



**Nineteenth Meeting of the Greater Mekong Subregion
Subregional Transport Forum
Phnom Penh, Cambodia
3–4 August 2015**

SUMMARY OF PROCEEDINGS

Introduction

1. The Nineteenth Meeting of the Subregional Transport Forum (STF-19) was held in Phnom Penh, Cambodia. The Meeting was jointly organized by the Ministry of Public Works and Transport (MPWT) of Cambodia and the Asian Development Bank (ADB). The objectives of the Meeting were to: (i) review progress in implementing high priority transport projects in the Greater Mekong Subregion (GMS) Regional Investment Framework Implementation Plan (RIF-IP); (ii) discuss possible ways to support and improve the operation and maintenance of GMS road assets for better sustainability; (iii) discuss possibilities for establishing a system for insuring critical transport infrastructure against natural disasters; (iv) review the progress of work of the Greater Mekong Railway Association; and (v) discuss other topics relevant to the transport sector. (The Meeting Program and Agenda is attached as **Appendix 1**).

2. The Meeting participants included delegations from the Kingdom of Cambodia, the People's Republic of China (PRC), the Lao People's Democratic Republic (Lao PDR), the Union of the Republic of Myanmar, the Kingdom of Thailand, the Socialist Republic of Viet Nam, and ADB. Representatives from four development partners, the Agence Française de Développement (AFD), the Department of Foreign Affairs and Trade of the Government of Australia (DFAT), the Japan International Cooperation Agency, and the World Bank also attended the Meeting. (The list of participants is attached as **Appendix 2**).

3. The Meeting was chaired by H.E. Mr. Pheng Sovicheano, Under-Secretary of State, MPWT of Cambodia and co-chaired by Mr. Hideaki Iwasaki, Director, Transport and Communications Division, Southeast Asia Department, ADB. His Excellency, Mr. Tauch Chankosal, Secretary of State, MPWT, Cambodia gave the Opening and Welcome Remarks.

I. Opening Session

4. H. E. Mr. Tauch Chankosal, in his opening and welcome remarks, stated that Cambodia was delighted to host STF-19 amidst significant development in the country, especially in the transport sector, which is one key focus area. He said that subregional transport integration is one of their key strategies in the transport sector. Thus, Cambodia is exerting much effort in strengthening their transport connectivity with their neighbors, Thailand and Viet Nam. In the transport sector, emphasis is being given to inter-modal public transport, deepening of the transport corridors, and planning for the expressway network development. Along with the Government's strong focus on education towards human resources development, infrastructure development is a key part of their overall development strategy. He lauded the STF and expressed confidence that this forum would likely be a key instrument for achieving significant

milestones in national as well as regional transport connectivity. (The opening speech is in **Appendix 3.**)

5. H.E. Pheng Sovicheano, meeting Chair, in his opening remarks, emphasized the importance of the STF-19 meeting. He expressed his expectations that the meeting will be instrumental in determining progress in the implementation of the RIF-IP as the blueprint for achieving further advancement of connectivity in the GMS. He thanked ADB for its support in organizing the meeting. (The opening remarks is in **Appendix 4.**)

6. Mr. Hideaki Iwasaki, Co-Chair, in his opening statement, noted that the STF-19 draws on and builds upon past and ongoing GMS initiatives, as well as focusing on emerging issues that are important for sustainable and reliable transport connectivity in the subregion. He recalled previous STF meetings in Cambodia where important topics were discussed, such as activities under the Cross Border Transport Facilitation Agreement (CBTA), the GMS Transport Sector Strategy Study (TSS, 2006–2015), the transport sector component of the Vientiane Plan of Action (2008–2012) (VPOA), and the GMS Railway Strategy Study – which eventually led to the establishment of the Greater Mekong Railway Association (GMRA).

7. In 2013 and 2014, STF discussions focused on the preparation of RIF-IP, which is considered a successor to the VPOA. He noted, however, that while the transport infrastructure development has been making significant progress, there are also emerging challenges, such as how to preserve and maintain transport infrastructure assets in a sustainable manner, and how to address the increasing risks for important transport infrastructure arising from natural disasters. STF-19 will have the opportunity discuss these important challenges and issues. He further stressed that the results of the meeting will be crucial in guiding the course of cooperation in the GMS transport sector over the coming years and, given transport's dominant role, accounting for 90% of the RIF IP's estimated cost, the future direction of subregional connectivity and competitiveness. (The opening statement is in **Appendix 5.**)

II. Session 1. Countries' Presentations on the Implementation Progress of Transport Projects under the RIF-IP

8. The GMS delegations presented their respective countries' status reports on their transport projects in the RIF-IP, by the following participants: (i) Mr. Kong Sophal, Deputy Director General, Planning and Administration, MPWT, Cambodia; (ii) Ms. Zhang Hongbin, Advisor, Department of International Cooperation, Ministry of Transport, PRC; (iii) Mr. Visara Khamvongsa, Officer, Division of International Cooperation and Investment, Department of Planning and Cooperation, MPWT, Lao PDR; (iv) Mr. Win Lwin, Chief Engineer, Road Department, Ministry of Construction, Myanmar; (v) Mr. Sorasak Saensombat, Inspector General, Ministry of Transport, Thailand; and (vi) Mr. Nguyen Ngoc Thuyen, Deputy Director General, International Cooperation Department, Ministry of Transport, Viet Nam.

9. The presentations were based on the monitoring report tables submitted by the countries on investment and technical assistance projects under the RIF-IP Monitoring System. The reports presented in this session will be the basis for the consolidated progress report on transport projects for inclusion in the overall RIF-IP Progress Report to be presented to the GMS Ministers in the 20th GMS Ministerial Conference in September 2015 in Nay Pyi Taw, Myanmar. (The GMS delegations' respective country presentations are in **Appendices 6-A to 6-F.**)

III. Session 2. Contents of the RIF-IP Report for the Transport Sector

10. Mr. John Cooney, ADB consultant for the RIF-IP Monitoring System, presented a preliminary consolidated RIF-IP report for the transport sector, which summarizes the key updates from the individual country reports. He requested the delegations to review the entries in the consolidated report for their respective projects. Therefore, country delegations provided their comments and based on these comments, the report entries were adjusted.

11. The countries agreed on submitting the finalized version of the consolidated monitoring report for the transport sector under the RIF-IP resulting from the discussions. (The finalized transport sector RIF-IP monitoring report table is in **Appendix 7.**)

IV. Session 3. Progress Report on the Greater Mekong Railway Association (GMRA)

12. H.E. Uon Song, Undersecretary of State in-charge of Railway Affairs of Cambodia presented the progress related to the GMRA, which held its first General Meeting in Kunming, Yunnan, PRC on 10 March 2015. He informed that the GMRA's activities have been divided into three working groups, namely, the Working Groups on Network Connectivity, on Network Integration and Interoperability, and on Partnerships and Operations, with specific countries designated as leads for each group. The GMRA has also identified the priority missing links in the GMS. It is also undertaking discussions in important topics and issues concerning railway connectivity, among which are terms of a common trans-border agreement for railways, technical requirements for interoperability of equipment, and conditions for participation in the GMRA by other government organizations and private entities. He also presented initial projections of potential GMS railway network traffic volumes, as well the challenges that the GMS countries face in developing their railways. (The GMRA presentation in **Appendix 8.**)

Discussion:

13. In response to Thailand's query on how the priority missing railway links were identified, H. E. Uon Song responded that there are many factors that were discussed in consultations with the countries. Some examples are potential economic returns for the whole region, condition of financing, land acquisition requirement, condition of the existing railway, the national plan priorities of the countries, and existence of bilateral agreements between countries.

14. Viet Nam noted that investment for railway missing links is very costly, roughly 5 times more than investments for roads with similar functions. Identifying missing links and determining potential investment require further technical assistance from ADB and other development partners. Moreover, as Mr. Song mentioned, ADB support for GMRA is only for two years and there may be a need to extend this support.

15. Mr. Iwasaki, Co-Chair, stated that the 9 missing links that have been identified will require further studies and it may be possible that ADB would provide assistance for this purpose. With regard to extension of ADB's assistance for the operations of the GMRA Secretariat and the Working Groups, ADB would consider this; however, this may be possible only if we can find a way to fund GMRA activities in a self-sustaining manner.

V. Session 4. Possible Ways of Improving the Operation and Maintenance of GMS Road Assets

16. Mr. Shihiru Date, Senior Transport Specialist, Transport and Communications Division,

Southeast Asia Department, ADB, introduced the topic, including possible key issues and approaches to preserving and maintaining road assets, which is an important aspect of ensuring and enhancing subregional connectivity.

17. Mr. To Nam Toan, Director, Science Technology, Environment and International Cooperation Department, Directorate of Roads, Viet Nam made a presentation on possible ways of improving the operation and maintenance of GMS road assets in Viet Nam. He first gave a brief overview of the road system in Viet Nam. He then identified some current issues in road asset management in Viet Nam, including the insufficiency of funding for maintenance, vehicle overloading, and the use of old technologies for road maintenance. He discussed various aspects of vehicle overload control as applied in Viet Nam as a pilot, including its legal basis, the technologies and facilities being used to control overloading, and the penalties applied on violators. He then discussed future directions and plans for road asset management that are being considered by the Government. (The Road Assets presentation in **Appendix 9.**)

Discussion:

18. With the co-chair's request to moderate the discussion, Mr. Date initiated the discussion with four questions to Mr. Nam Toan, as follows:

- (i) In actual legal requirement, is total vehicle overload or axle overload, or both considered as a violation?
- (ii) With what frequency is vehicle registration required in Viet Nam and in the first registration do you record the vehicle specifications to be enforced against illegal modifications?
- (iii) In case of overload, do you do unloading on site at weighing stations?
- (iv) How do you identify and handle repetitive violators in overloaded trucks?

19. Mr. Nam Toan gave the following responses:

- (i) Both total vehicle overload and axle overload are enforced by the law.
- (ii) Yes, there is registration and the vehicle specifications are recorded at initial registration. These are subject to check during axle load control.
- (iii) Currently, the violating trucks are not unloaded on site, but are made to go to another location where they are unloaded and made to pay the cost of unloading.
- (iv) Repetitive violators are identified in the system but currently charged the same penalty for each violation, but an increasing schedule of penalties depending on the number of violations is being considered.

20. In response to a question from Mr. Ratha Sann, Senior Program Manager for Infrastructure, Development Cooperation, DFAT whether Viet Nam applies HDM4, Mr. Nam Toan mentioned that since HDM4 requires so many data fields, they had to customize it to make it more practical, suited to their needs, and amenable to changes as needed. With regard to Myanmar's query on means for controlling corruption, for instance in cases where overloaded cargo is unloaded, he said that they installed CCTV cameras for online real time surveillance.

21. PRC informed that overloading is also a big problem in their country. Since the market for freight services is highly competitive, due to low freight rates charged by trucking companies, they choose to overload the trucks in order to keep their profits reasonable or gain more profits. There are also many other ways to circumvent the law, such as illegally modifying trucks. PRC informed that they are focusing their efforts to address these problems with the help of all agencies concerned. In reply, Mr. Nam Toan noted that most of the time, the drivers personally do not want to overload, as observed in Viet Nam, but the truck owners or the owners of the

goods are the ones who force the drivers to carry overloaded cargo. He added that they are currently considering new penalty systems for overloading, which may not allow the aforementioned unfair competition. A constraint, however, is that their present law does allow using the information generated by new technologies as bases for applying penalties. Viet Nam delegation also noted that since the basis for identifying violations is largely subjective, this presents opportunities for corruption.

22. In response to Lao PDR's query, Mr. Nam Toan that under the present overloading control system, the emphasis is still on national roads, largely because of insufficient funding availability to extend to other road networks. However, they are also exploring ways to apply this on provincial/local roads through public-private partnership schemes.

23. With regards to the query by Mr. Veasna Bun, Senior Infrastructure Specialist, World Bank, if there is a percentage of outsourcing vs. force account for road maintenance, Mr. Nam Toan said that Viet Nam is outsourcing 100% of road maintenance works.

24. Appreciation was expressed by participants for Viet Nam for their informative and thought-provoking presentation.

VI. Session 5. Possible Insurance System for Transport Infrastructure Against Natural Disasters

25. After the co-chair introduced this session and the presenter, Ms. Madeleine Varkay, Principal Private Sector Development Specialist, Public Management, Financial Sector & Trade Division, Southeast Asia Department, Mr. Date introduced the topic stressing its importance given the vulnerability of the GMS and the entire Southeast Asian region to natural disasters. He noted that the currently available mechanisms for insuring infrastructure against such disasters, including those set up by governments, are limited and serious action have to be undertaken to strengthen them, if sustainability of such infrastructure investments is a major focus area. Development partners can potentially also help countries in this discipline of insurance system. The presentation is, therefore, focused on key elements for formulating such a scheme for the government agencies and thereby preparing a strategic plan for preserving infrastructure assets against such disasters.

26. Ms. Varkay made a presentation on Options to Insure Transport Infrastructure Against Natural Disasters. The main objective of her presentation was to introduce possible approaches for minimizing the risk of losses to key public infrastructure assets resulting from natural disasters. Since road assets are the majority of transport related public assets in GMS countries, the Government, as the responsible entity for provision and management of such assets is also responsible for taking steps toward establishing a sustainable scheme to preserve such assets. One such approach is an insurance system for these assets, which basically consist of: (i) identifying the assets to be insured; (ii) conducting a risk assessment of the area underlying the road network for natural disasters through modeling; (iii) assessing the soundness of the infrastructure against natural disasters and thus also the premium; (iv) conducting dialogue for infrastructure rehabilitation and insurance scheme, and then for re-insurance by large global insurance companies; and (v) formulating agreements for the extent of development partner support and Government's ownership through the sustainability of insurance scheme. (The Insurance System presentation is in **Appendix 10.**)

Discussion:

27. PRC explained about a case in one of their provinces where the good condition of farm-to-market roads is crucial to the continued viability of their farms. The local authorities had discussions with insurance companies, and as a result an insurance company proposed to create a new type of insurance. As a result, the local authorities were able to propose to the local authorities a good solution to their problem on maintenance due to natural calamities. Ms. Varkay agreed to discuss this case and provide support to PRC, as post-forum actions.

28. Viet Nam questioned that since the examples given in the presentation pertained to developed countries, are there models applicable to developing or poor countries. In this regard, Ms. Varkay cited possible lessons from the case of Thailand, which in the aftermath of recent floods had established a national insurance pool that was structured by the country's insurance regulators and international reinsurance companies. The scheme also benefited from contributions from the private sector and the government. She also mentioned that Viet Nam has already been conducting studies to assess and risk models for its public assets, through assistance from the World Bank. She also explained a case of the Caribbean nations, where the World Bank and the Inter-American Development Bank helped to structure a regional insurance pool; however, it took 10 years to set this up. Relatedly, a World Bank team will visit Cambodia, Lao PDR, and Myanmar to study the possibility of setting up disaster risk management systems for these countries.

VII. Session 6: Proposed Study for Re-alignment and/or Extension of GMS Transport Corridors

29. Mr. Cuong Minh Nguyen, Principal Regional Cooperation Specialist, Regional Cooperation and Operations Coordination Division, Southeast Asia Department, ADB made a briefing on a proposed study on GMS corridor alignments. As its background, he explained that there is a need for such a study and it was discussed in previous GMS Economic Corridor Forums (ECF), i.e., ECF-4 in 2012 where the GMS countries called for the strengthening of the corridors and their linkages with maritime gateways and GMS trade flows; and ECF-7 in June 2015 where they requested ADB to review possible extensions and re-alignment of GMS corridors, especially in Myanmar. There is also a need to update designated routes and border crossing points in Protocol 1 of CBTA. He also informed that an initial discussion on possible GMS corridor realignment was also included in the Initial Review of the GMS TSS conducted last year. He also proposed an indicative work plan for the conduct of the study, including its presentation to the STF-20 in the first half of 2016, and at the ECF sometime in July 2016, and finally its endorsement by the GMS Ministerial Conference in the last quarter of 2016. (The GMS Corridor Alignment presentation is in **Appendix 11.**)

Discussion:

30. Cambodia expressed the view that greater focus should be given to implement the CBTA Protocol 1 at border crossing points along existing corridors rather than on creating new or extended corridors. One reason is that, although it is 10 years now after the Annexes and Protocols of the CBTA were first negotiated, there is still no full-scale implementation of the CBTA and, instead, implementation is being carried out at selected border crossing points through bilateral or trilateral Memorandum of Understanding (MOU) between countries.

31. Lao PDR commented that although the GMS Program has achieved much progress in hardware, there has been little success in software, such that the CBTA has not fully

materialized. It was suggested to strengthen the National Transport Facilitation Committees and in this regard, that in this case ADB has a big role to play in support through financing and coordination.

32. Mr. Cuong explained that although the study will take the software side and the CBTA into consideration, it is primarily focused on physical connectivity along the corridors. He also informed that there is an ongoing study on the institutional structure and technical issues regarding the CBTA and other transport and trade facilitation measures.

33. PRC expressed appreciation to ADB for conducting the TSS review. However, they also expressed interest in seeing a new strategy formulated, say for the next 10 years. They also supported the suggestions for accelerating the bilateral/trilateral agreements on exchange of traffic rights among countries.

34. Co-Chair informed that all hard and soft aspects are indispensable for the success of CBTA, and that there has been increasing recognition by countries of the importance of the software side and not just of physical infrastructure development. He stated that transport connectivity has many aspects to consider to be successful, and there are several forums where these aspects can appropriately be discussed for future development. The Secretariat will have discussions internally and with countries on how to approach these issues and to ensure that all aspects are given the necessary attention equally. In this regard, Cambodia suggested that, in order for greater focus be given to implementation, it may be useful to have joint meetings of the STF and the working groups concerned with Transport and Trade Facilitation (TTF). Co-Chair said that the Secretariat will work on devising mechanisms by which both hardware and software aspects will be addressed.

35. Mr. Cuong informed that ADB will communicate again with STF members within the next two weeks to get clear guidance/endorsement from them on whether or not they want the aforementioned study on GMS corridors to be undertaken.

VIII. Session 7: Statements/Updates from Development Partners

36. Mr. Bun stated that the World Bank remains keenly interested in the developments in the GMS transport sector and that they will continue to discuss and coordinate with the GMS countries on their transport development activities and plans.

37. Mr. Sann, said that they are happy to see that there is close coordination among GMS member countries. He noted that infrastructure development, particularly in the transport sector, is a key area for DFAT activities. He informed that they have initiated a new program to involve the private sector in infrastructure development in the region, focusing on water and energy, but also including transport.

38. Mr. Sebastien Carreau of AFD informed the Forum that AFD is deeply involved in the transport sector in the region, mostly in roads. For instance, he said that the agency is collaborating with ADB on the project for the improvement of rural roads in Cambodia. The AFD group, in general, is interested in supporting other transport infrastructures such as railways and ports. For instance, Proparco, a subsidiary specializing in private sector financing, financed Cambodia's airport operator.

IX. Other Matters

39. Mr. Math Sounmala, Lao PDR, raised certain issues, as follows: (i) the proposal to include Road Nos. 8 and 12 between Lao PDR and Viet Nam in the GMS corridor roads network. The proposal, which was also discussed at ECF-7 in Kunming in June 2015, was to upgrade the roads and bridges along these routes that are currently no longer suitable for transport and to include the routes under Protocol 1 of the CBTA. He said they approached JICA and the Neighbouring Countries Economic Development Cooperation Agency of Thailand for possible financing of the upgrading. He requested ADB's help in including the routes in the GMS network and under the CBTA; (ii) the need to accelerate the implementation of the MOU among Lao PDR, Thailand, and PRC on the exchange of traffic rights along the North-South Economic Corridor (NSEC), particularly since the new NSEC International Mekong Bridge has already been opened; and (iii) the upcoming launching ceremony for the trilateral MOU signed a year ago among Cambodia, Lao PDR, and Viet Nam for the exchange of traffic rights along the three countries' national roads. He also introduced his successor, Mr. Oulay Phadouangdeth, as Director General of the Planning and Cooperation Department of MPWT of Lao PDR.

40. H.E. Mr. Vasim Sorya, Cambodia, on behalf of the STF participants, expressed their appreciation to Mr. Math as one of the pioneers of the STF and of the CBTA. They thanked him for his contributions to GMS transport cooperation and wished him further success in his new responsibilities and expressed the hope that he will continue to participate in GMS activities.

41. In line with the tradition of rotating the venue of the STF among the GMS members according to the alphabetical order of country names, the PRC delegation said that they will be pleased to host the Twentieth Meeting of the GMS Subregional Transport Forum (STF-20) in 2015, although the specific city, time and venue are still to be determined. PRC informed that suggestions for potential city for the Forum are welcome from all.

X. Wrap up and Closing

42. As requested by the Chair, the Co-Chair wrapped up the Forum with the following summary points:

- The meeting was successful and fruitful. It has achieved its objectives as originally expected. It was able to prepare the first monitoring report on the status/progress of the transport sector projects in the GMS RIF-IP, which account for the biggest part of the RIF-IP pipeline. The report also showed encouraging results despite short period of time since the RIF-IP's adoption, such as the completion of two border crossing projects and the commencement of construction of some other projects.
- There was some good progress made by the GMRA, and ADB will consider the possibility of extending its support for its operations but subject to solutions for a self-sustaining basis.
- The meeting also recognized the importance of road asset management, particularly of effective ways of addressing the problem of overloading. The countries shared their experiences in the difficult areas of axle load control and adequate road maintenance. (ADB will consider stock-taking study on the existing practices of axle load control in the region.)
- The meeting also had the opportunity to discuss an emerging important issue, namely, insuring valuable infrastructure against natural disasters. There has to

be a coordinated effort between the government/infrastructure sector and the financial/insurance sectors to address this issue.

- The meeting also discussed a proposed new study on the alignment of GMS transport corridors. Among the points raised is the need to look into both the hardware and software aspects of the corridors equally. In this regard, there is a need to propose a mechanism through which the STF and the other responsible entities for TTF can work together on these issues of inadequate focus on software aspects of CBTA. The Secretariat will consult again with the STF members on how to proceed on this proposed study.

43. On behalf of Minister Tram Iv Tek and of MPWT, the Chair thanked the participants for their active participation and their contributions to the meeting's success. He reiterated his invitation to the participants to join the field visit in the afternoon to the newly completed Cross Border Facility at Lork-Ha Tien in Kampot Province. He then formally closed the meeting.

Nineteenth Meeting of the GMS Subregional Transport Forum

Phnom Penh, Cambodia
3–4 August 2015

PROVISIONAL PROGRAM AND AGENDA

Proposed Meeting Theme:

***Sustained Expansion, Improvement and Maintenance of the
GMS Transport Network***

Objectives:

1. To review progress in implementing high priority transport projects in the GMS Regional Investment Framework Implementation Plan (RIF-IP);
2. To discuss possible ways to support and improve the operation and maintenance of GMS road assets for better sustainability;
3. To discuss possibilities for establishing a system for insuring critical transport infrastructure against natural disasters;
4. To review the progress of work of the Greater Mekong Railway Association (GMRA); and
5. To discuss other topics relevant to the transport sector.

First Day: 3 August 2015

0830–0900

Registration

0900–0930

Opening Session

Welcome Remarks

**H.E. TAUCH Chankosal
Secretary of State
Ministry of Public Works and Transport
Royal Government of Cambodia**

Opening Remarks

**Chair, H.E. PHENG Sovicheano
Under- Secretary of State
Ministry of Public Works and Transport
Royal Government of Cambodia**

**Co-Chair, Hideaki Iwasaki
Director, Transport and Communications Division,
Southeast Asia Department
Asian Development Bank (ADB)**

0930–0940

Group Photo Session

0940–1030	<p>Session 1. Countries' Presentations on the Implementation Progress of Transport Projects under the RIF-IP</p> <p><i>[Countries will present the status of their respective transport projects in the RIF-IP based on guidelines to be circulated a reasonable time prior to the meeting. Each country will be given 25 minutes for its presentation.]</i></p> <p>Presentors: Representatives from all countries</p>
1030–1045	<p>Coffee/tea Break</p>
1045–1230	<p>Session 1. Countries' Presentations on the Implementation Progress of Transport Projects under the RIF-IP (Continued)</p>
1230–1400	<p>Lunch</p>
1400–1430	<p>Session 2. Outline of Contents of the RIF-IP Report for Transport Sector</p> <p><i>[The Forum will discuss the proposed contents of the RIF-IP report for the Transport Sector, and proposed schedule to finalize the RIF IP report for transport to be reported to the GMS Ministerial Conference in Myanmar on 10 September 2015.]</i></p> <p>Lead Discussants:</p> <ul style="list-style-type: none"> • Mr. Cuong Minh Nguyen, Principal Regional Cooperation Specialist, Regional Cooperation and Operations Coordination Division, Southeast Asia Department, ADB • Mr. John Cooney, ADB Consultant on the RIF-IP <p>Open Discussion</p>
1430–1500	<p>Session 3. Progress Report on the Greater Mekong Railway Association (GMRA)</p> <p><i>[The Forum will be briefed on progress of work under the GMRA and on next steps and required actions/inputs from countries.]</i></p> <p>Presenter: H.E. Uon Song, Undersecretary of State in-charge of Railway Affairs, Cambodia</p>
1500–1515	<p>Coffee/tea break</p>
1515–1630	<p>Session 4. Possible Ways of Improving the Operation and Maintenance of GMS Road Assets</p> <p><i>[The Forum will discuss recommendations on improving road asset operations and maintenance, which was identified as a key concern in the transport sector in previous STF meetings.]</i></p> <p>Short presentation of introduction of approach by Mr. S. Date, Senior</p>

	<p>Transport Specialist, Transport and Communications Division, Southeast Asia Department, ADB followed by a presentation by Viet Nam:</p> <ul style="list-style-type: none"> • Mr. To Nam Toan, Director, Science Technology, Environment and International Cooperation Department, Directorate of Roads, Viet Nam <p>Open Discussion</p>
1630-1645	Wrap Up of First Day Sessions
1900-2100	Dinner (Hosted by MPWT: Sofitel Hotel, specific venue to be announced)
<u>Second Day:</u>	4 August
0830- 0910	<p>Session 5. Possible Insurance System for Transport Infrastructure Against Natural Disasters</p> <p><i>[Given the increasing severity of natural disasters in the region, the Forum will discuss the possibility of establishing insurance scheme/s for critical transport infrastructure to cover the risks of such calamities.]</i></p> <p>Short presentation of introduction of approach by Mr. S. Date, followed by a presentation:</p> <ul style="list-style-type: none"> • Ms. Madeleine Varkay, Principal Private Sector Development Specialist, Public Management, Financial Sector & Trade Division, Southeast Asia Department, ADB and open discussion
0910-0940	<p>Session 6: Proposed Study for Re-alignment and/or Extension of GMS Transport Corridors</p> <p>(Given the recent requests of GMS countries at the ECF-7 in Kunming in July 2015, a study is proposed to review the GMS transport corridors, and examine possible alignment and/or extension)</p> <ul style="list-style-type: none"> • Mr. Cuong Minh Nguyen, Principal Regional Cooperation Specialist, Regional Cooperation and Operations Coordination Division, Southeast Asia Department, ADB • Mr. John Cooney, ADB Consultant on the RIF-IP
0940-0955	<p>Session 7: Statements/Updates from Development Partners</p> <p>Moderated by Co-Chairs</p>
0955-1000	<p>Session 8. Other Matters, including the venue of STF-20 (as traditionally confirmed by the next STF host)</p>
1000-1030	<p>Wrap Up of the Meeting and Concluding Remarks</p> <p>Closing by Chair and Co-Chair</p>

1030-1130	Break <i>[Note: This is to allow participants to attend to personal needs/arrangements. Lunch will be served in the bus/along the way during the trip to the site to be visited in order to save time and enable the participants to return to the hotel at a reasonably early time.]</i>
1130	Field Visit to a Site of Interest to GMS Transport Cooperation <i>[Cross Border Facility at Lork-Ha Tien in Kampot Province; lunch provided during bus ride]</i>

19TH Meeting of the GMS Subregional Transport Forum (STF-19)
Phnom Penh, Cambodia
3–4 August 2015

LIST OF PARTICIPANTS

CAMBODIA

1. **H.E. Tauch Chankosal**
Secretary of State
Ministry of Public Works and Transport
Royal Government of Cambodia

2. **H.E. Pheng Sovicheano (Chair)**
Under Secretary of State
Ministry of Public Works and Transport
Tel: (855-23) 724565 / 723055
Mobile: (855-12) 900760
Fax: (855-23) 724228
Email: psovicheano@online.com.kh

3. **H.E. Vasim Sorya**
Director General
General Department of Administration
Ministry of Public Works and Transport
Tel: (855-23) 724597
Mobile: (855-12) 900735
Fax: (855-23) 724056
Email: soryana22@gmail.com

4. **H.E. Kem Borey**
Director General
General Department of Public Works
Ministry of Public Works and Transport
Tel/Fax: (855-23) 723708
Mobile: (855-12) 900739
Email: kemborey14@yahoo.com

5. **H.E. Chan Dara**
Director General
General Department of Transport
Ministry of Public Works and Transport
Tel/Fax: (855-23) 864094
Mobile: (855-12) 271327
Email: chan_dara@online.com.kh

6. **H.E. Vong Piseth**
Deputy Director General
General Department of Public Works
Ministry of Public Works and Transport
Tel/Fax: (855-23) 426110
Mobile: (855-12) 833411
Email: wastewater@camnet.com.kh

7. **H.E. Uon Song**
Undersecretary of State in-charge of Railway Affairs
Tel/Fax:
Mobile:
Email: song2002_88@yahoo.com
8. **Mr. Hong Sinara**
Deputy Director General
General Department of Public Works
Ministry of Public Works and Transport
Tel/Fax: (855-23) 723 028
Mobile: (855-12) 900729
Email: hong.sinara@yahoo.com
9. **Mr. Nou Vaddhanak**
Deputy Director General
General Department of Public Works
Ministry of Public Works and Transport
Tel: (855-23) 428756
Fax: (855-23) 722413
Mobile: (855-17) 600777
Email: n_vaddhanak@yahoo.com
10. **Mr. Seoung Sokong**
Deputy Director General
General Department of Planning and Administration
Ministry of Public Works and Transport
Tel: (855-12) 972027
Fax: (855-23) 427392
Email: sokongs@hotmail.com
11. **Mr. Kong Sophal**
Deputy Director General
General Department of Planning and Administration
Ministry of Public Works and Transport
Mobile: (855-17) 881800
Email: k_sophal@yahoo.com
12. **Mr. Chhoun Voun**
Deputy Director General
Department of Transport
Ministry of Public Works and Transport
Mobile: (855-16) 886464
Email: voun.chhoun@hotmail.com
13. **Mr. Preap Chanvibol**
Director, Land Transport Department
Ministry of Public Works and Transport
Tel/Fax: (855-23) 864102
Mobile: (855-17) 881800
Email: p_chanvibol@yahoo.com

14. **Mr. Ly Borin**
Director, Railway Department
Ministry of Public Works and Transport
Tel/Fax: (855-23) 883749
Mobile: (855-17) 818949
Email: lyborin@yahoo.com
15. **Mr. Nay Chamnang**
Director, Road Infrastructure Department
Ministry of Public Works and Transport
Tel/Fax: (855-23) 991446 / 722413
Mobile: (855-12) 922347 / (855-11) 233678
Email: chamnang@hotmail.com / chamnang@yahoo.com
16. **Mr. Chhim Phalla**
Director, International Cooperation Department
Ministry of Public Works and Transport
Tel/Fax: (855-23) 724081
Mobile: (855-12) 942013
Email: chhim_phalla@yahoo.com
17. **Mr. Chreang Phollak**
Director, International Cooperation Department
Ministry of Public Works and Transport
Mobile: (855-12) 322230
Email: mpwt_phollak@hotmail.com
18. **Mr. Ouk Ourk**
Deputy Director, Railway Department
Ministry of Public Works and Transport
Tel: (855-23) 883748
Mobile: (855-12) 879926
Email: oukourk27@gmail.com
19. **Mr. Sar Vutha**
Deputy Inspector General / General Inspection
Ministry of Public Works and Transport
Tel: (855-23) 883748
Fax: (855-23) 883749
Mobile: (855-12) 878826 / (855-78) 999595
Email: sarvutha@online.com.kh
20. **Mr. Lim Sambo**
Director, Department of Public Works and Transport of Kampot Province
Ministry of Public Works and Transport
Tel: (933-33) 28458
Fax: (855-33) 210598
Mobile: (855-12) 889788
Email: limsambo@gmail.com / kampotdpwt@gmail.com

21. **Mr. San Sopheavotey**
Official, Department of Planning
Ministry of Public Works and Transport
Tel/Fax: (933-23) 428555
Mobile:
Email:
22. **Mr. Nouv Rattanak**
Official, Department of Planning
Ministry of Public Works and Transport
Tel/Fax: (933-23) 428555
Mobile:
Email:

PEOPLE'S REPUBLIC OF CHINA

23. **Ms. ZHANG Hongbin (Head of Delegation)**
Advisor, Division for Asia Pacific Affairs
Department of International Cooperation
Ministry of Transport (MOT)
Tel: (86-10) 65292262
Fax: (86-10) 65292248
Email: hbzhang@mot.gov.cn
24. **Mr. Shi Liangqing**
Deputy Chief Engineer
Transport Planning and Research Institute
Ministry of Transport
Tel: (86-10)
Fax: (86-10)
Email:
25. **Mr. Yang Yawei**
Deputy Advisor
Department of Engineering Supervision
State Railway Administration
Tel: (86-10)
Fax: (86-10)
Email:
26. **Ms. Luo Dan**
Official
Market Monitoring and Assessment Center
State Railway Administration
Tel: (86-10)
Fax: (86-10)
Email: luodan_2015@126.com

LAO PDR

27. **Mr. Math Sounmala (Head of Delegation)**
Assistant Minister
Ministry of Public Works and Transport
Mob: (856-20) 22211128
Fax: (856-21) 412265
Email: mathsm1@laotel.com
28. **Mr. Oulay Phadouangdeth**
Director General, Department of Planning and Cooperation
Ministry of Public Works and Transport
Tel: (856-20)
Fax:
Email: oulaympwt@rocketmail.com
29. **Mr. Visara Khamvongsa**
Officer, Division of International Cooperation and Investment
Department of Planning and Cooperation
Ministry of Public Works and Transport
Tel: (856-21) 412267
Fax: (856-21)
Email: visara.khamvongsa@gmail.com

MYANMAR

30. **Mr. Win Lwin (Head of Delegation)**
Chief Engineer, Road Department
Ministry of Construction
Tel: (95-95) 153149
Fax: (95-67) 407065
Email: wnlwn5@gmail.com
31. **Mr. Aung Win**
General Manager
Technical and Administration Support
Myanma Railways
Ministry of Rail Transportation
Tel: (95-67) 77188, (95-92) 130623
Fax: (95-67) 77187
Email: uagwinmr@gmail.com
32. **Mr. Nay Myo Win Aung**
Assistant Director
Department of Transport
Ministry of Transport
Tel: (95-67) 411418
Mob: (95-95) 122096
Fax: (95-67) 411420
Email: dept.transport@mptmail.net.mm / naymyowinaung@gmail.com

THAILAND

Ministry of Transport

33. **Mr. Sorasak Saensombat (Head of Delegation)**
Inspector General
Tel:
Email: sorasak.saen@gmail.com
34. **Ms. Dollaya Panthanont**
Transport Technical Officer
International Cooperation Bureau
Tel: (+66) 2280 3468 Fax. (+66) 2280 1714
Email: dollaya.mot@gmail.com

Department of Land Transport

35. **Mr. Soracha Hiranwat**
Transport Technical Officer
Tel: (+66) 2271 8409 Fax. (+66) 2271 8409
Email: soracha_oun@hotmail.com

Department of Highways

36. **Ms. Kamolthip Yoojaroensuk**
Economist, Practitioner Level
Tel: (+66) 2354 1756 Fax. (+66) 2354 6901
Email: tongkamolthip@gmail.com

State Railway of Thailand

37. **Mr. Pinyo Chanmaha**
Director, Project Planning and Development Center,
Special Project and Construction Department
Tel: (+66) 2220 4748 Fax. (+66) 2220 4750
Mobile: (+66) 87 707 4986
Email: pinyo_chanmaha@yahoo.com

Port Authority of Thailand

38. **Mr. Warunyu Raicharoen**
Manager, Chiang Saen Commercial Port
Port Authority of Thailand
Tel. (+66) 2269 5422 Fax. (+66) 2269 5500
Email: r.warunyu@gmail.com
39. **Mr. Supalerk Pindatisha**
Assistant Director, Office of Regional Ports
Tel. (+66) 2269 5384
Email: supalerk_p@port.co.th

Ministry of Foreign Affairs

40. **Ms. Ratanasiri Chotvitayakul**
 Second Secretary
 Division of Economic Relations and Cooperation
 Department of International Economic Affairs
 Tel: (+66) 2203 5000 ext. 14154
 Fax: (+66) 2643 5240
 Email: ratanasiric@mfa.go.th

Office of the National Economic and Social Development Board (NESDB)

41. **Mr. Vudthidech Chamnikij**
 Plan and Policy Analyst, Professional Level
 Tel:
 Email:
42. **Mr. Ongart Rukkhawattanakul**
 Plan and Policy Analyst, Practitioner Level
 International Coordination Office
 Tel: (+66) 2280 4085 ext. 6411
 Fax: (+66) 2 280 8005
 Email: Ongart@nesdb.go.th
43. **Mr. Tanapoom Kooprasertying**
 Plan and Policy Analyst, Practitioner Level
 Tel:
 Fax:
 Email:

Ministry of Finance

44. **Ms. Benyapha Thanasakdiwat**
 Project Analyst, Project Operation and Management Bureau
 Neighbouring Countries Economic Development Coop Agency (Public Organization)
 Tel: (+66) 2617-7676 ext 305
 Fax (+66) 2617-7683-4

VIET NAM

45. **Mr. Hoang Viet Khang (Head of Delegation)**
 Director General in-charge of GMS Program
 GMS National Coordinator, Ministry of Planning and Investment
 Fax: (84-43) 8230161
 Email: khanghv@mpi.gov.vn; hoangvietkhang@gmail.com
46. **Mr. Nguyen Ngoc Thuyen**
 Deputy Director General
 International Cooperation Department
 Ministry of Transport
 Fax: (84-43) 9421436
 Email: nnthuyen@mt.gov.vn

47. **Mr. Nguyen Xuan Lam**
Deputy Director General of PMU
Ministry of Transport
Email: lampmu1@yahoo.ca
48. **Mr. Duong Hung Cuong**
Official, (GMS National Focal Person)
Ministry of Planning and Investment
Fax: (84-43) 8230161
Email: cuongmpi@gmail.com
49. **Mr. To Nam Toan (Presenter)**
Director, Science Technology, Environment and International Cooperation Department
Directorate for Roads of Viet Nam
Fax:
Email: tnamtoan@yahoo.com

Agence française de développement / French Agency for Development

50. **Mr. Sideth Muong**
Tel: (855-23) 426360 / 426036
Mob: (855-12) 687438
Email : muongs@afd.fr
51. **Mr. Sebastien Carreau**
Tel:
Email: carreaus@afd.fr

Australian Embassy / DFAT – Cambodia

52. **Mr. Paul Keogh**
Counsellor Development Cooperation
Tel: (855-23) 213470 Ext:570
Email: paul.keogh@dfat.gov.au
53. **Ms. Michelle Vizzard**
First Secretary Development Cooperation (Infrastructure, Volunteer & NGOs)
Tel: (855-23) 213470 Ext: 586
Email: michelle.vizzard@dfat.gov.au
54. **Mr. Ratha Sann**
Senior Program Manager for Infrastructure, Development Cooperation
Tel: (855-23) 213470 Ext: 594
Email: ratha.sann@dfat.gov.au

World Bank – Phnom Penh, Cambodia

55. **Mr. Veasna Bun**
Senior Infrastructure Specialist
Tel: (855-23) 861300
Fax: (855-23) 861301
Email: vbun@worldbank.org

ADB

56. **Mr. Hideaki Iwasaki**
Director, Transport and Communications Division (SETC)
Southeast Asia Department
Email: hiwasaki@adb.org
57. **Mr. Shihiru Date**
Senior Transport Specialist, SETC
Southeast Asia Department
Email: sdate@adb.org
58. **Ms. Madeleine Varkay**
Principal Private Sector Development Specialist, SEPF
Email: mvarkay@adb.org
59. **Mr. Cuong Minh Nguyen**
Principal Regional Cooperation Specialist, SERC
Email: cuongnguyen@adb.org
60. **Mr. John R. Cooney**
Consultant
Email: jcooney68@gmail.com
61. **Mr. Rodrigo Castelo**
Consultant
Email: rcastelo.consultant@adb.org
62. **Ms. Marilou Hemady-Reyes**
Senior Operations Assistant, SETC
Southeast Asia Department
Email: mhreyes@adb.org
63. **Ms. Franzella Pinky Villanueva**
Senior Operations Assistant, SETC
Southeast Asia Department
Email: fvillanueva@adb.org

**Nineteenth Meeting of the Subregional Transport Forum (STF-19)
Phnom Penh, Cambodia**

3-4 August 2015

Welcome Remarks

H.E. Tauch Chankosal

**Secretary of State
Ministry of Public Works and Transport
Royal Government of Cambodia**

Good morning distinguished Excellencies from China, Lao PDR, Myanmar, Thailand and Viet Nam,

Mr. Hideaki Iwasaki, Asian Development Bank, SETC Director, and ADB officials organizing this event, and other development partners,

Distinguished officials of country delegations as well as of my Ministry, MPWT,

Ladies and Gentlemen :

On behalf of the host of this event, the Royal Government of Cambodia, I hereby welcome you all here today on the 19th event of Sub-regional Transport Forum, congratulating ADB for bringing this Forum successfully so far, very close to two decades, thus achieving important results on the way.

We are happy to host the 19th Forum in Phnom Penh, Cambodia at a time of changes are starting to happen in our country, especially in the discipline of transport. Cambodia has one among its six important transport strategies is transport regional integration. We have invested quite heavily in transport infrastructure projects link Cambodia with our neighboring Viet Nam, Lao PDR and Thailand. We strongly believe that this strategy is key to our common success in term of cross border trade and facilitation, and overall is economic growth.

The priority our Government has placed in the past two decades following the civil war on infrastructure development, the new Government has placed extreme priority in education which is the backbone of skills development and added value though strengthened human resources. Along with this new focus area into a long term in future, diversity of transport sector as well is about to happen soon, with MPWT focusing more on inter-modality of available public transport to expand the current stock, while deepening economic corridors and planning expressway networks for the future economic development.

We assume this approach will result in great achievements in these priority sectors through cross synergies, taking our national development agenda from strength to strength, with a solid foundation that our country has so far not experienced. Sub-regional transport agenda that we discuss in this Forum is also a key to achieving important milestones along the way. Although we have only five projects in the future program they are key interventions in transport sector. We are planning to expand on those projects to plan more interventions in future years to come.

I wish to wish you all best of luck during the fruitful discussions today and tomorrow for arriving at important decisions, also having looked at other important subjects of railway reforms, road asset management, and insurance systems for preserving public assets. I also wish you to have a very good trip to visit our new Cross Border Facility at Cambodia-Vietnam Border, Lork - Ha Tien, tomorrow.

We cordially invite you for dinner today, here at Sofitel Hotel, while leaving you in the able hands of Excellencies Lim Sidenin and Pheng Sovicheano.

Thank you very much.

Distinguished Excellencies from China, Lao PDR, Myanmar, Thailand and Viet nam,

Mr. Hideaki Iwasaki, Asian Development Bank SETC Director, and ADB officials organizing this event, and other development partners,

Distinguished officials of country delegations as well as of my Ministry, MPWT,

Ladies and gentlemen:

I am happy to be with you today knowing that you all have had constructive discussion and knowledge sharing sessions over this first day of the Forum. While I wish to thank all the participants, my special appreciation is due to ADB for organizing this important event.

I was very sorry that I could not attend the Opening session this morning due to my busy schedule with the opening ceremony of a Bridge across Basac River financed by our friends, China. This is one of many big projects that Cambodia achieves, and almost every month we celebrate the opening for the use of such transport project.

You all know that Cambodia is the youngest among the GMS member countries; however, we are very proud that for a short period of 17 years after the civil war completion in 1998 we have achieved very significant progress in our transport development. This achievement thanks to the Royal Government of Cambodia clear transport policies and strategies, and our development partners support which have significantly contributed to the transport sector progress in Cambodia.

Ladies and Gentlemen,

You all still have another half day of intensive discussion at the final event of the Forum. In the afternoon, we have organized a field visit to one of our cross border facility in Lork-Ha Tien border with Viet Nam, financed by the Southern Coastal Corridor Project. The CBF completed in Cambodia side in April 2015, and functioning now. The CBF is well designed for the implementation of the CBTA. I hope you will enjoy the trip tomorrow. Please, don't hesitate to give your comments to the facility.

I want to stop here because I think you are hungry now. Wishing you all the best, enjoy the

dinner and thereafter safe journey back home.

Good bye and thank you very much. Please, enjoy your dinner party

(Opening Remark)

Distinguished Excellency Delegates from China, Lao PDR, Myanmar, Thailand and Vietnam,

Mr. Hideaki Iwasaki, Co-chair, and ADB officials

Development Partners, and my MPWT Colleagues,

Ladies and gentlemen:

Ministry of Public Works and Transport is very pleased and honored to host the STF-19 in Phnom Penh this year. You heard from Excellency TAUCH Chankosal, MPWT Secretary of State, in his Welcome Remark about how important to us this Event and the transport regional integration.

Transport Connectivity in the GMS countries is of paramount importance to promote cross border trade and facilitation, and economic growth. I echo what my Secretary of state mentioned in his welcome remark as I believe that the STF-19, our discussion and sharing of the transport information updates in the next two days will give us the deep insight of what we need to invest to have the better regional transport connectivity from years to years.

I think this is what I want to say in my opening remark and I would like to turn the floor to Iwasaki san that he can give the remarks and facilitate the meeting.

Thank you very much

**Greater Mekong Subregion
Nineteenth Meeting of the Subregional Transport Forum (STF-19)
Phnom Penh, Cambodia
3-4 August 2015**

Opening Statement

By

Mr. Hideaki Iwasaki

**Director, Transport and Communications Division
Southeast Asia Department
Asian Development Bank**

Excellencies, Distinguished Guests, Ladies and Gentlemen:

I am very pleased to co-chair this 19th Meeting of the GMS Subregional Transport Forum. I would like to thank the Royal Government of Cambodia for graciously hosting this important meeting. I wish to thank in particular His Excellency Chankosal, Secretary of State, Ministry of Public Works and Transport of the Royal Government of Cambodia for taking time out of his surely busy schedule for being with us this morning and sharing with us his thoughts on GMS cooperation in the transport sector. Our special thanks also go to His Excellency Under Secretary of State Sovicheano for chairing our meeting, and to other officials and staff of the Ministry of Public Works and Transport for their invaluable support in organizing this meeting.

The 19th STF draws on and builds upon the past and ongoing GMS initiatives and it will also look at ongoing and emerging issues that are important for the sustainable and reliable transport connectivity in the region.

On exactly the same day 11 years ago in 2004, the 8th STF meeting met here in Phnom Penh and discussed progress and future activities under the Cross Border Transport Facilitation Agreement, GMS Transport Sector Strategy Study (SSS), and development matrix on the three economic corridors. I understand that some members of the country

delegates participated in the discussion. GMS Transport SSS' initial review and evaluation was conducted last year and its outcome was presented at STF-18. Continuing this exercise, we will hear about the proposal to review the Transport Corridors this time.

Five years later in October 2009, we met again in Cambodia in Siem Reap for the 13th STF. At that time, the key topics discussed included the progress of the transport sector component of the Vientiane Plan of Action (VPOA), which was prepared based on the GMS Transport Sector Strategy Study initiated in 2004. Railway featured as an important element of GMS connectivity in VPOA. We discussed GMS Railway Strategy Study and started the preparation to establish a Rail Coordination Office, which is now established as Greater Mekong Railway Association. At this meeting, we will be updated on the current activities of GMRA.

In the last two years, our discussion focused on the preparation of Regional Investment Framework and its Implementation Plan (RIF-IP), which is a successor to VPOA. We will hear from each delegate the status of RIF-IP today.

While the transport infrastructure development is making significant progress, we are increasingly facing the new challenge to preserve and maintain transport infrastructure assets. We discussed the plans to tackle this challenge four years ago at STF-15 and this time we are revisiting the same matter hoping to derive useful lessons and insights for future actions.

Another emerging issue is how to address the increasing risks for important transport infrastructure arising from natural disasters. We have all witnessed the increasing severity of natural calamities that have visited the region in recent years, which have been generally attributed to the impact of climate change. Our region is particularly vulnerable to such disasters. It is, therefore, imperative to now seriously look into possible ways of managing these risks. In our meeting, we will have the chance to discuss insurance as one of the disaster risk management mechanisms.

Excellencies, Distinguished Guests, Ladies and Gentlemen:

We certainly have an exciting and challenging agenda before us in today's and tomorrow's meeting. The results of our meeting will be crucial in guiding the course of cooperation in the GMS transport sector over the coming years and, given transport's dominant role, accounting for 90% of the RIF-IP's estimated cost, for example, the future direction of subregional connectivity and competitiveness.

I am looking forward to an interesting and productive Subregional Transport Forum here in Phnom Penh. Thank you.

GREATER MEKONG SUBREGION (GMS)

Nineteenth Meeting of the Subregional Transport Forum (STF-19)
3-4 August 2015, Phnom Penh, Cambodia

CAMBODIAN PRESENTATION

on

The Implementation Progress of Transport Projects under the RIF-IP

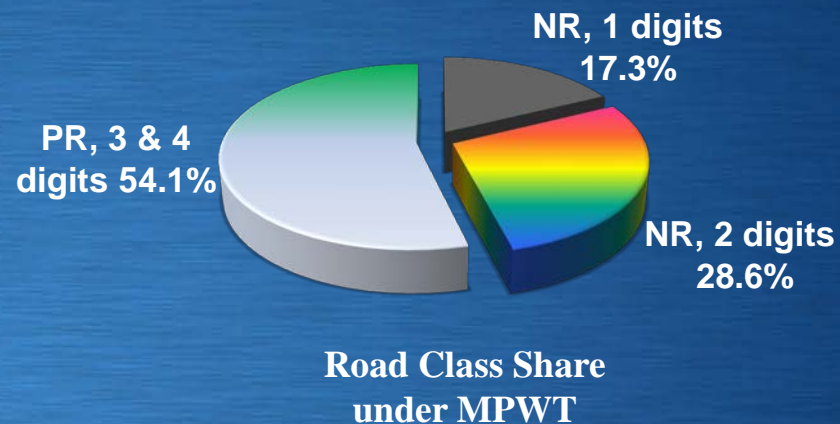
Ministry of Public Works and Transport
KINGDOM OF CAMBODIA

I. OVERVIEW



Capital	Phnom Penh
Area	181,035 Km²
Population	14.47 millions (National census 2012)
Annual Population Growth	1.54 % (2010-2012)
Urban Population	20 %
GDP Growth	7.2 %
GDP per capita	US\$ 1,006.80 (WB, 2013)
Currency	Riel (1USD=4000Riels)
Major Ports	Sihanoukville Port and Phnom Penh Port
Length of National Roads	12,331 km (2013)
Length of Railroad	652 km
Length of Asian Highway Route	1,486.80 km
Number of Major Vehicle	1.90 million vehicles (2013) about 80% are used in the Capital City

I. OVERVIEW (Cont.)



Road Class	Road Length (km)
1-Digit National Roads	2,258 Km
2-Digits National Roads	3,342 Km
3-4 Digits Provincial Roads	6,607 Km
Rural Road	35,000 Km
Total Length	47,207 Km

II. PROGRESS REPORT

II.a Sihanoukville Port Access Road Improvements:

CAM-TRA-01

Proposed Project Description:

**Improvement of the final 9.5 km of NR4 leading to Sihanoukville Port.
It may be included in the Sihanoukville Port Special Economic Zone Project, to
be financed by Japan.**

(Estimated cost: USD 40 million.)

Current Status:

JICA has cancelled the Project (Outside of Scope)

II.b GMS Southern Economic Corridor Improvement



II.b GMS Southern Economics Corridors Improvement (cont.)

National Road No.1 Phnom Penh-Neak Loeung (Japan Grant Aid)

RN1 is a part of GMS's Southern Economic Corridor connecting Phnom Penh to Bangkok and Ho Chi Minh City.

Stage 1:

Construction of 2 bridges
at St. 42 and st.47,
Completed in 2006

Stage 2:

Construction of Road , one
Bridge and Culverts between
st. 13+100 and st. 56 (Neak Loeung),
completed Feb. 2009

Stage 3:

Construction of Road
between st. 4+000 and st. 13+100,
completed March 2011

Stage 4:

Construction of Road between
st. 0+000 (Eastern side of
Monivong bridge) and st.4+000

On Going, planned to complete in March 2017



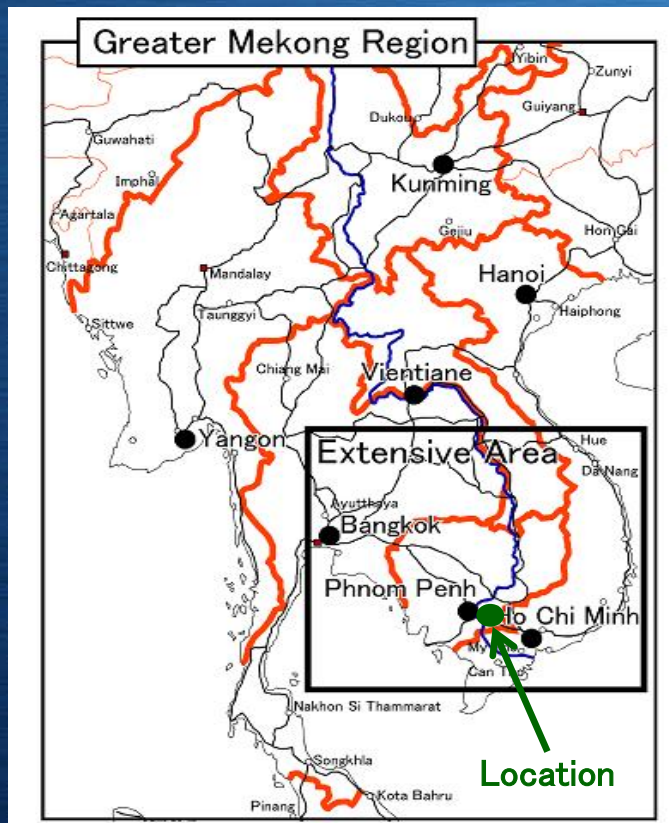
II.b GMS Southern Economics Corridors Improvement (Cont.)

A Cable-Stayed Bridge across the Mekong River,
through the GMS Southern Economic Corridor,
(Bangkok-Phnom Penh-Ho Chi Minh)

Bridge Length 2,215m

Width..... 13.50m

Completed in March 2015,



II.b GMS Southern Economics Corridors Improvement (Cont.)

Improvement of National Road No. 5 (Japan Yen Loan)

SCOPE OF WORKS:

- Widening to 4 lanes
- Construction of 4 bypasses

The Project divided into 3 sections:

A. North Section:

Length: 84.74km (51.48+9.34+23.92)

2 bypasses: Sri Sophon: 9.34km and
Battambang: 23.92km

Construction will start in October 2015

B. South Section:

Length: 135.40km

2 bypasses: Kg. Chhnang and Oudong

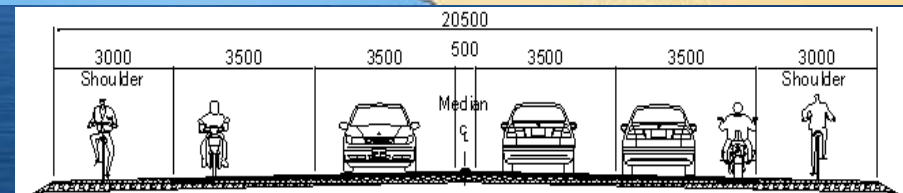
Consultant Selection will finish in

June 2015

C. Middle Section:

Length: C1: 112.60km + C2: 35.70km

Request proposal for Consultant Selection.



The entire project is planned to complete by 2020.

II.b GMS Southern Economics Corridors Improvement (Cont.)

The Study on Phnom Penh-Bavet Expressway

E1: Under Preparatory Study by JICA since March 2015

Preliminary Schedule of Expressway development

Source: JICA Preliminary Data collection survey, September 2013

No.	Route	Length	Operation
E1	Phnom Penh – Bavet	135 km	2020
E3	Phnom Penh – Sihanoukville	210 km	2020
E5	Phnom Penh – Poipet	355 km	2025
E6	Phnom Penh – Sri Sophon	400 km	2030
E7	Phnom Penh – Laos Border	355 km	2030
E9	Siem Reap – Vietnam Border	390 km	2030
E10	Krong Kep – Koh Kong	220 km	2030
UE	Phnom Penh Ring Road	155 km	2025
		2,200 km	



II.b GMS Southern Economics Corridors Improvement (Cont.)

CAM-TRA-02 GMS: Deepening Connectivity of Southern Economic Corridor Project:

Proposed Project Description:

Upgrading an existing 75km long connecting road between Battambang and Siem Reap and improve the cross-border facility with Thailand at Pailin to the standard of the GMS Cross-Border Transport Agreement.

(Estimated cost: USD 120 mill.)

Current Status:

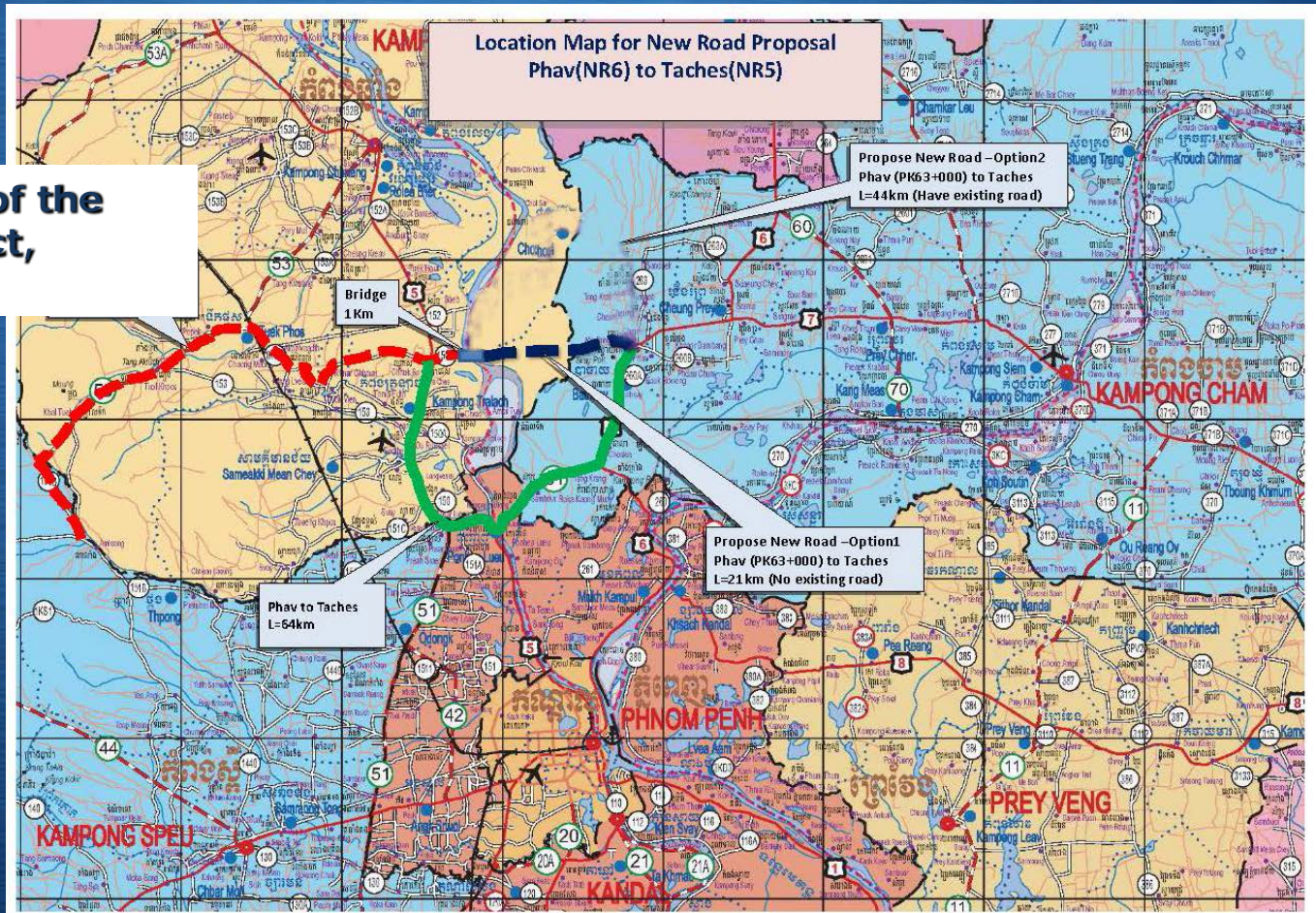
The Project has been postponed due to the environmental sensitivity surrounding Tonle Sap Great Lake.

The newly proposed PRIP II will be the rehabilitation of approx. 590 km of roads which are mostly of multimodal transport character and regional integration connecting Cambodia with VN and Cambodia with Thailand. The Project cost is approx. US\$ 200.00 million.

II.b GMS Southern Economics Corridors Improvement (cont.)

CAM-TRA-02 GMS: Deepening Connectivity of Southern Economic Corridor Project:

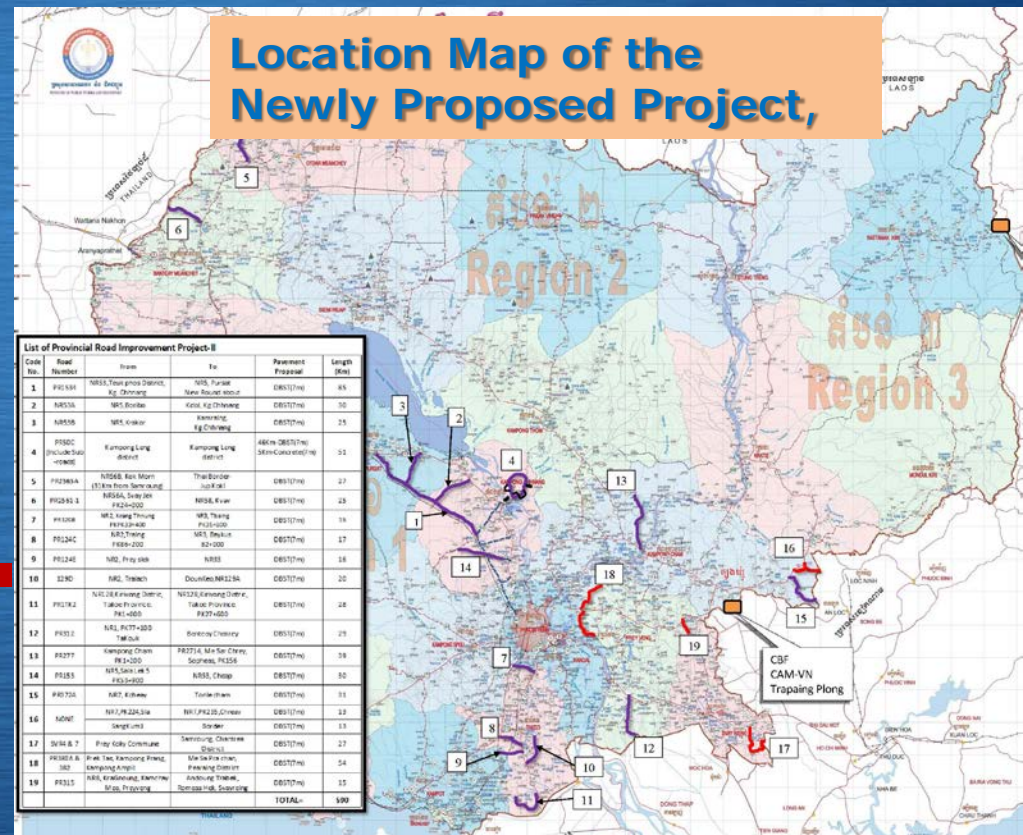
Location Map of the Original Project, (Postponed)



II.b GMS Southern Economics Corridors Improvement (cont.)

CAM-TRA-02 The newly proposed project's Name: Provincial Roads Improvement Project II.

List of Provincial Road Improvement Project-II						
Code No.	Road Number	From	To	Pavement Proposal	Length (Km)	
1	PR1534	NR53, Teuk phos District, Kg. Chhnang	NR5, Pursat New Round about	DBST(7m)	85	
2	NR53A	NR5, Boribo	Kdoi, Kg. Chhnang	DBST(7m)	30	
3	NR53B	NR5, Krakor	Kamraing, Kg. Chhnang	DBST(7m)	25	
4	PR50C (Include Sub-roads)	Kampong Leng district	Kampong Leng district	46Km-DBST(7m) 5Km-Concrete(7m)	51	
5	PR2565A	NR56B, Kok Morn (31Km from Samroung)	Thai Border- Jup Koki	DBST(7m)	27	
6	PR2561-1	NR56A, Svay Jek PK24+000	NR58, Kvav	DBST(7m)	25	
7	PR120B	NR2, Krang Thnong PKPK33+400	NR3, Tbaling PK35+600	DBST(7m)	15	
8	PR124C	NR2, Traing PK86+200	NR3, Baykus 82+000	DBST(7m)	17	
9	PR124E	NR2, Prey siek	NR33	DBST(7m)	16	
10	129D	NR2, Tralech	DounKeo, NR129A	DBST(7m)	20	
11	PR1TK2	NR128, Kirivong Distric, Takeo Province. PK1+000	NR128, Kirivong Distric, Takeo Province. PK27+600	DBST(7m)	28	
12	PR512	NR1, PK77+100 TakKouk	Banteay Chakrey	DBST(7m)	29	
13	PR277	Kampong Cham PK1+200	PR2714, Me Sar Chrey, Sopheas, PK156	DBST(7m)	39	
14	PR153	NR5, Sala Lek 5 PK53+900	NR53, Cheap	DBST(7m)	30	
15	PR372A	NR7, Kcheay	Tonle cham	DBST(7m)	31	
16	NONE	NR7, PK224, Sia	NR7, PK235, Chreay	DBST(7m)	13	
		SangKum1	Border	DBST(7m)	13	
17	SVR4 & 7	Prey Koly Commune	Samroung, Chantrea District	DBST(7m)	27	
18	PR380A & 382	Prek Tas, Kampong Prang, Kampong Ampil	Me Sa Pra chan, Pearaing District	DBST(7m)	54	
19	PR315	NR8, KraGnoug, Kamchay Mea, Preyveng	Andoung Trabek, Romeas Hek, Svay eing	DBST(7m)	15	
					TOTAL=	590



II.c Phnom Penh–Sihanoukville Highway Corridor Improvements

CAM-TRA-03

Proposed Project Description:

The proposed 209 km expressway project is being considered for a BOT model with a 50-year concession period. The expressway will provide a high-capacity road link between Phnom Penh and the port city of Sihanoukville and the Greater Mekong Subregion Southern Coastal Corridor.

(Estimated cost: USD 1 bill.)

Current Status:

A feasibility study was undertaken by a Chinese Consultant and completed in 2014.

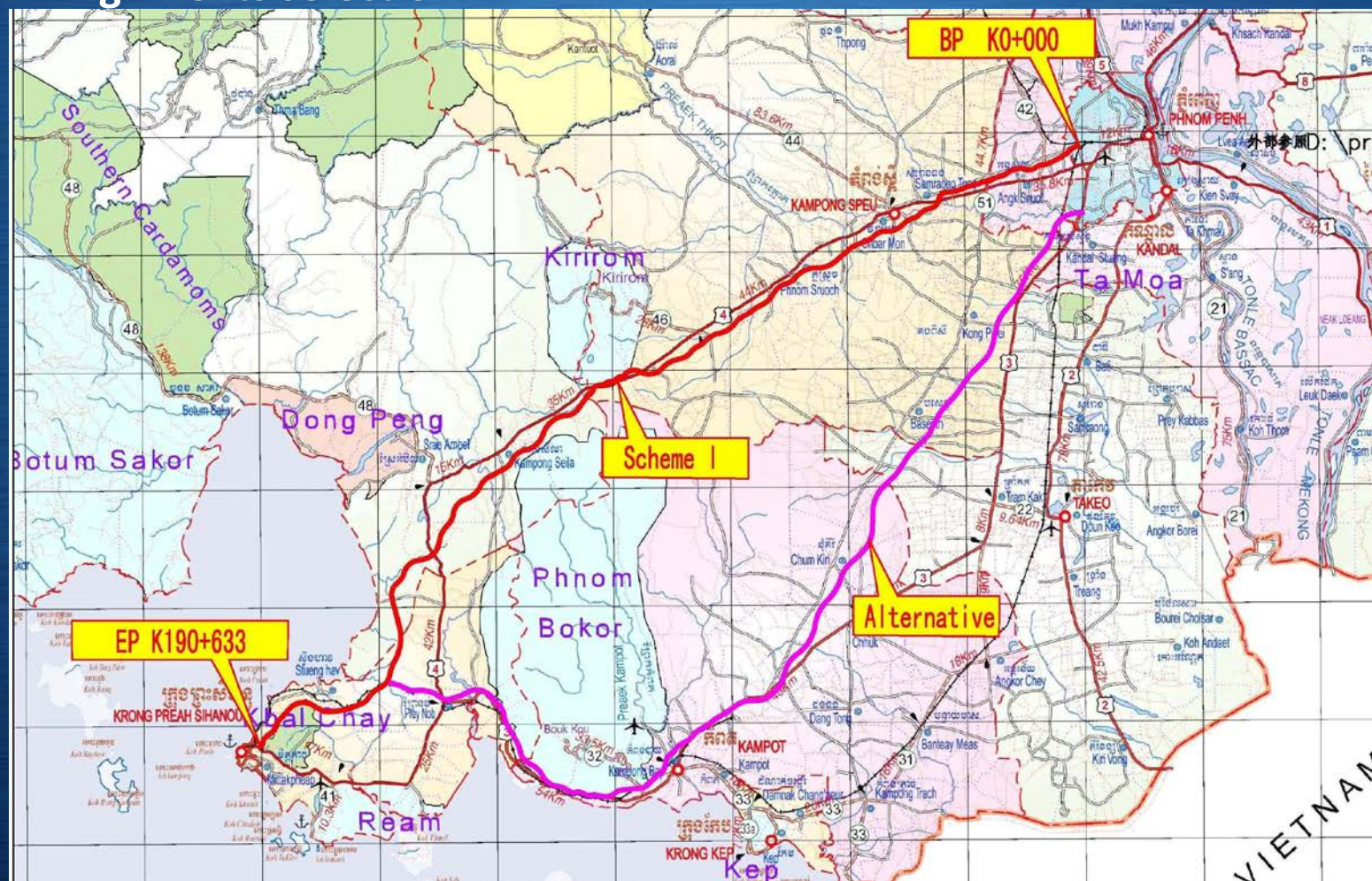
A Technical Proposal was issued in March 2015.

The Construction period 2016-2021 (Planned)

II.c Phnom Penh–Sihanoukville Highway Corridor Improvements

CAM-TRA-03

➤ Alignments selection



II.d Link road between NR 5 and NR 6 near Kampong Tralach north of Phnom Penh

CAM-TRA-04

Proposed Project Description:

The proposed link will facilitate traffic movement between the major highways north of Phnom Penh, and also reduce traffic congestion within Phnom Penh.

The project will construct a new road of 21 km and a bridge of 1.0 km length across Tonle Sap Lake.

(Estimated cost: USD 65 mill.)

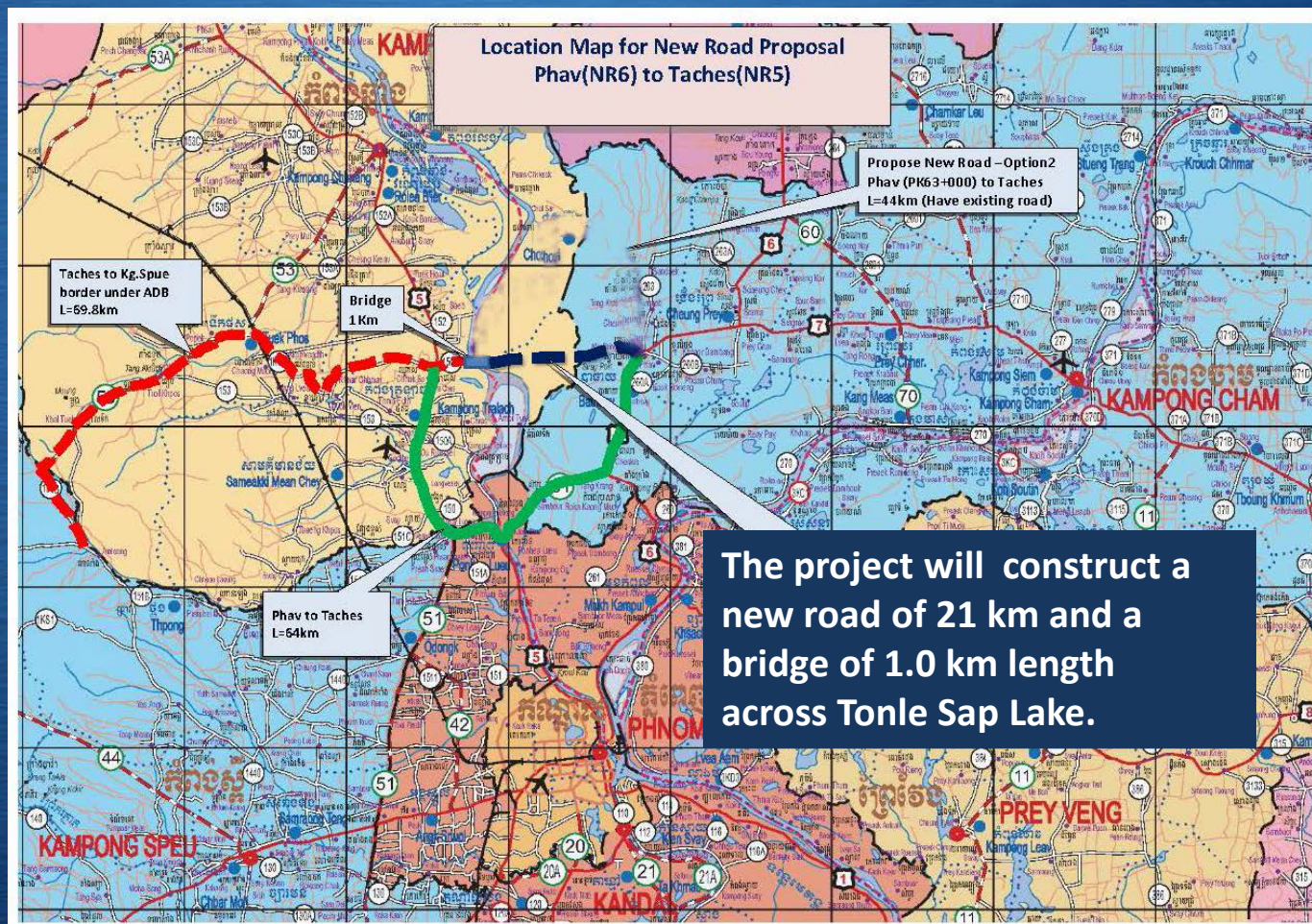
Current Status:

A new proposal, feasibility not started yet.

Proposed implementation schedule: 2019.

II.d Link road between NR 5 and NR 6 near Kampong Tralach north of Phnom Penh

CAM-TRA-04: Location Map



II.e Construction of Poipet (CAM)–Klong Loeuk (THA) Railway Bridge

CAM-TRA-05

Proposed Project Description:

Financed by Thailand, replacement of the existing unserviceable rail bridge at the Poipet-Aranyaprathet border-crossing point between Cambodia and Thailand.

This will link the completed Sisaphon-Poipet railway as a part of the Cambodian Railway's northern line.

(Estimated cost: USD 0.50 mill.)

Current Status:

Completed this year.

II.e Construction of Poipet (CAM)–Klong Loeuk (THA) Railway Bridge

CAM-TRA-05



Existing bridge



New bridge

**Thank you
for your attention**

GMS Regional Investment Framework Implementation Plan 2014-2018 Monitoring Report

**Transport Sector
People's Republic of China
June 2015**

**Reported at the 19th Meeting of the
GMS Subregional Transport Forum (STF-19)**

**3-4 Aug. 2015
Phnom Penh, Cambodia**



Investment Projects



Yunnan Pu'er Regional Integrated Road Network Development Project



■ PRC-TRA-01: Yunnan Pu'er Regional Integrated Road Network Development Project

Project description:

- estimated investment: US\$ 540

- sub-projects including:

- (1) 600 km rural road up-gradation ⇒ Class IV highways;

- (2) 234 km up-gradation ⇒ Class III and IV highways;

- (3) 48.75 km new construction: Class II highways



- FS Completed: Jun. 2014
- Financing Identified: Financing Agreement/25-Jun-2015
- Project Approved/By: NDRC, China

Narrative:

- Financing Agreement: China & ADB (25 Jun., 2015; 23 Sept., 2015)
- Approved by client: Project proposals, FS, financing application, preliminary design and the working drawings.
- In process: public bidding (roadbed construction), to begin upon the confirmation of the tender invitation documents by ADB.



1. Dali-Ruili Railway

2. Yuxi-Mohan Railway



This map was produced by the cartography unit of the Asian Development Bank. The boundaries, colors, denominations, and any other information shown on this map do not imply, on the part of the Asian Development Bank, any judgment on the legal status of any territory, or any endorsement or acceptance of such boundaries, colors, denominations, or information.



■ PRC-TRA-02 Dali-Ruili Railway

Project Description:

- total length: 330 km
- total investment: around US\$ 4.5 billion
- 2 sections: Dali-Baoshan & Baoshan-Ruili

Section 1----Dali-Baoshan (133.7km)

- bridges and tunnels: 115.2 km
- new stations: 11

Section 2----Baoshan-Ruili (196.4km)

- bridges and tunnels: 135.1 km
- new stations: 15



- FS Completed: Year 2007
- Project Approved/By: NDRC, China
- Narrative:

construction in process by sections:

Dali – Baoshan: 2008;

Baoshan – Ruili: 2014.



PRC-TRA-04 Yuxi-Mohan Railway

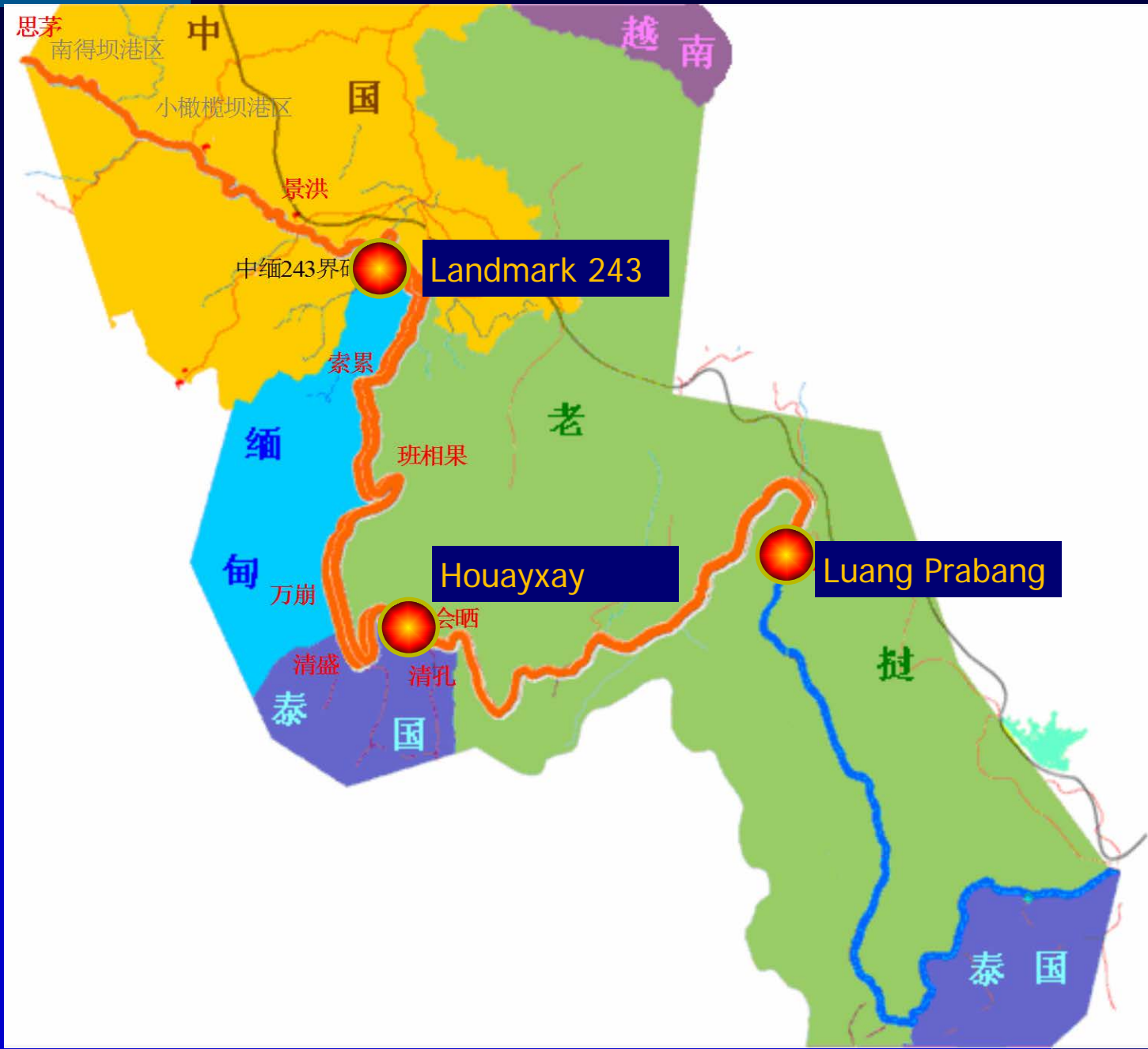
Project Description:

- total length: 514kms
- estimated investment: US\$ 7.4 billion
- FS completed: 2014

Narrative:

- FS: Approval in process (NDRC);
- Construction: before end of 2015.





■ PRC-TRA-03 Further Maintenance and Improvement of the Upper Mekong Navigation Channel

Project Description:

- PRC–Myanmar Landmark 243 – Luang Prabang, Lao PDR: 631 km;
- technical standards: Channel Class IV (500 DWT)
- works includes: 146 rapids; 1199 navigation aids; 5 ports/terminals; 3 emergency response bases; 4 rescue vessels (15 m)
- estimated investment: around US\$ 370 million
- FS: expected to start before end of 2015



Narrative:

- June 2015: Agreement on implementation;
- Joint working group: for preliminary work;
1st meeting in China in 3rd quarter of 2015.



Technical Assistance Project



■ REG-TR/TA/09: Promotion and Application of the Northeast Asia Logistics Information Service Network (NEAL-NET) in the GMS

- NEAL-NET is a cooperation mechanism to promote international logistics information interconnection on the basis of the mechanism of China-Japan-Korea Ministerial Conference on Transport and Logistics, aiming at constructing a logistics information sharing platform covering Asia and beyond and even the whole world.
- The application of technical standards for logistics information sharing of NEAL-NET in the GMS countries will help elevate the level of logistics information service in GMS and facilitate trade among the GMS countries as well as that with Japan and Korea



Overall Assessment of Progress of Transport Projects Implementation Under The RIF-IP

- China's transport projects under the RIF-IP are generally on track
- Construction of 1 project (PRC-TRA-02) is already ongoing
- FS for 2 projects have been completed (PRC-TRA-01, 04), and financing agreement of one of the two (PRC-TRA-01) has been concluded with ADB
- The FS for 1 project (PRC-TRA-03) is to be started



Thank You



GMS Regional Investment Framework Implementation Plan 2014-2018 Monitoring Report

Transport Sector Lao PDR

June 2015

Reported at the 19th Meeting of the
GMS Subregional Transport Forum (STF-19)
3-4 August 2015, Phnom Penh, Cambodia



Lao PDR RIF IP (2014-2018)

Investment Transport Projects

Subsector	Number of Projects	Total Cost estimate (\$ Million)
Road	4	640.0
Bridge	2	130.0
Border Crossing	5	62.0
Inland Waterways	2	7,200.0
Railway	1	27.0
Total	14	8,059.0



LAO-TRA-01 : Vang Tao Border-Crossing Facility

Description	Sub-sector	Cost estimate (\$ Million)	Justification/ Additional Information
This facility is the Lao PDR-Thailand border-crossing point at Vang Tao and Chong Mek, on NR 16. The border-crossing facility does not meet the implementation requirements of the GMS CBTA.	Road	Border crossing	

Activity/Date					Notes
FS Commenced	FS Completed	Financing Identified	Project Approved/By	Implementation Commenced	
N/A	N/A	1 Sep 2013	14 Dec 2013	14 Dec 2013	

Narrative:

- The construction of this government-financed project was commenced on 14 Dec 2013.
- As of 30 June 2015, it can see the progress of 65% towards the completion, and is expected to be completed in Dec 2016.



LAO-TRA-02 : Upgrading NR13N and 13S (Portion through Phon Hong–Vientiane Capital–Ban Hai); ASEAN Highway AH11 (NR13S)

Description	Subsector	Cost estimate (\$ Million)	Justification/ Additional Information
NR 13N connects Vientiane to the country's northern provinces, and NR13S connects Vientiane to the southern provinces. Present and projected traffic demand requires the road to be expanded to 4 lanes. The Government is considering using a public-private partnership (PPP) approach for implementing the project.	Road	320.0	

Activity/Date					Notes
FS Commenced	FS Completed	Financing Identified	Project Approved/By	Implementation Commenced	
Dec 2013	Dec 2014				

Narrative:

- FS financed by a grant from WB was undertaken as the 'pilot' Lao Roads PPP Project between Dec 2013 to Dec 2014.
- The study covers the length of 56 km on NR13N and 52 km on NR13S or AH11.
- Consultations with the government and private sectors were arranged at the end of April this year.
- It is expected that the project implementation can be commenced in Oct 2016.



LAO-TRA-03: Mekong Bridge at Bungkan–Paksan (with THA)

Description	Subsector	Cost estimate (\$ Million)	Justification/Additional Information
The bridge will facilitate transport of goods and passengers from northeastern Thailand through central Lao PDR and central Viet Nam via NR8.	Road & Bridge/ Border Facilities	TBD	Based on the FS, the project cost estimate is \$ 100 million.

Activity/Date					Notes
FS Commenced	FS Completed	Financing Identified	Project Approved/By	Implementation Commenced	
Jan 2014	Aug 2014				

Narrative:

- With a grant from NEDA, an FS and detailed design were completed.
- Based on the FS the total cost of approach roads for both sides and the bridge is about \$100 million.
- The selection of financial modalities is under process.
- The Lao government is negotiating with the Thai government on the possibility in providing a grant for the project construction.



LAO-TRA-04: Thanaleng Border–Crossing Infrastructure Improvement Project

Description	Subsector	Cost estimate (\$ Million)	Justification/Additional Information
The existing Thanaleng border crossing operates in a very restrictive and inefficient manner for both passenger and freight traffic, and this will become more severe as daily freight traffic grows beyond the present 300 trucks, and 1000 passenger cars and buses. In this regard, there is an urgent need to separate freight traffic from passenger traffic, also to significantly upgrade the road and other infrastructure.	Border crossing	25.0	Seeking financing for FS

Activity/Date					Notes
FS Commenced	FS Completed	Financing Identified	Project Approved/By	Implementation Commenced	

Narrative:



LAO-TRA-05: Muong Ngeune– Chomphet–Luang Prabang Road Rehabilitation (120 km)

Description	Subsector	Cost estimate (\$ Million)	Justification/Additional Information
The road is part of the tourism corridor that includes Chiang Rai, Chiang Mai, Luang Prabang (Chiang Thong), and Vientiane. The section rehabilitation will promote trade, investment and tourism.	Road	90.0	

Activity/Date					Notes
FS Commenced	FS Completed	Financing Identified	Project Approved/By	Implementation Commenced	
March 2011	Nov 2011	Nov 2014			

Narrative:

- With a grant financing from NEDA, an FS and detailed design were completed in Nov 2011.
- NEDA has agreed to provide funding for the rehabilitation works.
- Tendering and procurement process was completed and awaiting for an approval.
- The project implementation is expected to be commenced as soon as Sept 2015.



LAO-TRA-06: Upgrading of NR8 East–West Transport Route; ASEAN Highway AH15 (Ban Lao-Nam Phao) 132 km

Description	Subsector	Cost estimate (\$ Million)	Justification/Additional Information
NR8 branches off from NR13S at Ban Lao, passing through the districts of Kamkeuth and Laksao before reaching the Lao-Viet Nam border crossing point at Namphao-Cau Treo; after the point, it connects to Cua Lo Seaport, in Vinh, Viet Nam. The road does not meet ASEAN standards. This portion of the road has been included in the ASEAN Master Plan for Connectivity for upgrading.	Road	80.0	

Activity/Date					Notes
FS Commenced	FS Completed	Financing Identified	Project Approved/By	Implementation Commenced	

Narrative:

- A team from KOICA conducted a preliminary survey from 9-13 Feb 2015 and had an MOM signed with the Department of Roads.
- KOICA has agreed to provide a grant for a detailed FS and expected to be commenced next year.



LAO-TRA-07: Xiengkok River Port

Description	Subsector	Cost estimate (\$ Million)	Justification/Additional Information
Xiengkok in Luang Namtha Province is located on the Mekong River. Under the quadrilateral Lancang-Upper Mekong River Commercial Navigation Agreement (PRC, Lao PDR, Myanmar, and Thailand), it has been agreed that Xieng Kok Port will be a checkpoint for downstream river traffic from the PRC to Chiang Saen Port, in Thailand. The port is to be equipped with cargo handling equipment, immigration and customs offices, and warehouses	Inland waterway	15.0	

Activity/Date					Notes
FS Commenced	FS Completed	Financing Identified	Project Approved/By	Implementation Commenced	
March 2010	April 2010				

Narrative:

- An FS and detailed design funded by PRC were completed.
- The project will be included to the Sino-Lao Cooperation 2016-2020 Scheme in order to access a soft loan for the construction from PRC.



LAO-TRA-08: Ban Mom River Port

Description	Subsector	Cost estimate (\$ Million)	Justification/Additional Information
Ban Mom in Bokeo Province is located on the Mekong River. Under the Quadrilateral Agreement on the Commercial Navigation on Upper Mekong-Lancang River (PRC, Lao PDR, Myanmar, and Thailand), it has been agreed that Ban Mom Port will be a checkpoint for upstream river traffic from Chiang Saen Port, in Thailand, to the PRC. The port will be equipped with cargo handling equipment, immigration and customs offices, and warehouses.	Inland waterway	12.0	

Activity/Date					Notes
FS Commenced	FS Completed	Financing Identified	Project Approved/By	Implementation Commenced	
					Potentially received a grant support for an FS from PRC

Narrative:

- The project has been in the Development Plan of International Navigation on the Lancang-Mekong River 2015-2025.



LAO-TRA-09: Lalay Border–Crossing Point (NR15)

Description	Subsector	Cost estimate (\$ Million)	Justification/Additional Information
This facility is located at the Lao PDR-Viet Nam border-crossing point on the newly completed NR15 in Salavan Province. This road is a crucial link to the seaport in Vietnam. The existing border-crossing facilities do not meet the requirements of the GMS CBTA.	Border crossing	4.0	From the FS, a cost estimate of the project is \$ 6.4 million.

Activity/Date					Notes
FS Commenced	FS Completed	Financing Identified	Project Approved/By	Implementation Commenced	
August 2012	August 2013				Financing for construction is required.

Narrative:

- An FS financed by the provincial government was completed in August 2013.
- Financing for construction is being sought.



LAO-TRA-10: Nam Phao Border–Crossing Point (NR8)

Description	Subsector	Cost estimate (\$ Million)	Justification/Additional Information
This facility is located at Lao PDR-Viet Nam border crossing point on NR8 in Bolikhamxay Province. NR8 is vital route which provides the shortest link between Vientiane to the deep seaport in Vietnam. The existing border-crossing facilities do not meet the requirements of the GMS CBTA.	Border crossing	8.0	

Activity/Date					Notes
FS Commenced	FS Completed	Financing Identified	Project Approved/By	Implementation Commenced	
					Financing for FS is being sought.

Narrative:

- Financing for an FS is being sought.



LAO-TRA-11: Na Phao Border–Crossing Point (NR12)

Description	Subsector	Cost estimate (\$ Million)	Justification/Additional Information
This facility is located at Lao PDR-Viet Nam border crossing point on NR12 in Khammouane Province. After the Third International Friendship Bridge was opened for transit traffic through Thailand, Lao PDR and Viet Nam, the traffic has increased considerably. The existing border-crossing facilities do not meet the requirements of the GMS CBTA.	Border crossing	10.0	

Activity/Date					Notes
FS Commenced	FS Completed	Financing Identified	Project Approved/By	Implementation Commenced	
					Financing for FS is being sought..

Narrative:

- Financing for an FS is being sought.



LAO-TRA-12: Luang Namtha– Xiengkok–Lao– Myanmar Friendship Bridge: NR17

Description	Subsector	Cost estimate (\$ Million)	Justification/Additional Information
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 at Xiengkok. This road is part of the ASEAN-India transport corridor.	Road	150.0	

Activity/Date					Notes
FS Commenced	FS Completed	Financing Identified	Project Approved/By	Implementation Commenced	
					Potentially receive financing for a Pre-FS from WB

Narrative:

- A video conference held by WB on 11 Nov 2014 was participated by Vietnam, Laos and Myanmar.
- Three countries agreed on the concept and to pursuit the project Pre-FS.
- WB will finance the Pre-FS which is expected to be commenced in 2016.



LAO-TRA-13: Lao-Myanmar Friendship Bridge over the Mekong at Xienglok

Description	Subsector	Cost estimate (\$ Million)	Justification/ Additional Information
The governments of Lao PDR and Myanmar jointly financed (50% each) the construction of the International Friendship Bridge across the Mekong River at Xiengkok (Lao side) and Kainglap (Myanmar side).	Bridge	30.0	

Activity/Date					Notes
FS Commenced	FS Completed	Financing Identified	Project Approved/By	Implementation Commenced	
May 2012	Dec 2012			Feb 2013	Construction completed

Narrative:

- Construction was commenced in February 2013 and completed May 2015.
- An official opening ceremony attended by country leaders of Laos and Myanmar was held on 9 May 2015.



LAO-TRA-14: Vientiane–Boten Railway Project

Description	Subsector	Cost estimate (\$ Million)	Justification/ Additional Information
Under the Sino-Lao Cooperation Scheme, the Vientiane-Boten Railway Project is going through a final technical design review. The railway operating speed has been reduced from high speed to about 200km/h.	Rail	7,200.0	

Activity/Date					Notes
FS Commenced	FS Completed	Financing Identified	Project Approved/By	Implementation Commenced	
April 2010	April 2011				

Narrative:

- An MOU on FS signed on 07 April 2010, and it was undertaken for 1 year.
- It is under the process of analysing the most effective financing modality for the project implementation.



Overall Assessment of Progress of Transport Projects Implementation Under The RIF-IP

- In a big picture, many of Laos's transport investment projects under the RIF-IP make a very satisfactory progress.
- 4 road projects are progressing largely on track, 2 of which have FSs completed, and the other two are expected for FS commencement in a year or so.
- 1 bridge construction project was completed and another is under the financial modality negotiation with Thailand.
- In 5 border crossing projects, 1 is under the construction, and the rest are seeking financing for FS and construction.



Overall Assessment of Progress of Transport Projects Implementation Under The RIF-IP

- The implementation of 1 river port project is expected to be commenced next year, while another is likely to receive a fund for FS in the coming years.
- The only railway project is progressing towards the commencement of its implementation.
- It is expected that the vast majority of the projects, if not all will have commenced their implementation by the end of RIF-IP period.



Thank You



GMS Regional Investment Framework Implementation Plan 2014-2018

Transport Sector

The Republic of the Union of Myanmar

Reported at the 19th Meeting of the
GMS Subregional Transport Forum (STF-19)

3-4 August 2015,

Phnom Penh, Cambodia



Investment Projects



MYA-TRA-01: GMS: East-West Economic Corridor Eindu-Kawkareik Road Improvement Project

East-West Economic Corridor Eindu-Kawkareik Road Improvement Project

Description	Subsector	Cost estimate (\$ Million)	Justification/Additional Information
This project focuses on a key route, not only for the GMS, but also for the India-Myanmar-Thailand Trilateral Highway, and the ASEAN and Asian highway networks. It will be reconstructed to ASEAN Class II standard. be financed by ADB.	Road	121.8	Feasibility study and detailed design have been completed. Approval and procurement processes on going.

Activity/Date						Notes
FS Commenced	FS Completed	Financing Identified	Project Approved/By	Implementation Commenced		
14 Aug 2013	30 Jan 2015	Feb. 2015	21 Feb. 2013	Aug 2015		Procurement is on going

Narrative:

- Preparation of FS by <SMEC > ,procurement process for two civil works and construction services consultant ongoing .
- JICA provided a technical assistance to the preparation of FS for three major bridges one on this section and remaining two on Eindu- Mawlamyine section.





GMS EWEC

Eindu-Kawkareik (66.4 km)

MYA-TRA-02: Mae Sot-Myawaddy Border Crossing Project and Infrastructure Improvements (with THAI)

Description	Subsector	Cost estimate (\$ Million)	Justification/ Additional Information
A new bypass road and bridge to the north of the existing border crossing at Mae Sot (THA)–Myawaddy (MYA), which is located in the congested area of the two border cities. This new crossing would be dedicated to cross-border freight traffic. The bypass would link with a newly envisioned special trade zone on the Myanmar side. The overall project would include about 16.9 km of a new four-lane divided highway (13.3 km in Thailand; 3.6 km in Myanmar), a 100 m-long bridge across the Moei River at the border, and associated border-crossing facilities.	Road	TBD(million) 3,900	Feasibility study and detailed design completed. Construction is commencing in July 2015.

Activity/Date						Notes
FS Commenced	FS Completed	Financing Identified	Project Approved/By	Implementation Commenced		
April 2014	March 2015	14 Jan 2015	9 Oct 2014	July. 2015		Thai government provides 1000 Baht grant to Myanmar .

Narrative:

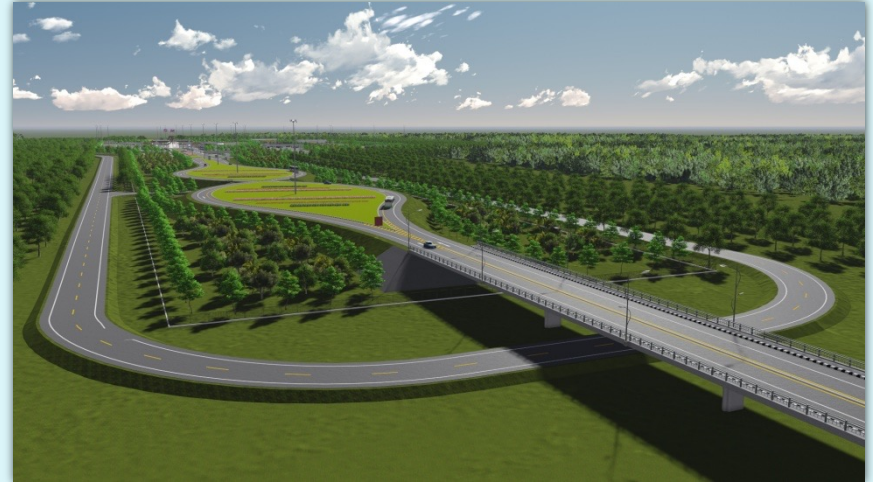
- A new bypass road and bridge to the north of the existing border crossing at Mae Sot (THA)–Myawaddy (MYA), which is located in the congested area of the two border cities. This new crossing would be dedicated to cross-border freight traffic. The bypass would link with a newly envisioned special trade zone on the Myanmar side. The overall project would include about 16.9 km of a new four-lane divided highway (13.3 km in Thailand; 3.6 km in Myanmar), a 100 m-long bridge across the Moei River at the border, and associated border-crossing facilities.
- The second friendship bridge is being constructed to ease congestion on the existing bridge.
- Transport infrastructure, shipment and distribution centres, duty-free areas, bonded warehouses, one-stop service facilities, single service inspection and customs checkpoints will be part of the special economic zone.

Myanmar- Thailand 2nd Friendship Bridge



The Second Friendship Bridge

Balance Cantilever



MYA-TRA-03: Improvement of Inland Ports

Description	Subsector	Cost estimate (\$ Million)	Justification/Additional Information
The project will construct four inland ports on the Ayeyarwaddy River (Bhamo, Mandalay, Pokokku, and Magway) and two inland ports on the Chindwin River (Monywa and Kalewa). The objective is to improve the transportation and handling of domestic and international cargo and containers.	Inland Water way	60	The first inland port project will be started in Mandalay, the Hub of Ayeyarwaddy River and country. Japan International Cooperation Agency (JICA) assisted for feasibility study and port design. As a result, Final Feasibility Study Report and EIA Report were submitted in 2014. Myanmar has sent an Official Request for Grant to Government of Japan for Mandalay Port Project. Other 5 Inland Ports will also be established consequently.

Activity/Date		Financing Identified	Project Approved/By	Implementation Commenced	Notes
FS Commenced	FS Completed				
March 2013	March 2014				

Narrative: Some of inland water ports have old jetty facilities, however, most of the ports have no mechanical facilities for transfer and the ports rely on manual labor to handle goods. So, establishment of Inland Ports in some significant areas along Ayeyarwaddy and Chindwin River is a priority in Transport sector.



MYA-TRA-03: GMS: Improvement of Inland Ports

Project Title - **Improvement of (6) Inland Ports along Ayeyarwaddy and Chindwin Rivers**

- Objectives**
- **To establish standard Inland Ports at Ayeyarwaddy and Chindwin rivers in order to promote efficient cargo handling**
 - **To promote the containerization by using inland water ways**
 - **To support the facilitation of inland water transport**
 - **To create job opportunities and develop the living standards of the people**



MYA-TRA-03: GMS: Improvement of Inland Ports

† Ayeyarwaddy River

- Bhamo Port
- Mandalay Port
- Pokokku Port
- Magway Port

† Chindwin River

- Monywa Port
- Kalewa Port

Benefits - Facilitation and efficient transportation

- Developing new inland ports
- Developing SEZ and industrial zones
- Getting more revenue
- Creating employment opportunities
- Developing foreign investment

The estimate cost US\$ 60 million



Mandalay Inland Port Project



- Port capacity is designed at 240,000 tons per year.
- Berth Length 180 ~ 200m, Cargo Yard 3 ha.



MYA-TRA-04: GMS: Lao Myanmar Friendship Bridge over the Mekong River at Xiengkok-Kyainglap

Description	Sub-sector	Cost estimate (\$ Million)	Justification/ Additional Information
The governments of Lao PDR and Myanmar have agreed to jointly finance (50% each) the construction of the International Friendship Bridge across the Mekong River at Xiengkok (Lao PDR side) and Kyainglap (Myanmar side).	Bridge	26	Completed in 15 March 2015

Activity/Date					
FS Commenced	FS Completed	Financing Identified	Project Approved/By	Implementation Commenced	Notes
2003	2003			16 Feb 2013	

Narrative:

- Narrative: The construction of the 691.6-meter bridge at a cost of USD26 million started in February 2013. People used the ferry boats to cross the river previously. But now smooth and speedy road transportation after completing of the friendship bridge. This bridged was inaugurated on 9 May 2015.





Technical Assistance Projects



REG-TR/TA/04: GMS: Feasibility Study for the Rail Link between Laem Chabang Port and Dawei Deep Sea Port(MYA, THA)

Description	Subsector	Cost estimate (\$ Million)	Justification/ Additional Information
<p>The governments of Myanmar and Thailand signed a memorandum of understanding on 19 May 2011 to expand their cooperation in promoting sustainable development in the Dawei Special Economic Zone and its related project areas. Since railways play an important role in transporting cargo, the rail links between Laem Chabang Port and Dawei deep sea port will promote the movement of cargo between the two countries.</p> <p>Myanmar and Thailand are recommended to consider the project as joint, as well as to conduct the feasibility study jointly, to create the best outcomes for the GMS and ASEAN.</p>	Rail	3	

Activity/Date						Notes
FS Commenced	FS Completed	Financing Identified	Project Approved/By	Implementation Commenced		

Narrative : There is no acknowledgement for supporting from any development partner. Myanmar can not identify on each milestone field discussions are being continuing between MYA and THA governments. Depending on the outcome, the governments may seek ADB or other development partner support for the feasibility .



Dawei Port- Laem Chabang Port Railway Link



- ✦ Dawei Port- Laem Chabang Port Rail Link
- ✦ MYA may seek ADB or other development partner support for the Feasibility Study
- ✦ Bago-Dawei Rail line - (526 km)
- ✦ Bago- Dawei Railway Track Upgrading Project cost US \$ 100 M to be supported by ADB



Thank You



GMS Regional Investment Framework
Implementation Plan 2014-2018
Monitoring Report

Transport Sector
THAILAND

June 2015

Reported at the 19th Meeting of the
GMS Subregional Transport Forum (STF-19)
3-4 August 2015, Phnom Penh, Cambodia



INVESTMENT PROJECTS



Bang Yai – Kanchanaburi Intercity Motorway Project

Description	Subsector	Cost estimate (\$ Million)	Justification/Additional Information
This expressway, in addition to having a strong national justification, will be part of the Laem Chabang–Bangkok–Dawai (MYA) highway corridor, linking the port at Laem Chabang with the proposed deep-water port at Dawai, and with Myanmar's highway network connecting with Mawlamyine and Yangon.	Road	2,000.0	

Activity/Date					
FS Commenced	FS Completed	Financing Identified	Project Approved/By	Implementation Commenced	Notes
1 Aug 08	1 Aug 09	-	14 Jul 15	-	

Narrative

- The project was approved by the cabinet in July 2015.
- Source of fund is underdetermining.

THA-TRA-02

Tak-Mae Sot Highway Improvement Project

Description	Subsector	Cost estimate (\$ Million)	Justification/Additional Information
The project will improve highway capacity on the East-West Economic Corridor (EWEC) in Thailand, for the section of the EWEC that connects with the Myanmar section at Myawaddy. The project will upgrade the existing road from two to four lanes; total length is 90 km.	Road	90.0	Budget allocated in FY 2015

Activity/Date					
FS Commenced	FS Completed	Financing Identified	Project Approved/By	Implementation Commenced	Notes
-	-	30 Sep 08	30 Sep 08	5 Feb 09	

Narrative

- Upgrade the existing road from 2 to 4 lanes.
- Construction completed 4-lane 25 km.
- Under construction 24 km.
- Fiscal year 2016, got budget for 27 km.

THA-TRA-03

Lomsak–Phetchabun Highway Improvement Project

Description	Subsector	Cost estimate (\$ Million)	Justification/Additional Information
The project will improve highway capacity on the EWEC in Thailand between Lomsak and Phetchabun. The project will upgrade the existing road from two to four lanes; total length is 120 km.	Road	120.0	Budget allocated in FY 2015

Activity/Date					
FS Commenced	FS Completed	Financing Identified	Project Approved/By	Implementation Commenced	Notes
-	-	12 May 15	12 May 15	-	

Narrative

- Upgrade the existing road from 2 to 4 lanes.
- Fiscal year 2016 got budget for 11 km.
- The remaining part is planned in the next 5 years plan.

Kalasin–Nakrai–Kamcha I Highway Improvement Project

Description	Subsector	Cost estimate (\$ Million)	Justification/Additional Information
The project will improve highway capacity on the EWEC in Thailand between Kalasin and Kamcha I. The project will upgrade the existing road from two to four lanes; total length is 140 km.	Road	140.0	Budget allocated in FY 2015

Activity/Date					
FS Commenced	FS Completed	Financing Identified	Project Approved/By	Implementation Commenced	Notes
-	-	12 May 15	12 May 15	-	

Narrative

- Upgrade the existing road from 2 to 4 lanes.
- Fiscal year 2016 got budget for 30 km.
- The remaining part is planned in the next 5 years plan.

Chiang Rai–Chiang Khong Highway Improvement Project

Description	Subsector	Cost estimate (\$ Million)	Justification/Additional Information
The project will improve highway capacity on the North-South Economic Corridor (NSEC) in Thailand. This project will upgrade the existing road from two to four lanes; total length is 80 km.	Road	80.0	Budget allocated in FY 2016

Activity/Date					
FS Commenced	FS Completed	Financing Identified	Project Approved/By	Implementation Commenced	Notes
-	-	30 Sep 07	30 Sep 07	9 Sep 09	

Narrative

- Upgrade the existing road from 2 to 4 lanes.
- Construction completed 4-lane 55 km.
- The remaining part is planned in the next 5 years plan.

Mae Sot–Myawaddy Border Crossing Project and Infrastructure Improvements (Thailand part)

Description	Subsector	Cost estimate (\$ Million)	Justification/Additional Information
The Thai government is studying a new road bypass 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 would be dedicated to cross-border freight traffic, and would avoid the congested urban areas of the cities. The bypass would link with a newly envisioned special trade zone on the Myanmar side. The overall project would consist of about 16.9 km of new four-lane divided highway (13.3 km in Thailand; 3.6 km in Myanmar), a 100-m long bridge across the Moei River at the border, and associated border-crossing facilities.	Road/Bridge /Border Facilities	TBD	Detailed design to be completed by the end of 2014

Activity/Date					
FS Commenced	FS Completed	Financing Identified	Project Approved/By	Implementation Commenced	Notes
30 Aug 13	Dec 14	2 Jun 15	6 Oct 09	Jul 14	

Narrative

Project's status is preparation for construction.

Mekong Bridge at Bungkan–Paksan (with LAO)

Description	Subsector	Cost estimate (\$ Million)	Justification/Additional Information
The bridge will connect Amphoe Muang, Bangkane Province (Thai side), and Muong Paksan, Bolikhamxay Province (Lao side). It will facilitate transport of goods and passengers from northeastern Thailand through central Lao PDR and central Viet Name via NR8.	Road/Bridge /Border Facilities	TBD	Included on a tentative basis, and subject to the availability of budget for the THA part, indicatively 50% of the project financing (for the LAO part, the Government of Lao PDR is considering seeking financing from Thai Government's NEDA

Activity/Date					
FS Commenced	FS Completed	Financing Identified	Project Approved/By	Implementation Commenced	Notes
26 Sep 13	Oct 14	-	-	-	

Narrative

Feasibility Study of the fifth friendship bridge between Thailand and Lao PDR was completed since October 2014.

THA-TRA-08

Laem Chabang Port Development Project, Phase 3 - Feasibility Study

Description	Subsector	Cost estimate (\$ Million)	Justification/Additional Information
Projections of future demand indicate that the total containers accommodated in Basin I and Basin II will exceed 10 billion 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. The purpose will be to accommodate the increasing throughput and strengthen the port's role as a gateway port to the GMS.	Port	5.0	Port container throughput projections indicate that the existing Phase I and II facilities will soon reach capacity. The proposed study will present technical and other options for expanding the port.

Activity/Date					
FS Commenced	FS Completed	Financing Identified	Project Approved/By	Implementation Commenced	Notes
			Approved by the cabinet	2025	FS completed 98%, excluding EHIA part.

Narrative

- Under the process of conducting a feasibility study.
- Design and economic and financial study completed.
- CSR measures launched

THA-TRA-08

Single Rail Transfer Operator Development Project for Laem Chabang Port

Description	Subsector	Cost estimate (\$ Million)	Justification/Additional Information
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 would facilitate rail transfer in the future, in response to the completion of the State Railway of Thailand's double-track construction project. It would increase the handling capacity of rail transport at the port from the current 500,000 TEUs/year to 1-2 million TEUs/year	Port	90.0	Objective of the project is to increase the proportion of container traffic moved by rail from 9% of port throughput to 20% of port throughput, in line with the Government's policy to reduce logistics cost.

Activity/Date

FS Commenced	FS Completed	Financing Identified	Project Approved/By	Implementation Commenced	Notes
21 Dec 10	23 Sep 11	Financed by Port Authority of Thailand, and implemented by Laem Chabang port	Approved by the cabinet	2018	

Narrative

- To increase capacity of rail transport at Lam Chabang Port from the existing of 500,000 TEUs/year to 1-2 million TEUs/year.

TECHNICAL ASSISTANCE



TECHNICAL ASSISTANCE Road



Strategic Study on the Development and Management of the GMS Motorway Network System

Description	Subsector	Cost estimate (\$ Million)	Justification/Additional Information
<p>The improvement and expansion of the existing highway network system, raising it to an advanced highway standard with fully controlled access, is a key aspect of the strategic plan for GMS highway development, to promote cross-border and transit transport. The GMS motorway network system will be the core system of road connectivity to other modes of transport, border areas, special economic zones, and other high-potential development areas in the GMS countries. The whole system will efficiently reduce travel time, improve road safety, and reduce transport logistics costs.</p> <p>The strategic study should view all GMS corridors, and consider how they overlay the GMS motorway network system.</p>	Road	To be determined	

Activity/Date

Financing Identified		Project Approved/By	Implementation Commenced	Project Completed
-	-	-	-	-

Narrative

No activities undertaken. Pending for a project framework development

REG-TR/TA/08

Knowledge Transfer between Thailand and the other GMS Member Countries on Highway and Bridge Standards and Specifications, including Transport Facilitation Facilities

Description	Subsector	Cost estimate (\$ Million)	Justification/Additional Information
Thailand's Department of Highways fulfills its role in providing technical experts and training center facilities, and organizing staff to various training courses in the areas of road and bridge engineering. The objective of the TA is to enhance knowledge and exchange experience in road engineering, as well as to brainstorm on road engineering best approaches for better solutions leading to sustainable road development in the GMS.	Road	0.4	

Activity/Date			
Financing Identified	Project Approved/By	Implementation Commenced	Project Completed
-	-	-	-

Narrative

No activities undertaken. Pending for a project framework development

TECHNICAL ASSISTANCE Rail



REG-TR/TA/04

Feasibility Study for the Rail Link between Laem Chabang Port and Dawei Deep Sea Port

Description	Subsector	Cost estimate (\$ Million)	Justification/Additional Information
<p>The governments of Myanmar and Thailand signed a memorandum of understanding on 19 May 2011 to expand their cooperation in promoting sustainable development in the Dawei Special Economic Zone and its related project areas. Since railways play an important role in transporting cargo, the rail links between Laem Chabang Port and Dawei deep sea port will promote the movement of cargo between the two countries.</p> <p>Myanmar and Thailand are recommended to consider the project as joint, as well as to conduct the feasibility study jointly, to create the best outcomes for the GMS and ASEAN.</p>	Rail	3.0	

Activity/Date

Financing Identified	Project Approved/By	Implementation Commenced	Project Completed
31 Aug 2014	30 Sep 2014	01 October 2014	30 April 2015

Narrative

Thai government allocated 2014 fiscal year budget of 45 million baht for feasibility study work. The study has started in October 2014 and completed in April 2015

REG-TR/TA/10

Study on Dry Port Development Plan along International Railway Lines Connecting Thailand with Cambodia, the Lao PDR, and Myanmar

Description	Subsector	Cost estimate (\$ Million)	Justification/Additional Information
<p>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. Cross-border railway projects have been emphasized by the Government of Viet Nam, i.e., Nong Khai–Thanaleng–Vientiane, to connect with the Lao PDR; Aranyaprathet–Khlong Luk–Poipet, to connect with Cambodia; and Kanchanaburi–Dawei, 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, connected via GMS economic corridors. The dry ports should also be maximized by considering connections with other important ports in the GMS, such as Dawei, in Myanmar; Sihanoukville, in Cambodia; and Ho Chi Minh City, in Viet Nam.</p> <p>The TA study will determine the need for dry ports at strategic rail locations on international borders.</p>	Other Infrastructure	To be determined	

Activity/Date			
Financing Identified	Project Approved/By	Implementation Commenced	Project Completed
-	-	-	-

Narrative

- Term of Reference (TOR) is being drafted.
- State Railway of Thailand will responsible for the cost of hiring consultant for the project by using its own revenue.

THANK YOU



GMS Regional Investment Framework Implementation Plan 2014-2018 Monitoring Report

Transport Sector

VIET NAM

August 2015

Reported at the 19th Meeting of the
GMS Subregional Transport Forum (STF-19)
3-4 August 2015, Phnom Penh, Cambodia



Investment Projects



VIE-TRA-01: GMS Ben Luc – Long Thanh expressway project (Stage 2)

Description	Subsector	Cost estimate (\$ Million)	Justification/Additional Information
The project will construct a 57.8km expressway from Ben Luc to Long Thanh, through Long An, Dong Nai provinces and Ho Chi Minh city.	Road	1,607.0	

Activity/Date					
FS Commenced	FS Completed	Financing Identified	Project Approved/By	Implementation Commenced	Notes
23/10/2008	8/8/2010	ADB: 635.7 JICA: 634.8 State budget: 336.9		Quarter 2/2016	

Narrative: The technical detail design has been approved.

- For JICA funding components: J2 package was commenced at 19/7/2014; J1 and J3 package contracts were signed and are prepared under construction.
- For ADB funding components: The western packages under the 1st loan include A1, A2-1, A2-2, A3 has contracted and are under construction, A4 Package under Bidding doc. For the eastern packages (A5, A6, A7) of the 2nd loan, VEC currently has completed the bidding documents and is awaiting ADB's approval.



VIE-TRA-02: GMS Ha Noi – Lang Son expressway

Description	Subsector	Cost estimate (\$ Million)	Justification/ Additional Information
To construct 43.3km expressway, 4-lane from Dong Dang to Chi Lang (Lang Son province)	Road	446.83	

Activity/Date					
FS Commenced	FS Completed	Financing Identified	Project Approved/By	Implementation Commenced	Notes
23/10/2008	June 2011	ADB: 444.22 State budget: 2.6	Not decided	Not decided	

Narrative:

ADB program Mission has review meetings with MPI, MOT and agreed to put the project into Fiscal year 2016. ADB requested that F/S and PDO projects should be approved by 9/2015 to sign loan agreement in 2016 for 3rd section in Lang Son province about 42 km as public investment. This project can be considered as a PPP project, i.e. its first section from Ha Noi – Bac Giang, 47 km started construction through BOT form with a domestic investor (Ocean Bank), due complete by end 2015 to 4 lane expressway, cost roughly USD163.6 million. 2nd section from Bac Giang to Lang Son, 63.8 km started construction on 5 July 2015 to 4 lanes expressway complete by end of 2016 by domestic private Xuan Thanh. Total length of Ha Noi – Lang Son is 152 km.



VIE-TRA-03: Second GMS Southern Coastal Corridor

Description	Subsector	Cost estimate (\$ Million)	Justification/Additional Information
The project includes 04 components which are SCCP2 alignment, Ha Tien international border facility, Ha Tien commune bypass and the Project component 4.	Road	359.0	

Activity/Date					Notes
FS Commenced	FS Completed	Financing Identified	Project Approved/By	Implementation Commenced	
03/01/2012	31/12/2012			Not decided	

Narrative:

SCCP1 is almost complete. The project procedure:

- The SCCP2 alignment: the FS is finished and appraised by MOT
- MOT added the SCCP2 project into the List of projects which use ADB fund during 2016-2020 and submitted to the Ministry of Planning and Investment
- In the Country program mission for 2016-2018 (MOU signed on 16/7/2015, ADB accepted to arrange the amount of USD 350 mil for the project (USD 291 mil of OCR and USD 59 mil of ADF).



VIE-TRA-04: Second GMS Northern Transport Network Improvement (Luang Prabang – Thanh Hoa)

Description	Subsector	Cost estimate (\$ Million)	Justification/Additional Information
Upgrading 44.675km of Viet Nam NH.217 from Do Len to the Na Meo border gate with Laos, and Laos NH 6, 6A, 6B	Road	78.358	

Activity/Date					
FS Commenced	FS Completed	Financing Identified	Project Approved/By	Implementation Commenced	Notes
		ADB: 71.228 State budget: 7.13			

Narrative:

- This project was approved on 3/6/2015
- On 24/6/2015, ADB sent the letter to State Bank of Viet Nam to negotiate Loan Agreement from 9-11/9/2015



VIE-TRA-05: National Highway 14D Improvement Project

Description	Subsector	Cost estimate (\$ Million)	Justification/Additional Information
The project will improve the highway section (75km) from Thanh My to the border with the Laos in Quang Nam province. NH.14D is a part of the minimum distance route for freight transportation from Bangkok through Pakse (Laos) to Da Nang (Viet Nam)	Road	120.0	

Activity/Date					
FS Commenced	FS Completed	Financing Identified	Project Approved/By	Implementation Commenced	Notes
		ADB: 120.0 State budget: 20.0			

Narrative: The project includes 3 components which are (i) Upgrading around 75km of National Highway, (ii) Rehabilitation of feeder roads connection to economic centers, and (iii) Ha Tien National border facilities.

The project procedure:

- The project has been included in the ADB's Program 2016 - 2017 (PPTA programmed in early 2017 and Loan programmed in 2017). FS will be finished in late 2016.



Bé GIAO TH NG V N T I / ministry of transport
BAN QU N L y D  N 1 / project manager no. 1

DỰ  N N NG CẤP CẢI TẠO QUỐC LỘ 14D
ĐOẠN: BẾN GI NG – CỬA KH U ĐẶC O C

KM0 – KM76

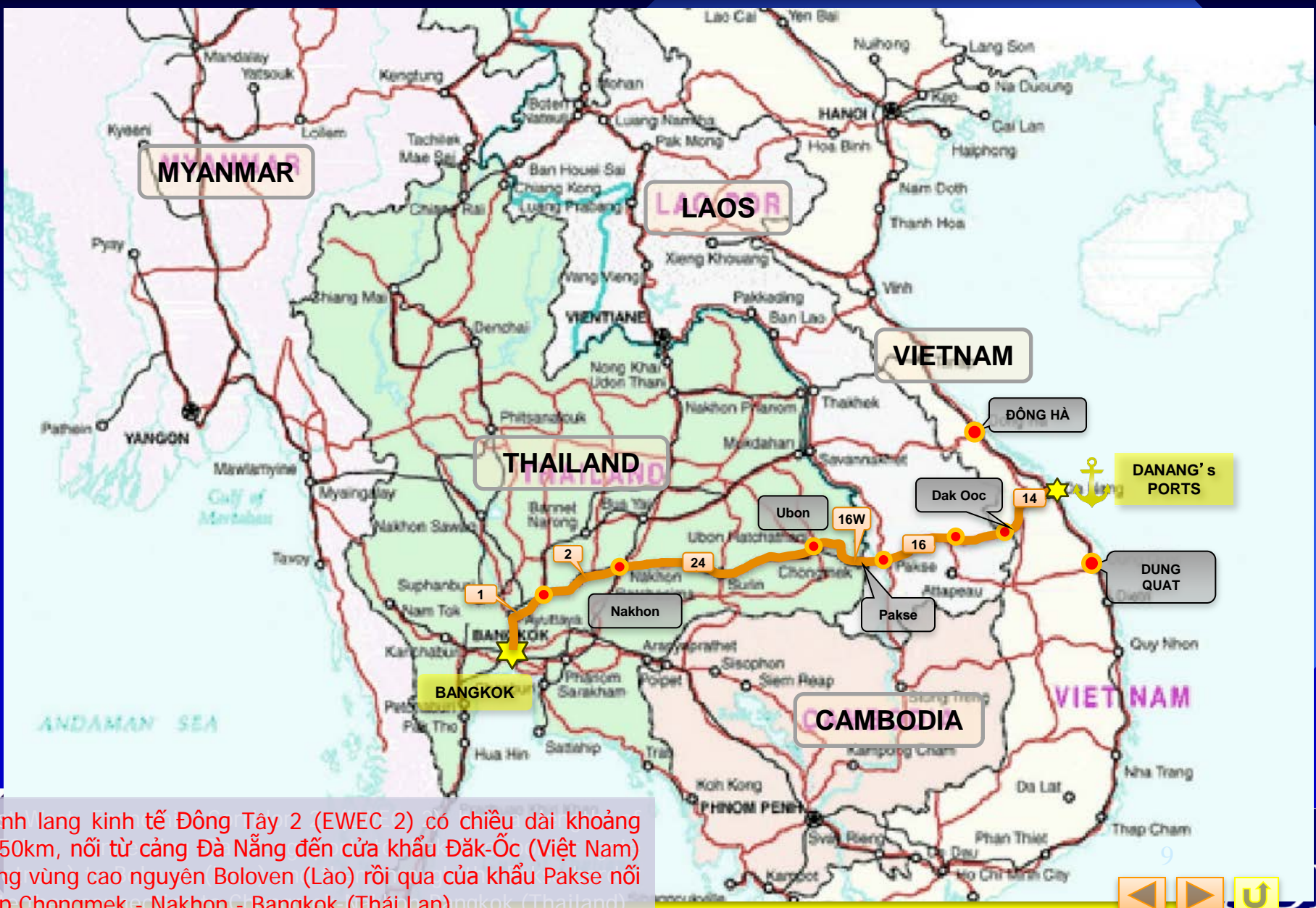
THUỘC TUYẾN HÀNH LANG KINH TẾ ĐÔNG TÂY 2
(EWEC 2)

UPGRADING AND REHABILITATION NH14D PROJECT
FROM BEN GIANG TO DAC OOC BORDER GATE

KM0 – KM76

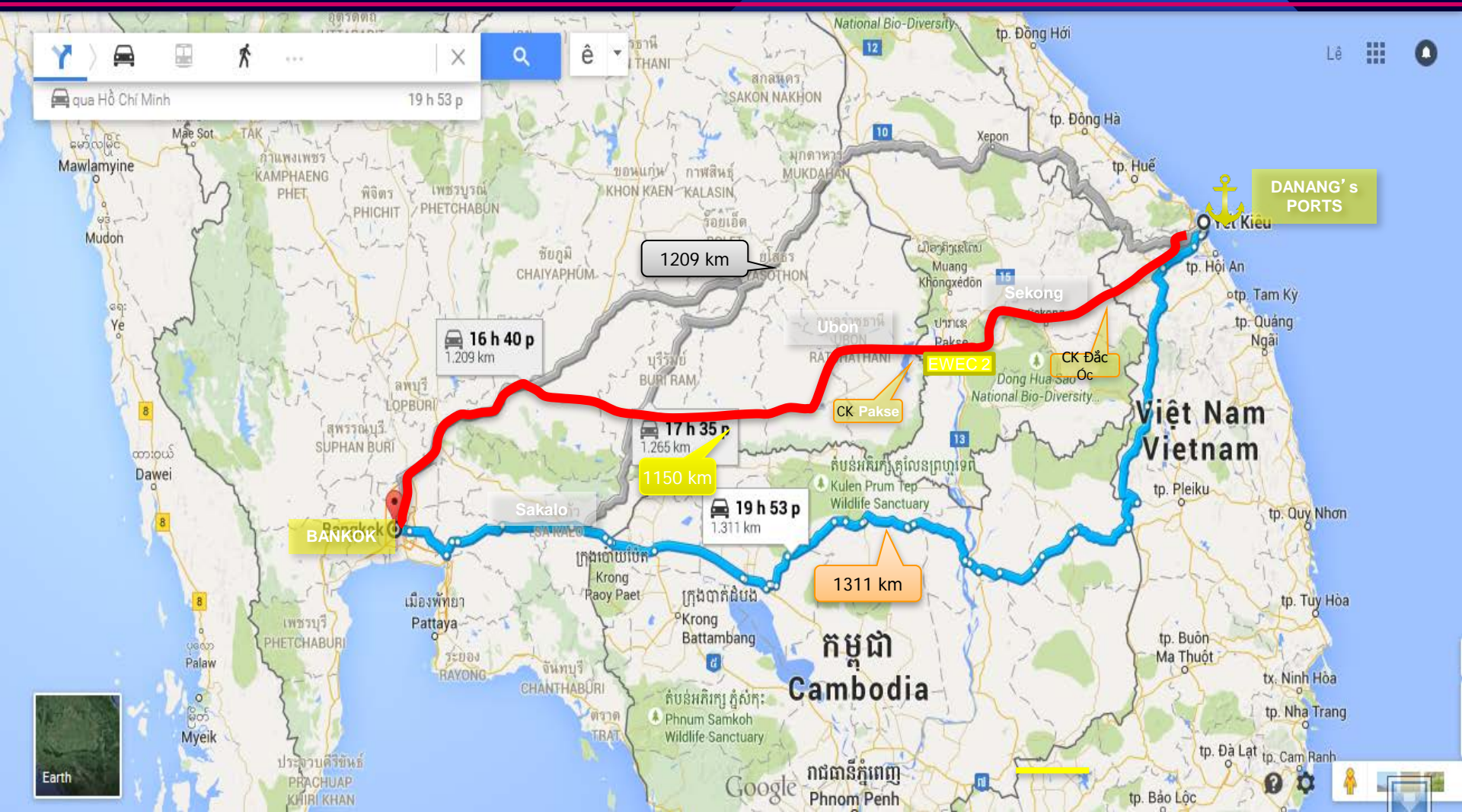
IN East-West Economic Corridor 2 (EWEC 2)

GMS' s EAST-WEST CORRIDOR



Hành lang kinh tế Đông Tây 2 (EWEC 2) có chiều dài khoảng 1150km, nối từ cảng Đà Nẵng đến cửa khẩu Đăk-Ôc (Việt Nam) sang vùng cao nguyên Boloven (Lào) rồi qua cửa khẩu Pakse nối tiếp Chongmek - Nakhon - Bangkok (Thái Lan)

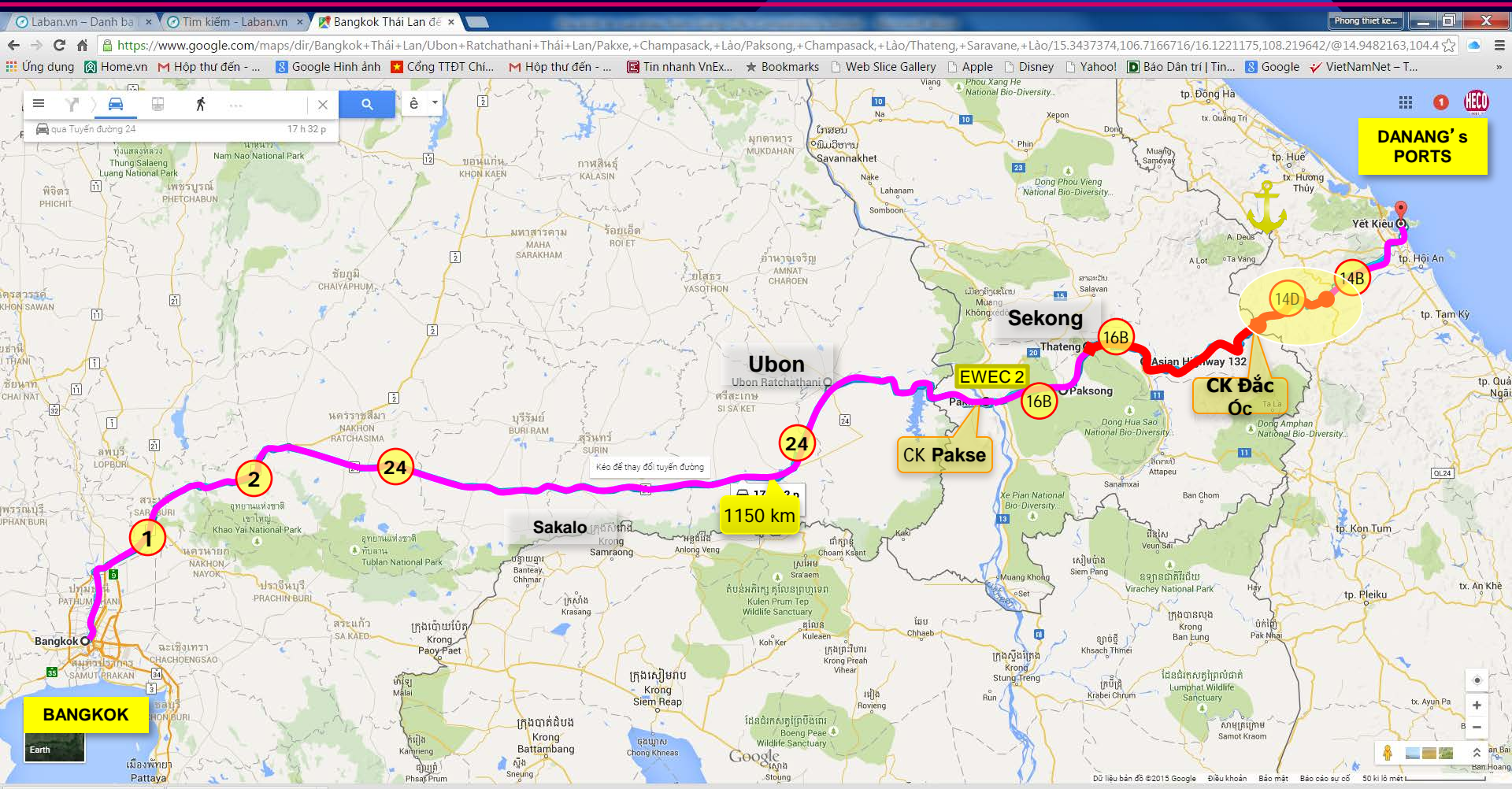
GMS' s EAST-WEST CORRIDOR



Về chiều dài, tuyến EWEC 2 (1150km) có hành trình ngắn hơn các tuyến đường khác nối từ Bangkok - Đà Nẵng từ 70km-170km.

In term of length, the EWEC 2 corridor is less than other highways connecting Bangkok – Danang from 70 km to 170 km.

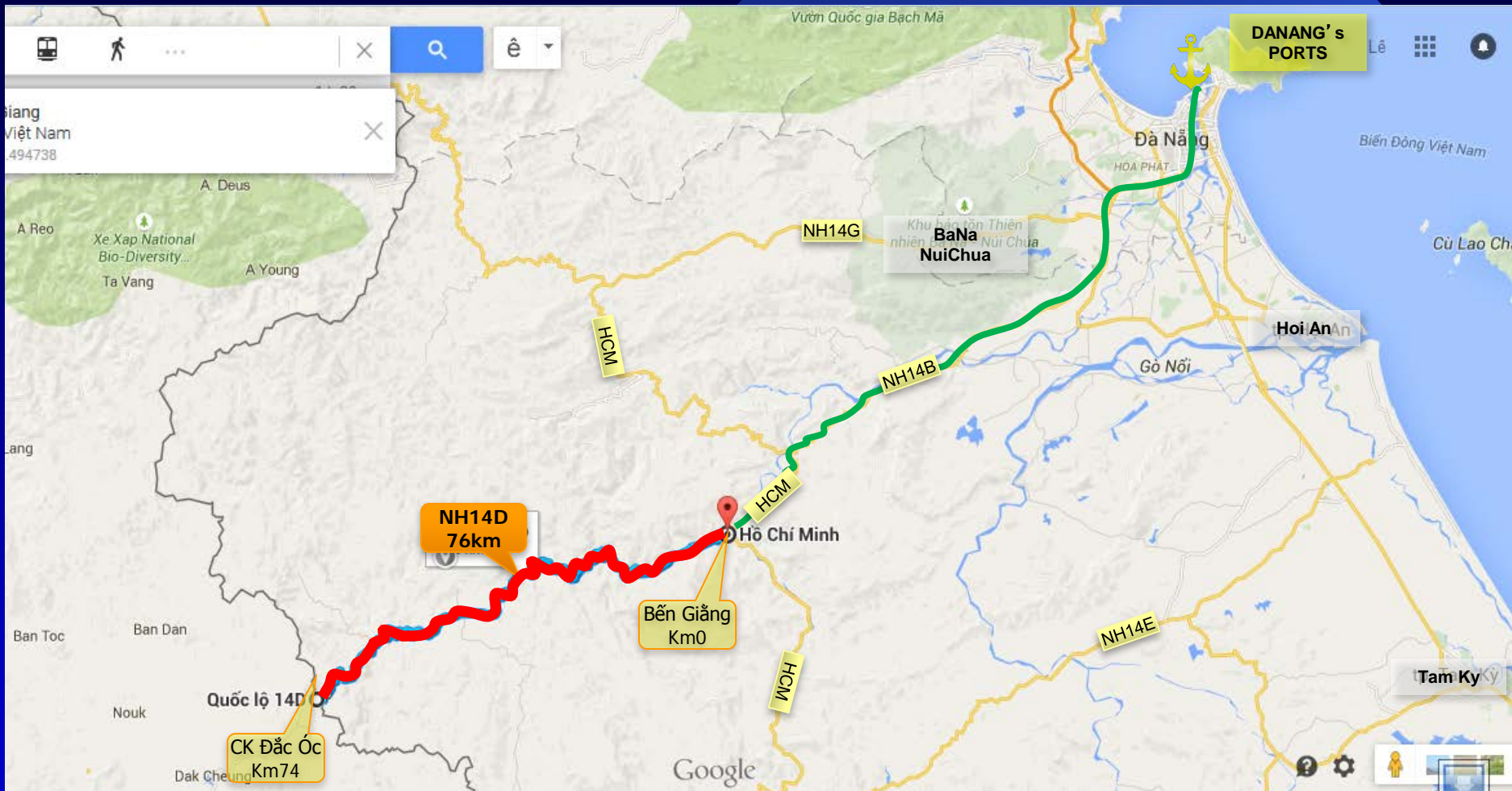
GMS' s EAST-WEST CORRIDOR



Status: EWEC 2 corridor include: the NH1, NH2, NH24 (Thailand) was a good investment. The NH16B (Laos) has reached the class of investment IV. In Vietnam, HCM route and NH14B has invested IV, III class.

Only about 123km from Dak-oc border gate to Sekong (Laos) not paving and 76km HN14D from Ben Giang to Dak-oc border gate (Vietnam) have lower standards should be upgraded in order to promote efficiency exploit the entire route.

SECTION IN VIETNAM



Trong địa phận Việt Nam, tuyến hành lang kinh tế Đông Tây gồm QL14D từ cửa khẩu Đắc Ooc đến đường Hồ Chí Minh dài 76km, đi theo đường Hồ Chí Minh và QL14B đến cảnh biển Đà Nẵng. Tất cả các tuyến đều có quy mô 2 làn xe ngoại trừ tuyến QL14D chỉ có 1 làn xe (tiêu chuẩn đường cấp V, nền đường rộng 6,5m, mặt đường rộng 3,5m, mặt đường láng nhựa), đã xuống cấp. Vì vậy, cần thiết đầu tư nâng cấp QL14D để phát huy hiệu quả đầu tư khai thác toàn tuyến hành lang kinh tế Đông – Tây 2.

PROPOSALS

Vietnam's national highway number 14D (NH14) is a part of the corridor connecting southern part of Thailand, Lao RCP and Vietnam's sea ports of Danang.

With the total length of about 1 142 km, the corridor connects the following provinces:

- Thailand: Bangkok, Saraburi, Nakhon Ratchasima, Ubon Ratchathani.
- Laos: Pakse, Pakson, Sekong.
- Vietnam: Danang.

In term of length, the corridor is less than other highways connecting Bangkok – Danang from 70 km to 170 km. Of that, the Thailand's section has been widened and in good condition. The Lao's part is now improved and the works will be finished within 2015.

In Vietnam's territory, the corridor follows NH14D from Đak Ta Ooc border gate to HCM highway (76km). The corridor then follows HCM highway and NH14B to Danang (or NH14E to Quangngai) to form the whole GMS's East-West corridor. All the roads except section of NH14D from Đak Ta Ooc border gate to HCM highway has at least 2 lanes. And the section of NH14D with only one lane and in bad condition, therefore, is the main obstacle to exploit the whole corridor.

In addition, according to Vietnam's Master plan of Seaport system (decision 1037/QĐ-TTg dated 24 Jun 2014), the sea port groups of Danang will be supplemented by Lien Chieu sea port. This port will be widened to ensure 100 000T vessels as a major international sea port of the central region of Vietnam.

IMPROVEMENT of NH14D from Đak Ta Ooc border gate to HCM highway is NECESSARY and URGENT to maximize the use of this GMS's East-West corridor



VIE-TRA-06:Northern East-West Corridor: Son La - Dien Bien - Tay Trang Border Gate (Viet Nam and Laos) section, to connect with the RIF-listed Luang Namtha (LAO) to the Friendship Bridge (LAO/MYA) at Xiengkok-Kainglap

Description	Subsector	Cost estimate (\$ Million)	Justification/Additional Information
This is the shortest route to connect the Northern Laos and the Northeast of Myanmar, through the Northwest of Viet Nam to the Hai Phong international sea port	Road		

Activity/Date					Notes
FS Commenced	FS Completed	Financing Identified	Project Approved/By	Implementation Commenced	

Narrative:



Recommendations

- ADB to provide support to survey to open scheduled passenger bus routes from VN – Laos and Thai as well as VN – Laos and Cambodia and vice versa
- Support preparation road (i) Son La - Dien Bien - Tay Trang Border Gate (Viet Nam and Laos) section, to connect with the RIF-listed Luang Namtha (LAO) to the Friendship Bridge (LAO/MYA) at Xiengkong-Kainglap, (ii) Southern corridor improvement (NH19 in VN and NR 178 in Cambodia), (iii) North South Corridor (NH 3 in VN section Bac Can – Cao Bang 150 km to connect with Ta Lung – Shuikou border....



Thank You



Transport Sector Monitoring Report under the GMS RIF-IP¹

As of 30 June 2015

I. Transport Sector Investment Projects

Code/Name of Project	Country Coverage	Cost US\$ m	Status at 30 June 2015
Cambodia			
1	CAM-TRA-01 Sihanoukville Port Access Road Improvements	40.0	The JICA-funded port project does not include improvement of this road. To be deleted. ²
2	CAM-TRA-02 GMS: Deepening Connectivity of Southern Economic Corridor Project	200.0	The Government has redefined the scope of the project to a Second Provincial Road Improvement Project. This will achieve the intended deepening of connectivity by providing hinterland linkages within the GMS Southern Economic corridor and will also provide multi-modal connectivity with the existing railway. Feasibility study is to be completed by November 2015, for planned project approval in 2016.
3	CAM-TRA-03 Phnom Penh–Sihanoukville Highway Corridor Improvements	1,000.0	Feasibility study being undertaken by a possible developer. A legal basis for a project of this nature is to be developed.
4	CAM-TRA-04 Link Road between NR5 and NR6 near Kampong Tralach North of Phnom Penh	65.0	No progress to date. Project scheduled for implementation from 2019.
5	CAM-TRA-05 Construction of Poipet (CAM)–KlongLoeuk (THA) Railway Bridge	0.5	To be completed in 2015.
People's Republic of China			
6	PRC-TRA-01 Yunnan Pu'er Regional Integrated Road Network Development	540.0	ADB Loan Agreement signed June 2015. Implementation is to commence in 2016
7	PRC-TRA-02 Dali–Ruili Railway	4,500.0	Construction of the section from Dali to Baoshan commenced in 2008, and the section from Baoshan to Ruili commenced in

¹ The status of projects presented in these tables are based on the RIF-IP monitoring tables submitted by the countries and already incorporates the results of the discussions at the Nineteenth Meeting of the GMS Subregional Transport Forum (STF-19) held on 3-4 August 2015 in Phnom Penh, Cambodia.

² Projects to be deleted are shown as shaded in the tables.

				2014. Project scheduled for completion in 2020
8	PRC-TRA-03 Further Maintenance and Improvement of the Upper Mekong River Navigation Channel from PRC (Landmark 243) and Myanmar to LuangPrabang, Lao PDR	PRC Lao PDR Myanmar Thailand	370.0	PRC, LAO PDR, Myanmar and Thailand have agreed in principle the implementation of the project and are now setting up a joint working group to prepare for preliminary work. Feasibility study to commence by end 2015.
9	PRC-TRA-04 Yuxi–Mohan Railway	PRC	7,400.0	Feasibility study was completed in 2014. Government approval is proceeding. Construction is expected to commence before the end of 2015.
Lao People's Democratic Republic				
10	LAO-TRA-01 Vang Tao Border–Crossing Point	Lao PDR	15.0	Scheduled for completion in December 2016.
11	LAO-TRA-02 Upgrading NR13N and N13S (Portion through Phon Hong–Vientiane Capital–Ban Hai); ASEAN Highway AH11 (NR13S)	Lao PDR	320.0	The World Bank supported a feasibility study (completed in December 2014) as a pilot PPP. Government and private sector consultations for financing alternatives took place in April 2015. Target date for project commencement is October 2016.
12	LAO-TRA-03 Mekong Bridge at Bungkan–Paksan	Lao PDR Thailand	TBD	Feasibility study completed in August 2014. Detailed design is complete. Discussions between LAO and THA governments about financing are continuing.
13	LAO-TRA-04 Thanaleng Border–Crossing Infrastructure Improvement Project	Lao PDR	25.0	Financing source for the feasibility study is being sought.
14	LAO-TRA-05 MuongNgeune–Chomphet–LuangPrabang	Lao PDR	90.0	Funding from NEDA has been secured. Procurement completed in May 2015. Project implementation is expected to commence in September 2015
15	LAO-TRA-06 Upgrading of NR8 East–West Transport Route; ASEAN Highway AH15 (Ban Lao–Nan Pao)	Lao PDR	80.0	Preliminary study completed with Government of Korea (KOICA) assistance in February 2015. Further KOICA assistance for a detailed feasibility study in 2016 is being discussed.
16	LAO-TRA-07 Xiengkok River Port	Lao PDR	15.0	Detailed design completed in December 2013. Discussions between LAO and PRC governments for implementation financing are proceeding. Implementation could commence

Appendix 7

				in early 2016.
17	LAO-TRA-08 Ban Mom River Port	Lao PDR	12.0	Financing for the feasibility study being discussed with PRC.
18	LAO-TRA-09 Lalay Border– Crossing Point (NR15)	Lao PDR	4.0	Feasibility study completed in Aug 2013. Financing for implementation not yet identified.
19	LAO-TRA-10 Nam Phao Border– Crossing Point (NR8)	Lao PDR	8.0	Financing for feasibility study not yet identified.
20	LAO-TRA-11 Na Phao Border– Crossing Point (NR12)	Lao PDR	10.0	Financing for feasibility study not yet identified.
21	LAO-TRA-12 Luang Namtha– Xiengkok Lao–Myanmar Friendship Bridge (NR17)	Lao PDR Myanmar	150.0	Financing for a pre-feasibility study being discussed with the World Bank. Viet Nam has also participated in meetings. (Also refer to VIE-TRA-06 #42)
22	LAO-TRA-13 Lao PDR–Myanmar Friendship Bridge over the Mekong at Xianglok	Lao PDR Myanmar	30.0	The bridge was completed and opened in May 2015.
23	LAO-TRA-14 Vientiane–Boten Railway Project	Lao PDR	7,200.0	Discussions between the LAO and PRC governments about financing are continuing. A project commencement date has not yet been determined.
Myanmar				
24	MYA-TRA-01 East–West Economic Corridor Eindu– Kawkareik Road Improvement	Myanmar	150.0	Detailed design completed in March 2015. ADB financing for the project scheduled for approval late 2015. JICA financing for a major bridge within the project is being discussed. Cost increase from RIF-IP reflects latest estimates for both parts of the project. Procurement for the ADB-financing part is proceeding, with implementation scheduled to commence in mid-2016.
25	MYA-TRA-02 Mae Sot–Myawaddy Border Crossing Project and Infrastructure Improvements (with THA)	Myanmar Thailand	0.0	Implementation to commence in July 2015 under grant financing from the Government of Thailand. (\$30 million see THA-TRA-06 #33)
26	MYA-TRA-03 Improvement of Inland Ports	Myanmar	60.0	The project is to establish 6 inland ports along Ayeyarwaddy and Chindwin rivers. Feasibility study for Mandalay port completed in March 2014. Financing for its implementation is being sought, for which the Government is seeking JICA support.

Appendix 7

27	MYA-TRA-04 Lao Myanmar Friendship Bridge over the Mekong River at Xiengkok-Kainglap	Lao PDR Myanmar	30.0	The bridge was completed and opened in May 2015.
Thailand				
28	THA-TRA-01 Bang Yai–Kanchanaburi Intercity Motorway Project (part of the LaemChabang-Bangkok-Dawei[MYA] corridor)	Myanmar Thailand	2,000.0	Project approved by Government in July 2015. Financing for implementation not yet identified.
29	THA-TRA-02 Tak–Mae Sot Highway Improvement Project	Thailand	90.0	Implementation is proceeding. Project to be completed by end 2019
30	THA-TRA-03 Lomsak–Phetchabun Highway Improvement Project	Thailand	120.0	Project approved by Government in May 2015. Implementation on the first section will commence in 2016.
31	THA-TRA-04 Kalasin–Nakrai–Kamcha I Highway Improvement Project	Thailand	140.0	Project approved by Government in May 2015. Implementation on the first section will commence in 2016.
32	THA-TRA-05 Chiang Rai–Chiang Khong Highway Improvement Project	Thailand	80.0	Implementation commenced in 2009. Work is proceeding. Projected to be completed by 2022.
33	THA-TRA-06 Mae Sot–Myawaddy Border Crossing Project and Infrastructure Improvements (THA)	Thailand	116.0	Project approved in July 2014. Implementation commenced in July 2015 under grant financing from the Government of Thailand for the section in Myanmar (\$30 million – see MYA-TRA-02 #25).
34	THA-TRA-07 Mekong Bridge at Bungkan–Paksan	Thailand Lao PDR	TBD	Feasibility study was completed in August 2014. Detailed design is complete. Discussions between LAO and THA governments about financing are continuing.
35	THA-TRA-08 LaemChabang Port Development Project, Phase 3— Feasibility Study	Thailand	5.0	Feasibility study largely complete. Environmental and health impact consultations proceeding. Implementation scheduled to commence in 2025.
36	THA-TRA-09 Single Rail Transfer Operator Development Project of LaemChabang Port	Thailand	90.0	Project approved by the Government. Implementation to commence in 2018.
Viet Nam				
37	VIE-TRA-01 GMS Ben Luc–Long Thanh Expressway (Stage 2)	Viet Nam	1,607.0	Project is under implementation with financing from ADB (US\$636m)and JICA(US\$635m).

38	VIE-TRA-02 GMS Ha Noi–Lang Son Expressway	Viet Nam	1,400.0	ADB financing for the section of the project in Lang Son province (US\$447 million) included in 2016 country program. Other sections are being implemented though PPP or similar financing.
39	VIE-TRA-03 Second GMS Southern Coastal Corridor	Viet Nam	373.0	Feasibility study completed in December 2012. Project proposed for inclusion in ADB's program for 2016-2018.
40	VIE-TRA-04 Second GMS Northern Transport Network Improvement (LuangPrabang–ThanhHoa) (additionalfinancing)	Viet Nam Lao PDR	145.0	The Government approved the project in June 2015. Negotiations with ADB for the project loan are scheduled for Sept 2015.
41	VIE-TRA-05 National Highway 14D Improvement Project	Viet Nam	130.0	Feasibility study to be completed by end 2016. ADB loan for the project is proposed in 2017 program.
42	VIE-TRA-06 Northern East–West Corridor: Son La–Dien Bien–TayTrang Border Gate (Viet Nam and Lao PDR) connecting with theLuangNamtha (LAO) to the Friendship Bridge (LAO–MYA) project at Xiengkok–Kainglap	Viet Nam Lao PDR	TBD	Discussions with World Bank are proceeding about regional financing for the project.

II. Technical Assistance Projects

	Name of Project	Country Coverage	Cost US\$ m	Status at 30 June 2015
1	VIE-TRA-TA-01 Highway 14D Improvement Project	Viet Nam	1.0	No activity to date
2	REG-TRA-TA-02 Second GMS Northern Transport Network Improvement: LuangPrabang (LAO)–ThanhHoa (VIE)	Lao PDR Viet Nam	1.5	Included in ongoing additional financing for two investment projects, in LAO and VIE
3	VIE-TRA-TA-03 Proposed Hoa Lac–HoaBinh City Expressway PPP Project Feasibility Study	Viet Nam	1.0	Likely to be financed by a private sector developer
4	REG-TRA-TA-04 Feasibility Study for the Rail Link Between LaemChabang Port and Dawei Deep Sea Port Project	Myanmar Thailand	3.0	THA comment: An initial feasibility study commenced in Oct 2014 and was completed in April 2015.
5	REG-TRA-TA-05 Building Institutional Capacity of the Greater Mekong Railway Association	All GMS countries	0.2	TA is ongoing
6	REG-TRA-TA-06 GMS Road	All GMS	1.2	ADB will discuss further with the

Appendix 7

	Corridors Maintenance	countries		governments
7	REG-TRA-TA-07 Strategic Study on the Development and Management of the GMS Motorway Network System	All GMS countries	TBD	No activity to date.
8	REG-TRA-TA-08 Knowledge Transfer between Thailand and GMS Member Countries on Highway and Bridge Standards and Specifications, including Transport Facilitation Facilities	All GMS countries	0.4	No activity to date
9	REG-TRA-TA-09 Promotion and Application of the Northeast Asia Logistics Information Service Network (NEAL-NET) in the GMS	All GMS countries	TBD	Initial discussions ongoing between PRC and the other governments
10	REG-TRA-TA-10 Study on Dry Port Development Plan along International Railway Lines Connecting Thailand with Cambodia, Lao PDR, and Myanmar	Thailand with Cambodia, Lao PDR, and Myanmar	TBD	Terms of Reference being prepared. State Railway of Thailand will finance the study.

GMS – STF 19

Progress Report on the Greater Mekong Railway Association

Presented by H.E. Uon Song, Chairman, GMRA

August 3, 2015
Phnom Penh, Cambodia

Contents

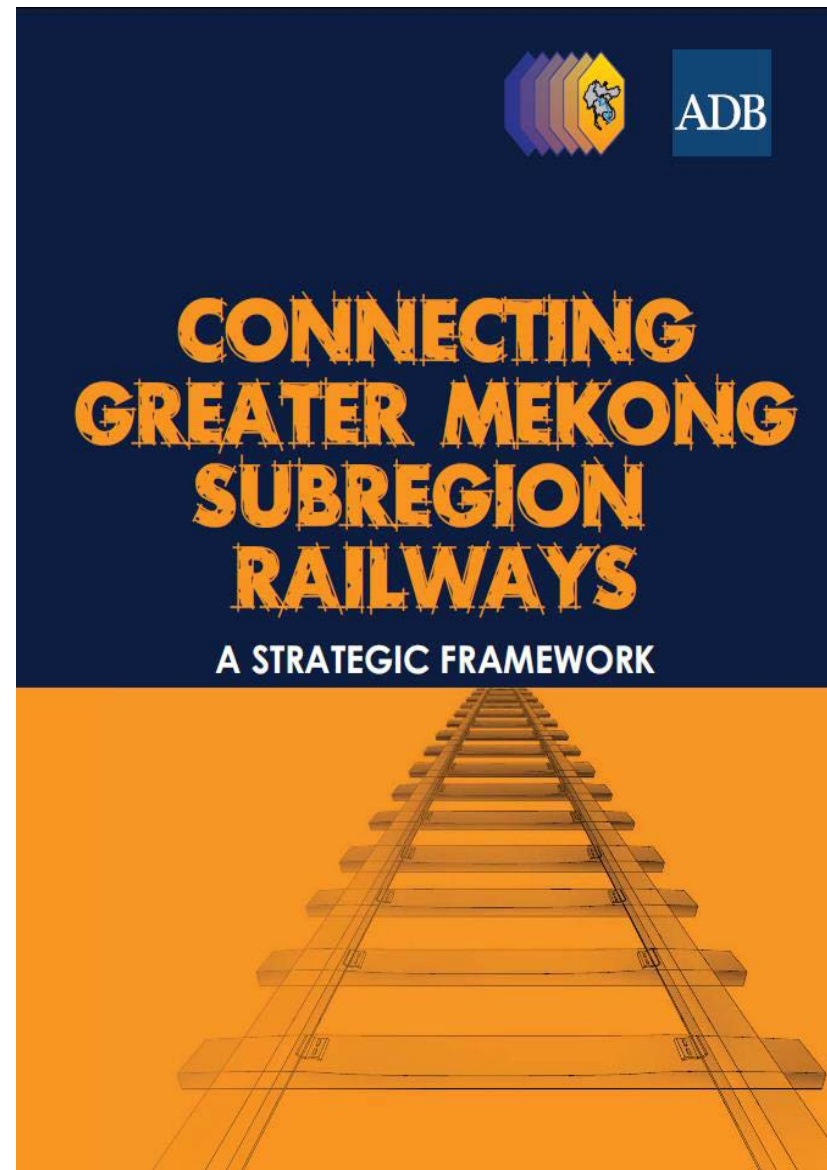
- ▶ Background
- ▶ GMRA Activities
- ▶ GMRA Accomplishments
- ▶ GMRA's Challenges

History

- ▶ Efforts to build a connected railway network in Southeast Asia began with the Singapore- Kunming Railway Link concept (**SKRL**) – which was raised in the late 1990s
- ▶ In 2006, the Trans-Asian Railway Network Agreement (TAR) designated the SKRL as one of the Trans Asian Railways
- ▶ SKRL is now a core ASEAN initiative – part of the ASEAN Master Plan on Connectivity
- ▶ Despite this support, progress on creating an integrated railway network has not been very successful - there are only two connections (Thailand/Lao PDR and PRC/Vietnam)
- ▶ In 2009, ADB commissioned the development of a strategy for connecting GMS railways

One of the key recommendations of the strategic framework was to form an association to develop the railway network

- ▶ Formation of the Greater Mekong Railway Association (GMRA) was ratified at the 18th GMS Ministerial Meeting, Nanning, PRC 12-13 December 2012
- ▶ GMRA membership comprises the 6 GMS countries as the founding members
- ▶ GMRA is a non-legal intergovernmental forum
- ▶ ADB serves as the GMRA's initial Secretariat



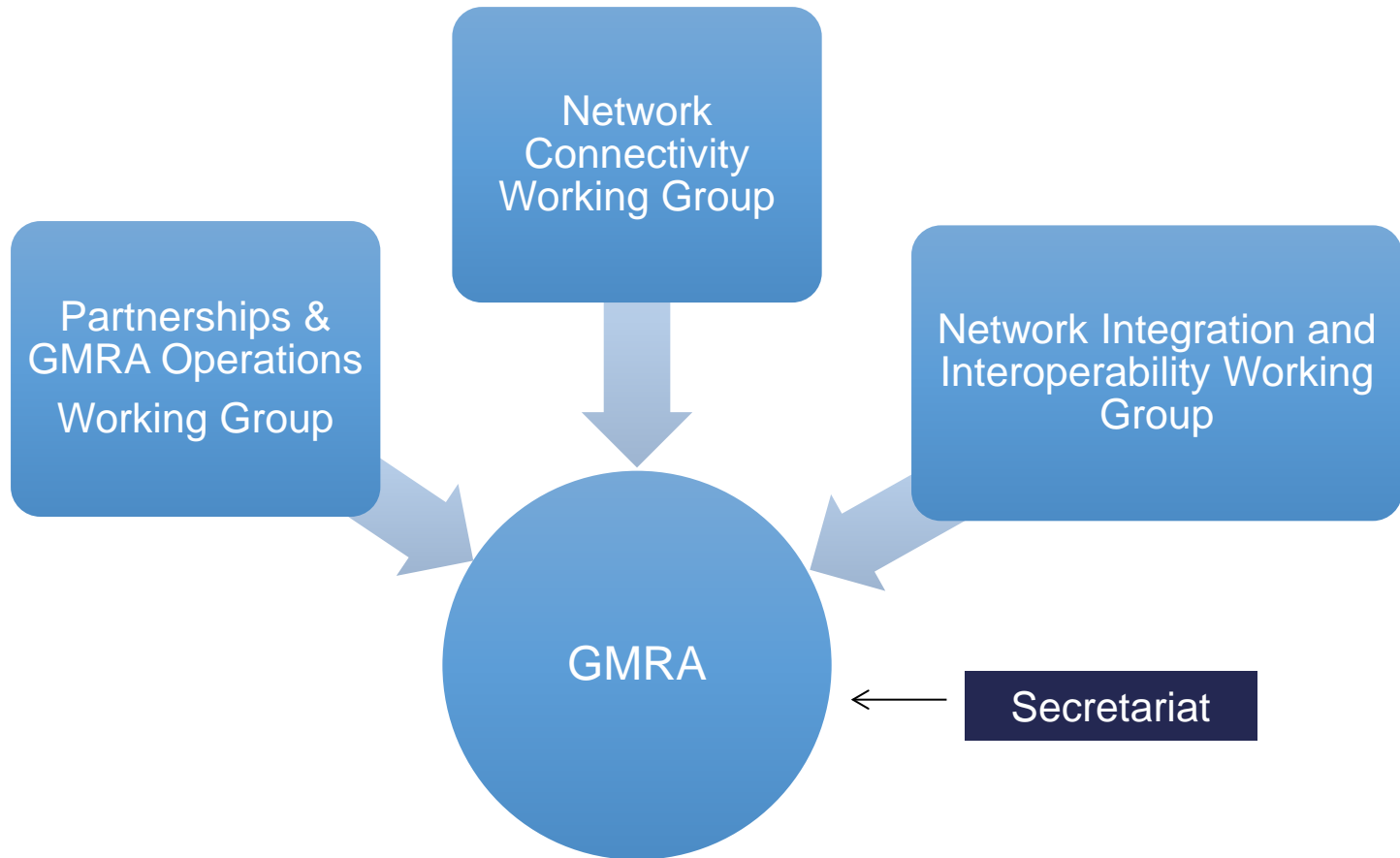
Goals of the GMRA

1. Ensure that all GMS countries are connected to a GMS rail network by 2020.
2. Promote the development of a seamless GMS rail network by:
 - ▶ Agreeing on technical standards of interoperability
 - ▶ Streamlining and harmonizing procedures for cross border movement of goods and people.
3. Develop the institutions and procedures to effectively integrate the national railways across the GMS.
4. Ensure that railways, rolling stock and equipment are modern and sufficient to meet the demand for rail services.
5. Involve the private sector, as required, in the planning and development of the GMS railway network.

GMRA Activities

- ▶ The GMRA held its first General Meeting in Kunming, Yunnan, PRC on 10 March 2015
- ▶ Our activities are organized into three (3) working groups
 - Since October 2014, 5 working group meetings have been held in Cambodia, Thailand (2), Lao PDR and PRC.
 - The next working group meetings are to be held in Da Nang on 15-16 September and 3-4 November.
- ▶ ADB is serving as the GMRA's initial secretariat
- ▶ The GMRA planning for funding its own operations starting in 2016

Organization of GMRA Activities



Tasks of Working Groups

Working Group	Objectives (ToR)	Country Co-Leads
Network Connectivity (future steering group for proposed TA)	<ul style="list-style-type: none"> # Develop plan for completing missing links (ADB has proposed TA to look at pre-feasibility/feasibility studies including costs and timelines) # Develop investment requirements and identify financing options # Develop marketing program to sell to potential financiers # Define reporting requirements and data to be collected 	<ul style="list-style-type: none"> # Cambodia # Vietnam
Network Integration and Inter-operability	<ul style="list-style-type: none"> # Develop agreements/ recommendations <ul style="list-style-type: none"> ✓ Intergovernmental and ✓ Bilateral/Technical, to define <ul style="list-style-type: none"> • Equipment and infrastructure specifications and standards • Safety standards • Modifications to customs, immigration and quarantine (CIQ) systems to ensure enhanced connectivity # Develop Institutions – ticketing and freight billing # Train inter-operability 	<ul style="list-style-type: none"> # Lao PDR # Thailand

Tasks of Working Groups

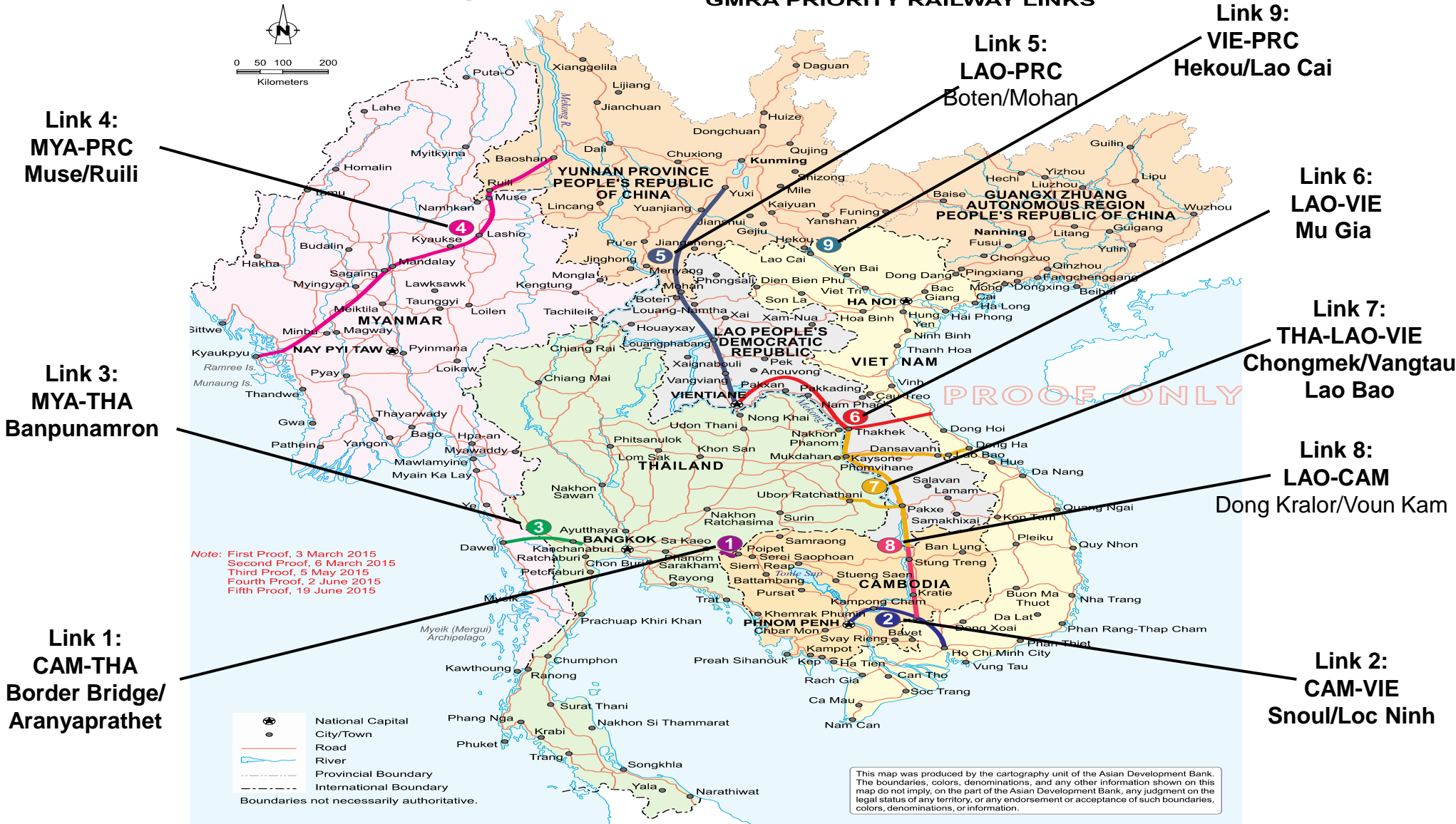
Working Group	Objectives (ToR)	Country Co-Leads
Partnerships and GMRA Operations	<ul style="list-style-type: none"> # Identify various membership options, including outside GMS member countries # Develop approach & methods for attracting private participation/funding in the GMRA, to include best practices of UIC and OSJD # Identify GMRA operational requirements and funding options, especially post ADB support (ending 2016) 	<ul style="list-style-type: none"> # Myanmar # PRC
Secretariat	<ul style="list-style-type: none"> • Support for GMRA Activities 	

GMRA Accomplishments

- ▶ GMRA has agreed on the priority list of missing links
- ▶ Topics under discussion/review are:
 - the terms of a common trans-border agreement for railways
 - technical requirements for interoperability of equipment (and trains, in the long term)
 - conditions for participation in the GMRA by other organizations and private companies
 - budget for post ADB support

GMRA Priority Missing Links

GREATER MEKONG SUBREGION GMRA PRIORITY RAILWAY LINKS



This map was produced by the cartography unit of the Asian Development Bank. The boundaries, colors, denominations, and any other information shown on this map do not imply, on the part of the Asian Development Bank, any judgment on the legal status of any territory, or any endorsement or acceptance of such boundaries, colors, denominations, or information.

Agreed Priority Missing Links

LINK	CORRIDOR	MISSING LINK	Length (km)	Cost Estimate (USD Million)
1	Kunming, Ha Noi, HCMC, Phnom Penh, Bangkok (SKRL Main Line)	CAM: Poipet - Border Bridge/Aranyaprathet	6.5	6.5
		THA: Aranyaprathet - Klong Luk Bridge (Border Bridge with CAM)	6	3.5
2	Kunming, Ha Noi, HCMC, Phnom Penh, Bangkok (SKRL Main Line)	CAM: Bat Doeung - Snoul (Loc Ninh)	258	1300
		VIE: Loc Ninh (Snoul) - Ho Chi Minh City	129	900
3	Kunming, Mandalay, Mawlamyine, Yangon, Bangkok (SKRL West Spur Line)	MYA: Dawei - (Banpunamron)	170	N/A
		THA: Banpunamron - Kanchanaburi	88	136
4	Kunming, Mandalay, Mawlamyine, Yangon, Bangkok (SKRL West Spur Line)	MYA: Lashio - Muse (Ruili)	232	N/A
		PRC: Ruili (Muse) - Baoshan	196	3000
5	Kunming, Vientiane	LAO: Vientiane - Luangprabang - Boten (Mohan)	417	7000
		PRC: Mohan (Boten) - Yuxi	504	7200

Agreed Priority Missing Links (2)

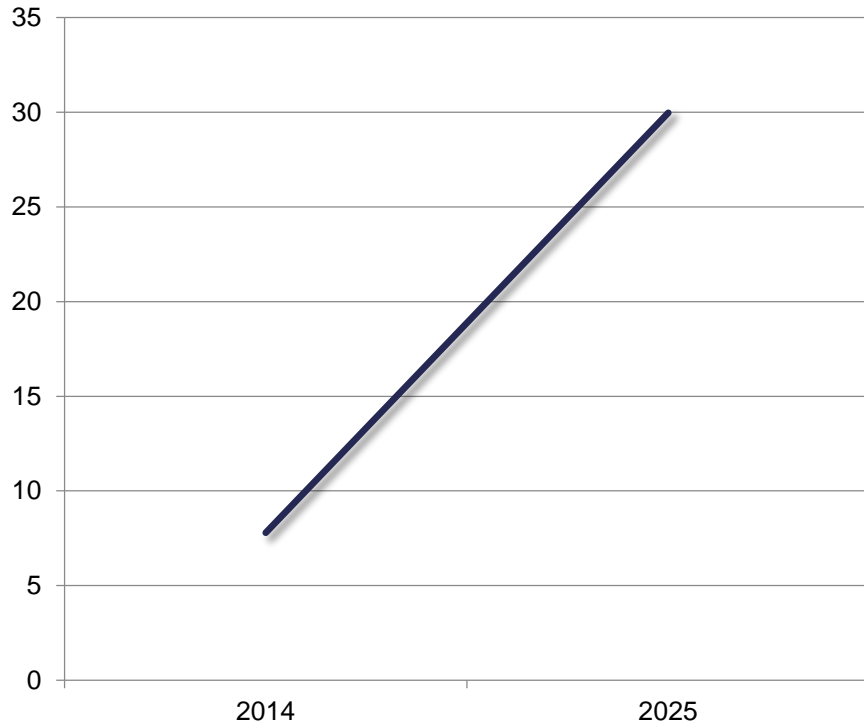
LINK	CORRIDOR	MISSING LINK	Length (km)	Cost Estimate (USD Million)
6	Kunming, Ha Noi, Vung Ang, Thakek, Vientiane (SKRL East Spur Line)	LAO: Vientiane - Thakhek - Mu Gia	450	4119
		VIE: Mu Gia - Vung Ang	119	N/A
7	GMS East-West Corridor	THA: Mukdahan - Savannakhet	N/A	N/A
		LAO: Thakhek - Savannakhet - Pakse - Vangtau (Chongmek)	342	5000
		THA: Ubonrachatani - Chongmek (Vangtau)	78	N/A
		LAO: Savannakhet - Lao Bao	220	5000
		VIE: Lao Bao - Dong Ha	114	800
8	Vientiane - Pakse - Phnom Penh	LAO: Pakse - Dong Kralor (Voun Kam)	N/A	N/A
		CAM: Voun Kam (Dong Kralor) - Snoul	249	1200
9	Kunming, Ha Noi, HCMC, Phnom Penh, Bangkok (SKRL Main Line)	VIE: Lao Cai - Hekou	4	N/A
		PRC: Hekou - Lao Cai	4	20
			Total Estimated Cost	35.685 Million

GMRA Traffic Potential

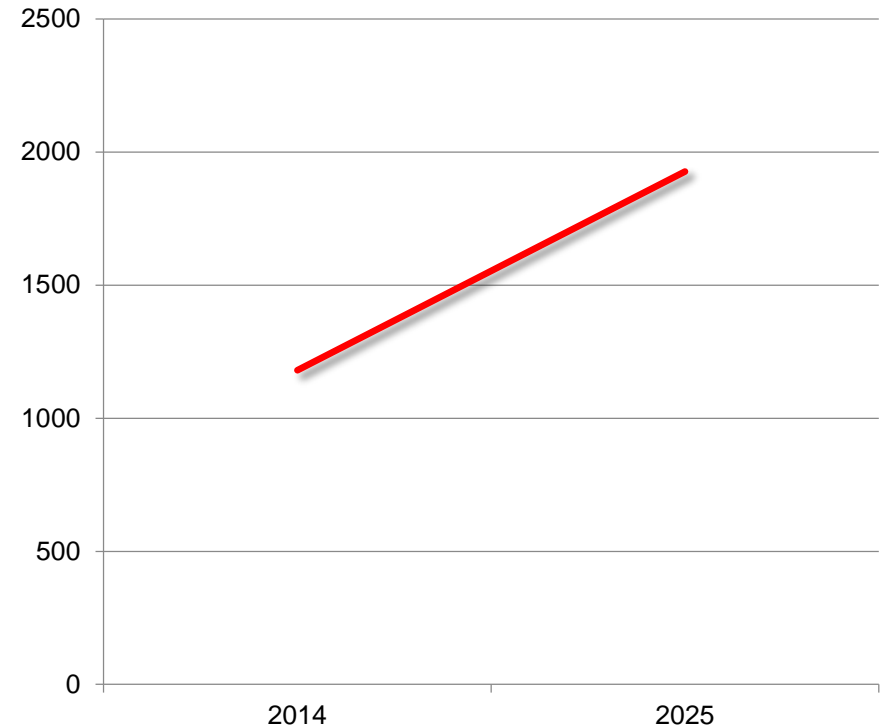
- ▶ A connected railway network has huge potential to carry passengers and freight
- ▶ Projections of railway traffic, made in 2009, showed a market of almost 30 Million tonnes of cargo and 2 Billion passengers
- ▶ Since 2009, GDP growth in the GMS has averaged 6%, as a result of this growth the market potential for railway transport is even more significant
- ▶ In addition to providing a competitive option for shippers and travelers and greater regional connectivity, development of railways has other benefits:
 - it will reduce road traffic and make roadways safer
 - efficient railways use less fuel

Projected Rail Traffic

GMS: Projected Freight by Rail (million tonnes)

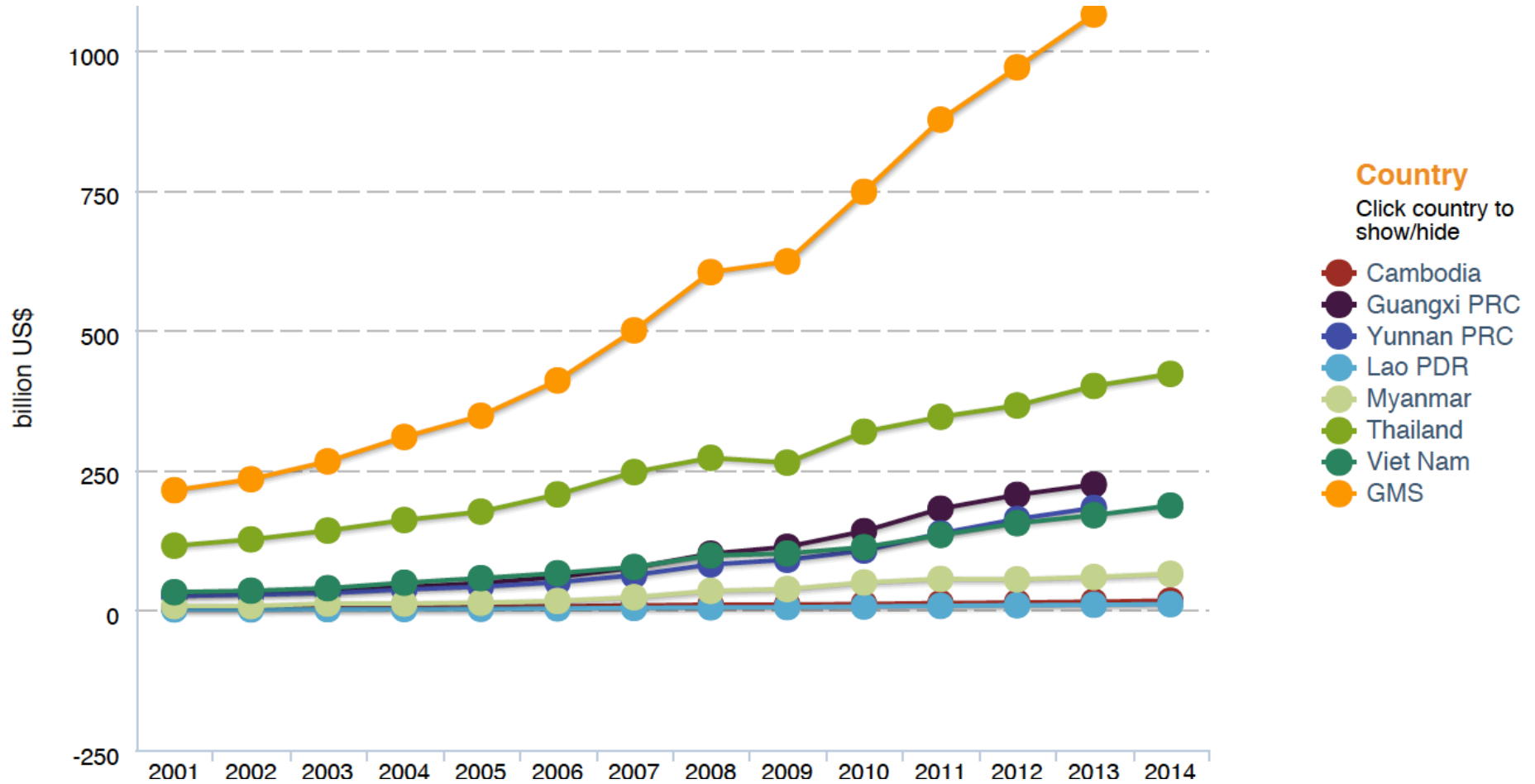


GMS: Projected Passengers by Rail (million passengers)



Source: GMS Rail Strategy Study (ADB)

GMS GDP Growth – Initial traffic projections may be low



Challenges

- ▶ Investment required to develop a connected railway network could cost as much as \$40 Billion, after feasibility studies are updated
- ▶ GMRA's priority challenge is to obtain funding to build these lines – without a railway network the “soft” activities on developing institutions and on interoperability may show little progress
- ▶ GMRA Member Countries face many other issues related to the implementation of the GMRA railway network outside of funding
 - policy issues related to financing options (Government, BoT, Regional)
 - need to ensure that the existing national networks are upgraded and operating efficiently as it make little sense to connect if the national railways are performing poorly
 - environmental and social impact issues related to new railway construction
 - lack of railway regulatory institutions in GMRA Member countries, except for PRC

Challenges

- ▶ To address these issues from a regional perspective, the proposed ADB TA to assist in examining issues related to financing and implementation needs to be approved as soon as possible
- ▶ By mid-2016, ADB support to the GMRA (as Secretariat) will likely end.
 - GMRA is considering how to fund itself and may need more than \$500,000 per year
 - GMRA may need an extension of ADB assistance until self-funding arrangements are in place



**MINISTRY OF TRANSPORT
DIRECTORATE FOR ROADS OF VIETNAM**

**Possible Ways of Improving the Operation
and Maintenance of GMS Assets in Vietnam**

**Greater Mekong Subregion: 19th Meeting of the Subregional Transport Forum
3 - 4 August, 2015**

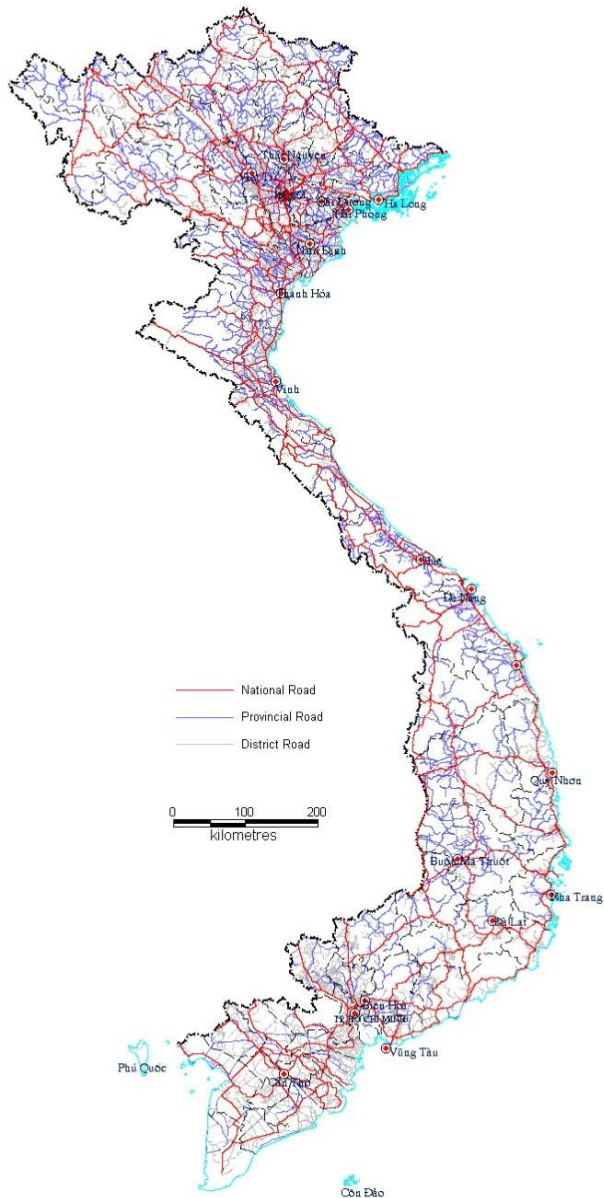
To Nam Toan, PhD

Outline

1. Overview of Vietnam Road System
2. Current Issues for Road Asset Management
3. Vehicle Overload Control in Vietnam
4. Future Works for Road Asset Management

Overview of Vietnam Road System

1. Overview of Vietnam Road System



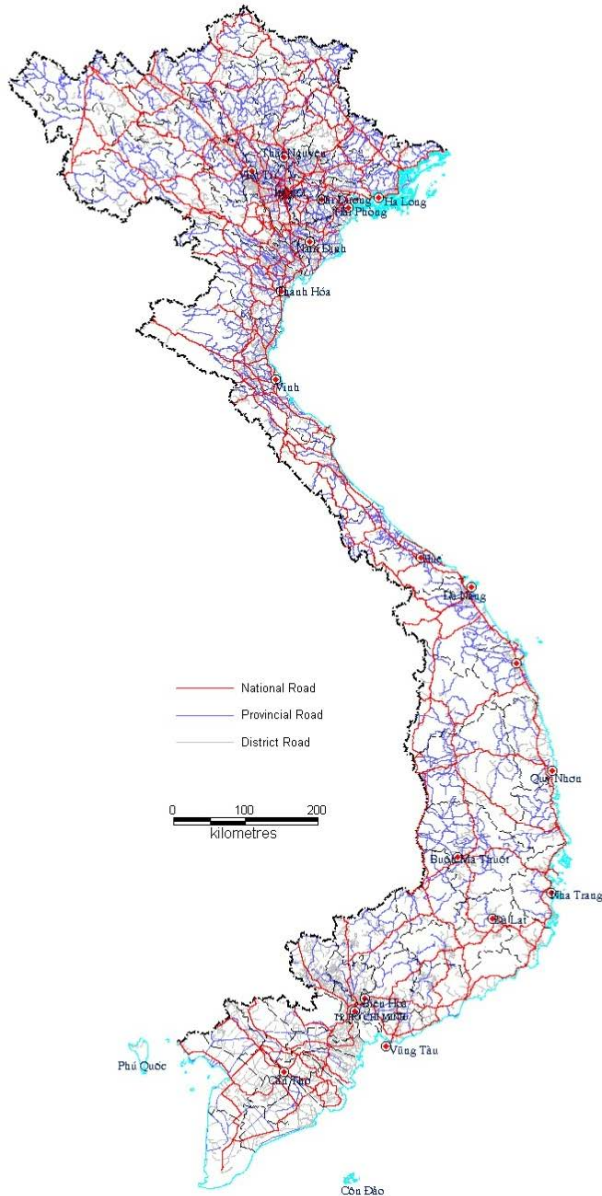
Administrative Classification

No	Road Type	Length (km)	Proportion (%)
1	National Road	21.278	7.32
2	Provincial Road	28.041	9.65
3	District Road	58.696	20.20
4	Commune Road	151.639	52.18
5	Urban Road	20.076	6.91
6	Specialized Road	10.836	3.73
	Total	288.748	100

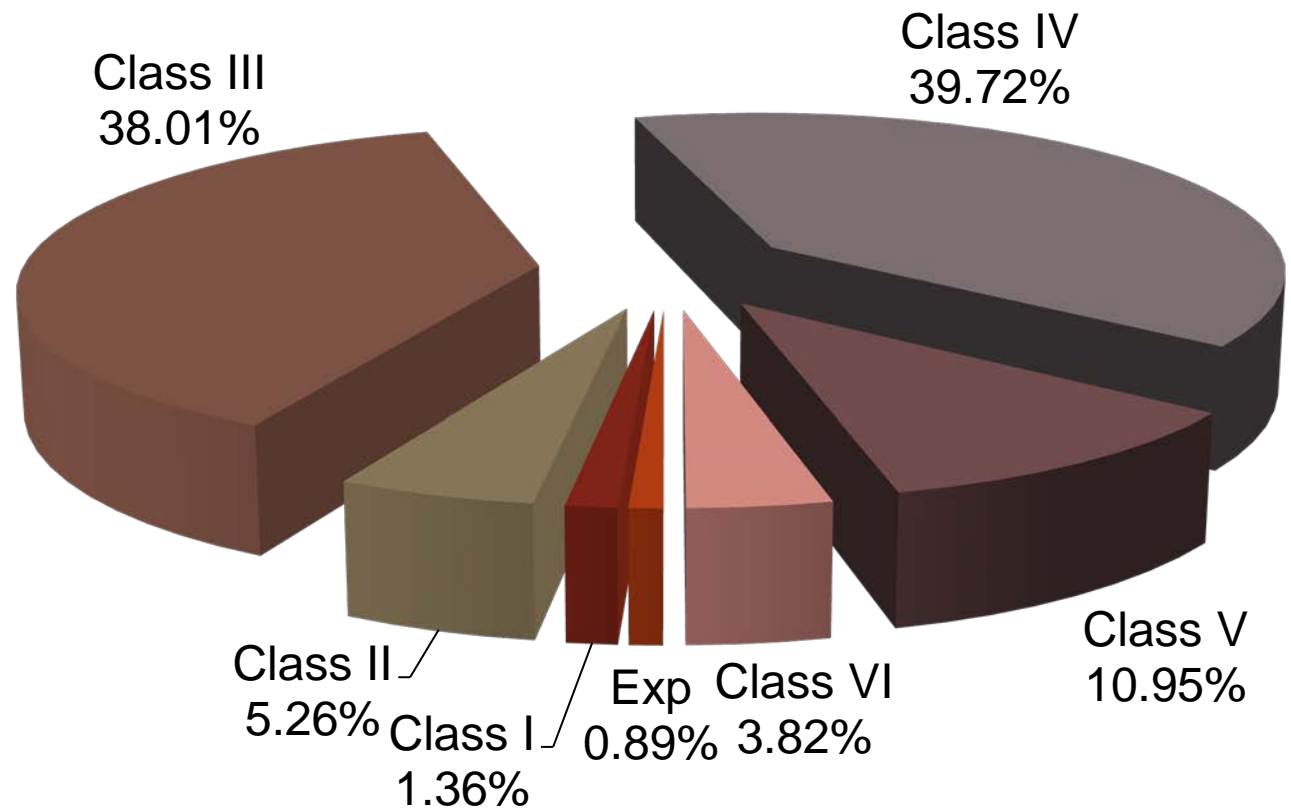
In additional:

- Village Road: 175.134 (km)
- Interior field Road: 106.134 (km)

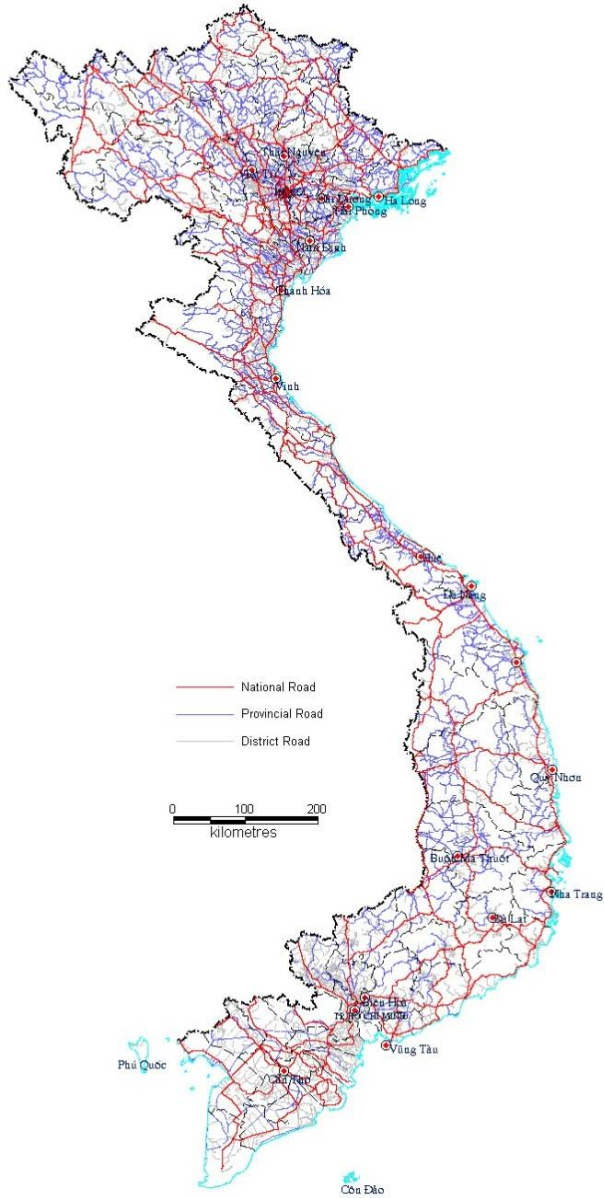
1. Overview of Vietnam Road System



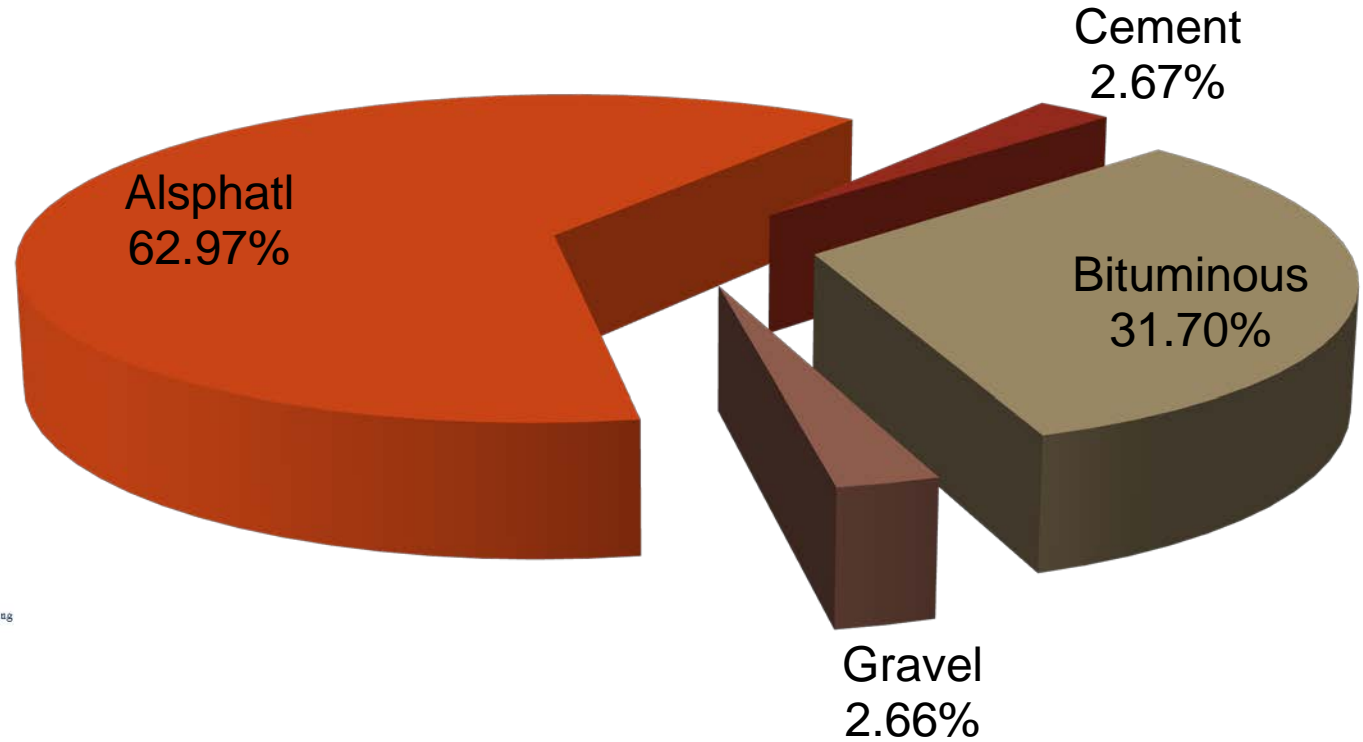
Technical Classification



1. Overview of Vietnam Road System



Pavement Type

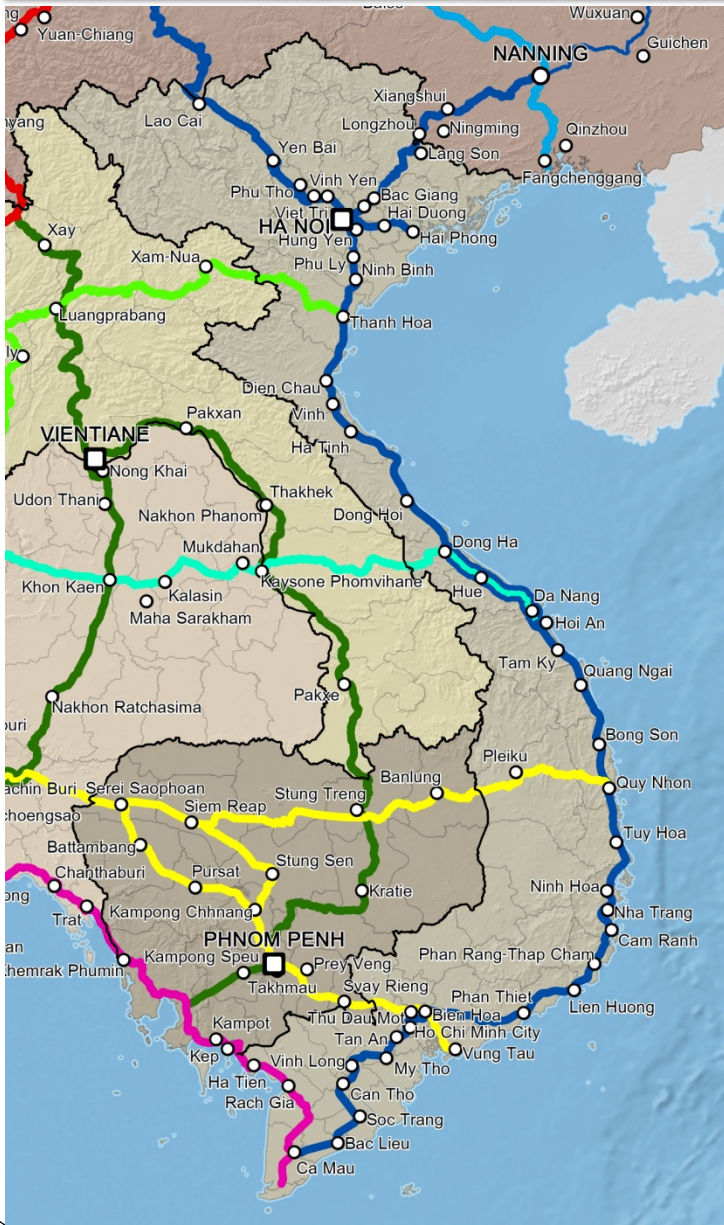


1. Overview of Vietnam Road System

EXPRESSWAY IN OPERATION

No	Road	Length (km)	Funding	Investment (Bil VND)	Operation	O&M
1	Cau Gie – Ninh Binh	50	VEC - Govt Bond	8.974	7/2012	VEC
2	Ring road No3 - Hanoi	28	ODA Japan	5.547	10/2012	Hanoi
3	Lang – Hoa Lac	30	Govt Budget	7.527	10/2010	Hanoi
4	Hanoi – Thai Nguyen	62	ODA Japan	10.004	01/2014	DRVN
5	Noi Bai – Lao cai	245	ADB	30.132	09/2014	VEC
6	Lien Khuong - Dalat	19	BOT	-	06/2008	BOT
7	HCM – Trung Luong	40	Govt Budget	9.885	02/2010	DRVN
8	HCM – Long Thanh	55	ADB & JICA	20.630	01/2014	VEC
9	Lao Cai – Border	19	Govt Budget		5/2015	Laocai
Total		548				

1. Overview of Vietnam Road System



GSM ROAD ASSETS

TT	Section	Length (km)
1	Huu Nghi Quan – Ca Mau	2301
2	Lao Cai – Hai Phong	427
3	Na Meo – Thanh Hoa	194
4	Lao Bao – Tien Sa Port	268
5	Le Thanh – Quy Nhon	243
6	Moc Bai – Vung Tau	175
7	Xa Xia – Nam Can	271

Current Issues for Road Asset Management

2. Current Issues for Road Asset Management

Low National Highway Maintenance Funding

Unit: Billion VND

	Road fund (65%)	Govt. Budget	Total
2013	3.200	1.471	4.671
2014	3.340	2.448	5.788
2015	3.250	3.100	6.350

Comment: Fund allocation to maintenance of national road system for past years only meet 40÷45% demand

2. Current Issues for Road Asset Management

Low National Highway Maintenance Funding

Unit: Billion VND

Routine Maintenance	Flooding recovery Emergency repair		Periodic Maintenance		Other
	Flooding recovery	Emergency repair	Approved	New Const.	
721,48 (12%)	145,32 (2,5%)	328,03 (5.2%)	1496,71 (23,6%)	2746,99 (43,3)	207,52 (3,2%)

Allocated amount: 5646.05 billion VND

Unallocated fund: More than 600 billion VND

Comment: Fund for routine maintenance is not enough

2. Current Issues for Road Asset Management

Vehicle Overload on Road Systems



2. Current Issues for Road Asset Management

Vehicle Overload on Road Systems



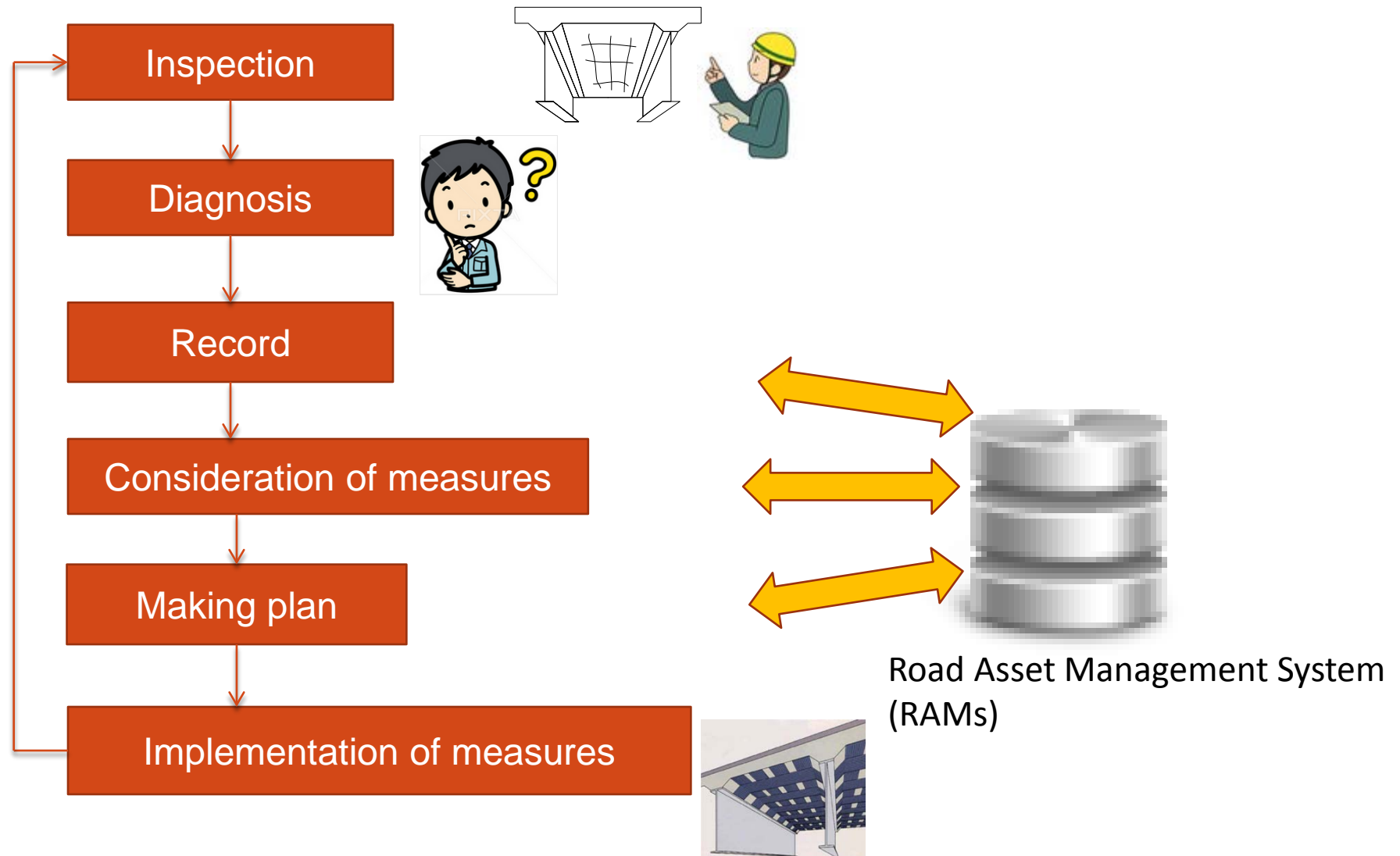
2. Current Issues for Road Asset Management

Old Technology for Road Maintenance



2. Current Issues for Road Asset Management

Road Asset Management System



Vehicle Overload Control in Vietnam

3. Vehicle Overload Control in Vietnam

Legal Framework in Vehicle Overload Control

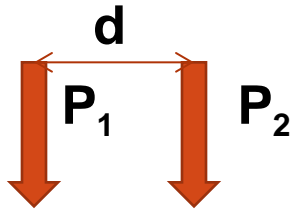
Axle Load

❖ Single Axle



$$P \leq 10T$$

❖ Double Axles



$$d < 1.0\text{m} \Rightarrow P \leq 11T$$

$$1.0 \leq d < 1.3 \text{ m} \Rightarrow P \leq 16T$$

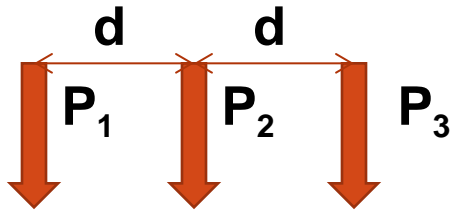
$$d \geq 1.3 \text{ m} \Rightarrow P \leq 18T$$

3. Vehicle Overload Control in Vietnam

Legal Framework in Vehicle Overload Control

Axle Load

❖ Tree Axles



$$d \leq 1.3 \text{ m} \Rightarrow P \leq 21 \text{ T}$$

$$d > 1.3 \text{ m} \Rightarrow P \leq 24 \text{ T}$$

3. Vehicle Overload Control in Vietnam

Legal Framework in Vehicle Overload Control

Vehicle Load

❖ Truck (Single Unit)



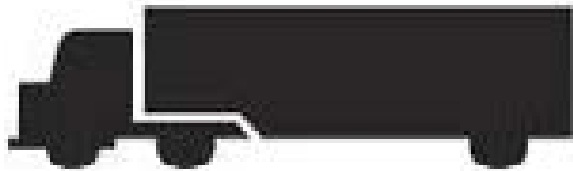
Number of axles	Maximum Vehicle Load (tons)
2	16
3	24
4	30
≥5	34

3. Vehicle Overload Control in Vietnam

Legal Framework in Vehicle Overload Control

Vehicle Load

❖ Semi Trailer



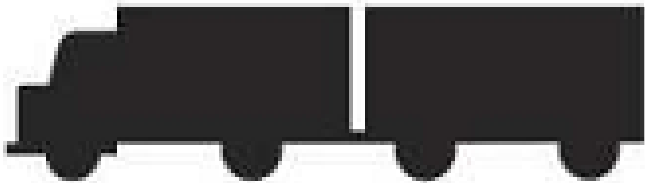
Number of axles	Maximum Vehicle Load (tons)
3	26
4	34
5	44
≥ 6	48

3. Vehicle Overload Control in Vietnam

Legal Framework in Vehicle Overload Control

Vehicle Load

❖ Trailer (Single-unit truck pulling a trailer)



$$P = P_{\text{single-unit truck}} + P_{\text{trailer}}$$

$$P \leq 45T$$

3. Vehicle Overload Control in Vietnam

Legal Framework in Vehicle Overload Control

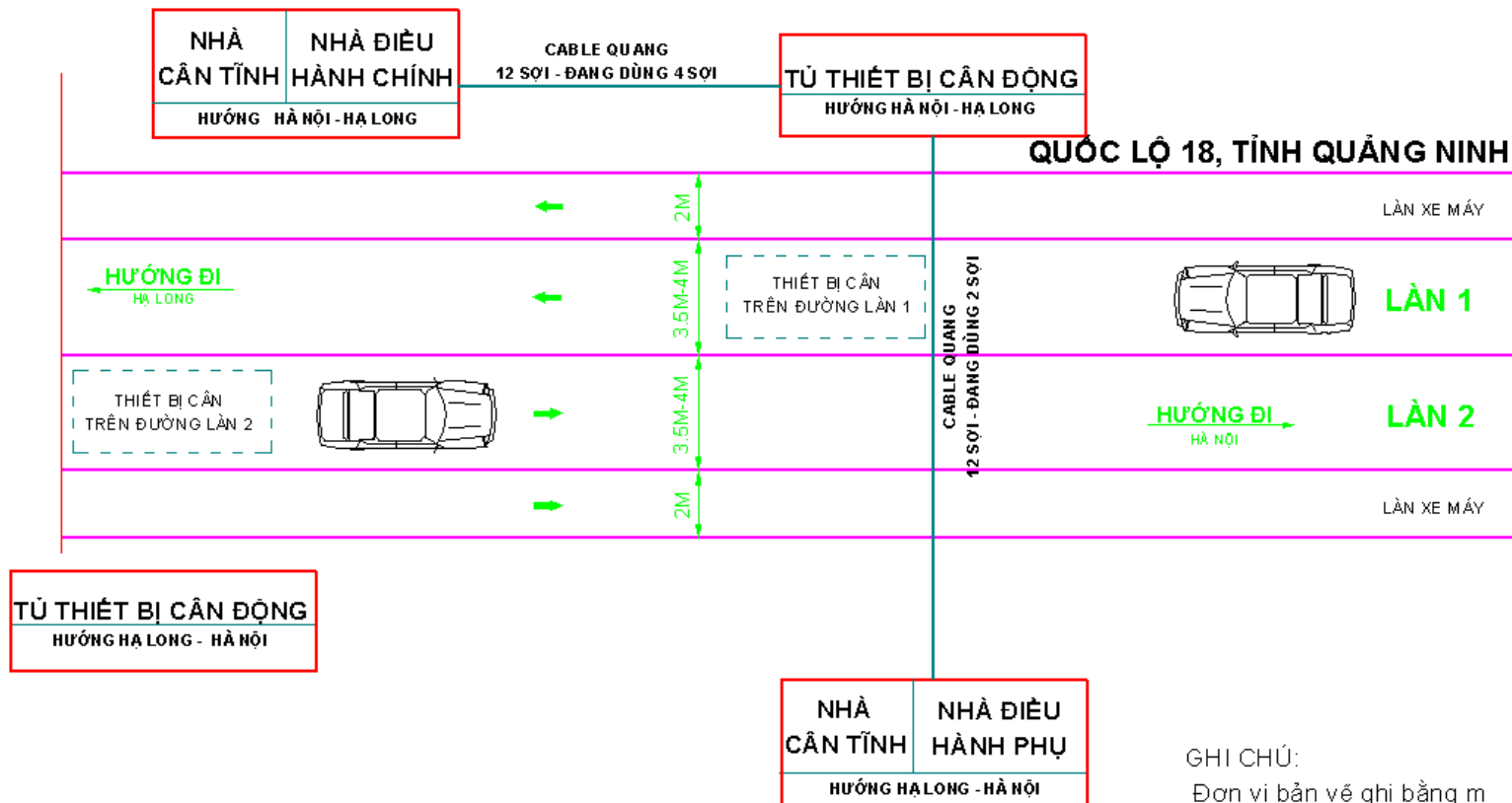
Fine Level for Overload Penalty

		Lowest level	Highest level
For Driver		800.000 ~ 1.000.000 VND	7.000.000 ~ 8.000.000 VND & deprive driver license for 3 month
For Vehicle Owner	Private	2.000.000~4.000.000 VND	16.000.000~18.000.000 VND
	Organization	4.000.000~8.000.000 VND	32.000.000~36.000.000 VND
For Goods Owner		500.000~4.000.000 VND	

3. Vehicle Overload Control in Vietnam

Pilot Weight Station Projects

- Two weight stations in NH18 (Quang Ninh) and NH1 (Dong Nai)



3. Vehicle Overload Control in Vietnam

Pilot Weight Station Projects

- Weight station in NH18 (Quang Ninh): using Quartz (Kisler) WIM technology
- Weight station in NH1 (Dong Nai): using piezo-electric sensor technology



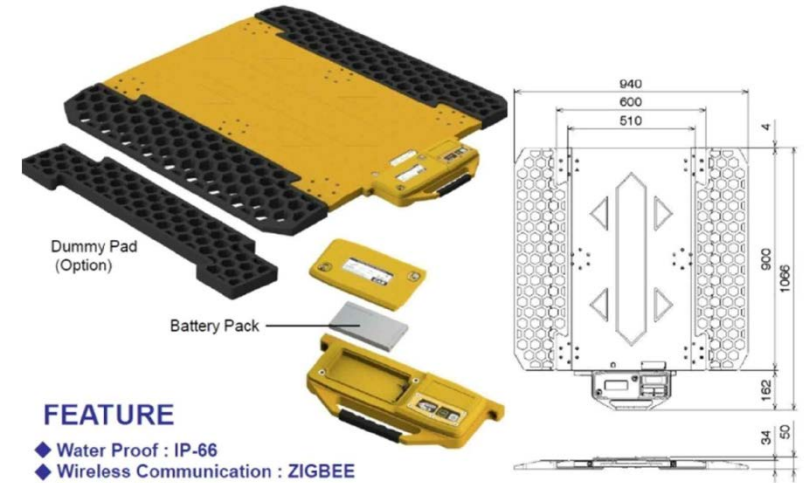
3. Vehicle Overload Control in Vietnam

Moveable WIM Station



3. Vehicle Overload Control in Vietnam

Moveable WIM Station



FEATURE


- ◆ Water Proof : IP-66
- ◆ Wireless Communication : ZIGBEE
- ◆ Low Height (34mm)
- ◆ Easy Battery Pack Exchange (Lithium Polymer Battery)



3. Vehicle Overload Control in Vietnam

Vehicle Overload Control Systems

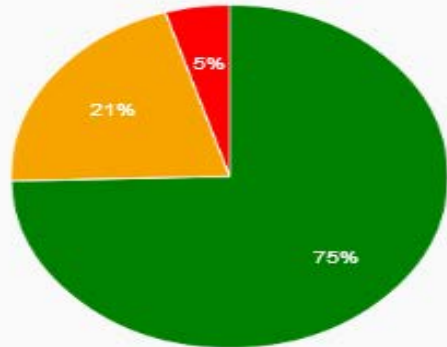
www.drvn.gov.vn Hệ thống được xây dựng bởi Công ty TNHH MTV Hanel




 **BỘ GIAO THÔNG VẬN TẢI**
TỔNG CỤC ĐƯỜNG BỘ VIỆT NAM
DIRECTORATE FOR ROADS OF VIETNAM

PHẦN MỀM GIÁM SÁT VÀ QUẢN LÝ TẬP TRUNG DỮ LIỆU TẢI TRỌNG XE
Xin chào, *admin* | Thoát


TRANG CHỦ | PHIẾU CẢN | TRẠM CẢN | BÁO CÁO | DANH MỤC | QUẢN TRỊ HỆ THỐNG | TRỢ GIÚP

Thống kê trạng thái trạm cản



Thống kê	Tổng
- Tổng số trạm cản hoạt động trong ngày	60
+ Đang hoạt động 	47
+ Đã hoạt động trong ngày, hiện tại nghỉ 	13
- Tổng số trạm cản không hoạt động 	3

Bản đồ phân bố trạm cản



Địa chỉ liên hệ: Lô D20 - Khu Đô thị Cầu Giấy - Hà Nội
Email: tcdbvn@drvn.gov.vn
Điện thoại (Tel.): 84 4 385 714 44
Fax: 84 4 385 714 40

3. Vehicle Overload Control in Vietnam

Vehicle Overload Control Systems

Chi tiết phiếu cân In phiếu cân Xuất Ảnh

Sở GTVT Đồng Nai
Trạm KTTX Lưu động số: TC040


Lý trình: km25+600,ql51 ,long thành , dong nai
Lần cân: 1

PHIẾU CÂN XE

Số: TC040.20150516064605

Hình thức: **Kiểm tra theo tải trọng cho phép của cầu, đường.**

Biển số xe: 51C-499.93/51R-093.21
Loại xe: Xe đầu kéo RM/SMRM
Họ tên lái xe: NGUYỄN VĂN THẠCH
Giấy phép lái xe: FC
Chủ xe: Chưa nhập
Tốc độ xe: 4.10 km/h
Số trục xe: 6
Thời gian xe vào: 16/05/2015 06:45:55
Thời gian xe ra: 16/05/2015 06:46:05
Ngày cân: 16/05/2015
GP.QK/QT số: Chưa nhập
Chế độ cân: Cân động



1 2

STT	Bộ trục xe	Tải trọng bộ trục [tấn]	Sai số cho phép [tấn]	Tải trọng trừ sai số [tấn]	Tải trọng cho phép [tấn]	Tải trọng quá tải [tấn]	Kết luận quá tải (%)
1	Đơn : d=0m	5.6	0.22	5.38	10	0	0
2	Đôi : d>=1.3m	17.72	0.71	17.01	18	0	0
3	Ba : d>1.3m	24.09	0.96	23.13	24	0	0
Tổng cả xe		47.41	1.89	45.52	48.00	0.00	0.00

3. Vehicle Overload Control in Vietnam

Control Vehicle Specification



3. Vehicle Overload Control in Vietnam

Communicating Overload Control on the Media



3. Vehicle Overload Control in Vietnam

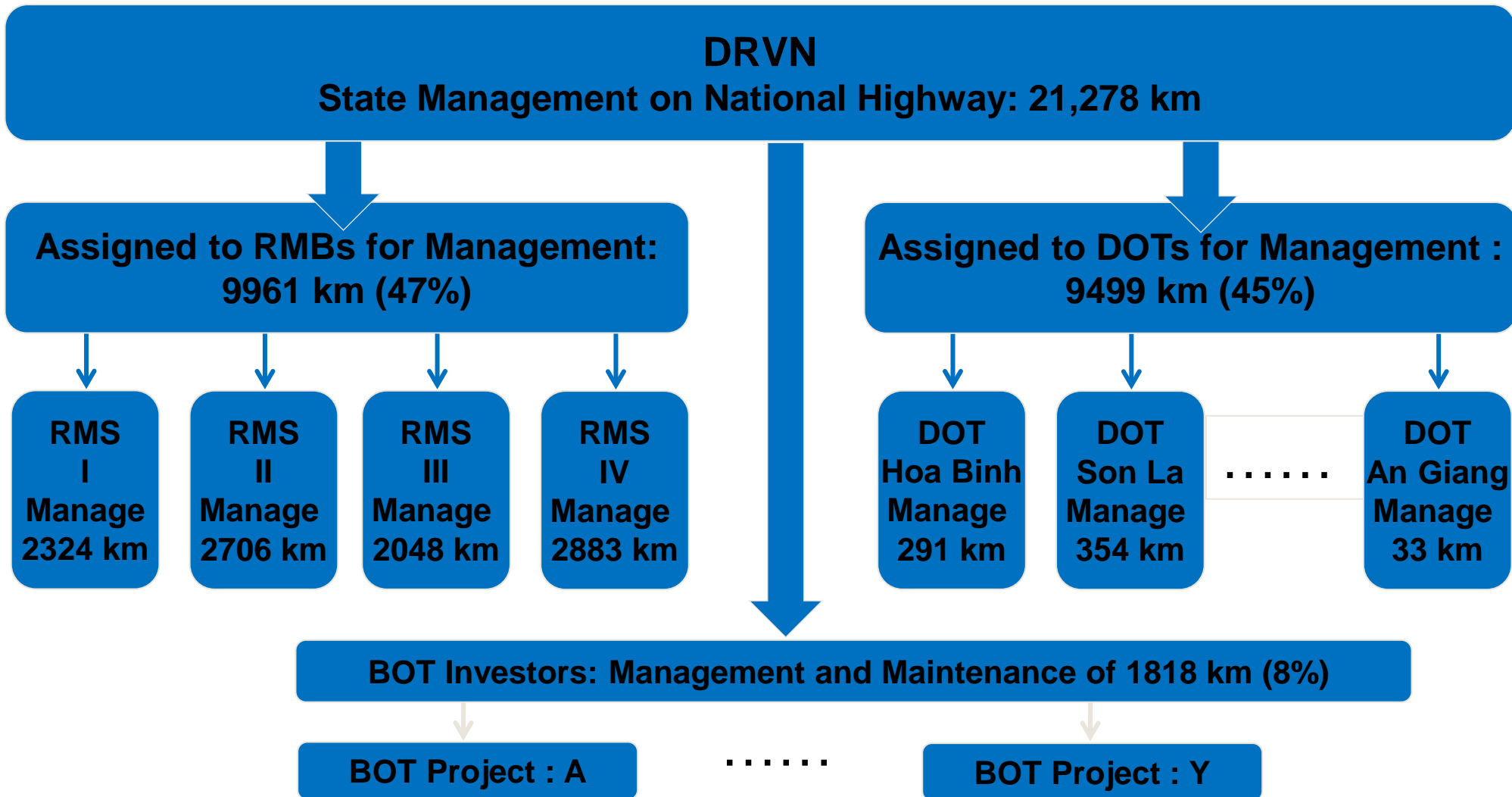
Ask the commitment from vehicle owners and goods owners



Future Works for Road Asset Management

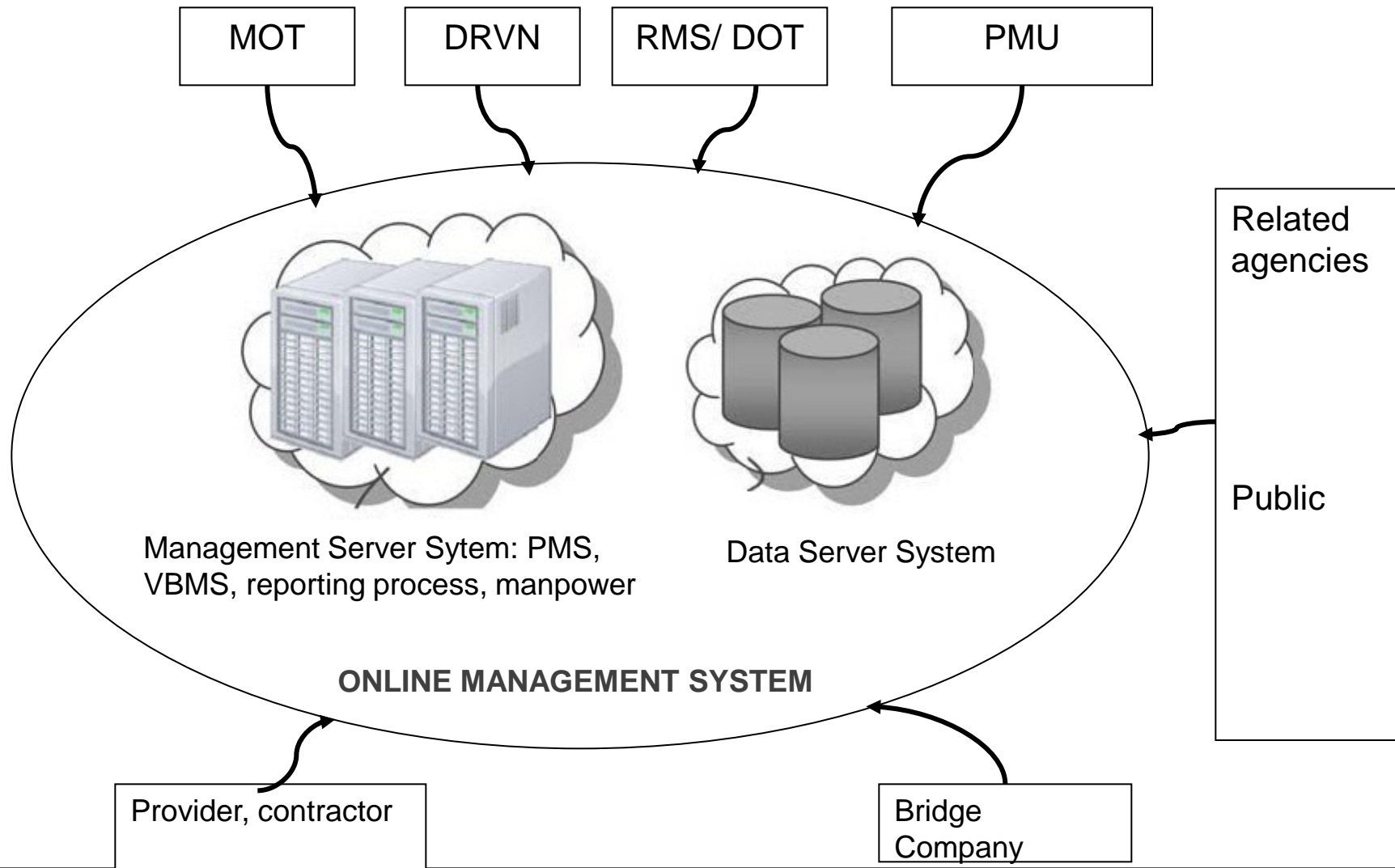
4. Future Works for Road Asset Management

Applying PPP for Road Maintenance



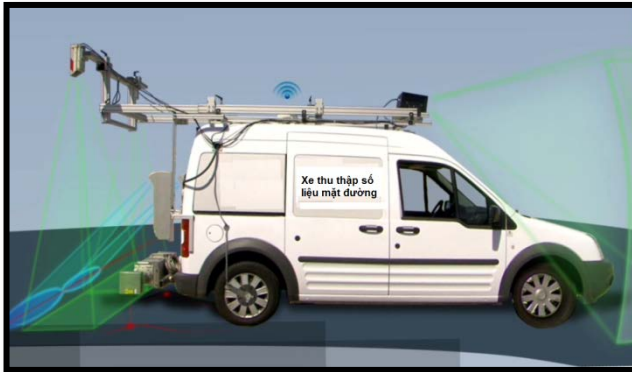
4. Future Works for Road Asset Management

Establish Road Asset Management System



4. Future Works for Road Asset Management

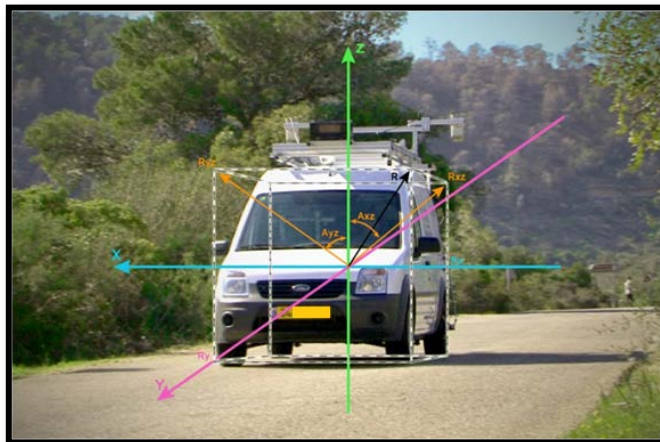
Intensified application of technologies into data collection for developing maintenance plan (1)



Pavement data collection vehicle

On board units:

- Camera;
- Sensors;
- GPS;
- Computer...



Data collection:

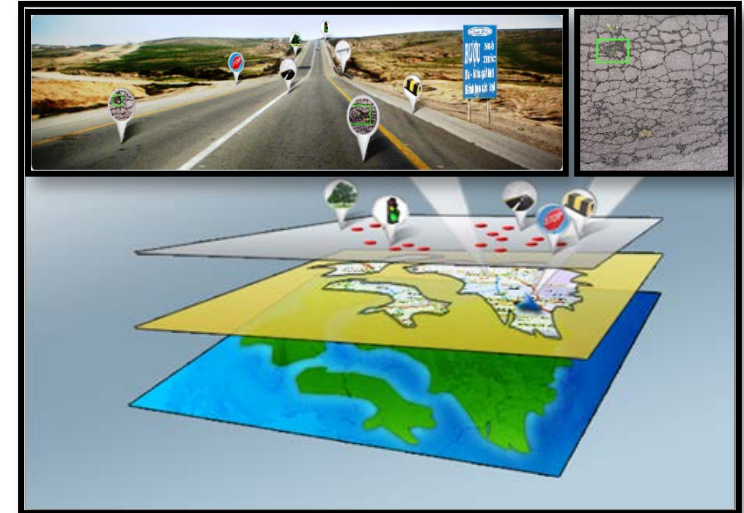
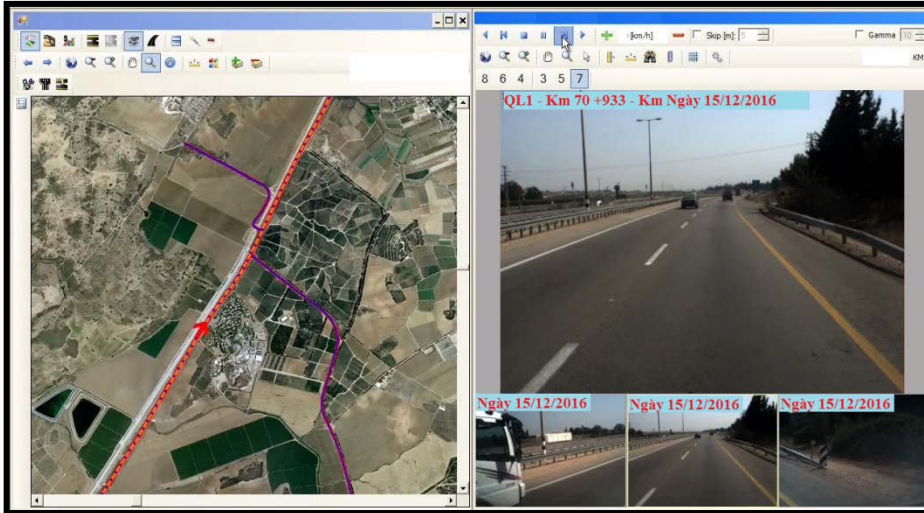
- Geometric dimension
- Rutting;
- Evenness;
- Deterioration...



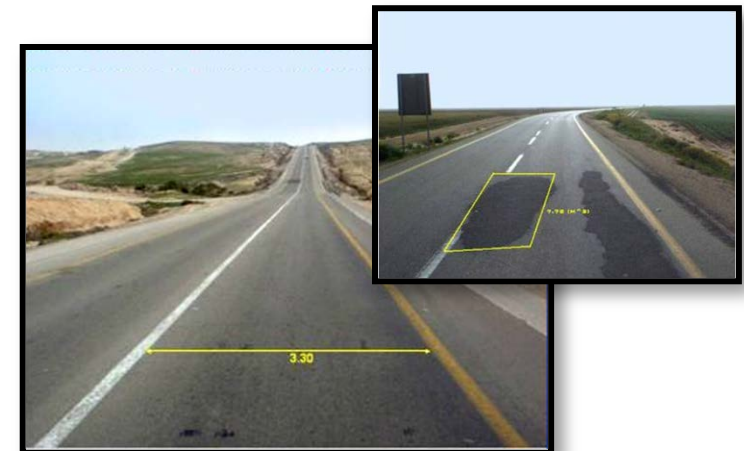
DATA COLLECTION BY SPECIALIZED VEHICLE

4. Future Works for Road Asset Management

Intensified application of technologies into data collection for developing maintenance plan (2)



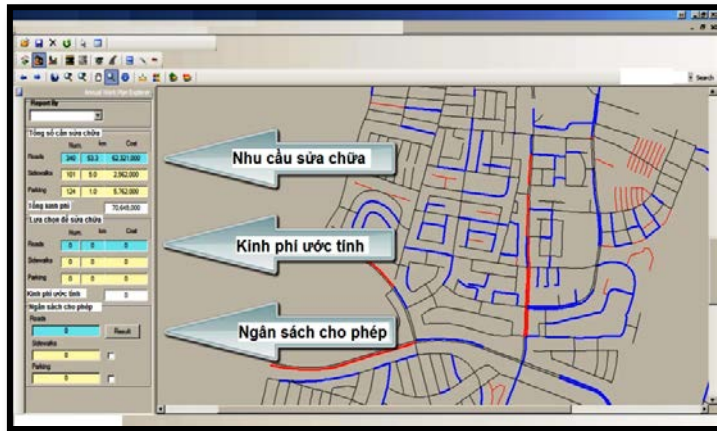
- Data processing, road inventory, determination of road condition (deterioration, rutting and cracking)
- Develop road pavement data on digital maps;
- Synchronize data and display on the digital map by coordinates : Image, pavement data, coordinates ...



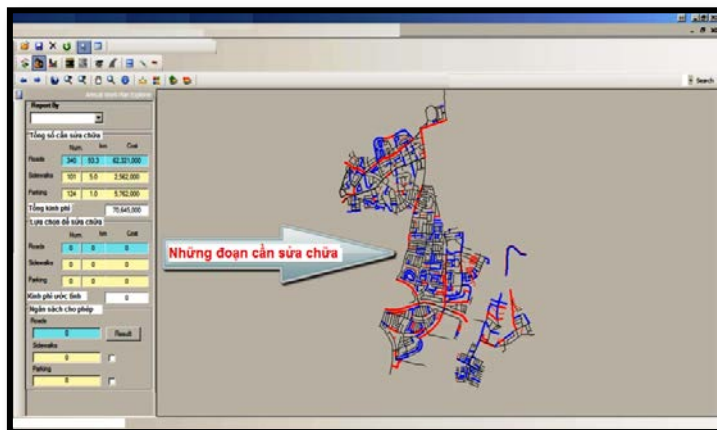
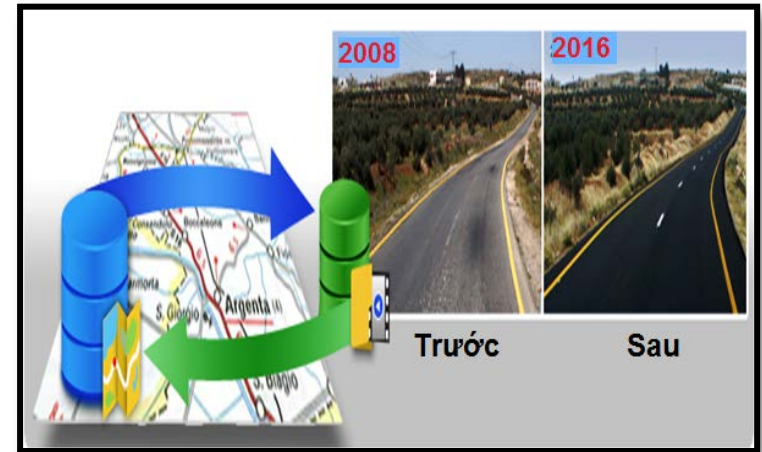
DATA PROCESSING

4. Future Works for Road Asset Management

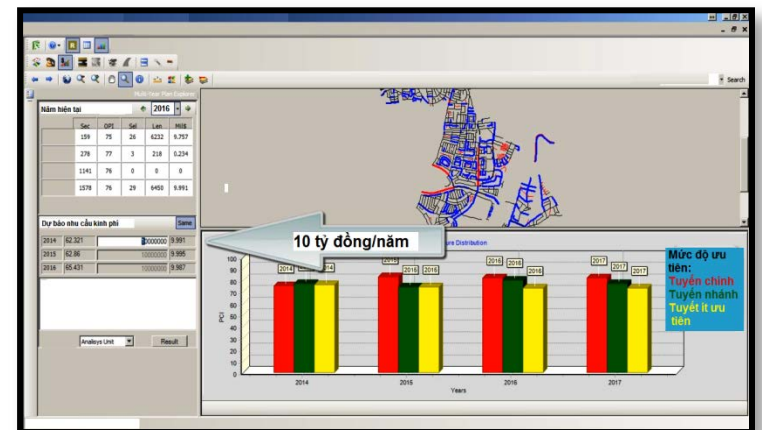
Intensified application of technologies into data collection for developing maintenance plan (3)



- List of sections for maintenance;
- Estimated cost



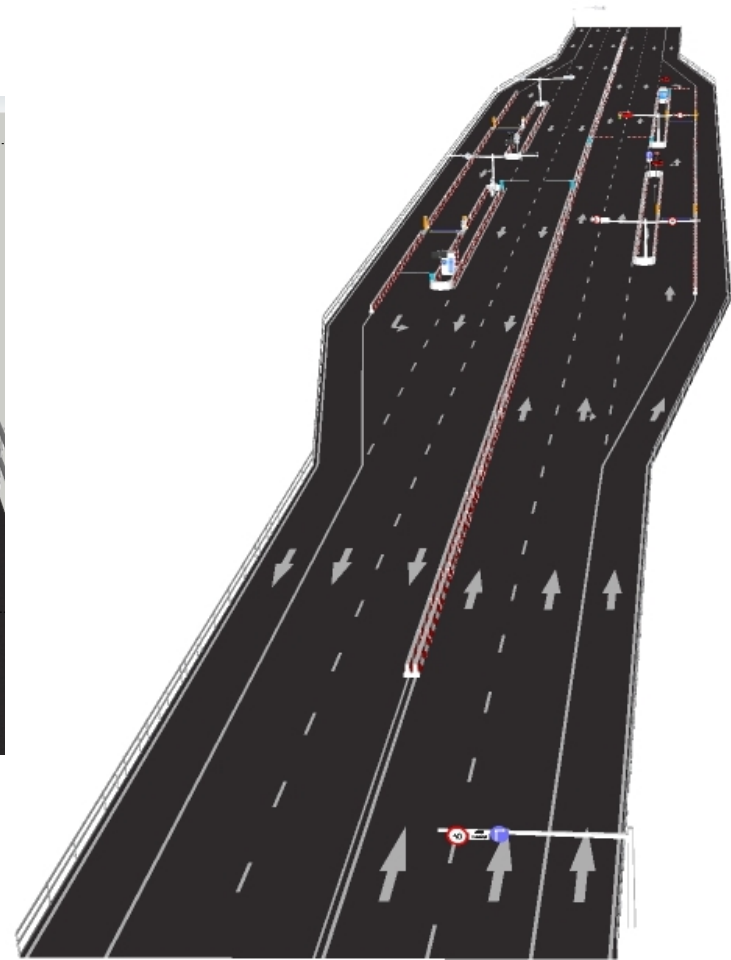
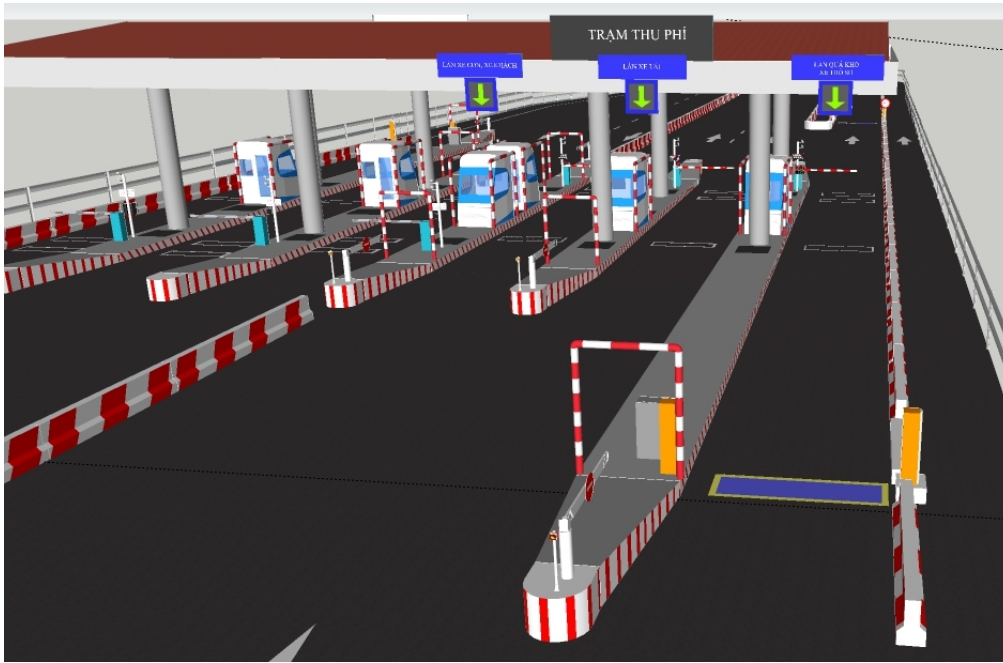
Development of options based on maintenance budget allocation



Development of short-term, midterm and long-term maintenance plans

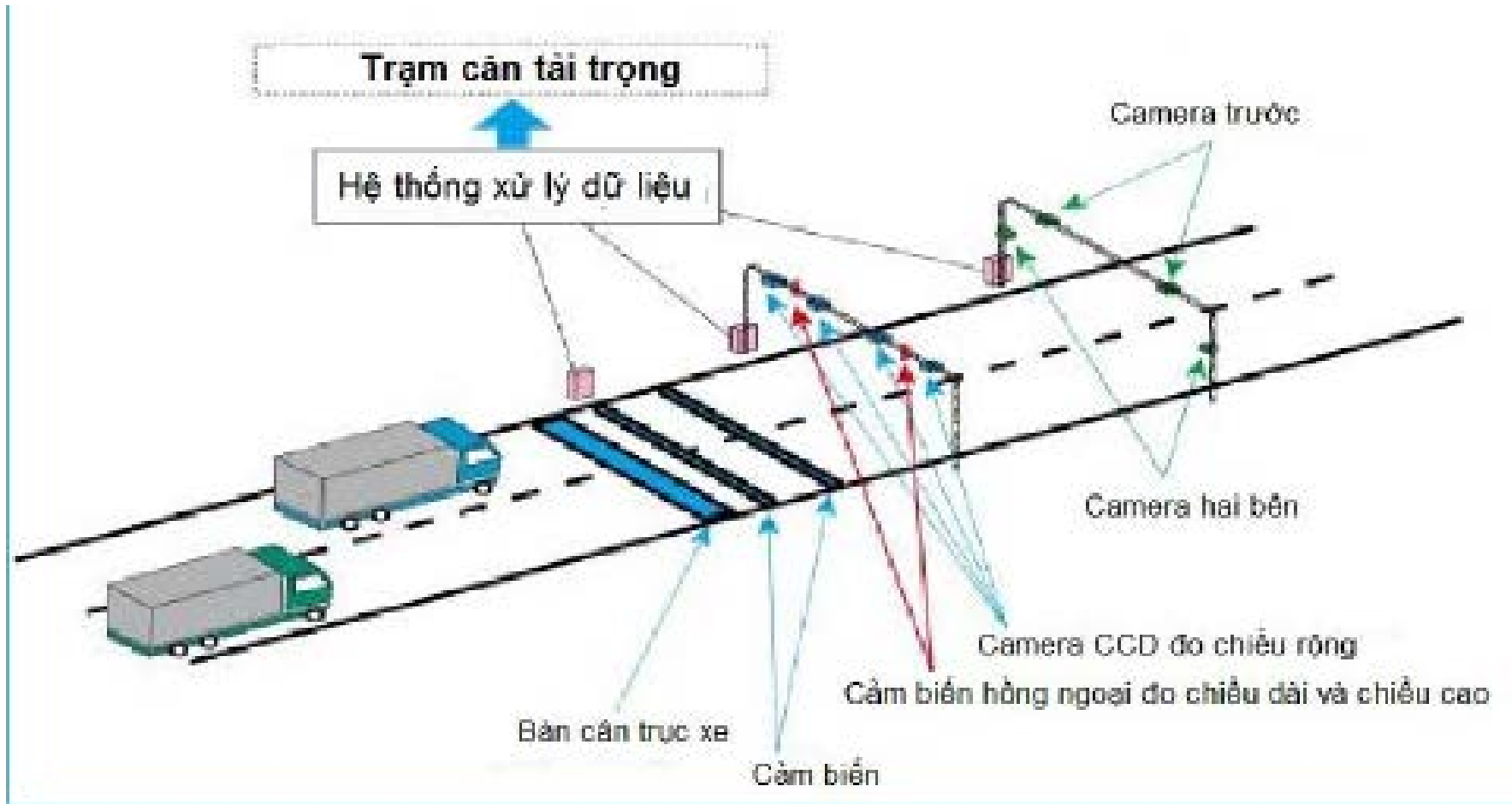
4. Future Works for Road Asset Management

Vehicle Overload Control



4. Future Works for Road Asset Management

Vehicle Overload Control



4. Future Works for Road Asset Management

Vehicle Overload Control



4. Future Works for Road Asset Management

Apply New Technology for Road Maintenance



Cold
Recycling



4. Future Works for Road Asset Management

Apply New Technology for Road Maintenance

Hot
Recycling



4. Future Works for Road Asset Management

Apply New Technology for Road Maintenance



Cold
Microsurfacing



Rhinophalt

Thank you for your attention!

Options to Insure Transport Infrastructure against Natural Disasters

Supporting Resilient Infrastructure

Presentation to the
Nineteenth Meeting of the GMS Subregional Transport Forum
Phnom Penh, Cambodia

3 – 4 August 2015

Madeleine Varkay
Asian Development Bank

**Insurance?
.....one option**



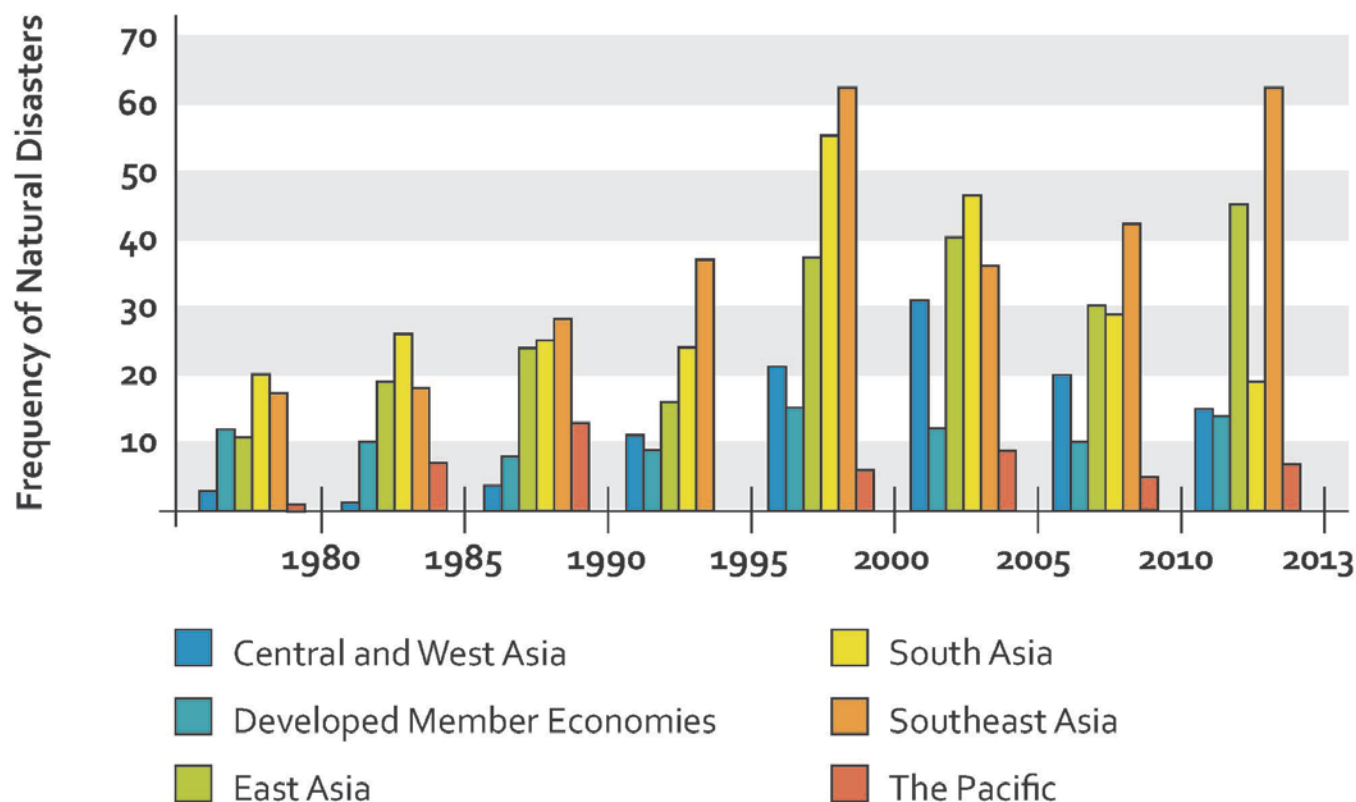
Insurance →

disaster!



Government

Natural Calamities in Asia by Subregion (1980-2013)



Source: *EM-DAT: The OFDA/CRED International Disaster Database*, at www.emdat.be, Université Catholique de Louvain, Brussels, Belgium

Cost of Natural Catastrophes on Infrastructure and Government Budget

December 2012 - Hurricane Sandy (United States) caused **US\$68 bn** of damage, and killed at least 286 people.

October 12, 2014 - Cyclone Hudhud (India) caused **US\$4 - \$16 bn** of damage to national highways, ports, defence – cost of repairs to highway washed away between four coastal districts i.e. between Uppada and Kakinada: est. INR10 million/km or US\$ 0.162 mn/km)

After a disaster, ... losses can ... exceed government's ability to act as insurer ... <http://www.adb.org/publications/asian-economic-integration-monitor-april-2014>

Who Pays for Damage to Infrastructure?

Government:

Munich Re. "Severe Weather in Eastern Asia": sharp increase in loss events (in 2012 values)

- Thailand (\$55 billion),
- **Philippines (\$15.1 billion),**
- Indonesia (\$15 billion), and
- **Viet Nam (\$14.7 billion)**

... or, can be shared with international insurance and reinsurance company (ies)

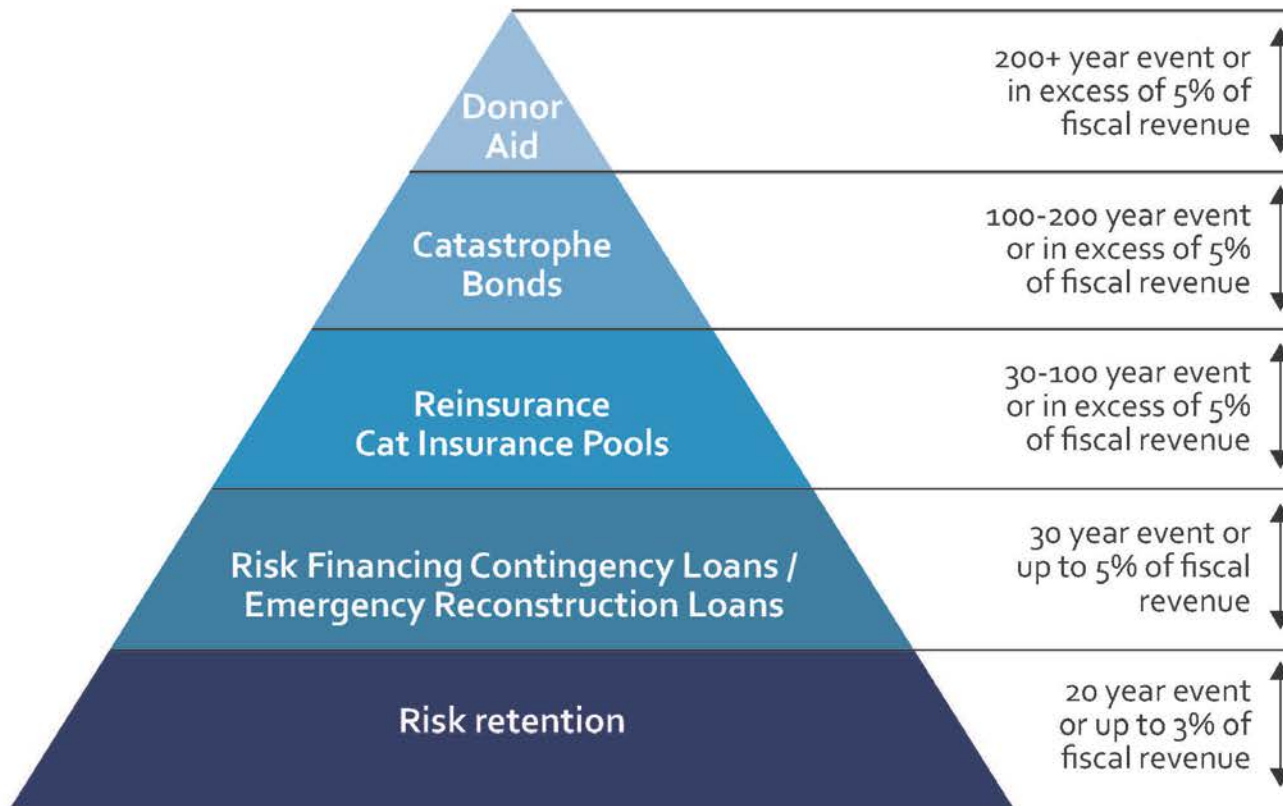
Need for Insurance and Reinsurance?

- ① **Survey of Assets / Highways at Risk** (use detailed GIS maps, drone and other aerial photos)
- ② **International Risk Model** to identify impact of typhoon, flooding, on highway
- ③ **Test Government budget** to determine (i) how much damage will cost and (ii) how much government can pay
- ④ **If cost is too big** – buy insurance and reinsurance

Need for Insurance and Reinsurance?

- ⑤ **Identify amount needed** – share highway insurance between government and international insurance and reinsurance company (ies)
- ⑥ **Engineering contractor / sub-contractor proof of construction standards and repairs** before insurance and reinsurance agreements signed
- ⑦ **Actuaries** determine risk-based premium / cost of insurance and reinsurance.

Risk Layering Pyramid



Source: World Bank Group

Disaster Risk Management Framework



Source: World Bank Group

Approaches from Developed Countries

USA

Usual structures



damage!



Insurance
Payment

JAPAN

Strengthened
structures



damage!

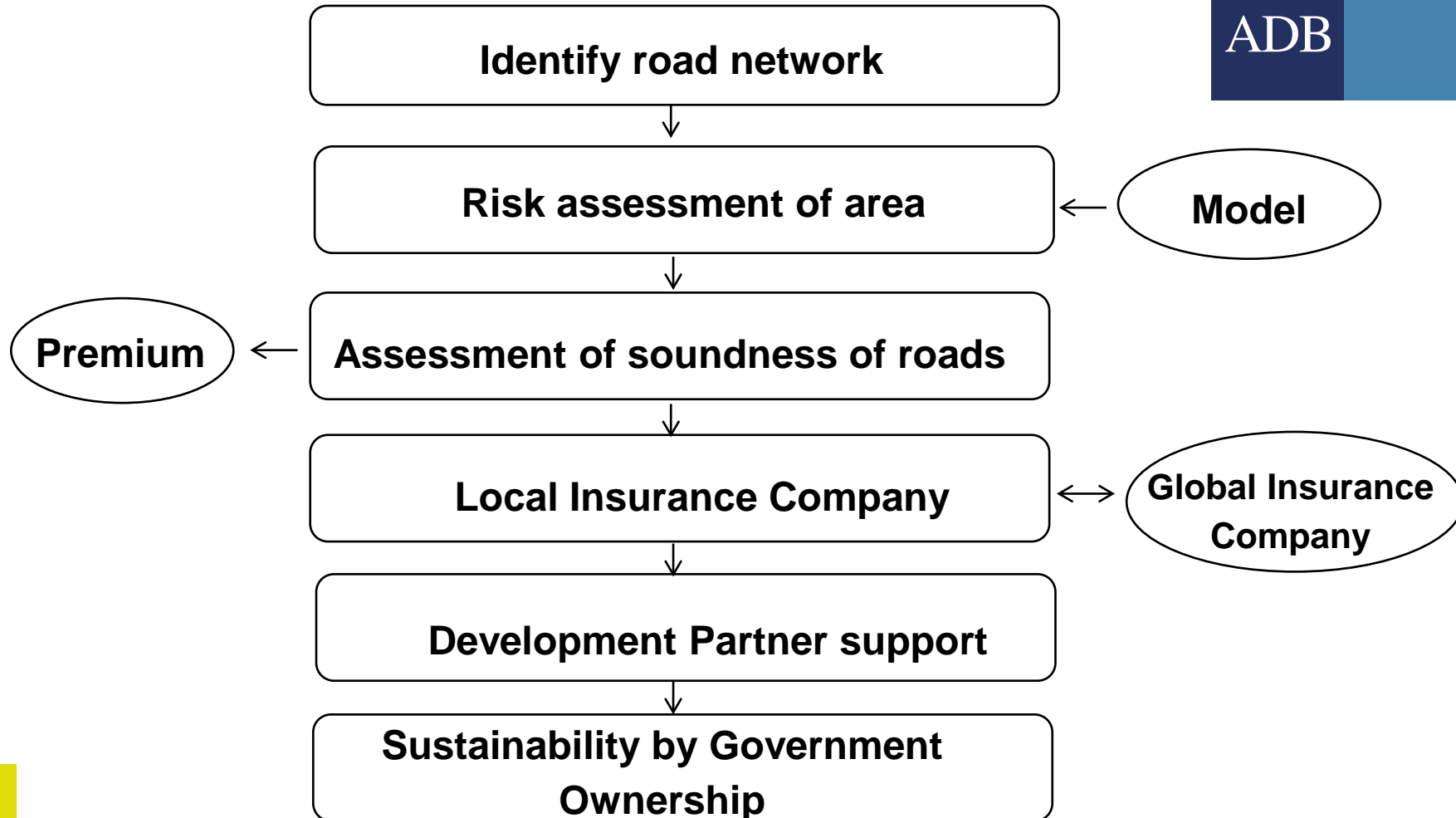


Compensation
Payment

Major Actions for Insuring Public Assets

11

ADB



Contact Details

Madeleine Varkay

Principal Private Sector Development Specialist
South East Asia Regional Department

mvarkay@adb.org

(632) 632-4030

(632) 636-2331



Proposed Study on GMS Corridor Alignment

Cuong Minh Nguyen
 Southeast Asia Department
 Asian Development Bank

Background of the Study

- **4th ECF:** GMS corridors to be strengthened with greater linkages with maritime gateways and GMS trade flow
- **7th ECF:** GMS countries requested ADB to review possible extensions and re- alignment of GMS corridors, especially in Myanmar
- **CBTA:** There is a need to update designated routes and border crossing points in Protocol 1 of CBTA

Expected Initial Outcomes of the Study

- Proposed changes / refinement to GMS corridors
- Refined maps of GMS transport corridors

Indicative Work Plan

- **August 2015:** Initial concept presented at STF
- **September to October 2015:** Engagement of consultants
- **November 2015 – March 2016:** Preparation of the Study (including site visits, and consultation missions)
- **End March 2016:** First draft submitted
- **April:** Review by countries and finalization of the report
- **May 2016:** Subregional Transport Forum (TBC)
- **July 2016:** Submission of the report to ECF (TBC)
- **November 2016:** Endorsement of GMS Ministerial Conference (TBC)



Thank You