities for transport and trade facilitation, with a focus on inclusive growth; and (iii) strengthened institutional capacity for VDTA planning, project design, and implementation, and for resource management.	2016	122.1	122.1	ADB—106.5 Government of Viet Nam—15.6	ADB—106.5 Government of Viet Nam—15.6	Ongoing  ADB loan approved on 8 December 2016 and effectivity date is 10 august 2017.	Binh Phuoc, Dak Nong, Gia Lai, Kon Tum, Tinh Dak Lak SEC	1. Road infrastructure in five VDTA provinces rehabilitated  2. VDTA plans and facilities for transport and trade facilitation with a focus on inclusive growth developed  3. Institutional capacity for VDTA investment planning, project design and implementation, and resource management strengthened	Binh Phuoc Provincial People's Committee WEB@ BINHPHUOC. GOV.VN  Dak Lak Provincial People's Committee UBND@DAKLAK. GOV.VN  Dak Nong Provincial People's Committee VPUBND@ DAKNONG. GOV.VN

						stimate illion)	Potential Source and (\$ mil	d Amount		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
												Gia Lai Provincial People's Committee VPUBNDTINH@ GIALAI.VN  Kon Tum Provincial People's Committee VPUBND@ KONTUM.GOV.VN
6	Ruili Border Economic Zone Infrastructure Development Project	PRC	The proposed project will support the development of infrastructure and public services on the Chinese side of the Ruil–Muse Border Economic Zone (shared with Myanmar). The objectives are to facilitate the flow of goods, people, and investment capital, and to provide better public services to local residents. Outputs will include (i) building four schools (a kindergarten, elementary, middle, and high school); and (ii) improving the infrastructure of the Ruili International Logistics Park, which has a total area of 239.2 ha. In terms of linkages with national and/or regional strategies, the Ruili–Muse Border Economic Zone is a critical node on the GMS NSEC and on the western branch of the Pan-Asia Railway Network; it is also one of the key border economic zones supported by the Chinese government.	2018	627.8	627.8	To be determined (TBD)	TBD	Proposed.			
Sub	total (Other Multis	ector/Border	Economic Zones Investment Project	s in RIF 2022	2,084.9	2,084.9						

#### Investment projects proposed to be added in RIF 2022

				u.		stimate illion)	Potential Source an (\$ mi	d Amount		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
Pro	jects propose	ed to be a	added in RIF 2022									
7	Border Trade Zone in Muse, Kampitee, Shinshwehaw	Myanmar, PRC	To improve the competitiveness of the border area cities with following proposed components: (1) Provide and upgrade infrastructure in GMS corridor towns and in other key urban areas; (2) Identify or update key border areas and priority border points based on reconfigured GMS economic corridors; and (3) Develop border zones.	TBD		TBD		TBD	<b>Proposed</b> by Myanmar	Muse, Kampitee, Shinshwehaw NSEC	(1) Provide and upgrade infrastructure in GMS corridor towns and in other key urban areas; (2) Identify or update key border areas and priority border points based on reconfigured GMS economic corridors; and (3) Develop border zones	FERD, MPI ferdsection@ gmail.com
	Su	ubtotal Inves	tment Projects proposed to be added	d in RIF 2022		TBD						
	Subtotal (O	ther Multise	tor/Border Economic Zones Investme	ent Projects)	2,084.9	2,084.9						

# Technical Assistance Projects

				Year	Cost Es	stimate illion)		Funding d Amount llion)		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
Pro	jects in RIF 20	)22										
1	Policy Coordination and Planning of Border Economic Zones of the People's Republic of China and Viet Nam (formerly Joint Feasibility Study on Cross-Border Economic Zones in the PRC and Viet Nam)	PRC, Viet Nam	This policy and advisory technical assistance (TA) is enhancing the capacity of the governments  of the PRC and Viet Nam to develop, manage, negotiate, and promote border economic zones (BEZs) in their border areas. Outputs will include  (i) policy recommendations for coordinated BEZs; (ii) strengthened development and management of the BEZs, along with public – private coordination; and (iii) capacity building of government stakeholders.	2017	0.4	0.4	PRC Regional Cooperation and Poverty Reduction Fund- 0.4	PRC Regional Cooperation and Poverty Reduction Fund- 0.4	Approved on 10 January 2017.  Experts for the key international and national consultant positions have been recruited. The project was launched during the TA inception mission from 30 January to 5 February 2018. Two separate TA inception workshops were held in Dongxing, PRC and Hanoi, Viet Nam, as well as field visits of two BEZs in the PRC (i.e. Dongxing and Pingxiang). The TA inception workshop in Hanoi was held jointly with Viet Nam National University, where experts presented ongoing academic research on the subject area in Viet Nam.	PRC Nationwide and Viet Nam Nationwide	1. Policy recommendations for coordinated development and economic integration for BEZs; 2. support on cooperative mechanism, cooperation in public and private- invested area of BEZs; 3. capacity connection in key area.	Su Yayun Government of Guangxi Zhuang Autonomous Region, through Guangxi Foreign Loans Project Management Office

				u.		stimate illion)		l Funding ad Amount illion)		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
2	PPTA for Yunnan– Lincang Cross- Border Economic Cooperation and Integration Promotion Investment Program	PRC	This project preparatory technical assistance (PPTA) will arrange the proposed loan for a project focused on the PRC–Myanmar border, with a scope that will include: (i) crossborder economic cooperation zone infrastructure (water supply, wastewater, solid waste, roads), (ii) border facilities, (iii) hospitals, (iv) schools (primary and vocational); and (v) capacity development.	2018	0.5	0.5	ADB	ADB	Proposed	Lincang, Yunnan NSEC	Proposed loan investment project prepared	Lincang Municipal Government No. 350, Shiji Road, Fengxiang Sub-district, Linxiang District, Lincang City, Yunnan Province
3	Preparatory TA for Guangxi Regional Cooperation and Integration Promotion Investment Program	PRC	The PPTA has been (i) conducting sector reviews to identify the key issues to be addressed by the investment program; (ii) identifying subprojects covered by the first tranche of the MFF, and helped the executing agency prepare preliminary feasibility studies; (iii) doing pre-implementation workforthe investment program; (iv) assisting the executing agency and implementing agencies in assessing preliminary engineering designs and specifications, verifying detailed cost estimates, etc.; (v) suggesting key features for the contractual agreements and/or other necessary legal or institutional arrangements; and (vi) helping prepare the facility's administration manual.	2016	1.2	1.2	ADB-1.0  Government of PRC-0.2	ADB- 1.0  Government of PRC- 0.2	Completed	Fangchenggang, Chongzuo, Baise, Qinzhou NSEC	(i) sector reviews conducted  (ii) subprojects in the first tranche of the MFF identified and preliminary feasibility studies prepared  (iii) pre-implementation work for the investment program conducted, (iv) assisted the executing agency and implementing agencies in assessing preliminary engineering designs and specifications,	Su Yayun Government of Guangxi Zhuang Autonomous Region, through Guangxi Foreign Loans Project Management Office

				u.		stimate illion)	Potential Source an (\$ mi	d Amount		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
											(v) suggested key features in contractual agreements or other necessary legal or institutional arrangements, and (vi) contributed to the preparation of the facility administration manual.	
4	Research on China– Indochina Peninsula Economic Corridor Transportation and Business Planning	GMS countries	Beginning in Nanning, the China–Indochina Peninsula Economic Corridor passes through seven countries (PRC, Viet Nam, Lao PDR, Cambodia, Thailand, Malaysia, and Singapore). The corridor could impact Myanmar via its connection to the GMS East–West Economic Corridor (EWEC). Although the corridor has transportation capacity, the associated infrastructure is not good enough, and economic development there is still insufficient. The proposed project aims to study the status of the corridor's transportation infrastructure and to propose key projects to address any challenges. The research will also generate suggestions regarding the planning of the business environment and the change from a transportation corridor into an economic corridor.	TBD	4.2	4.2	TBD	TBD	Proposed	EWEC		Mr. LI Rui Office of the GMS National Coordinator, PRC Iiruimof@139.com

					<b>Cost E</b> : (\$ m	stimate illion)	Source an	l Funding d Amount illion)		Key locations and GMS Economic	Expected/ Planned	
N	o. Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
5	Feasibility Study for Thakhek Special Economic Zone	Lao PDR, Thailand	The Thakhek Special Economic Zone (SEZ) is located near the Third Mekong Lao–Thai Friendship Bridge, and thus could possibly serve as a logistics center. The TA would support studies conducted by the governments of the Lao PDR and Thailand to determine the zone's potential for facilitating flows of goods and services between the two countries and among the other GMS countries, and to come up with a strategy for realizing that potential.	TBD	1.5	1.5	TBD	TBD	Proposed	EWEC	Strategy for Thakhek SEZ to be developed to guide investment in trade and logistics.	Special Economic Zone promotion and management Office (SEZO), MPI. Ms. Phanchinda LENGSAVAD, DDG, phanchinda.sez@ gmail.com Mr. Phonpaseuth HAO- ONECHANH, phonepaseuth81 @gmail.com
6	Training and Technical Assistance for Implementing Cross- Border Economic Zone between Myanmar and the PRC	Myanmar, PRC	The ministries of commerce of Myanmar and the PRC signed a memorandum of understanding (MOU) on the establishment of the Myanmar–PRC Border Economic Cooperation Zone. To carry out the responsibilities mentioned in the MOU, Myanmar needs to set up a joint working group composed of competent government officials. Myanmar should recruit these officials from line ministries, and train them to be able to formulate a master development plan, design a structure for cross-border administration, create an investor-friendly business environment, and enhance private—public partnerships (PPPs). Toaccomplish this, Myanmar needs to design a 3-month training course that would include course work and field trips to SEZs in Cambodia; Hong Kong, China; Japan; and the Lao PDR. It is proposed that 20 officials undergothis training.	2018	0.2	0.2	ADB	ADB	Proposed by Myanmar	NSEC	Myanmar officials trained in setting up and implementing cross border economic zone between Myanmar and PRC	FERD, MPI ferdsection@ gmail.com
		Subtota	al (Other Multisector/ BEZs TA Project	s in RIF 2022	8.0	8.0						

#### Technical assistance projects proposed to be added in RIF 2022

				Year		stimate illion)	Potential Source an (\$ mi	d Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	<b>Project Contact</b>
TA F	rojects prop	osed to l	oe added in RIF 2022									
7	Strengthening the Coordination of the GMS Program	All GMS countries	The regional policy and advisory technical assistance (TA) will build on earlier regional TA providing coordination support to the GMS program to help member countries strengthen their regional cooperation and integration. The TA has been developed in consultation with GMS national secretariats in all countries, which coordinate public and private sector as well as civil society participation in the GMS program in their respective countries.	2010		6.0		ADB—5.95	Completed.	NSEC  EWEC  SEC	The TA's expected outputs were: (i) preparation of a new GMS 10-year Strategic Framework (2012-2022); (ii) GMS working groups, corridor development forums, and other high-level meetings to promote the planned and prepared multi-sector approach; (iii) increased capacity of GMS national secretariats; (iv) new and emerging information and knowledge products for GMS prepared and disseminated; and (v) structured information exchange and dialogue between ADB and development partners.	GMS Secretariat Southeast Asia Department, ADB gms@adb.org

#### Technical assistance projects proposed to be added in RIF 2022 continued

						stimate illion)	Potentia Source an (\$ m	d Amount		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
8.	Sustaining the Gains of Regional Cooperation in the Greater Mekong Subregion	All GMS Countries	The knowledge and support technical assistance (TA) will support countries in the Greater Mekong Subregion (GMS) in transforming the GMS Program into a more effective regional cooperation platform that adds value to member countries' national development strategies and benefits the local populations of member countries.1 The TA is aligned with the GMS Economic Cooperation Program Strategic Framework, 2012–2022; and ADB's Operational Plan for Regional Cooperation and Integration, 2016–2020. 2 GMS countries strongly support the proposed outputs and activities.	2017		2.0		ADB—2.0	Ongoing since October 2017 and expected closing date is 31 December 2019.		(i) GMS coordination and decision-making mechanisms strengthened.  (ii) Project identification, resource mobilization, and results monitoring mechanism improved.  (iii) Knowledge-based strategic planning enhanced.	GMS Secretariat Southeast Asia Department, ADB gms@adb.org
9	Training and Technical Assistance for Implementing Cross- Border Economic Zone frame work plan between Lao PDR and the PRC	Lao PDR, PRC	The Government of Lao PDR and the PRC signed a Joint Framework Plan for the Boten – Mohan Economic Cooperation Zone between Lao PDR – PRC in 2015, and Brief Master Plan for Border Economic Cooperation Zone in 2016. To achieve the objectives of connected infrastructure, facilitating cross border movement of goods, services and peoples while ensuring effective and efficient administration and monitoring system, the Lao PDR needs technical assistance and financial support to map out different procedures and regulations as well as training for relevant staff members at central and local levels to accomplish the objectives. The training could be a combination of course work and field trips to other cross border SEZs such as China-Kazakhstan cross border zone and other SEZs that have played significant roles in terms of facilitating border trade and cooperation.	2018		2.0		TBD	Proposed	Boten Lao PDR-Mohan PRC Border Economic Zone NSEC	Model of Cross border cooperation zone established, Facilitation on the flow of goods, services and people	Special Economic Zone promotion and management Office (SEZO), MPI. Ms. Phanchinda LENGSAVAD, DDG phanchinda.sez@ gmail.com

#### Technical assistance projects proposed to be added in RIF 2022 continued

						stimate illion)	Source an	l Funding d Amount Illion)		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
Subto	Subtotal (Other Multisector/Border Economic Zones TA Projects proposed to be added in 2022)					10.0						
Subto	ubtotal (Other Multisector/ Border Economic Zones TA Projects)					18.0						
Total	tal (Other Multisector/ Border Economic Zones Investment and TA Projects)					2,102.9						

# Tourism

# **Investment Projects**

					<b>Cost E</b> : (\$ mi	stimate illion)	<b>Potential</b> <b>Source an</b> (\$ mi	d Amount		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
Pro	jects in RIF	2022										
1	GMS Tourism Infrastructure for Inclusive Growth	Cambodia, Lao People's Democratic Republic (Lao PDR), Viet Nam	The project will accelerate inclusive economic growth along targeted segments of the Greater Mekong Subregion (GMS) economic corridors by improving tourism-related access infrastructure and environmental conditions at cross-border tourism centers, and by strengthening the capacity of public and private destination management organizations.  The project will support (i) improvements in the last-mile tourism access infrastructure, (ii) enhanced environmental services at cross-border tourism centers, (iii) strengthened institutional capacity for promoting and managing inclusive tourism growth, and (iv) effective project implementation and knowledge management. Project areas will include contiguous segments of the Southern Coastal Corridor in Cambodia and Viet Nam, the Southern Corridor in Viet Nam, the Central Corridor in the Lao PDR, and the Eastern Corridor in northern Viet Nam.  The breakdown of the estimated costs in terms of millions of dollars is as follows:  Country Total ADB Government Cambodia 18.77 18.0 0.77 Lao PDR 43.57 40.0 3.57 Viet Nam 55.08 50.0 5.08 TOTAL 117.42 108.0 9.42	2014	117.4	117.4	Asian Development Bank (ADB)— 108.0  Governments of Cambodia, the Lao PDR, and Viet Nam—9.4	Asian Development Bank (ADB)— 108.0  Governments of Cambodia, the Lao PDR, and Viet Nam—9.4	Ongoing.  Lao PDR: all works contracts awarded and 30% - 80% completed. Capacity building programs all on-track.  Cambodia: all works contract awarded and 5%-75% completed. Capacity building programs all on-track.  Viet Nam: 2of 9 works contracts awarded, 40% completed. Capacity building programs partially on-track.	Cambodia: GMS Southern Coastal Corridor Lao PDR: GMS Central Corridor Viet Nam: NSEC	(i) 127 km of provincial and district access roads to tourist sites and two ferry ports improved/constructed, (ii) 4,000 m3/day wastewater treatment capacity installed at tourist sites, (iii) about 30 hectares of land in tourist areas protected from flooding; (iv) about 1,400 entrepreneurs receive business support services; and (v) 12 destination management organizations strengthened.	Mr. Steven Schipani, SERD/ ADB sschipani@adb. org

				Vers	<b>Cost Es</b> (\$ mi	stimate llion)	Potential Source an (\$ mi	d Amount		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
2	Construction of the Sino – Vietnamese Detian–Ban Gioc Waterfalls International Tourism Cooperation Zone	PRC, Viet Nam	The project aims to develop tourism infrastructure and support service facilities in the Sino–Vietnamese Detian–Ban Gioc Waterfalls International Tourism Cooperation Zone, which is located in the GMS Northern Economic Corridor. The project includes the construction or renovation of river ports, frontier trading facilities, highways, water supply systems, electricity supply systems, and sewage and garbage-disposal systems, as well as support for village-based development within the Detian Tourism Area.  The PRC has suggested including improvements in the local rural environment and ecosystem, and the construction of a tourist center, parking lots, sightseeing walkways, green bicycle paths, a Sino–Vietnamese museum, and a center for Sino– Vietnamese intercultural communication.	2016	200.0	200.0	Governments of the PRC and Viet Nam	Governments of the PRC and Viet Nam	Ongoing.  Highway network to Detian in Guangxi Province under construction.  In 2017, Govt of Viet Nam.  approved the general construction project of Ban Gioc waterfall tourism site and detailed plan for the site's central area.	Detian-Ban Gioc NSEC	See description.	Mr. LI Rui Office of the GMS National Coordinator, PRC liruimof@139. com  Mr DUONG Hung Cuong Office of the GMS National Coordinator, Viet Nam cuongmpi@ gmail.com
3	GMS Tourism Infrastructure for Inclusive Growth II	Cambodia, Lao PDR, Viet Nam	The project will improve urban- rural connectivity; environmental services; and the capacity to manage tourism growth in secondary destinations along the GMS economic corridors. It will also support the implementation of the Association of Southeast Asian Nations (ASEAN) Tourism Standards.  The breakdown of the estimated costs in terms of millions of dollars is as follows:	2018	131.0	136.2	ADB—122.0  Governments of the Lao PDR, and Viet Nam—9.0	ADB—122.0 Governments of the Lao PDR, and Viet Nam—14.2	Ongoing for Cambodia and Lao PDR.  ADB Board  Approved the Cambodia and Lao PDR components on 31 August 2018. The Viet Nam component approval is expected in November 2018.	Cambodia: SEC Lao PDR: NSEC, SEC Viet Nam: NSEC, EWEC	(i) provincial and district access roads to tourist sites and ferry ports improved/constructed, (ii) landfill constructed; (iii) land in tourist areas protected from flooding; (iv) towns achieve ASEAN Clean Tourist City standard; (v) entrepreneurs and	Mr. Steven Schipani, SERD/ ADB sschipani@adb. org

				u l	<b>Cost Es</b> (\$ mi	timate llion)	Potential Source and (\$ mil	d Amount		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
			Country         Total         ADB         Government           Cambodia         30.0         30.0         0.0           Lao PDR         49.7         47.0         2.7           Viet Nam         56.5         45.0         11.5           TOTAL         136.2         122.0         14.2						Government project management teams established. Cambodia and Lao PDR have started to prepare detailed engineering designs for 2 landfills and 1 road subproject. Works procurement expected to begin in Q1 2018.		hotels/homestays receive business support services.  Viet Nam: (i) provincial and district access roads to tourist sites and ferry piers improved /constructed, (ii) beachfront improved and protected from storms/flooding; (iv) towns achieve ASEAN Clean Tourist City standard; (v) hotels receive service training and business support services	
4	Tourism Infrastructure Development in the Green Triangle Development Area	Cambodia, Lao PDR, Viet Nam	The project will develop tourism-related infrastructure within the framework of the Green Triangle Development Plan. In northeastern Cambodia, for instance, the project will develop tourism-related infrastructure (including the airport in Ratanakiri Province), vocational training, and small-scale community-based tourism.	2022	75.0	75.0	To be determined (TBD)	TBD	Proposed			Mr. Jens Thraenhart, Mekong Tourism Coordinating Office (MTCO) jens@ tourismmekong.
5	Tourism Infrastructure Development in the Emerald Triangle Development Area	Cambodia, Lao PDR, Thailand	The project will develop tourism- related infrastructure within the framework of the Emerald Triangle Development Plan.	2022	75.0	75.0	ADB—50.0 Government of Thailand—25.0	ADB—50.0 Government of Thailand—25.0	Proposed			Mr. Jens Thraenhart, Mekong Tourism Coordinating Office (MTCO) jens@ tourismmekong. org

				, and	_		<b>Potentia</b> l <b>Source an</b> (\$ mi	d Amount		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
6	River and Coastal Port Improvements	All GMS countries	The project will develop and/or improve water transport terminals to facilitate access to tourist attractions and secondary destinations.	2022	250.0	250.0	Governments of the GMS countries, ADB, Official Development Assistance (ODA	Governments of the GMS countries, ADB, Official Development Assistance (ODA	Proposed			Mr. Jens Thraenhart, Mekong Tourism Coordinating Office (MTCO) jens@ tourismmekong.
7	Improve Tourism Infrastructure and Facilities in the Konglor Cave—Phong Nha Ke Bang— Nakhon Phanom Corridor	Lao PDR, Thailand, Viet Nam	The project is helping improve small infrastructure and public amenities to provide better visitor services and tourist information.  The New Zealand – Lao PDR Ministry of Information, Culture and Tourism Lao Tourism Support Activity is enhancing visitor experience and service quality and promoting travel around The Loop, a touring circuit through Khammouane and Bolikhamxay provinces of Lao PDR, with Konglor Cave as one its key attractions. In addition to support for Konglor Cave, the project is developing additional sites and products around The Loop, including construction of tourist facilities, improving site access, interpretation and management, SME support targeting handicraft producers, and transportation and food and accommodation service providers, enhancing tourist safety etc. Marketing activities include promotion of the Loop as to existing and potential cross-border tourism flows between Thailand, Lao PDR and Viet Nam.	2017	1.6	1.6	Governments of the Lao PDR, Thailand, and Viet Nam, ODA (New Zealand)	Governments of the Lao PDR, Thailand, and Viet Nam, ODA (New Zealand)	Ongoing.  Small infrastructure support and capacity building programs all ontrack.  Thailand Hosted the 2018 Mekong Tourism forum in Nakhon Phanom	Lao PDR: NSEC Thailand: EWEC Viet Nam: EWEC	Lao PDR:  IN project areas - overnight visits: \$2.1 million, day visits: \$1.0 million.  Overnight visits: daily expenditure international: \$55, regional: \$45, domestic: \$18.  Average length of stay: 2.5 days.  Employment: 160 additional women and 125 additional men employed in the tourism sector.	Thaviphet Oula:  Deputy Director General, Tourism Development Department Ministry of Information, Culture, and Tourism thaviphet@ yahoo.com

					<b>Cost Es</b> (\$ mi	stimate illion)	<b>Potentia</b> l <b>Source an</b> (\$ mi	d Amount		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
8	Tourism Information Center and Roadside Rest Area Development	All GMS countries	The project is developing or improving tourism information centers at primary and secondary tourist attractions, and will professionalize facilities management.	2017	30.0	30.0	Governments of the GMS countries, ODA	Governments of the GMS countries, ODA	Ongoing			Mr. Jens Thraenhart, Mekong Tourism Coordinating Office (MTCO) jens@ tourismmekong.
9	Improve Environmental Services in World Heritage Sites	All GMS countries	The project will improve the infrastructure and services relating to solid waste and wastewater management at United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Sites.	2022	250.0	250.0	Governments of the GMS countries, ODA	Governments of the GMS countries, ODA	Proposed			Mr. Jens Thraenhart, Mekong Tourism Coordinating Office (MTCO) jens@ tourismmekong. org
10	Border Facilities Improvement Program	All GMS countries	The project will upgrade border infrastructure, information technology, and management systems to improve passenger and vehicle clearance efficiency, safety, and security.	2022	200.0	200.0	Governments of the GMS countries, ODA	Governments of the GMS countries, ODA	Proposed			Mr. Jens Thraenhart, Mekong Tourism Coordinating Office (MTCO) jens@ tourismmekong. org
11	Strengthening Tourism Vocational Training Institutions	Cambodia, PRC, Lao PDR, Thailand, Viet Nam	The project is establishing vocational training institutions, strengthening teaching capacity, and developing curriculum and training materials that harmonize with ASEAN and PRC standards. It is also promoting exchanges and cooperation among GMS tourism schools and university programs to promote better tourism management and hospitality services.	2016	70.0	70.0	Governments of Cambodia, Lao PDR, Thailand, and Vietnam, ODA (Luxembourg, Switzerland ADB)	7.5m EUR (8.6 m USED) from Luxembourg 7.5m (8.6m USD) EUR from Switzerland In-kind contribution from Lao PDR	Ongoing.  Implementation of 5-year project began in September 2016. Project is generally on track. Disbursement is expected to be at approx. 6m EUR by end of 2018.	All provinces and Vientiane Capital, with a higher concentration of support/ activities in key tourism locations.	5,000 people participate in a tourism/ hospitality vocational education and training program.  75% of graduates are employed within 3 months of graduation.  80% of employed have income above minimum wage.	Tony Donovan Chief Technical Adviser Skills for Tourism Project tony.donovan@ luxdev.lu

						stimate illion)	Potential Source an (\$ mi	d Amount		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
12	Community- Based Tourism Enterprise Support Program	All GMS countries	The project will provide business support services to facilitate community-based tourism development and local access to tourism-related value chains.	2021	30.0	30.0	Governments of the GMS countries, ODA	Governments of the GMS countries, ODA	Proposed			Mr. Jens Thraenhart, Mekong Tourism Coordinating Office (MTCO) jens@ tourismmekong.
			Subtotal (Tourism Investm	ent Projects)	1,430.0	1,435.2						

## Technical Assistance Projects

						stimate illion)	Potential Source and (\$ mi	d Amount		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
Pro	jects in RIF	2022										
1	Preparing Second GMS Tourism Infrastructure for Inclusive Growth Project	Cambodia, Lao PDR, Myanmar, Viet Nam	The technical assistance (TA) is supporting the preparation of investment projects to improve urban-rural connectivity, environmental services and the capacity to boost tourism revenues, jobs, and environmental performance in secondary destinations along the GMS economic corridors. The project is also supporting the implementation of ASEAN regional tourism standards.	2016	2.5	2.5	ADB—1.5 Nordic Development Fund (NDF)—1.0	ADB—1.5  Nordic Development Fund(NDF)—1.0	Ongoing.  Project preparation 90% completed. NDF supported climate risk and vulnerability assessment for 12 infrastructure subprojects and detailed engineering design for 3 subprojects.		GMS Tourism Sector Strategy 2016-2025 updated and endorsed at 22 <sup>nd</sup> GMS Ministerial Conference. TA feasibility studies for priority infrastructure and other project outputs including market analysis; stakeholder consultations; climate risk assessment;	Mr. Steven Schipani, SERD/ ADB sschipani@adb. org

					<b>Cost Es</b> (\$ mi	stimate illion)	Potential Source and (\$ mil	l Amount		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
											preliminary engineering designs; social, economic and financial analysis; safeguards documents; cost estimates; and analysis of risks and mitigation measures.	
2	Preparing the Tourism Infrastructure Development in the Green Triangle Development Area	Cambodia, Lao PDR, Viet Nam	The TA will support the preparation of a project to develop tourism-related infrastructure within the framework of the Green Triangle Development Plan. In northeastern Cambodia, for instance, the project will cover tourism-related infrastructure (including the airport in Ratanakiri Province), vocational training school, and small-scale community-based tourism.	To be determined (TBD)	1.0	1.0	Governments of Cambodia, Lao PDR, and Viet Nam, ODA		Proposed			Mr. Jens Thraenhart, Mekong Tourism Coordinating Office (MTCO) jens@ tourismmekong. org
3	Preparing the Tourism Infrastructure Development in the Emerald Triangle Development Area	Cambodia, Lao PDR, Thailand	The TA will support the preparation of a project to develop tourism-related infrastructure within the framework of the Emerald Triangle Development Plan.	TBD	1.0	1.0	Governments of Cambodia, Lao PDR, and Viet Nam, ODA	Governments of Cambodia, Lao PDR, and Viet Nam, ODA	Proposed			Mr. Jens Thraenhart, Mekong Tourism Coordinating Office (MTCO) jens@ tourismmekong. org
4	Strengthening Coordination of GMS Tourism Product Development and Promotion	All GMS countries	The TA will strengthen the capacity of the Mekong Tourism Coordinating Office to coordinate multi- country experience development, marketing, and delivery of knowledge services.	2017	0.5	0.5	Governments of the GMS countries, ODA	Governments of the GMS countries, ODA	Ongoing-with GMS counterpart contributions (\$0.09 million/yr). Meetings organized to discuss key thematic multi- country routes. MekongTourism. org features multi- country routes	SEC, EWEC	Continuous communication between public and private sectors of the member countries to develop and promote routes as tourism products  Provide awareness to tourism industry of multi-country and thematic routes	Mr. Jens Thraenhart, Mekong Tourism Coordinating Office (MTCO) jens@ tourismmekong. org

						stimate Ilion)	Potential   Source and (\$ mill	Amount		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
									and plots the 11 multi-country routes as defined in GMS Tourism Sector Strategy on Google Map.  Sponsored by Thailand (TAT), MekongMoments will develop eight (8) multi-country routes including Thailand, powered by social commerce technology, featuring experiences in these geo-fenced areas, plus Thai Royal Projects.		Support promotion and private sector engagement, as well as sharing of experiences on social media on these mutli-country routes, aggregated to MekongMoments. com via hashtags	
5	Capacity Building for Sustainable Destination Management	All GMS countries	The project will strengthen the capacity of public officials to develop and manage tourism destinations sustainably. Initiatives will include regional planning, policy development, service delivery, ecotourism management, and thematic interpretation.	TBD	12.0	12.0	Governments of the GMS countries, ODA	Governments of the GMS countries, ODA	Proposed			Mr. Jens Thraenhart, Mekong Tourism Coordinating Office (MTCO) jens@ tourismmekong. org
6	Mekong Inclusive Growth and Innovation Program	Cambodia, Lao PDR	The project is strengthening responsible tourism development and management capacity, as well as business support services, to increase income and job opportunities in southern Lao PDR and southern Cambodia.	2017	3.0	3.0	ODA, Swisscontact	ODA, Swisscontact	Ongoing.  Lao PDR: digital marketing strategy deployed to promote Southern Laos (www.southern-laos. com; experiential tourism products strengthened/ developed, Southern	SEC	Lao PDR: tourism SMEs improve performance in Champasak Province; tour guides trained; visitor flows strengthened in coffee tourism, cycling, river experiences, and nature-based	Mr. Richard Rose, Counry Director, Swisscontact Lao PDR Richard.rose@ swisscontact.org

				Year		stimate illion)	Potential Source an (\$ mi	d Amount		Key locations and GMS Economic Corridor	Expected/ Planned	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Measurable Outputs	Project Contact
									Lao Destination Management Network (DMN) supported to monitor/ manage progress against destination management plan 3.0'Refill not Landfill' plastic reduction initiative launched.  Cambodia: in- service training program supports hospitality SMEs; experiential tourism products developed in culture and cuisine, and heritage visitor flows; Tourism Industry Marketing Working Group (TIMWG) established to support destination marketing		tourism; improved destination management and marketing.  Cambodia: staff of hospitality SMEs training in improved service; SMEs improve performance in Kampot province; improved destination marketing.	Mr. Rajiv Pradhan, Country Director, Swisscontact Cambodia Rajiv.pradhan@ swisscontact.org
7	Cambodia, Lao PDR, Viet Nam Development Triangle Tourism Development Plan	Cambodia, Lao PDR, Viet Nam	The project will prepare a plan to promote the natural and cultural values of the area, enhance visitor experiences and services, and support local communities.	TBD	1.0	1.0	Governments of Cambodia, Lao PDR, and Viet Nam, ODA— TBD	Governments of Cambodia, Lao PDR, and Viet Nam, ODA— TBD	Proposed			Mr. Jens Thraenhart, Mekong Tourism Coordinating Office (MTCO) jens@ tourismmekong.
8	Integrated Destination Planning and Management Support Program	All GMS countries	The project will develop integrated destination- management plans to boost local economic development and strengthen cultural, natural, and urban heritage management.	TBD	20.0	20.0	Governments of the GMS countries, ODA	Governments of the GMS countries, ODA	Proposed		Con	tiMIeleBA next page Thraenhart, Mekong Tourism Coordinating Office (MTCO) jens@ tourismmekong.

						stimate illion)	Potential Source and (\$ mil	d Amount		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
9	Formulation of Travel Guidelines along the Main GMS Corridors	All GMS countries	The project will gather inventory data on travel formalities and border gates along the main GMS corridors to develop tourist travel guidelines that will help enhance visitors' experiences and improve service quality.	TBD	0.2	0.2	Governments of the GMS countries, ODA	Governments of the GMS countries, ODA	Proposed			Mr. Jens Thraenhart, Mekong Tourism Coordinating Office (MTCO) jens@ tourismmekong. org
10	Tourism Product Development for Lao-Thai Heritage Quadrangle	Lao PDR, Thailand	The project will develop experiences linked to Lanexang and Lanna heritage resources.	2018	4.0	0.5	Governments of the Lao PDR and Thailand, ODA— TBD	Governments of the Lao PDR and Thailand, ODA—TBD	Ongoing.  The Lane Xang Cultural Quadrangle initiative is promoting cross-border travel and tourism by developing experiences linked to shared heritage resources. It is partially financed by ADB loan proceeds, and Thailand's Designated Areas for Sustainable Tourism Administration (DASTA). Joint activities include promotion of public-private sector cooperation through workshops and meetings, joint surveys of heritage resources and potential travel	NSEC	Joint activities to develop and promote the Lao–Thai Heritage Quadrangle (10 activities)  Lane Xang Culture Routes map published (20,000 copies)  Familiarization trips for tour operators and media organized (2 trips)	Lao PDR: Ministry of Information, Culture and Tourism (MICT).  Thailand: Designated Areas for Sustainable Tourism Administration (DASTA).

				W. co	<b>Cost Es</b> (\$ mi	stimate illion)	Potential Source and (\$ mil	d Amount		Key locations and GMS Economic Corridor	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Measurable Outputs	Project Contact
									routes and circuits, publication of a Lane Xang Culture Routes map, promotional events and familiarization trips for tour operators and media from Lao PDR, Thailand and Myanmar.			
11	Common Tourism Standards Implementation Program	All GMS countries	The project will strengthen and expand the implementation of common ASEAN tourism standards and the PRC's scenic area rating system.	TBD	12.0	12.0	Governments of the GMS countries, ODA—TBD	Governments of the GMS countries, ODA— TBD	Proposed			Mr. Jens Thraenhart, Mekong Tourism Coordinating Office (MTCO) jens@ tourismmekong. org
12	Child-Safe Tourism Program and GMS Conference on Preventing Child Sex Tourism	All GMS countries	The project will strengthen information, education, and communication activities to equip governments, tourism enterprises, and communities with the knowledge and skills needed to make tourism safe for children.	TBD	3.0	3.0	Governments of the GMS countries, ODA	Governments of the GMS countries, ODA	Proposed			Mr. Jens Thraenhart, Mekong Tourism Coordinating Office (MTCO) jens@ tourismmekong.
13	Climate Resilience and Green Growth Planning Program	All GMS countries	The project will develop green growth strategies to promote climate-resilient, lower-carbon, and socially inclusive tourism.	TBD	12.0	12.0	Governments of the GMS countries, ODA	Governments of the GMS countries, ODA	Proposed			Mr. Jens Thraenhart, Mekong Tourism Coordinating Office (MTCO) jens@ tourismmekong. org

							stimate illion)	Potential Source and (\$ mil	d Amount		Key locations and GMS Economic	Expected/ Planned	
N	No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
1.		Explore Mekong Digital Marketing Initiative	All GMS countries	(1) Improve the functionality and usability of the <a href="www.">www.</a> mekongtourism.org website, e-library. Mekong Tourism Contributor Program, e-newsletter, and social media. Dedicated Mekong TourismForum.org website, customized yearly for respective annual forums.  (2) Public-private tourism marketing programs, executed by Destination Mekong, including "Mekong Moments", Mekong Mini Movies campaign, "Experience Mekong Collection & Showcases," and Mekong Trends snapshot reports.	2015	3.0	3.0	Governments of the GMS countries, ODA	Governments of the GMS countries, ODA	GMS counterpart contribution: \$0.09 million/year)  MekongTourism. org website has seen increased traffic, number of articles posted and documents uploaded to e-library, and Tourism Storytellers in Contributor program.  Mekong Moments features experience websites by businesses and shared photos and videos tagged with #mekongmoments. Mini movies shared for Mekong Mini Movies campaign with total reach of over 6 million. Total video views: over 600,000. (February-June 2018).  Small responsible travel businesses in Experience Mekong Collection (www. ExperienceMekong. com). Mekong		(1) Engagement with the travel and tourism industry active in the GMS.  (2) Increased promotion of the GMS as an experiential tourism destination.  (3) Drive public-private partnership models to execute programs and initiatives.	Mr. Jens Thraenhart, Mekong Tourism Coordinating Office (MTCO) jens@ tourismmekong. org

					Cost Es (\$ mi	timate llion)	Potential I Source and (\$ mill	l Amount		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
									Trends Snapshot Report on GMS Aviation published end of 2017, and Snapshot Report on Responsible Tourism due to be published end of 2018.			
15	Improve Subregional Tourism Data Collection and Analysis	All GMS countries	The project will harmonize methodologies for collecting tourism statistics and produce an annual GMS tourism statistics report. It will also include the establishment of a GMS tourism big data center in the PRC.	2017	6.0	6.0	Governments of the GMS countries, ODA	Governments of the GMS countries, ODA	Ongoing.  Regular workshops are held to discuss issues and approaches towards facilitating harmonization of data collection and reporting aligned with ASEAN's tourism statistics standardized methodology for data collection, reporting and monitoring.			Mr. Sok Sokun, Ministry of Tourism, Cambodia ssokun@gmail. com  Mr. Jens Thraenhart, Mekong Tourism Coordinating Office (MTCO) jens@ tourismmekong. org
16	Monitoring GMS Visitor Satisfaction	All GMS countries	The project will develop and implement a GMS visitor satisfaction index to track multiple dimensions of the visitor experience, including attractions, hotels, immigration procedures, restaurants, retail shops, and transportation services.	TBD	1.0	1.0	Governments of the GMS countries, ODA	Governments of the GMS countries, ODA	Proposed			Mr. Jens Thraenhart, Mekong Tourism Coordinating Office (MTCO) jens@ tourismmekong. org
17	Third GMS Tourism Infrastructure for Inclusive Growth Project	Select GMS countries	The project will improve transport infrastructure and environmental services in secondary GMS corridor towns to boost tourism growth and service-sector investment.	2020	1.0	1.0	ADB—1.0	ADB—1.0	Proposed			Mr. Steven Schipani, SERD/ ADB sschipani@adb. org
			Subtotal (Tourism TA Projects	in RIF 2022)	83.2	79.7						

### Technical assistance projects proposed to be added in RIF 2022

				Versi		stimate illion)	Potential Source and (\$ mil	d Amount		Key locations and GMS Economic Corridor	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Measurable Outputs	Project Contact
Pro	jects propo	sed to be a	dded in RIF 2022									
18	Small Scale Knowledge and Support Technical Assistance for 2018 Mekong Innovative Startup Tourism (MIST) Accelerator Program	All GMS Countries	MIST identifies, pilots, and helps entrepreneurs and government scale innovative tourism solutions, both traditional and technology-based, that contribute to sustainable and inclusive tourism. The first MIST accelerator program launched in January 2017 successfully incubated 12 tourism startups from Cambodia, Lao PDR, Myanmar, and Viet Nam. The 2018 MIST will help identify scalable business models and technologies that address priority GMS visitor market needs. It will deepen industry engagement by setting up a tourism industry advisory group that includes corporates, technology companies, mature startups, research agencies, media, and academia.	2018		0.2		DFAT Australia 0.225	Ongoing.  2018 MIST program received 107 applications with 5 accepted to the market access program. Startup accelerator selected 19 semi-finalists for business training, 5 finalists presented their business models at the 2018 Mekong Tourism Forum, and will pitch to investors at the 2018 ITB-Asia in Singapore.  As of August 2018, the program generated 656 positive media articles and 1.96 million social media shares.		2018 MIST accelerator program designed and implemented.	Mr. Dominic Mellor, SERD/ ADB dmellor@adb.org Mr. Jens Thraenhart, MTCO jens@ tourismmekong. org
		Subtotal (Touris	m TA Projects proposed to be added	in RIF 2022)		0.2						
			Subtotal (Tourism	TA Projects)	83.2	79.9						
			Total (Tourism Investment and	TA Projects)	1,513.2	1,515.1						

# Transport and Trade Facilitation

# **Investment Projects**

						stimate illion)	Source an	l Funding d Amount illion)		Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
Pro	jects in RIF	2022										
1	Improved SPS Handling in GMS Trade Project (additional financing) (formerly Modernization of Sanitary and Phytosanitary [SPS] Agencies for Trade Facilitation Project in GMS [Phase 2])	Lao PDR	The project is a follow-up to the first phase of the Greater Mekong Subregion (GMS) Sanitary and Phytosanitary (SPS) Project for Cambodia and the Lao People's Democratic Republic (Lao PDR). It will aim to continue building an effective SPS system by introducing information technology to SPS management for risk identification, risk sharing, procedural streamlining, and food safety development at the provincial level to facilitate trade and protect health.	2017	10.3	10.3	Asian Development Bank (ADB)—10.0 Government of the LaoPDR—0.3	Asian Development Bank (ADB)—10.0 Government of the Lao PDR—0.3	Ongoing  Effectivity Date: 5 Jan 2018; as of 28 Mar 2018 engaged (i) Intr'l Mgt and Procurement Advisor, (ii) International transboundary animal disease (TAD) Control specialist, (iii) National TA TAD Control Specialist, (iv) Project Admin Assistant, and (v) Project Secretary; engagement of others experts are ongoing.	Nationwide in Lao PDR (per ADB project data sheet) NSEC	Scale up activities in 3 main outputs: (i) surveillance and inspection for plant health, and food safety; (ii) enhanced education levels and university training of SPS specialists; and (iii) regional cooperation and harmonization for SPS measures and practices.	Lao PDR Ministry of Agriculture and Forestry, Department of Livestock and Fisheries (is the executing agency per ADB project data sheet)
2	Establishment of Logistics Hub and Truck/ Trailer Terminal in Wartayar Industrial Zone (northwest part of Yangon)	Myanmar	The project aims to establish a truck/ trailer terminal and a logistics hub for training transporters. The terminal and hub will facilitate smoother trade flows and enable better logistics between the main trading cities, Yangon and Mandalay, with both inland and off-land transportation. The proposed location is near Wartayar Industrial Zone, in the northwestern outskirts of Yangon. This will be a multimodal transport facility that could include bonded transports, cool chain transports, bonded warehouse services, third-party logistics services, inland water services, and rail transports.	TBD	20.0	20.0	To be determined (TBD)	TBD	Proposed	Yangon	Truck/trailer terminal and logistic hub established	FERD, MPI ferdsection@ gmail.com
		Subtotal (Tra	ansportand Trade Facilitation Investm	ent Projects)	91.3	30.3						

### Investment projects in RIF 2022 continued

				V		stimate illion)	Potential Source and (\$ mi	d Amount		Key locations and GMS Economic	Expected/ Planned	David
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
Pro	jects propo	sed to be a	added in RIF 2022									
3	Enhancing Capacity of Sanitary and Phytosanitary (SPS) Arrangement to Facilitate Trade in Myanmar	Myanmar	The project is proposed to support relevant SPS agencies, trade regulatory and promoting bodies, as well as relevant private sector stakeholders to enhance their full spectrum of SPS capabilities, and thus promoting increased trade in Myanmar. It will cover the following preliminary scope:  1. Strengthening SPS governance: The project will facilitate a coordination platform among relevant SPS agencies and the trade bodies with the private sector to ensure effective coordination and efficient delivery of required SPS services.  2. Enhancing SPS capability: The project will support upgrading of (a) SPS testing labs and capabilities; (b) relevant IT-based systems to facilitate SPS processing (including improved procedures); and (c) improved surveillance capability to manage market access requirements and outbreak control.  3. Improving SPS trade-enabling functions: The project will enhance the government's capacity in managing SPS market access requirements in concluded and negotiating trade agreements and engage with private sector stakeholders to build their compliance capability to ensure positive impact on trade flows from the improved SPS	2020		25.0		ADB—24.0  Government of Myanmar—1.0 (in kind, TBC)  Co-financing— TBC	Proposed			ADB Myanmar
	Sub	total(TTF Inve	capability. stmentProjects proposed to be added	l in RIF 2022)		25.0						
			ransportand Trade Facilitation Investm		91.3	55.3						

### Technical Assistance Projects

				Year of		stimate illion)		Funding d Amount llion)		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title jects in RIF	Subsector	Description	Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
1	Strengthening Quarantine Facilities in Myanmar	Myanmar	Myanmar has demonstrated that market-oriented reforms and increased trade are on its national development agenda. The importation and exportation of agricultural products, as well as quarantine facilities, are important for the country's commercial development. Proposed outputs include  (i) the implementation of a fully online system for applications and certifications for the importation and exportation of animals, animal products, animal feed, and veterinary drugs; (ii) the upgrading and facilitation of animal quarantines and checkpoints; and (iii) the upgrading of the website of the Government of Myanmar's Livestock Breeding and Veterinary Department.	2018	0.5	0.5	TBD	TBD	<b>Proposed</b> by Myanmar		See description	Dr. Ye Tun Win Director General, Livestock Breeding and Veterinary Department, Ministry of Agriculture, Livestock and Irrigation (MOALi) Myanmar 067-408056 ytwvet84@gmail.com
2	Trade Facilitation through Partnership with the Private Sector	Cambodia, Lao PDR, Myanmar, Thailand, Viet Nam	The outcome of this regional policy and advisory technical assistance (TA) will be improved trade facilitationthrough thesimplification, standardization, and harmonization of customs procedures and operations in the participating countries. The outputs of the TA include (i) a business perception survey for private sector stakeholders engaged in international trade (e.g., the industrial sector, freight forwarders, and trade brokers in the region); (ii) the promotion of public–private sector dialogue on trade facilitation through joint workshops with participants including government officials and private sector stakeholders, including the GMS Business Forum and representatives of small and mediumsized enterprises (SMEs); and (iii) capacity building for improved private sector outreach, to be achieved through reviews of the private sector's provisions and practices with regard to customs	2014	1.5	1.5	ADB Japan Fund for Poverty Reduction (JFPR)—1.5	ADB Japan Fund for Poverty Reduction (JFPR)—1.5	Completed closed on 31 Aug 2017		The TA had two outputs: (i) ttrade facilitation constraints and solutions identified via surveys of the trade-related private sector; and (ii) capacities and procedures of customs administrations improved to enable more effective partnership and engagement with the trade-related private sector.	Nguyen Ba Hung, Trade Specialist, Public Management, Financial Sector and Trade Division. Southeast Asia Department, ADB

			_		Year of		stimate illion)	Potential Funding Source and Amount (\$ million)  Ted Original Updates		Key locations and GMS Economic Corridor	Expected/ Planned Measurable		
-	No.	Project Title	Subsector	Description	Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
				and security standards, and through the organization of capacity building workshops.									
3		Support for Implementing the Action Plan on Transport and Trade Facilitation in the GMS (Subproject 2)	All GMS countries	The cluster regional policy advisory TA supports the implementation of the GMS Trade and Transport Facilitation Action Plan, which was endorsed by  the 16th GMS Ministerial Conference, in August 2010 in Ha Noi. The TA has the following expected outputs under three components: (i) under transport facilitation, an exchange of traffic rights; (ii) under trade facilitation, (a) coordinated border management,  (b) an enhanced SPS regime, (c) strengthened national and subregional transport and trade facilitation  (TTF) institutions, and (d) a regional trade logistics strategy; (iii) under capacity building and regulatory reform: (a) capacity development, and (b) legal and regulatory improvements and harmonization. The TA is being implemented through a cluster approach, with Subproject 1 (\$2 million) implemented from 2011 to 2013, and Subproject 2 (\$3.7 million) from 2014 to 2017. The cluster approach was adopted to (i) acquire the flexibility needed for successful TTF outcomes, and (ii) allow a fine-tuning of activities based on the outcomes of previous efforts and the evolving context of TTF initiatives, as the GMS countries implement the ASEAN Economic Community Blueprint.	2014	3.7	3.7	Department of Foreign Affairs and Trade (Australia)— 3.7	Department of Foreign Affairs and Trade (Australia)— 3.7	Ongoing.  One of the major initiatives being supported by this RETA related to the advancement of the GMS Cross Border Transport Agreement, implementation of which was launched on 1 August 2018 following the signing of the MOU for its Early Harvest Implementation by all member countries as of March 2018 and its ratification in 2015.		See description	Kanya Sasradipoera ADB

				Year of	(\$ mi	stimate illion)	(\$ mi	d Amount llion)		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No. 4	ASEAN Economic Community Support Program, Technical Assistance	Cambodia, Lao PDR (2 of 8 ASEAN countries covered)	The AEC Support Program Facility will assist countries in formulating and implementing national reform programs designed to meet their AEC commitments. This TA will help prepare the AEC Support Program for Cambodia and Lao PDR, among others.	2016	Original	Updated 5.0	Original ADB	ADB 5.0	Country coverage was expanded to 8 ASEAN Countries which includes Cambodia and Lao PDR.	Alignment	Outputs  1. Action plans and/ or roadmaps to participate in the AEC prepared  2. Capacity to implement the AEC Commitments in priority areas developed  3. Monitoring and Evaluation of AEC implementation at the country level strengthened	Project Contact  Maria Cristina Lozano Astray, Asian Development Bank
5	Strengthening Capacity Building for Logistics for Small and Medium Enterprises along GMS Corridors	PRC, Viet Nam	As a driving force of economic corridor development, the SMEs, especially logistics SMEs, face many constraints and bottlenecks. Before transforming a transport corridor into a logistics corridor, the capacity of logistics SMEs should be addressed. As a starting point, training the logistics SMEs that are operated by minority ethnics could be a good way to support the inclusive growth agenda of the GMS. The train-the-trainers approach would be desirable for this TA, and logistics associations could play an important role.	TBD	TBD	TBD	TBD	TBD	Proposed			
6	Strengthening the Cooperation among Cambodia, Lao PDR, and Viet Nam in the Development Triangle Area	Cambodia, Lao PDR, Viet Nam	The TA will involve (i) an assessment of the potential of the Cambodia–Lao PDR–Viet Nam (CLV) Development Triangle; (ii) the facilitation of structured dialogues among the CLV countries, and between these countries and other stakeholders in the development triangle area, including potential investors and donors; (iii) an improvement of the capacity of joint	TBD	1.0	1.0	TBD	TBD	Proposed			
			coordination committees by providing selected sector and/orthematic studies with policy recommendations to the central and provincial governments.									

				Year of		stimate illion)	Potential Funding Source and Amount (\$ million)  ad Original Updates		Key locations and GMS Economic Corridor	Expected/ Planned Measurable		
No.	Project Title	Subsector	Description	Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	<b>Project Contact</b>
7	GMS Trade and Investment Information Service Platform	All GMS countries	Using the official GMS website as a model, this project will establish the only official internet portal for all GMS members. The portal will have circular sectors, with the trade and economic sectors focusing on the economic corridors. Independent and interconnected websites on politics, economics, culture, tourism, customs clearance, investment, e-commerce, and logistics will be developed gradually. In the next step, the project will address technology issues and questions regarding the operation mode and business system, as the information and industrial sectors for each GMS member develop. The project will also strengthen market information sharing among the GMS countries by (i) building and improving a database on the crossborder trade of key goods, and  (ii) initiating and institutionalizing information-sharing mechanisms among the entities concerned.	2018	2.5	2.5	TBD	TBD	Proposed			
8	Commodity Fairs in GMS Countries	Selected GMS countries	The annual commodity fairs in GMS countries are important platforms for strengthening GMS trade cooperation. The fairs are held in GMS countries on an alternate basis. The project aims to support the booth rentals for the exhibitors. Commodity trade fairs are supported by the Yunnan provincial government and the Japan International Cooperation Agency (JICA)	2014	5.0	5.0	PRC (Yunnan), JICA	PRC (Yunnan), JICA	Ongoing			

				Year of	Cost Es	stimate illion)	Potential Source an (\$ mi	d Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
9	Advancing Time Release Study in Southeast Asia (formerly Advancing Time Release Study in the Greater Mekong Subregion)	Cambodia, Lao PDR, Myanmar,	The TA will assist the participating countries in undertaking specific customs reforms and modernization steps (based on data from a time release study) to support substantive trade-facilitation measures based on the associated investment project's action plan and will conduct a study of their checkpoints to improve their handling of bottlenecks.	2017	1.0	1.0	ADB—1.0	ADB—1.0	Ongoing  Per ADB project data sheet, TA is scheduled to close on 31 Mar 2020.		1.TRS recommendations implemented;  2. New TRSs conducted;  3. TRS implementation strategy strengthened	Shigeaki Kamo ADB
	Promote Lao PDR Products with Digital Technology System (for agriculture production)	Lao PDR	To develop 3 criteria such as: food/ agriculture supply chains, food safety and agriculture trade modernization. The digital technology system is a modality key to achieve those fundamental elements to support agriculture industry.	2020		Count and Cost estimate listed under ICT to avoid double counting		ADB, IFAD, FAO	Proposed by Lao PDR			Mr. Chanthaly Chansompheng Office of the GMS National Coordinator, Lao PDR chansompheng@ yahoo.com
	Subtotal (Transport and Trade Facilitation TA Projects in RIF 2022)											
	Subtotal (Transport and Trade Facilitation TA Projects proposed to be added in RIF 2022)											
	Subtotal (Transport and Trade Facilitation TA Projects)											
		Total (Trans	port and Trade Facilitation Investment and	TA Projects)	107.9	75.5						

# Information and Communication Technology

# **Investment Projects**

		Cost Estimat (\$ million)			Potential Source and (\$ mill	l Amount		Key locations and GMS Economic	Expected/ Planned			
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
Pro	jects in RIF 2	022										
1,	Broadband Development Strategies and Implementation Programs of the GMS	All GMS countries	The GMS member countries have many people living in remote rural areas (for example, 70% of the population in the Lao PDR), where there is typically no broadband internet access. But the government policies to meet rural demand are hindered by low returns on infrastructure investments. The project aims to survey and analyze the status of broadband development in the GMS member countries, identify problems and development needs, implement pilot spectrum frequencies (LTE 700MHz, TV White Space [TVWS], or other types of frequency bands), and develop broadband strategies for the GMS countries.  An example of linkage between national and subregional plans: the ASEANICT Master Plan (AIM) 2015 and AIM 2020 (which will soon start implementation) and the Lao PDR country analysis report prepared under the Lao PDR-United Nations Partnership Framework	2018	8.0	8.0	Official Development Assistance (ODA)	ODA	Proposed			
			(2017–2021).									
2.	Digital Connectivity	All GMS countries	GMS members have to adapt to the ever-changing economic landscape and explore new ways of cooperating to promote growth. A new scientific and industrial revolution is currently underway, featuring the emergence of new technologies, new industries, and new business models. Digital technologies in particular, have spread rapidly, connecting and deeply transforming the world to an	2018	15.0	15.0	ODA	ODA	Proposed			

### Investment projects in RIF 2022 continued

					Cost Estimate (\$ million)		Potential Source and (\$ mil	d Amount		Key locations and GMS Economic	Expected/ Planned	Postor
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
			unprecedented degree. By creating new business opportunities and significantly reducing the costs of transactions and transplantation, digital connectivity will prove to be a key driver of growth, creating jobs and promoting innovations.  An example of linkage between national and subregional plans: the ASEANICT Master Plan (AIM) 2015 and AIM 2020 (which will soon start implementation) and the Lao PDR country analysis report prepared under the Lao PDR-United Nations Partnership Framework (2017–2021).									
	Subtotal (ICT Investment Projects in RIF 2022)					23.0						
	Subtotal (ICT Investment Projects proposed to be added in RIF 2022)					0.0						
	Subtotal (I	nformation and	Communication Technology Investme	ent Projects)	28.0	23.0						

# Technical Assistance Projects

					Cost Estimate (\$ million)		Potential Funding Source and Amount (\$ million)			Key locations and GMS Economic	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
Pro <sub>.</sub>	jects in RIF 2	.022										
1	Broadband Development Strategies and Implementation Programs of the GMS	All GMS countries	Broadband is the cornerstone of national development. The United Nations defines its new broadband objective as "20 megabits per second (Mbps) access at \$20 per person by 2020."The technical assistance (TA) project will make recommendations to GMS governments and enterprises concerning their participation in broadband development. To this end, the project will analyze each country's national broadband development status, identify problems and development needs, establish GMS broadband development goals, and set major tasks and key construction projects.	TBD	10.0	0.1	TBD	TBD	Proposed			
2	Workshops on E-Commerce Cooperation and Exchanges in GMS	All GMS countries	The project involves a joint effort with related Chinese internet value-added enterprises (such as Alibaba) to conduct exchanges on e-commerce solutions and typical cases, with a view to implementing the MOU on the Joint Cooperation in Further Accelerating the Construction of the Information Superhighway and its Application in the GMS, promoting pilot programs involving electronic applications in cross-border and domestic projects of member countries, boosting e-commerce development in the GMS, and providing favorable conditions for those value- added enterprises to expand their presence in the GMS markets.	TBD	10.0	0.1	TBD	TBD	Proposed			

				Vers	Cost Estimate (\$ million)		Potential Funding Source and Amount (\$ million)			Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Measurable Outputs	Project Contact
3	Cross-border International Interconnected Bandwidth Expansion Project	PRC, Lao PDR, Viet Nam	China Unicom signed a cooperation contract with Viettel, Vietnam Posts and Telecommunications Group (VNPT), FPT, HTC, and CMC, in Viet Nam; and Lao Telecom (LTC), Unitel, and ETL, in the Lao PDR, to extend the communication bandwidth across the border. The project will build a cable network encompassing Hong Kong, China, and the United States. An over 300-gigabyte bandwidth is expected to be available through 2018.	TBD	2.1	2.1	State-owned telecom operators (China Unicom, Viettel, and LTC)—2.1	State-owned telecom operators (China Unicom, Viettel, and LTC)—2.1	Proposed			
4	Workshop on international roaming for all operator/ regulator in GMS countries	Lao PDR, Cambodia, Myanmar, Thailand, Viet Nam	International roaming has become a global service of interest not only to tourists, but to investors and businesses, as well. Therefore, the techniques of negotiating interconnections and international roaming charges will be discussed by experts in the proposed workshop, which would be open to operators and regulators from the GMS countries.  The project's outputs will include:	TBD	0.1	0.1	ODA	ODA	Proposed			
			(i) technical skill training given to operators and regulators attelecom companies and internet service providers in MOK countries,  (ii) exchanges of ideas and experiences about international roaming,  (iii) linkages between national and subregional strategies, and									
			(iv) improved technical knowledge in the public and private sectors.									

				Year		stimate illion)	Potential Source and (\$ mil	d Amount		Key locations and GMS Economic Corridor	Expected/ Planned Measurable	
No.	Project Title	Subsector	Description	of Approval	Original	Updated	Original	Updates	Status Updates	Alignment	Outputs	Project Contact
5	Training in Quality of Experience (QoE) in Voice/Data Services over Communication Network Monitoring	Cambodia, Lao PDR, Myanmar, Thailand, Viet Nam	The quality of experience (QoE) associated with voice and data services is very important for measuring the efficiency of networks and the users' level of satisfaction. For this reason, it is important to have the capacity to monitor network performance and understand user perspectives.  The project's outputs will include:  (i) training in technical skills given to relevant personnel in MOK countries,  (ii) exchanges of ideas and experiences regarding the QoE with voice and data services,  (iii) linkages between national and subregional strategies, and improved technical knowledge in the government and private sectors.	TBD	0.1	0.1	ODA	ODA	Proposed			
Pro	jects propos	ed to be ac	dded in RIF 2022									
6	Promote Lao PDR Products with Digital Technology System (for agriculture production)	Lao PDR	To develop 3 criteria such as: food/ agriculture supply chains, food safety and agriculture trade modernization. The digital technology system is a modality key to achieve those fundamental elements to support agriculture industry.	2020		1.0		ADB, IFAD, FAO	Proposed by Lao PDR			Mr. Chanthaly Chansompheng Office of the GMS National Coordinator, Lao PDR chansompheng@ yahoo.com
7	Science and Technology Strategy for Enhancing Organic Food Industry	Lao PDR	Lao PDR is a landlocked country namely as the highest percentage of forest area, which is 92.1% of the total area including abundant environment resources that has potential in producing clean, safe, secure and sustainable agriculture products. However, Lao agriculture performance has lagged far behind potential due to limited productivity and increasing importance reliance.	2020		0.4		ADB	Proposed by Lao PDR		Ca	Mr. Chanthaly Chansompheng Office of the GMS National Coordinator, Lao PDR chansompheng@ yahoo.com

### Technical assistance projects proposed to be added in RIF 2022 continued

					Cost Estimate (\$ million)		Potential Funding Source and Amount (\$ million)			Key locations and GMS Economic	Expected/ Planned	
No.	Project Title	Subsector	Description	Year of Approval	Original	Updated	Original	Updates	Status Updates	Corridor Alignment	Measurable Outputs	Project Contact
8	Feasibility Study on Science and Technology Park	Lao PDR	Technology transfer and innovation is new drivers which the GMS Strategy framework 2012-2022 focus on the next half period to strengthen the competitive of SME in the GMS region, because of the STI is the key of Social-Economic development plan. The STI Park aims to increase the wealth of communities by promoting the culture of innovation and the competitiveness of SMEs	2020		0.35		ADB	Proposed by Lao PDR			Mr. Chanthaly Chansompheng Office of the GMS National Coordinator, Lao PDR chansompheng@ yahoo.com
			Subtotal (ICT TA Projects	in RIF 2022)	22.3	2.5						
Subtotal (ICT TA Projects proposed to be added in RIF 2022)						1.8						
Subtotal (ICT TA Projects)					22.3	4.3						
			Total (ICT Investment and	TA Projects)	50.3	27.3						

### Regional Investment Framework 2022: First Progress Report and Update

The Regional Investment Framework 2022 (RIF 2022) is the medium-term pipeline of priority investment and technical assistance projects in the Greater Mekong Subregion (GMS) and operationalizes the strategic thrusts and priorities of the GMS Program under the GMS Strategic Framework (2012-2022) and the Ha Noi Action Plan 2018-2022. The RIF 2022 was endorsed at the 22nd GMS Ministerial Conference in Ha Noi, Viet Nam on 20 September 2017 and then adopted by the GMS Leaders during the 6th GMS Summit of Leaders on 31 March 2018 in Ha Noi including the direction to ensure that the RIF is reviewed and updated regularly to adapt to changing conditions and priorities.

This RIF 2022 First Progress Report and Update represents updates to the RIF 2022 during the 2018 cycle (from February to November 2018). It includes a revision to the RIF 2022 to a new total of 242 investment and technical assistance projects requiring a total of \$80.7 billion in financing.

### **About the Greater Mekong Subregion Economic Cooperation Program**

The Greater Mekong Subregion (GMS) is made up of Cambodia, the Lao People's Democratic Republic, Myanmar, the People's Republic of China (specifically Yunnan Province and Guangxi Zhuang Autonomous Region), Thailand, and Viet Nam. In 1992, with assistance from the Asian Development Bank and building on their shared histories and cultures, the six countries of the GMS launched a program of subregional economic cooperation—the GMS Program—to enhance their economic relations. The Program currently covers the following priority sectors: agriculture; energy; environment; health and other human resource development; information and communication technology; tourism; transport; transport and trade facilitation; and urban development, border economic zones, and other multisector.

### **About the Asian Development Bank**

ADB is committed to achieving a prosperous, inclusive, resilient, and sustainable Asia and the Pacific, while sustaining its efforts to eradicate extreme poverty. Established in 1966, it is owned by 67 members—48 from the region. Its main instruments for helping its developing member countries are policy dialogue, loans, equity investments, guarantees, grants, and technical assistance.

#### **GMS Secretariat**

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