Chapter 6

Strategic Goals, Actions, and Milestones for ASTP

ERIA Study Team

October 2010

This chapter should be cited as

ERIA Study Team (2010), 'Strategic Goals, Actions, and Milestones for ASTP', in *ASEAN Strategic Transport Plan 2011-2015*, Jakarta: ASEAN Secretariat and ERIA, pp.6-1—6-34.

CHAPTER 6 STRATEGIC GOALS, ACTIONS, AND MILESTONES FOR ASTP

6.1 INTRODUCTION

The objective of this chapter is to suggest the proposal for the ASEAN Strategic Transport Plan (ASTP) 2011-2015. Based on the review and description of trend, roadmaps, current status, issues, missing links/gaps and emerging development trend and challenges in transport sector as discussed in earlier chapters, this chapter will describe proposed policy directions, specific goals and actions for ASTP. The proposed goals and actions are based on the progress review of ATAP's actions, analysis of the current and future transportation requirements in ASEAN Member States (AMSs). For easy understating, the chapter also highlighted the inter-linkages between the proposed goals and actions. To facilitate the monitoring and implementation, each action was further sub-divided into measurable components/milestones and allotted general time-frame for implementation purpose. In addition, trends and linkages of proposed actions for ASTP and those in the last two ASEAN transport plans are summarized, and presented in the Appendix of this Draft Final Report.

6.2 VISION, OBJECTIVES AND POLICY DIRECTIONS

Figure 6-2-1 shows a scheme identifying specific actions for ASTP.

(1) Vision

Visions for ASEAN Economic Community (AEC) had been stated in AEC Blueprint as shown below;

- (i) Single Market and Production Base
- (ii) Competitive Economic Region
- (iii) Equitable Economic Development; and
- (iv) Integration into the Global Economy

(2) Objectives

The ultimate objective of ASEAN transport cooperation is to develop an efficient, secure and integrated transport system to support the realization of the ASEAN Economic Community (AEC) and regional connectivity through improving its competitiveness and attractiveness to investments, facilitating the flow of goods, services and people, and integrating with the global economy.

The specific objectives of ASTP were agreed in STOM as follows:



Figure 6-2-1 Scheme for

- To undertake a comprehensive assessment of the current transport situation in ASEAN and of the implementation of the current action plan with a view to identifying the gaps and priorities for the period 2011-2015 and beyond;
- > To identify strategic actions to support the establishment of AEC by 2015, that will also compliment existing transport undertaking; and
- ➤ To identify long-term vision of ASEAN transport cooperation beyond 2015.

(3) Policy directions

The following are the policy directions to serve as guiding principles in identifying the ASTP goals and actions:

- 1) Maintain <u>continuity of actions</u> for the implementation of AEC Blueprint to develop an integrated and harmonized trans-ASEAN transportation network.
- 2) Enhance <u>connectivity of intra-ASEAN transport networks</u> to support the Master Plan on ASEAN Connectivity (MPAC).
- 3) Leverage on the strong Asian economic growth and increased external ASEAN cooperation by strengthening transport connectivity with Dialogue Partners and other regional partners.
- 4) Capitalize on the <u>strategic geographical location</u> of ASEAN and accelerated pace of <u>globalization</u> to upgrade selected transport infrastructure components and services, which serve as vital links to international supply routes.
- 5) Incorporate <u>environmental and climate change</u> considerations in planning, development, operations and management of ASEAN transport networks in line with relevant global initiatives.
- 6) Enhance regional capability to further improve the level of <u>safety and security</u> in the provision of transport services.

6.3 LAND TRANSPORT

6.3.1 LAND TRANSPORT GOALS

The main goal for land transport is to establish a safe, efficient, environmentally-friendly and integrated regional land transport system for the promotion of trade and tourism within ASEAN and with neighbouring countries, with the following specific goals:

- 1. Accomplish the implementation of SKRL project;
- 2. Complete the ASEAN Highway network (AHN);
- 3. Reduce road fatalities by 50% in AMSs by 2020;
- 4. Establish efficient and integrated inland waterways network;
- 5. Develop 'Intelligent Transport System' (ITS);
- 6. Enhance human, technical and institutional capacity in AMSs; and,
- 7. Establish a sustainable, energy efficient and environmentally-friendly transport system.

6.3.2 LAND TRANSPORT ACTIONS

In order to achieve above defined goals for land transport, ten specific actions are proposed as below, along with brief explanation specifying the rationale for their inclusion in ASTP.

LT-Action 1: Construct the missing link sections of SKRL project.

Though as per AEC Blue Print, the target completion year for SKRL project is 2015 but considering the current progress and the concerned issues, it is unlikely that this can be accomplished by 2015. It will take another 5 years or so for the completion. However, despite this, it is one of the prime priority projects. In a broader sense, SKRL can be divided into two lines, an "Eastern line "through Thailand, Cambodia and Viet Nam, with a spur line between Laos and Viet Nam, and a "Western line" through Thailand and Myanmar. In view of the

greater challenges in establishing the Western line, it is preferable to first complete the Eastern line in order to have an operational railway link between Singapore and China (via Kunming) as soon as possible. The following are details with timeline of the missing links and spur lines for SKRL:

- Thailand: Aranyaprathet Klongluk (6km) by 2014;
- Cambodia: Poipet Sisophon (48km) by 2013;
- Cambodia: Phnom Penh Loc Ninh (255km) by 2015;
- Viet Nam: Loc Ninh Ho Chi Minh (129km) by 2020;
- Viet Nam: Mu Gia Tan Ap Vung Ang (119km) by 2020;
- Lao PDR: Vientiane Thakek Mu Gia (466km) by 2020;
- Myanmar: Thanbyuzayat Three Pagoda Pass (111 km) by 2020; and
- Thailand: Three Pagoda Pass Nam Tok (153km) by 2020.

In Cambodia, due to financial constraints, the implementation of the missing links is going at very slow pace. However, it is expected that the implementation of missing link, Phnom Penh – Loc Ninh section, 255 km will be completed by 2015 and Poipet – Sisophon section by 2013.

In Viet Nam, the single-track construction on two (2) links of length 129 km and 119 km respectively are planned for completion by 2020. However, in future, there is also a plan to convert this track to double-track. Currently, Viet Nam is looking forward to ROK for technical assistance (TA).

In Lao PDR, the implementation of the two (2) spur lines of length 330 km and 136 km respectively will go beyond the target year of 2015 and is likely to be completed by 2020. Lao PDR is also facing financial constraints for the implementations of these spur lines.

In Myanmar, the feasibility study of the Thanbyuzayat – Three Pagoda Pass (111 km) section has been completed. However, Myanmar is currently facing financial constraints for its implementation. Considering such constraints, it will likely exceed the target year of 2015 and is likely to be completed by 2020.

In Thailand, the implementation of the missing link between Three Pagoda Pass and Nam Tok of length 153 km is planned for completion by 2020. This is one of the major sections and should be given a prime importance for its completion. In addition, the Aranyaprathet – Klongluk (6 km) section is planned for completion by 2014.

In addition to the above missing links and spur lines as mentioned above, the measures also include the upgrading of the other sections to support SKRL project. The following sections are planned for upgrading or new construction:

- Cambodia (Rehabilitation/Upgrading): Sisophen Phnom Penh (338 km) by 2013.
- Thailand (Track Rehabilitation): Kaeng Khoi Kaeng Suaten & Suranarai Bua Yai
 & Jira Bua Yai (308 km) by 2013.
- Thailand (Track Rehabilitation): Bua Yai Nong Khai (278 km) by 2013.
- Thailand (New Line): Bua Yai Mukdahan Nakhon Phanom (368 km) by 2030.
- Malaysia (Double Track Construction): Ipoh Padang Besar (329 km) by 2013.
- Malaysia (Double Track Construction): Seremban Gemas (98 km) by 2012.

In addition, the following two key measures that will facilitate the seamless operation of SKRL and will facilitate in mobilization of resources are:

- Formulate a strategy for a seamless operation of SKRL by 2013
- Mobilise financial resources and technical assistance from external partners, either on a bilateral basis or with the coordination of ADB, to support the completion of SKRL in accordance with the agreed deadline.
- To improve and enhance the linkages of railway connectivity with other AMSs, it is proposed to conduct the study about the possibility of extending SKRL to Indonesia and an additional spur line connecting Thailand and Myanmar. Considering this, the following study is to be initiated.
- Study the possibility of extending SKRL to Surabaya, Indonesia.
- Feasibility study and preliminary design for the railway spur line between Kanchanaburi (Thailand) and Dawei (Myanmar).

<u>LT-Action 2:</u> Upgrade all 'below Class 3' sections of the ASEAN Highway Network into at least 'Class 3', with highest priority to the 'below class 3' sections of the Transit Transport Routes

Considering the importance of Transit Transport Routes (TTR) in enhancing the trade and economic growth in AMSs, the top priority is given to the existing 'below Class 3' TTR roads for the upgrading by 2012. This will require upgrading of total road length of 1999.55 km in Lao PDR, Myanmar and Indonesia. The details are as follows:

Lao PDR: AH12, 293 km

• Lao PDR: AH 15, 98 km

• Myanmar: AH1, 781 km

• Myanmar: AH 2, 593 km

• Myanmar : AH3, 93 km

• Indonesia: AH25, 141.55 km

The second priority is given to the implementation of the missing links and upgrading of 'other below Class 3' roads, which in total are 201 km and 4536.7 km respectively. Such sections exist in Myanmar, Indonesia, Lao PDR, Viet Nam and Malaysia. It is to be noted that as 'below Class 3' TTR roads doesn't exist in Indonesia, Viet Nam and Malaysia, these three countries may execute the upgrading of 'Other below Class 3 roads' from 2011 onwards. In other words, there is no need to wait for the upgrading completion of 'below Class 3' roads on TTR sections in Lao PDR and Myanmar. Though, Lao PDR and Myanmar may also execute the implementation of these sections in parallel with TTR routes considering financial and other administrative issues allows for it. Otherwise, the 'below Class 3' roads can be executed after the upgrading completion of TTR roads. It is anticipated that the implementation of such sections will go beyond the year 2015. Below are the details of the highway 'Other below Class 3' sections and missing links that need to be upgraded/constructed are:

• Indonesia : AH150, 1762.3 km

• Indonesia: AH151, 611.9 km

• Lao PDR: AH131, 96 km

• Lao PDR: AH 132, 126 km

Myanmar: AH111, 239 km

• Myanmar: AH 112, 1085 km

• Myanmar : AH 112, 60 km (missing link)

• Myanmar :AH 123, 141 km (missing link)

• Viet Nam: AH13, 215.5 km (by 2011)

• Viet Nam : AH 132, 160 km (by 2012)

Malaysia: AH 150, 40 km

Other existing 'Class 2 or 3' roads with high traffic volume can be upgraded to 'Class 1' in parallel to the above. However, this will depend on the availability of financial and other resources in the respective country. Otherwise, these may be upgraded after the completion of the above two priority task as stated in the Table 6-3-1.

Considering the growing trade of AMSs with other Asian nations particularly with India and China, it is suggested to upgrade the extension of AHN to China and India, particularly sections from Hanoi via northern Lao PDR through Myanmar to the border with India, by 2015. Such initiative will facilitate in enhancing the trade with Asian nations.

Taking advantage of the strategic location of ASEAN as the geographic center of the emerging global center of production and demand such as South Asia, Southeast Asia, Northeast Asia, Australia and New Zealand, need is to strategise ASEAN as the transport hub in the region and to promote corridors, which will facilitate in economic development. It is thus recommended to promote East West Economic Corridor (EWEC) by constructing a missing link in Myanmar and to promote the Mekong – India Economic Corridor (MIEC) by constructing the Mekong Bridge in Neak Loung (National road No.1 in Cambodia) and building the highway between Kanchanaburi and Dawei.

Considering that transport cooperation in ASEAN has been formulated and implemented separately by various modes of transportation, it is important that ASEAN streamline the sectoral strategies with reference to the concept of multimodal transport systems and dry ports in order to enhance intra- and extra ASEAN connectivity. Thus, it is suggested to identify and develop a network of ASEAN dry ports in accordance with existing ASEAN initiatives such as the ASEAN Highway Network and SKRL.

<u>LT-Action 3:</u> Install common road signs and the route numbering system in all designated routes with a specific priority on TTR routes.

Route numbering on ASEAN Highways is ongoing on certain sections. However, considering the large network, the priority for implementation are fixed with a top priority on Transit Transport Routes (TTR) followed by other AH sections. It is suggested to accomplish the target by 2013.

The installations of "Road Signage's" are in progress. However, as stated above that considering the large AH network, the priority for installation of "Signage's" need to be prioritised with a top to Transit Transport Routes (TTR) followed by other AH sections. It is suggested to accomplish the installation of Signage's by 2015.

<u>LT-Action 4:</u> Conduct a feasibility study on bridging archipelagic countries and mainland ASEAN by 2015

To enhance the connectivity of intra-ASEAN transport networks particularly of ASEAN mainland with the archipelagic countries such as Philippines and Indonesia, it is important to

initiate a study to bridge the existing transportation connectivity gaps between the archipelagic countries and ASEAN mainland. Such study will facilitate in strengthening the vital transport links by suggesting the improvement areas for further development of intra-ASEAN transport network. It is suggested to first conduct a feasibility study on bridging archipelagic countries and mainland ASEAN by 2015 and thereafter, follows the recommendations made by the study for the improvement of transport connectivity in ASEAN.

<u>LT-Action 5:</u> Formulate the 'ASEAN Regional Road Safety Strategy Plan 2011-2020' and 'National Road Safety Action Plan 2011-2020' by the year 2012 and its implementation.

In line with the 'UN declaration on the Global Decade of Action on Road Safety 2011-2020' and strategic framework identified in the 2005-2010 Draft ASEAN Road Safety Action Plan, it is suggested to first formulate the policy /guidelines for the regional road safety in ASEAN. Thereafter, the respective AMSs will formulate a 'National Road Safety Action Plan 2020' for their respective nation. The above two task are planned for completion by 2012. Later, based on the recommendations of 'National Road Safety Action Plan', the projects or programme need to be initiated and implemented.

<u>LT-Action 6:</u> Formulate a 'Regional Plan for developing inland waterways transport in ASEAN' by 2012 and begin implementation thereafter.

With an objective to establish the efficient Inland Waterways Transport system in ASEAN, it is essential to conduct a study and formulate 'Regional Plan' for developing Inland Waterways Transport (IWT) services in ASEAN region'. This study after identification of inland waterways routes, their status and related issues, will propose the long, mid and short-term measures to utilize and develop the IWT to its potential in ASEAN region. Later, based on the recommendations from this study, the projects/program need to be implemented. Considering the large scope of the work, the implementation of projects and programmes will require additional number of years and will be continued beyond 2015.

<u>LT-Action 7:</u> Formulate the "Intelligent Transport System Master Plan" by 2013 and its implementation.

Following the recommendations from the 'ASEAN ITS Policy Framework, Plan of Action', it is suggested to formulate the 'Intelligent Transport System (ITS) Master Plan for ASEAN' by 2012, addressing the goals, design of IT system architecture, determination of standards for ASEAN, implementation and monitoring measures among others. In addition, the master plan should also highlight the development and application of ITS on the existing ASEAN Highways. Later, following this, respective AMSs will first need to formulate "National ITS Policy and Master Plan' and later, implementation based on study recommendations.

LT-Action 8: Implement the 'ITS Capacity Building Program' in order to develop ITS.

In order to facilitate the establishment of ITS system in AMSs, it is suggested to enhance the capacity by implementing number of workshops, programme, training session etc. in AMSs. Considering the socio-economic status in AMSs, the top priority for capacity building will be given to nations that are lagging behind. This is continuous and ongoing measures and will need to be implemented throughout the ASTP duration as well as beyond it.

<u>LT-Action 9:</u> Implement programmes/seminars to enhance the 'Technical, Institutional & Human Capacity' for safer, secured & efficient transport system

In order to facilitate the establishment of efficient and integrated transport system in ASEAN, it is suggested to enhance the technical, institutional & human capacity by implementing

number of workshops, programmes, training sessions, security awareness etc. in AMSs. Considering the socio-economic status and existing capability to manage and implement transport projects/programmes in AMSs, the top priority for capacity building will be given to the nations that are lagging behind. This is continuous and ongoing measures and will need to be implemented throughout the ASTP duration as well as beyond it.

<u>LT-Action 10:</u> Exchange & adoption of experiences, projects & knowledge related to 'Environment Friendly Transport System, Vehicles and Fuels'.

The practice of exchange and adoption of experiences, projects and knowledge related to 'Environmentally-friendly Transport System, Vehicles and Fuels' during specially organized seminars/workshops need to be continued. As per the nation's demand and requirement, the feasible projects may be adopted and implemented, first on pilot basis and than later at larger scale. This is continuous and ongoing measures and will need to be implemented throughout the ASTP duration as well as beyond it.

Considering the ASEAN Ministers affirmation on increasing energy efficiency, reducing consumption and carbon emissions in the transport sector, there is a need to initiate actions to mitigate climatic changes and global warming. To improve the public transport share in the selected capital cities in AMSs that are currently coping with poor public transportation, the study on Green Public Transport (Bus Rapid Transport) will be the first step to achieve this goal. Later, based on the recommendations of this study the suggested projects/programme needs to be implemented. However, considering the large scope of the work, the suggested projects will require additional number of years for implementation and will be continued beyond 2015.

Figure 6-3-1 shows the inter-linkages between the specific goals and actions, which are not always one-to-one. For simple presentation, we identified one goal, which has the most significant linkage with each action, and indicated the relationship with bold lines in Figure 6-3-1. Table 6-3-1 provides a summary of land transport goals, actions, and milestones. In Table 6-3-1, actions are related to one goal as indicated in Figure 6-3-1.

LT-Action 1: Construct the missing link sections of SKRL project. LT-Goal 1 Accomplish the implementation of Singapore Kunming Rail Link LT-Action 2: Upgrade all "below Class 3" sections of the (SKRL) project. ASEAN Highway Network into at least "Class 3", with highest priority to the below class 3 sections of the Transit Transport Routes (TTR). LT-Goal 2 Complete the ASEAN Highway network. LT-Action 3: Install common road signs and the route numbering system in all designated routes with a specific priority on TTR routes. LT-Goal 3 Reduce the road fatalities by 50% in ASEAN Member States LT-Action 4: Conduct a feasibility study on bridging by 2020. archipelagic countries and mainland ASEAN by 2015. LT-Goal 4 LT-Action 5: Formulate the 'ASEAN Regional Road Safety Establish an efficient and Strategy Plan 2011-2020' and 'National Road Safety Action integrated inland waterways Plan 2011-2020' by the year 2012 and its implementation. network. LT-Action 6: Formulate a 'Regional Plan for developing LT-Goal 5 Develop 'Intelligent Transport inland waterways in ASEAN by 2012 and begin System'. implementation thereafter. LT-Action 7 Formulate the "Intelligent Transport System LT-Goal 6 Master Plan" by 2013 and its implementation. Enhance human, technical and institutional capacity with LT-Action 8: Implement the 'ITS Capacity Building harmonized standards in ASEAN Programme' in order to develop ITS. Member States. LT-Action 9: Implement programmes/seminars to enhance LT-Goal 7 the 'Technical, Institutional & Human Capacity' for safer, Establish sustainable, energy secured & efficient transport system. efficient and environmentalfriendly transport system. LT-Action 10: Exchange & adoption of experiences, projects & knowledge related to 'Environmentally-friendly Transport System, Vehicles and Fuels'.

Figure 6-3-1 Linkages between Land Transport Goals and Actions

Table 6-3-1 Land Transport Goals, Actions, and Milestones

Γ G-1 :	Accomplish the implementation of Singapore Kunming Rail Link (SKRL) project.	Timelines						Remark
_TA-1:	Construct the missing link sections of SKRL.	2011	2012	2013	2014	2015	Beyond	
1. C	construct the missing link sections /spur lines.							
	Thailand: Aranyaprathet – Klongluk (6km) by 2014							
	Cambodia: Poipet – Sisophon (48km) by 2013							
	Cambodia: Phnom Penh – Loc Ninh (255km) by 2015							
	Viet Nam: Loc Ninh - Ho Chi Minh (129km) by 2020							MPAC
	Viet Nam: Mu Gia – Tan Ap – Vung Ang (119km) by 2020							
	Lao PDR: Vientiane – Thakek – Mu Gia (466km) by 2020							
	Myanmar: Thanbyuzayat - Three Pagoda Pass (111 km) by 2020							
	Thailand: Three Pagoda Pass - Nam Tok (153km) by 2020						,	
2. S	upplementary up gradation work in AMSs to support SKRL.							
	Cambodia (Rehabilitation/Up gradation) : Sisophen-Phnom Penh (338 km) by 2013							
	Thailand (Track Rehabilitation): Kaeng Khoi – Kaeng Suaten & Suranarai – Bua Yai & Jira – Bua Yai (308 km) by 2013							
	Thailand (Track Rehabilitation) : Bua Yai – Nong Khai (278 km) by 2013							AMS Feedbac
	Thailand (New Line) ; Bua Yai - Mukdahan - Nakhon Phanom (368 km) by 2030							
	Malaysia (Double Track Construction) ; Ipoh-Padang Besar (329 km) by 2013							
	Malaysia (Double Track Construction); Seremban-Gemas (98 km) by 2012							
3. F	ormulate a strategy for a seamless operation of SKRL by 2013.				1			
part sup	lobilise financial resources and technical assistance from external ners, either on a bilateral basis or with the coordination of ADB, to port the completion of SKRL in accordance with the agreed dline.							MPAC
5. S	tudy the possibility of extending the SKRL to Surabaya, Indonesia.							
	conduct a feasibility study and preliminary design for the railway spur between Kanchanaburi and Dawei.							

6-2: Complete the ASEAN Highway network.		_	Hime	elines	_		Remark
Upgrade all "below Class 3" sections of the ASEAN Highway TA-2: Network into at least "Class 3", with highest priority to the below class 3 sections of the Transit Transport Routes (TTR).	2011	2012	2013	2014	2015	Beyond	
Implement the up gradation of 'below Class 3' roads on Transit Transport Routes (TTR) by 2012.							
Lao PDR: AH12; 293 km, AH 15; 98 km Myanmar: AH1; 781 km, AH 2; 593 km, AH3; 93 km Indonesia: AH25; 141.55 km							
Implement the other missing links on ASEAN Highway.							
Myanmar : AH 112; 60 km (missing link) Myanmar :AH 123; 141 km (missing link)							MAPC, LTWG &
3. Implement the up gradation of other 'below Class 3' roads.							EG-STO
Indonesia: AH150; 1762.3 km, AH151; 611.9 km Lao PDR: AH131; 96 km, AH 132; 126 km Myanmar: AH111; 239 km, AH 112; 1085 km							
Viet Nam : AH13; 215.5 km (by 2011) Viet Nam : AH 132; 160 km (by 2012) Malaysia : AH 150; 40 km							
4. Upgrade 'Class 2 or 3' sections with high traffic volume to 'Class 1' be 2020.	ру						
Upgrade the extension of AHN to China and India, particularly							=
sections from Ha Noi via northern Lao PDR through Myanmar to the border with India, by 2015.							
6. Construct the Mekong Bridge in Neak Loung (National road No.1 in Cambodia).							MPAC
7. Build the highway between Kanchanaburi and Dawei (by 2020).							
8. Construct the missing link of East West Economic Corridor (EWEC in Myanmar.	C)						
Identify and develop a network of ASEAN dry ports in accordance with existing ASEAN initiatives such as the ASEAN Highway Network and the SKRL.							
A-3: Install common road signs and the route numbering system in all designated routes with a specific priority on TTR routes.	2011	2012	2013	2014	2015	Beyond	
Install common road signs in all designated routes with a specific priority on TTR routes by 2013.							
Install common road signs on other ASEAN Highways.							
Install common road signs on any additional ASEAN Highways that will be newly implemented after 2015.							MPAC
Install route numbering system in all designated routes with a specific priority on TTR routes by 2013.							
Install route numbering system on other ASEAN Highways.							
Install route numbering system on any additional ASEAN Highways that will be newly implemented after 2015.							
CA-4: Conduct a feasibility study on bridging archipelagic countries and mainland ASEAN by 2015.	2011	2012	2013	2014	2015	Beyond	
Conduct a feasibility study on bridging archipelagic countries and mainland ASEAN by 2015.							MDAC
•		-	-	+	+	+	MPAC

TG-3:	Reduce the road fatalities by 50% in ASEAN Member States by 2020.			Time	elines			Remarks
LTA-5:	Formulate the 'ASEAN Regional Road Safety Strategy Plan 2011-2020' and 'National Road Safety Action Plan 2011-2020' by the year 2012 and its implementation.	2011	2012	2013	2014	2015	Beyond	
	mulate the 'ASEAN Regional Road Safety Strategy Plan 2011-2020' 2012.							
	mulate the 'National Road Safety Action Plan 2011-2020' by all Ss by 2012.							1st MSRSSW
lmp	lement the prepared 'Road Safety Action Plan' in AMSs.							
TG-4:	Establish an efficient and integrated inland waterways network.			Time	elines			Remarks
LTA-6:	Formulate a 'Regional Plan for developing inland waterways transport in ASEAN' by 2012 and begin implementation thereafter.	2011	2012	2013	2014	2015	Beyond	
For	mulate the 'Regional Plan for developing IWT in ASEAN' by 2012.							MPAC
	lement the suggestions/projects by the above study on 'Regional							WIFAC
	n for developing IWT in ASEAN'.			Time	elines			Remarks
TG-5:	Develop 'Intelligent Transport System'.			IIIIE	illes			Remarks
LTA-7:	Formulate the "Intelligent Transport System Master Plan" by 2013 and its implementation.	2011	2012	2013	2014	2015	Beyond	
add star	mulate the "Intelligent Transport System Master Plan' for ASEAN ressing the goals, design of IT system architecture, determination of dards for ASEAN and developing implementation and monitoring chanism.							ASEAN IT
the	mulate the "National ITS Policy & Master Plan' for AMSs addressing policy, standards, ITS system development, operation & ntenance, and monitoring mechanism.	,						Policy Framewor (Plan of Acti
	lement the recommendations/projects suggested by above study on elligent Transport System Master Plan for ASEAN" & 'National ITS n'.							
LTA-8:	Implement the 'ITS Capacity Building Program' in order to develop ITS.	2011	2012	2013	2014	2015	Beyond	
_	anize and implement number (as many) of ITS Capacity Building gram in lagging nations.							
Org AM	anize and implement the ITS Capacity Building program in other Ss.							
TG-6:	Enhance human, technical and institutional capacity with harmonized standards in ASEAN Member States.			Time	elines			Remarks
LTA-9:	Implement programs/seminars to enhance the 'Technical, Institutional & Human Capacity' for safer, secured & efficient transport system.	2011	2012	2013	2014	2015	Beyond	
Ser	anize and implement number (as many) of ninar/Workshop/Program for 'Technical, Institutional & Human acity Building' in lagging nations.							
<u> </u>						t		

L	TG-7:	Establish sustainable, energy efficient and environmentally-friendly transport system.			Time	elines			Remarks
	LTA- 10:	Exchange & adoption of experiences, projects & knowledge related to 'Environmentally-Friendly Transport System, Vehicles and Fuels'.	2011	2012	2013	2014	2015	Beyond	
	E	schange of experiences, projects & knowledge related to							
	'E	nvironmentally-Friendly Transport System, Vehicles and Fuels'.							
		doption and implementation of pilot projects based on the							
		ccessful experiences and projects related to 'Environmentally- iendly Transport System, Vehicles and Fuels'.							
		onduct studies on 'Promotion of Green Public Transportation stem' to improve and establish energy efficient green public							
	-	Insport (bus rapid transport/LRT) in the capital cities of AMSs,							
	as	per requirement by 2013.							
	lm	plement the suggestions/projects by the above study on							
	'P	romotion of Green Public Transportation System'.							

6.4 AIR TRANSPORT

6.4.1 AIR TRANSPORT GOALS

An ASEAN Single Aviation Market (ASAM) and open sky policy are undoubtedly necessary to achieve the economic development for AMSs. However, the initiatives should not only be convenience-oriented, but should also pay enough attention to the issues related to safety, security, and environmentally-friendly aviation in accordance with the globally acceptable standards.

Considering the above and the review of earlier plans, current situation and regional issues, and emerging trend & challenges, the specific goals for air transport are proposed as below.

- 1. Establish an ASEAN Single Aviation Market (ASAM)
- 2. Promote environmentally-friendly aviation
- 3. Enhance engagement with Dialogue Partners to promote greater connectivity

6.4.2 AIR TRANSPORT ACTIONS

In order to pursue three (3) specific goals for air transport sector, six actions are proposed. These actions are based on the review of ATAP 2005-2010 actions, the Master Plan on ASEAN Connectivity (MPAC), and the recommendations from the 22nd ATWG meeting held in August 2010 in Singapore and the 2nd STOM Expert Group meeting held in August 2010in Jakarta.

The implementation of the proposed six (6) actions will facilitate the development of a harmonized and integrated air transport system in ASEAN. Actions No. 1 to 3 are the leading actions to realize the implementation of ASAM, while actions No. 4 and 6 are actions in support of the development of an ASAM. To achieve a sustainable future for air transport sector, action No 5 will explicitly consider the environmental measures, which are highly necessary to reduce carbon emissions and mitigate negative environmental impacts. The proposed six actions are shown below:

<u>AT-Action 1:</u> Formulate an ASEAN Single Aviation Market (ASAM) Roadmap and implementation strategy by 2011 and develop ASAM by 2015.

This is the most significant action in the air transport sector to promote the implementation of an ASEAN Single Aviation Market (ASAM). Airline industry liberalisation, aviation safety, aviation security, civil aviation technology, air transport regulatory framework and human resource development (HRD) are elements of an ASAM, and the details will be specified in the Roadmap for the Establishment of ASAM by 2011.

AT-Action 2: Ratify and implement the RIATS Agreements and MAFLPAS.

Under this action, all AMSs are to:

- ratify and implement the Multilateral Agreement on the Full Liberalisation of Air Freight Services (MAFLAFS) and its Protocols 1 and 2 as soon as possible, in support of the establishment of the AEC by 2015, noting that the implementation timeline of the MAFLAFS and its Protocols 1 and 2 as agreed by ASEAN Transport Ministers (ATM) is 31 December 2008;
- ratify and implement the Multilateral Agreement on Air Services (MAAS) and its Protocols 1 to 6 as soon as possible, in support of the establishment of the AEC by 2015,

- noting that the implementation timelines of the MAAS as agreed by ATM are 31 December 2008 for Protocol 5 and 31 December 2010 for Protocol 6; and
- ➤ sign the ASEAN Multilateral Agreement on the Full Liberalisation of Passenger Air Services (MAFLPAS) by 2010 and ratify and implement the MAFLPAS and its Protocols 1 and 2 as soon as possible, in support of the establishment of the AEC by 2015, noting that the implementation timelines of the MAFLPAS as agreed by ASEAN Transport Ministers are 30 June 2010 for Protocol 1 and 30 June for Protocol 2.

<u>AT-Action 3:</u> Implement the liberalisation of the ASEAN Air Transport Ancillary Services by 2015.

Liberalisation of the air transport ancillary services is also an important component to fundamentally promote an ASAM. Guidelines for liberalisation of the air transport ancillary services set out sub-sectors and their timeline to pursue freer trade in the ASEAN air transport ancillary services.

Table 6-4-1 Timeline of the ASEAN Air Transport Ancillary Services

No	Sub-sector	Timeline
Phase 1		
1	Aircraft repair and maintenance services	Dec. 2010
2	Selling and marketing of air transport services	Dec. 2010
3	Computer reservation system (CRS) services	Dec. 2010
4	Aircraft leasing without crew	Dec. 2010
5	Aircraft leasing with crew	Dec. 2010
6	Air freight forwarding services	Dec. 2010
Phase 2	2	Dec. 2015
7	Cargo handling	Dec. 2015
8	Aircraft catering services	Dec. 2015
9	Refuelling services	Dec. 2015
10	Aircraft line maintenance	Dec. 2015
11	Ramp handling	Dec. 2015
12	Baggage handling	Dec. 2015
13	Passenger handling	Dec. 2015

Source: 22nd ATWG

AT-Action 4: Enhance the involvement of the private sectors/airlines.

Presently, air transport sector collaborate with public and private including airlines partially. In order to enhance the rapid increase of air traffic movements, air transport sector will expand the business activity. Therefore, more strengthening of involvement will be absolutely imperative.

AT-Action 5: Develop programmes to improve environmentally-friendly aviation.

AMSs are encouraged to work towards the ICAO Programme of Action to reduce aviation emissions viz. the goals set out and endorsed by the ICAO High Level Meeting on International Aviation and Climate Change (HLM-ENV).

<u>AT-Action 6:</u> Conclude the Air Transport Agreement (ATA) with China by 2010, India, ROK and possibly other dialogue partners, not later than 2015, and thereafter consider the possible expansion to other partners.

The ATA with China is scheduled to be signed in November 2010, and those with India and the Republic of Korea (ROK) are in progress. It is important for ASEAN to maintain this momentum and to consider the expansion of the scope of ATAs to other dialogue partners and other partners. The establishment of an ASAM and ATAs will be important elements of AEC.

The Figure 6-4-1 shows the linkages between the proposed goals and actions.

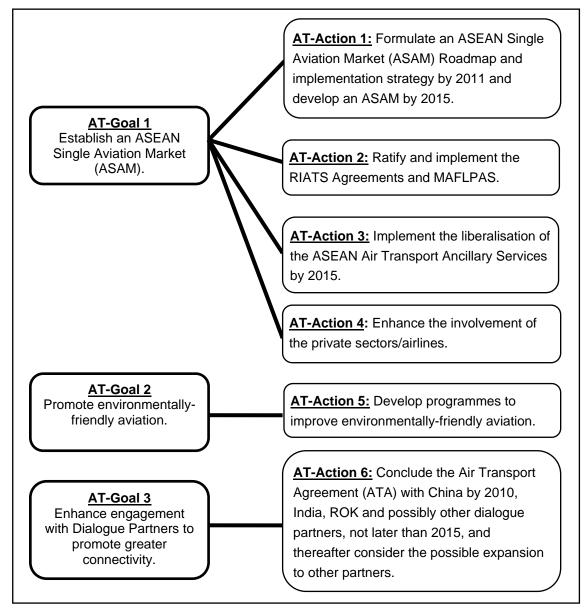


Figure 6-4-1 Linkages between Air Transport Goals and Actions

Table 6-4-2 Air Transport Goals, Actions, and Milestones

'G-1:	Establish an ASEAN Single Aviation Market (ASAM).			Time	lines	S		Remar
TA-1:	Formulate an ASEAN Single Aviation Market (ASAM) Roadmap and implementation strategy by 2011 and develop an ASEAN by 2015.	2011	2012	2013	2014	2015	Beyond	
For	mulate ASAM Roadmap and implementation strategy by 2011.							
Dev	elop an ASAM by 2015.							
	nance Search and rescue (SAR) capacity and capability through nbined air and maritime SAR exercises (SAREX) by 2015.							
	Develop programs for SAREX by 2012.							
	Inplement regular SAREX by 2015.							
	operation in the area of aviation safety, aviation security and Air fic Management (ATM).							
Hur	nan resource development for the implementation of an ASAM.							
TA-2:	Ratify and implement the RIATS Agreements and MAFLPAS.	2011	2012	2013	2014	2015	Beyond	
Libe 1 ai AE MA	ify and implement the Multilateral Agreement on the Full eralization of Air Freight Services (MAFLAFS) and its Protocols and 2 as soon as possible, in support of the establishment of the C by 2015, noting that the implementation timelines of the DLAFS and its Protocols 1 and 2 as agreed by ASEAN ansport Ministry is 31 December 2008.							
(M <i>A</i> the imp Trai	ify and implement the Multilateral Agreement on Air Services (AS) and its Protocols 1 to 6 as soon as possible, in support of establishment of the AEC by 2015, noting that the lementation timelines of the MAAS as agreed by ASEAN asport Ministers are 31 December 2008 for Protocol 5 and 31 cember 2010 for Protocol 6.							
Pas imp sup imp	In the ASEAN Multilateral Agreement on the Full Liberalization of issenger Air Services (MAFLPAS) by 2010 and ratify and lement MAFLPAS and its Protocols as soon as possible, in port of the establishment of the AEC by 2015, noting that the lementation timeline of Protocol 1 is 30 June 2010; and Protocol 30 June 2013.							
	Ratify and implement Protocol 1 of MAFLPAS.							
	Ratify and implement Protocol 2 of MAFLPAS.							
TA-3:	Implement the liberalisation of the ASEAN Air Transport Ancillary Services by 2015.	2011	2012	2013	2014	2015	Beyond	
	ntinue liberalisation of Phase I sub-sectors as agreed in the idelines for liberalisation of the air transport ancillary services".							
	eralisation of Phase II sub-sectors as agreed in the "Guidelines iberalisation of the air transport ancillary services".							
TA-4:	Enhance the involvement of the private sectors/ airlines.	2011	2012	2013	2014	2015	Beyond	

ATG-2: Promote environmentally-friendly aviation.			Time	lines	5		Remarks
ATA-5: Develop programmes to improve environmentally-friendly aviation.	2011	2012	2013	2014	2015	Beyond	
Implement "ICAO Programme of Action on International Aviation and Climate" to reduce aviation emissions.							
Conduct a pilot study for the development of environmentally-friendly AMS airports by 2015.							
ATG-3: Enhance engagement with Dialogue Partners to promote greater connectivity.			Time	lines	5		Remarks
Conclude the Air Transport Agreement (ATA) with China by 2010, India, ROK and possibly other dialogue partners, not later than 2015, and thereafter consider the possible expansion to other partner.	2011	2012	2013	2014	2015	Beyond	
Conclude the ATA with China by 2010.							
Conclude the ATA with India by 2015.						•	
Conclude the ATA with ROK by 2015.							
Consider ATAs with other dialogue partners and other partner.							

6.5 MARITIME TRANSPORT

6.5.1 MARITIME TRANSPORT GOALS

The main goal for maritime transport is to establish an integrated, competitive and seamless maritime transport network, paying explicit attention to promote maritime safety and security, and environmental- and user-friendly ports. Specific goals for maritime transport are proposed as below.

- 1. Accomplish an integrated, efficient, and competitive maritime transport system.
- 2. Develop safety navigation system and establish advanced maritime security system in line with international standards.
- 3. Accomplish the Eco-Port and environmentally-friendly shipping

6.5.2 MARITIME TRANSPORT ACTIONS

As mentioned in Chapter 4.9, contents of Action No.1, No.2 (consists of three Sub Actions), No.3 and No.4 of ATAP 2005-2010 are comprehensive and abstract measures, and focuses on efficient and competitive maritime transport to succeed in AEC.

Additionally "Roadmap towards an Integrated and Competitive Maritime Transport in ASEAN" was developed and adopted at the 13th ATM Meeting in Singapore in November 2008. The objective of the Roadmap is to promote the progressive Liberalisation on maritime transport services in ASEAN, and twenty concrete measures are adopted from the viewpoint of i) developing a single ASEAN voice, ii) development of infrastructure, iii) market integration, iv) harmonization, and v) human resources and capacity development.

Twenty measures of the Roadmap are deemed to specific measures to execute Actions No.1 to 4 of ATAP 2005-2010. Most measures have been implemented and reported at every MTWG Meeting by lead coordinator countries. Accordingly, key milestones of Action No.1, No.2, No.3 and No.4 shall extend to ASTP 2011-2015.

Among remaining Action No.5 to No.14 of ATAP 2005-2010, No.6 and No.11 were completed. Regarding Action No.11, APA proposed and executed the project "Sustainable Port Development in the ASEAN Region" which is a three-year extension of the Action No.11. Thus, Action No.5-No.14 except for No.6 and No.11 shall basically extend to ASTP 2011-2015 in consideration of current conditions.

Based on the review of Actions in ATAP 2005-2010 as mentioned above, the concept of MPAC, following eight actions are proposed for ASTP 2011-2015. Regarding MT-Action 4, ASEAN Cruise Working Group (CWG) proposed to MTWG to nominate "the Cruise Transport" as an Action in ASTP 2011-2015.

MT-Action1: Realize an ASEAN Single Shipping Market by 2015

➤ Measure: Develop the strategies for an ASEAN Single Shipping Market through completing a study by the end of 2011, and agree on the strategies for an ASEAN Single Shipping Market by 2012.

It has started as Measure No.12 in "Roadmap towards an Integrated and Competitive Maritime Transport in ASEAN". On the other hand, development of strategies of an ASEAN Single Shipping Market is scheduled to be finalized by 2012, according to MPAC.

➤ Measure: Develop the relevant framework for implementation of an ASEAN Single Shipping Market by 2015.

It is planned to be implemented in MPAC.

➤ Measure: Develop guidelines on acceptable practices in the provision of fiscal support for shipping operations by 2011.

This Action focuses on harmonization. It has been implemented as Measure No.14 in the Roadmap.

Measure: Formulate the directory of ship registration by 2011.

It has started as Measure No.15 in the Roadmap.

➤ Measure: Develop guidelines for the structure of port tariffs in ASEAN transport network ports by 2011.

It has started as Measure No.16 in the Roadmap.

➤ Measure: Formulate a strategy for the implementation of a single labor market for ASEAN seafarers by 2013, and implement the strategy by 2015.

It is planned to be implemented as Measure No.20.

Measure: Support the Privatization/Commercialization of port operation by 2014.

It has started by APA 5-Year Work Programme.

Measure: Support Simplification and Harmonization of Port Documentation by 2014.

It has started by APA 5-Year Work Programme.

MT-Action 2: Enhance the performance and the capacity of the 47 designated ports by 2015.

➤ Measure: Develop project priorities based on the guidelines for assessing port development by 2011.

It is planned to be implemented as Measure No.8 in the Roadmap in cooperation with Japan.

➤ Measure: Explore funding mechanisms to support the implementation of identified projects by 2012.

It is planned to be implemented as Measure No.9 in the Roadmap.

➤ Measure: Ensure the 47 designated ports to meet the acceptable performance and capacity levels by 2015.

It is planned to be implemented as Measure No.10 in the Roadmap.

Measure: Identify and support Electronic Transmission of Information by 2014.

It has started by APA 5-Year Work Programme.

➤ Measure: Develop Port Technology (construction and maintenance of port facilities) by 2015.

It has been supported by ASEAN-Japan Transport Partnership (AJTP).

MT-Action 3: Establish efficient and reliable shipping routes, including RORO, connections between mainland and archipelagic Southeast Asia, and strengthen the linkages with global and domestic routes by 2015.

➤ Measure: Conduct a Master Plan Study and Feasibility Study on Global/Domestic Shipping together with a Feasibility Study on an ASEAN RORO Network by 2012.

In order to achieve the action, as a first step, it will be required to conduct the Master Plan Study and Feasibility Study. The Studies will especially focus on shipping network in archipelago countries, as well as an ASEAN RORO network. The Studies will also examine the shipping routes and linkages between global and domestic, which are composed of existing and new proposed shipping routes.

➤ Measure: Implement the proposed measures of the Master Plan and Feasibility Study by 2015

Based on the result of the said Master Plan Study and Feasibility Study, appropriate measure should be implemented.

MT-Action 4: Establish and enhance the Cruise Corridors.

➤ Measure: Conduct the Study on ASEAN cruise infrastructure development by 2011.

Comprehensive development study is required to thrive the cruising tourism, the Study includes 1) identify the importance of cruise shipping, ii) construct or upgrade the port infrastructure, iii) facilitation measure for cruise transport and iv)simplifying cruise regulations and procedures in sailing in the region is proposed.

Measure: Implement the proposed measures of the Study on ASEAN cruise infrastructure development by 2015.

<u>MT-Action 5</u>: Review ASEAN Near Coastal Voyage (NCV) Limits as per the requirements of Standards of Training, Certification and Watch-keeping (STCW) Convention by 2012.

➤ Measure: Review current arrangements for STCW in ASEAN NCV Limits by 2012.

IMO has reviewed NCV Limits as per STCW Convention, and if necessary, develop a framework for NCV Limits.

MT-Action 6: Enhance Search and Rescue (SAR) capacity and capability through combined air and maritime SAR Exercises (SAREX) by 2015.

➤ Measure: Develop the programme for SAREX by 2012.

An ASEAN SAR Directory has been completed and uploaded on the ASEAN website. On the other hand, the existing programme on SAREX do not involve participation of both air and maritime SAR agencies, the SAR activities usually come under the responsibility of a single SAR agency of individual Member States and are not implemented. Thus, it is required to enhance and activate the SAREX in keeping a relationship with air transport sector.

➤ Measure: Implement regular SAREX by 2015.

Based on several primary SAREX, its contents and method will be implemented, and it is better to regularly hold SAREX every year.

MT-Action 7: Develop human resources to strengthen port and shipping operations, including the introduction of advanced technologies for navigation safety, maritime security and environment preservation.

Measure: Formulate training programme to enhance capability of port personnel by 2012.

In order to enhance the capability of port personnel in cargo handling operation, navigation control, security management and environment management, training programme for port personnel is required to be formulated and implemented.

➤ Measure: Exchange information of navigation system.

Member states have presented their latest situation of navigation system, i.e., Long-Range Identification and Tracking System (LRIT) and Automatic Identification System (AIS) during MTWG meetings.

➤ Measure: Enforcement of cooperation relating to maritime casualty and marine incident investigation by 2013.

It has started under the scheme of ASEAN MOU on Cooperation Relating to Marine Casualty and Marine Incident Investigation, and ASEAN-China Maritime Consultation Mechanism (ACMCM) plans to support it.

➤ Measure: Establish logistics education and training centers at selected tertiary institutions within ASEAN by 2012.

It has started under Measure No.17 of the Roadmap and need to be continued.

➤ Measure: Establish regional centers for training advanced maritime technology by 2013.

It has started under Measure No.19 of the Roadmap and need to be continued.

➤ Measure: Formulate the programme for seafarers training and implementation.

It shall be supported by ACMCM and ASEAN-Japan Transport Partnership.

➤ Measure: Improve maritime security level and train security officer in accordance with ISPS code.

It shall be supported by ACMCM and ASEAN-Japan Transport Partnership.

Measure: Develop strategy for enhanced shipboard placements by 2011.

It has started under Measure No.18 of the Roadmap and need to be continued.

➤ Measure: Hold the workshop and formulate the programme for realizing environmentally-friendly maritime transport system by 2015.

ASEAN-Japan Action Plan on Environment Improvement in the Transport Sector (AJAPEIT) shall support it.

➤ Measure: Develop and implement the programme of port management system as to health and environment by 2015.

It has started under ASEAN/APA/GTZ Project; furthermore, ASEAN-Japan Action Plan on Environment Improvement in the Transport Sector (AJ-APEIT) and ACMCM shall support it.

<u>MT-Action 8:</u> Enhance the activity in cooperation with IMO, and promote to sign and implement the relevant IMO initiative Conventions.

➤ Measure: Support formulation and implementation of ASEAN Oil Spill Response Action Plan (OSRAP) by 2011.

It is planned to be implemented as IMO Integrated Technical Cooperation Programme (ITCP) for 2010-2011.

➤ Measure: Hold the regional workshop for maritime issues and sign and implement the relevant IMO initiative Conventions.

Under IMO-ASEAN MOU and ITCP, Workshop on HNS (Hazardous/Noxious/Substances) incidents, maritime casualty investigation and the international Convention on the control of Harmful Anti-fouling Systems on ships are planned. Furthermore, IMO-ASEAN partnership, which supports activities of member states, is under consideration by IMO.

Figure 6-5-1 below highlights the linkage between maritime transport goals and actions.

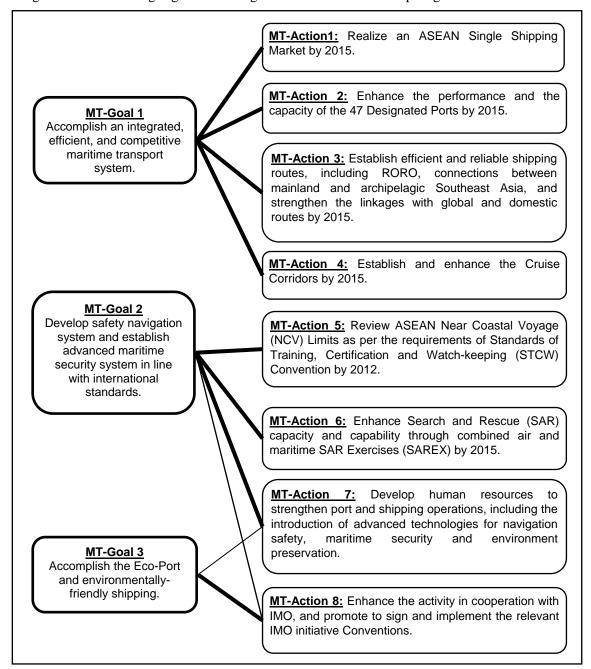


Figure 6-5-1 Linkages between Maritime Transport Goals and Actions

Table 6-5-1 Maritime Transport Goals, Actions, and Milestones

FG-1: Accomplish integrated, efficient, and competitive maritime transport system.			Time		Remarks		
MTA-1: Realize an ASEAN Single Shipping Market by 2015.	2011	2012	2013	2014	2015	Beyond	
Develop the strategies for an ASEAN Single Shipping Market through completing a study by the end of 2011, and agree on the strategies for an ASEAN Single Shipping Market by 2012.							Roadmap MPAC
Develop the relevant framework for implementation of an ASEAN Single Shipping Market by 2015.							MPAC
Develop guidelines on acceptable practices in the provision of fiscal suppor for shipping operations by 2011.	t						Roadmap
Formulate the directory of ship registration by 2011.							Roadmap
Develop guidelines for structure of port tariffs in ASEAN transport network ports by 2011.							Roadmap
Formulate a strategy for Implementation of a single labor market for ASEAI seafarers by 2013 and implement the strategy by 2015.	N						Roadmap
Support Privatization/Commercialization of port operation by 2014.							APA
Support Simplification and Harmonization of Port Documentation by 2014.							APA
ATA-2: Enhance the capacity of the 47 Designated Ports by 2015.	2011	2012	2013	2014	2015	Beyond	
Develop project priorities based on the guidelines for assessing port development by 2011.							Roadmap
Explore funding mechanisms to support the implementation of identified projects by 2012.							Roadmap
Ensure the 47 designated ports to meet the acceptable performance and capacity levels by 2015.						•	Roadmap
Identify and support Electronic Transmission of Information by 2014.					•		APA
Develop Port Technology (construction and maintenance of port facilities) b 2015.	у					•	ASEAN-Japa
Establish efficient and reliable shipping routes, including RORO, connections between mainland and archipelagic Southeast Asia, and strengthen the linkages with global and domestic routes by 2015.	2011	2012	2013	2014	2015	Beyond	
Conduct Master Plan Study and Feasibility Study on Global/Domestic Shipping together with a Feasibility Study on an ASEAN RORO Network b 2012.	у						MPAC
Implement the proposed measures of Master Plan and Feasibility Study by 2015.							MPAC
MTA-4: Establish and enhance the Cruise Corridors by 2015.	2011	2012	2013	2014	2015	Beyond	
Conduct a Study on ASEAN cruise infrastructure development by 2011.							ASEAN CW
Implement the proposed measures of the Study on ASEAN cruise infrastructure development by 2015.						•	ASEAN CW

MTG-2: Develop safety navigation system and establish advanced maritim security system in line with international standards.	е		Time	eline	s		Remarks
Review ASEAN Near Coastal Voyage (NCV) Limits as per the MTA-5: requirements of Standards of Training, Certification and Watch-keeping (STCW) Convention by 2012.	2011	2012	2013	2014	2015	Beyond	
Review current arrangements for STCW in ASEAN NCV Limits by 2012.							
MTA-6: Enhance Search and Rescue (SAR) capacity and capability through combined air and maritime SAR Exercises (SAREX) by 2015.	2011	2012	2013	2014	2015	Beyond	
Develop the program for SAREX by 2012.							
Implement regular SAREX by 2015.							
Develop human resources to strengthen port and shipping operations, MTA-7: including the introduction of advanced technologies for navigation safety, maritime security and environment preservation.	2011	2012	2013	2014	2015	Beyond	
Formulate training program to enhance capability of port personnel by 2012.			•				
Exchange information of navigation system.							
Enforcement of cooperation relating to maritime casualty and marine incident investigation by 2013.				•			ASEAN MOU ASEAN-China
Establish logistics education and training centers at selected tertiary institutions within ASEAN by 2012.							Roadmap
Establish regional centers for training advanced maritime technology by 2013	-			•			Roadmap
Formulate the program for seafarers training and implementation.							ASEAN-China ASEAN-Japan
Improve maritime security level and train security officer in accordance with ISPS code.							ASEAN-China ASEAN-Japan
Develop strategy for enhanced shipboard placements by 2011.		•					Roadmap
Hold the workshop and formulate the program for realizing environmentally-friendly maritime transport system by 2015.							ASEAN-Japan
Develop and implement the program of port management system as to health and environment by 2015.							ASEA/APA/GT ASEAN-Japan ASEAN-China
ITG-3: Accomplish the Eco-Port and environmentally-friendly shipping.			Time	eline	s		Remarks
MTA-8: Enhance the activity in cooperation with IMO, and promote to sign and implement the relevant IMO initiative Conventions.	2011	2012	2013	2014	2015	Beyond	
Support formulation and implementation of ASEAN Oil Spill Response Action Plan (OSRAP) by 2011.							IMO
Hold the regional workshop for maritime issues and sign and implement the relevant IMO initiative Conventions.							IMO

6.6 TRANSPORT FACILITATION

6.6.1 TRANSPORT FACILITATION GOALS

The main goal for transport facilitation is to establish an integrated, efficient and globally competitive logistics and seamless multimodal transport system to enhance the connectivity within ASEAN and with the world, as well as pursuing green logistics for global environment preservation

The following four specific goals were given prime importance on the framework of transport facilitation in ASTP by the review of ATAP actions, emerging trend analysis and issues covering three transport sectors, land, air and maritime transport. This follows MPAC as well.

- 1. Establish integrated and seamless multimodal transport system.
- 2. Enhance the competitiveness of ASEAN Logistics Industry
- 3. Establish safe and secure inter-state transport system
- 4. Develop environmentally-friendly logistics

6.6.2 TRANSPORT FACILITATION ACTIONS

In order to achieve above defined goals for land transport, ten specific actions are proposed as below, along with brief explanation specifying the rationale for their inclusion in ASTP.

<u>TF-Action 1:</u> Fully operationalise the three Framework Agreements on Transport Facilitation.

A transport network is only as strong as the weakest link. In addition, the weakest links can be found behind the national borders. In order to realise the vision of "single market and production base" as envisaged in the AEC Blueprint, ASEAN's connectivity should be enhanced through transport facilitation initiatives to minimise (and eventually eliminate) the frictions at national borders that increase the transactions cost of moving goods between countries in the region. These agreements have been signed on by all AMSs respectively and under ratification process. There are many steps to implement them fully. Protocol 6 of AFAFGT will start after SKRL is completed but it is necessary to accelerate the conclusion by 2011. Protocol 2 and 7 are neither signed nor finalized yet under other implement bodies but it is also necessary to be expedited under ASTP aiming at full operationalisation. For the smooth and swift implementation of these agreements, this action needs to be promoted with improved coordination. TTCB and NTTCCs will lead by following and implementing the TTCB overall work plan.

All AMSs has established their respective NTTCCs or formed an organization that will undertake the latter's corresponding roles. However, as the NTTCCs and TTCB have just started and further active enhancement of their function is expected. Evaluate/monitor regularly the implementation of the three framework agreements by TTCB and NTTCCs will be necessary and TTCB has to develop and implement work plan 2010-2015 to accomplish those actions by 2015, conducting regular meetings to implement three agreements.

TF-Action 2: Implement initiatives to facilitate Inter-State Passenger Land Transportation

This action will also be listed as one of the key strategies to enhance institutional connectivity in the Master Plan on ASEAN Connectivity.

The expansion of road and rail connections within ASEAN would certainly help to facilitate land travel between AMSs (by private vehicles, tour buses and coaches) which could likely to result in the development of new tour packages comprising of different Member States tourism products.

However there are a number of challenges which will impede the free movement of vehicles, goods, and people across international borders that includes: (i) restrictions on the entry of motor vehicles; (ii) different standards requirements (vehicle size, weight and safety requirements, and driver qualifications); (iii) inconsistent procedures related to customs inspections, customs clearances, and assessment of duties; and (iv) restrictive visa requirements.

In addressing these concerns, GMS signed the CBTA to facilitate cross border transport for both goods and people and BIMP-EAGA signed and implemented the Memorandum of Understanding on Cross Border Movement for Buses and Coaches. Several AMSs have entered into bilateral agreements to cater for greater cross-border mobility of passenger vehicles.

ASEAN should capitalise on the existing sub-regional agreements with the view to develop it into an ASEAN-wide agreement to facilitate inter-state passenger land transportation in the region.

<u>TF-Action 3:</u> Conduct studies on potential multimodal transport corridors to empower parts of ASEAN to function as land bridges in global supply routes.

For this action, three measures are i) Study on the 'Land Bridges' connecting the ports (dry and sea ports) in ASEAN mainland and its implementation, ii) Study on Mekong-India Economic Corridor as a land bridge and its implementation, and iii) Conduct development studies of the intra-ASEAN ferry links connecting ASEAN Highways and other priority routes by 2012 and its implementation.

With the purpose to integrate transport in an efficient way specially land and maritime transport and to decongest and reduce the disruption (man-made or natural hazards) from the Strait of Malacca, which is currently the busiest international waterways, it is proposed to conduct the 'Land Bridge' studies connecting the ports (sea and dry ports) at the eastern and western cost of ASEAN mainland via land transport (road/highways or rail). With such development, it is likely that transportation will be more economical, time saving and safer and will provide access to Indian Ocean. This will also be able to set up a perfect example of "Multi-Modal Transportation" as has been propagated by ASEAN leaders.

Varied intermediaries are rapidly growing in AMSs at present. More concrete and measurable action is required to achieve the promotion of the entire group of freight forwarders, MTOs, LSPs, and truck/haulage operators. Currently, the minimum requirement for MTOs has been set by AFAMT. While AFAMT were mainly derived from the UN Convention on Multimodal Transport and the UNCTAD / ICC Rules, APRIS report stated that signed AFAMT cannot satisfy the requirement of issues. The ASEAN Logistics Development Study proposed an action, i.e., "Develop a practical, simple, and uniform liability framework for multimodal transport through regional operation in line with global MT regime development." Such kind of liability framework will greatly help to clarify the definition and function of MTO and enhance the AFAMT.

TF-Action 4: Complete the East West Economic Corridor (EWEC)

To take advantage of the strategic location of ASEAN as the geographic center of the emerging global center of production and demand, it is necessary to strategise ASEAN as the

transport hub in the region. East West Economic Corridor (EWEC) will facilitate in economic development connecting ASEAN region and other countries. It is thus recommended to complete East West Economic Corridor (EWEC) by constructing a missing link in Myanmar and develop or upgrade terminal ports, Yangon and Da Nang

TF-Action 5: Promote the Mekong – India Economic Corridor (MIEC) as a land bridge.

The AEC blueprint states "ASEAN transport is also critical in linking ASEAN with the neighboring northeast and south Asian countries' and the draft statement of 'Comprehensive Asia Development Plan' also suggest for MIEC study to link ASEAN region with the rapidly growing South Asian region. ERIA has conducted an initial research on MIEC and the need is to further build on it. The development of such linkages by roads, bridges, ports, and railways will likely open multiple economic and trade related opportunities for ASEAN region.

<u>TF-Action 6:</u> Comparative study between EU & ASEAN region for the development of efficient transport system by 2013 and its adoption.

During the various discussions, report review and working group meetings, it was observed that ASEAN region is still not very well familiar with the details of integrated transport network and its facilitation system of European Union which is considered best among the comparative regions in the world. As there are many lessons that can be learnt and adopted for ASEAN region from EU system, the comparative transport study between these two regions will be the first step in this direction. Such study will bear fruits in long term and will be the ready reference material for any improvement or modification in the transportation system in ASEAN region.

<u>TF-Action 7:</u> Promote the usage of trade terms and practices related to multimodal transport, including the INCOTERMS.

This action is continued from ATAP and corresponding to measure No. 44 of RILS, which is requested to STOM and AFFA targeting 2013. These trade terms are important to achieve seamless multimodal transport operation and necessary to be continued in ASTP. Training and seminars about trade terms following new INCOTERMS 2010 might be very helpful.

<u>TF-Action 8:</u> Develop and upgrade skills and build capacity for MTO and Logistics Service Providers (LSPs) through joint training and workshops.

Capacity building is still highly demanded in AMSs. This requires continuous and long-term approach and efforts need to be accelerated in ASTP. As partially mentioned in section 3.2 of Chapter 3, No.39 to 42 of the RILS measures are intended for capacity building under which the AFFA proposed and implemented related programmes. In addition, there is an action to provide training on multimodal transportation, logistics, and supply chain management in IAI Work Plan Phase II. It is important to develop a policy and a plan on capacity development for MTOs and LSPs and conduct related joint training and workshops, including training for international driving, with the support of dialogue partners and AFFA. It is also necessary to promote logistics regional cooperation to assist CLMV countries as shown in RILS measure No.39 with AFFA as well.

<u>TF-Action 9:</u> Establish national/regional centres of excellence (training centers), national skills certification systems for LSPs, and a common core curriculum.

Each country has developed or planned to develop their training centres for logistics management, sometimes in assistance with dialogue partners or ASEAN cooperation framework. To achieve improved capacity development for logistics, each country needs to i) develop a national skills certification system for LSPs, ii) develop a common ASEAN core

curriculum for logistics management, and iii) establishment of national/sub-regional centers of excellence (training centres) in each AMSs. These are also stated in the RILS measures No. 40, 41, and 42.

<u>TF-Action 10:</u> Identify and develop the ASEAN logistics network and formulate the necessary infrastructure development requirements.

It is necessary to consider infrastructure development for efficient and integrated logistics more than just establishing logistic centres, which was the focus of ATAP. This action above is based on measure No. 43 of RILS. As stated in said measure, the followings should be the focus of such action; improving inland transport network infrastructure and the inter-modal linkages of connecting transport, matching inland and maritime transport infrastructure and developing connectivity between ASEAN logistics gateways. Also, it is important to identify infrastructure requirement by private sectors and to address private sector involvement and/or public-private partnership in the development of transport logistics infrastructure. Conducting monitoring of corridor performance would help to keep their corridor performance. The RILS stated "Develop and update an ASEAN database on logistics services providers" in measure No. 38. The outcome and benefit of database will enhance the development of networking and is expected to return to each country especially for other private service providers. The implementing bodies are stated by the ASEAN Secretariat with inputs from STOM and AFFA. However, these processes require discussions and cooperation during TFWG. The primary study and monitoring of the database are required as well.

<u>TF-Action 11:</u> Share and apply appropriate technologies of information systems for the promotion of supply chain security initiatives.

In terms of trade/transport procedure and documentation in ATAP Action No.4, application of technologies including but not limited to electronic documentation and signature remarkably contributes to efficient multimodal transport operation. Application of such appropriate technologies is important to establish safe, secure and efficient logistics network among ASEAN. To implement these technologies, capacity building and other knowledge sharing are essential. However, these systems are to be introduced gradually and carefully as per requirement as some of these advanced technologies may not be appropriate to some countries for time-being.

<u>TF-Action 12:</u> Develop green logistics through increase in logistics management efficiency and utilization of environmentally-friendly transport modes, fuel, fleets, and supporting logistics facilities.

To achieve efficient and environmentally-friendly transport in the region, green logistics is an essential concept to be introduced in ASTP. At the same time, LSPs can gain intangible benefits in the form of meeting the social responsibility and reducing the costs by adopting green logistics approach. The best practices and new ideas derived from the discussions and exchange of experiences about green logistics should be shared and applied to other AMSs. This action can be covered by the proposed three measures in the ASEAN Logistics Development Study, (1) encouraging energy saving, (2) decreasing carbon emissions, and (3) environmentally-friendly reverse logistics. These approaches necessitate a great deal of effort from forwarders, accordingly further cooperation from AFFA and Environment-WG.

The Figure 6-6-1 shows the inter-linkages between the specific goals and proposed actions. Following are the thirteen (13) proposed transport facilitation actions based on MPAC and the review of ATAP. Table 6-6-1 provides a summary of transport facilitation goals, actions, and milestones.

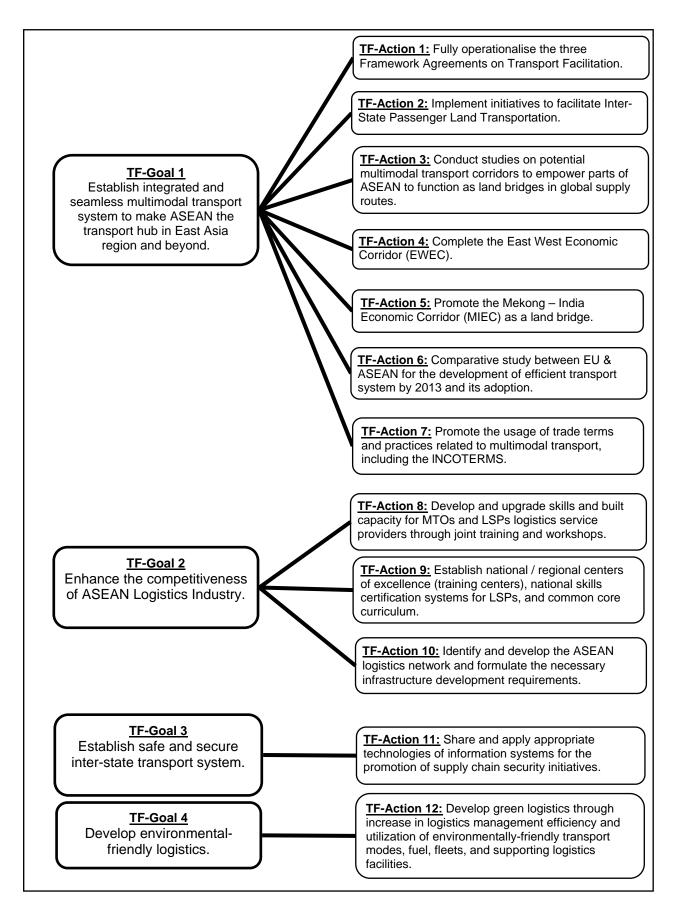


Figure 6-6-1 Linkages between Transport Facilitation Goals and Actions

Table 6-6-1 Transport Facilitation Goals, Actions, and Milestones

G-1:	Establish integrated and seamless multimodal transport systems to make ASEAN the transport hub in East Asia region and beyond.			Time	eline	Remarks		
FA-1:	Fully operationalise the three Framework Agreements on Transport Facilitation.	2011	2012	2013	2014	2015	Beyond	MPAC
	expedite the ratification of the Agreements so as to start their operationalisation the region.							
8	Accelerate the conclusion of Protocol 6 (Railway borders and interchange stations) under AFAFGIT for eventual signing by ASEAN Member States by 2011.							MPAC
٦	Expedite the finalisation of Protocol 2 (Frontier Posts) and Protocol 7 (Customs Fransit) under AFAFGIT for eventual signing by ASEAN Member States by 2011.							
	AFAFGT Protocol 1 - Conclusion of Annex 1 and ratification by all Member States.							
r	AFAFGT Protocol 3 - Formally increase maximum number of vehicles to be egistered per Member State from 60 to 500 revise and increase notify on ASEAN web site.							
	AFAFGT Protocol 4 - Implementation of guidelines, registration and certification procedures and begin registration of road transit transport vehicles.							
	AFAFGT Protocol 5 - Establishment of national and council of bureaus, review and amend national laws.							
	AFAFGT Protocol 5 - Fix content and form and administer Blue Cards insurance Scheme.							
	AFAFGT Protocol 5 - Control of accidents and investigation and settlement of claims including issuing of Blue Cards.							TTCB Overall Work P
	AFAFGT Protocol 8 - Establish bilateral, multilateral or ASEAN SPS arrangements and inspection procedures.							
	AFAFGT Protocol 9 - Ratification by all Member States and adoption of international standards.							
Å	AFAFGT Protocol 9 - Develop permit scheme.							
ļ	AFAMT-Ratification by all Member States.							
Å	AFAIST - Ratification by all Member States.							
AFA	Closely monitor the progress of implementation of AFAFGIT, AFAFIST and AMT in order to ensure that the three agreements would be implemented by the EAN Member States by 2014-2015.							MPAC
[Develop and implement work plan 2010 - 2015 initiated by TTCB.							
	Conduct regular TTCB meetings to operationalize the three framework agreements.							
	Evaluate/monitor regularly the implementation of the three framework agreements by TTCB and NTTCCs.				F		H	

3-1:	Establish integrated and seamless multimodal transport systems to make ASEAN the transport hub in East Asia region and beyond.	Timelines						Remarks
FA-2:	Implement initiatives to facilitate Inter-State Passenger Land Transportation.	2011	2012	2013	2014	2015	Beyond	MPAC
arra	pedite the implementation of the existing bilateral and sub-regional ngements on facilitation of inter-state passenger land transportation in the							
Dev tran	on by 2013. elop a regional ASEAN arrangement on facilitation of inter-state passenger land sportation, based on the assessment of the implementation of the bilateral and regional arrangements by 2015.							- MPAC
FA-3:	Conduct studies on potential multimodal transport corridors to empower parts of ASEAN to function as land bridges in global supply routes.	2011	2012	2013	2014	2015	Beyond	MPAC
	tudy on the 'Land Bridge' connecting the ports (dry and sea ports) in ASEAN nland by 2013 and its implementation.							
	dentification study of potential land bridges that may be taken up for further letail study by 2011.							
	Study on the identified and suggested "Land Bridge" connecting the ports in ASEAN mainland by 2013.							
	mplementation of the suggestions/projects by the above study on 'Land Bridge'. (from 2013 onwards)							
	tudy on Mekong-India Economic Corridor (MIEC) as a land bridge by 2013 its implementation.							MPAC
	Conduct study on Mekong-India Economic Corridor utilizing the research conducted by ERIA by 2013.							MPAC
	mplementation of the suggestions/projects by the above study on 'Mekong- ndia Economic Corridor (MIEC)'. (2013 onwards)							MPAC
	conduct development studies of the intra-ASEAN ferry links connecting ASEAN aways and other priorty routes by 2012 and its implementation.							MPAC
2 <u>(</u> 1	Conduct the following along with other development studies for the ferry links by 2012: Cambodia . Stung treng - Thalaboriwat (2 km) on AH-11 Indonesia							
3 <u>F</u> 2	2. Gilimanuk Terminal -Banyuwangi Terminal (8 km) on AH-2 3. Bakauheni Ferry Terminal -Merak Ferry Terminal (26 km) on AH-25 2. Hilippines 3. Matnog Terminal - Allen Terminal (25 km) on AH-26 5. Ormoc Terminal - Cebu Terminal (65 km) on AH-26 5. Liloan Ferry Terminal -San Francisco Madilao Port (60 km) on AH-26							
	mplement the projects/recommendation made in above studies. (2012 inwards)							
tran	evelop a practical, simple, and uniform liability framework for multimodal sport through regional operation in line with global multimodal transport regime elopment.							
	Conduct comparison study between actual regional practices and global and other regional initiatives to develop the most effective liability regime by 2012.							
	Develop a liability framework for multimodal transport through regional operation in line with global multimodal transport regime development by 2012 onward.							

G-1:	Establish integrated and seamless multimodal transport systems to make ASEAN the transport hub in East Asia region and beyond.			Time	eline	s		Remarks
FA-4:	Complete the East West Economic Corridor (EWEC).	2011	2012	2013	2014	2015	Beyond	MPAC
Cor	nstruct the missing link in Myanmar.							
Dev	elop/upgrade terminal ports: Yangon, Da Nang.							
FA-5:	Promote the Mekong – India Economic Corridor (MIEC) as a land bridge.	2011	2012	2013	2014	2015	Beyond	
Cor	nstruct the Mekong Bridge in Neak Loung (National road No.1 in Cambodia).							
Dev	elop the Dawei deep sea port (by 2020).							
Buil	d the highway between Kanchanaburi and Dawei (by 2020).							
	nduct a feasibility study and preliminary design for the railway spur line between achanaburi and Dawei.							
FA-6:	Comparative study between EU & ASEAN region for the development of efficient transport system by 2013 and its adoption.	2011	2012	2013	2014	2015	Beyond	
	nduct comparative study between EU & ASEAN region for the development of cient transport system by 2013.							
	option and implementation of suggestions made by the above study 'Conduct							
	nparative study between EU & ASEAN region for the development of efficient isport system. (2013 onwards)							
FA-7:	Promote the usage of trade terms and practices related to multimodal transport, including the INCOTERMS.	2011	2012	2013	2014	2015	Beyond	RILS 44
	mote the usage of trade terms and practices related to multimodal transport, uding the INCOTERMS.							RILS 44
G-2:	Enhance the competitiveness of ASEAN Logistics Industry.		<u> </u>	 Time	line	 s		Remarks
	Develop and upgrade skills and built capacity for MTOs and LSPs logistics	1	2	3	4	2	pu	
FA-8:	service providers through joint training and workshops.	2011	2012	2013	2014	2015	Beyond	
	elop a plan/ a policy of capacity building for MTOs and LSPs with the support ialogue partners and AFFA.							
Cor	nduct capacity building through joint training and workshops, including training							
	rnational driving, for multimodal operators and LSPs with the support of ogue partners and AFFA.							
Pro	mote logistics regional cooperation in AMSs.							
	Establish national / regional centers of excellence (training centers) , national	2011	2012	2013	2014	2015	Beyond	
FA-9:	skills certification systems for LSPs, and common core curriculum.					_		
FA-9:	elop national skills certification systems for LSPs, and common core curriculum.						l I	RILS 40
FA-9: Dev								RILS 40

G-2:	Enhance the competitiveness of ASEAN Logistics Industry.			Time	eline	Remarks		
FA-10:	Identify and develop the ASEAN logistics network and formulate the necessary infrastructure development requirements.	2011	2012	2013	2014	2015	Beyond	
1. D	evelop and upgrade an ASEAN database on logistics service providers.							RILS 38
	study on developing an ASEAN database on logistics with a view on enhancing ne development of networking services by 2011.							
С	Develop and update an ASEAN database on LSPs by 2014.							
	Nonitor and update the ASEAN database regulaty on logistics service providers 013 onward.							
2. ld	entify and develop the ASEAN logistics network.							
	mprove intermodal linkages between connecting modes of transport to improve onnectivity between ASEAN logistics gateways.							RILS 32
s	Develop logistics centers with strong intermodal connectivity and facilities for torage and special logistics services as well as distribution and consolidation ubs.							
	ormulate the necessary infrastructure development requirements.							
s tı	establish enabling and conducive policy environment for increased private ector involvement and/or public-private partnerships in the development of ransport logistics infrastructure and the provision and operation of transport ogistics facilities.							RILS 34
р	Conduct periodic monitoring of regional corridor performance to gauge the rogress of trade and transport facilitation, infrastructure development, and ervice improvement of LSPs.							
	G-3: Establish safe and secure inter-state transport system.		Timelines					
G-3:	Establish safe and secure inter-state transport system.			Time	line	s		Remarks
• G-3: •A-11:	Establish safe and secure inter-state transport system. Share and apply appropriate technologies of information systems for the promotion of supply chain security initiatives.	2011	2012	Time	eline:	2015	Beyond	Remarks
Enha	Share and apply appropriate technologies of information systems for the promotion of supply chain security initiatives. ance cooperation and communication between TFWG and CPTFWG to itate cross-border electronic transactions, information sharing, electronic	2011					Beyond	Remarks
Enha facili payr	Share and apply appropriate technologies of information systems for the promotion of supply chain security initiatives. ance cooperation and communication between TFWG and CPTFWG to itate cross-border electronic transactions, information sharing, electronic ment, and electronic signatures.	2011					Beyond	Remarks
Enha facili payr Pror	Share and apply appropriate technologies of information systems for the promotion of supply chain security initiatives. ance cooperation and communication between TFWG and CPTFWG to itate cross-border electronic transactions, information sharing, electronic	2011					Beyond	Remarks
Enha facili payr Pror amo chai	Share and apply appropriate technologies of information systems for the promotion of supply chain security initiatives. ance cooperation and communication between TFWG and CPTFWG to itate cross-border electronic transactions, information sharing, electronic ment, and electronic signatures. note relevant technologies for advanced information systems to be shared ing governmental agencies, shippers, and industry players in advancing supply in security initiatives. ance transport security and safety in the regional supply chain networks	2011					Beyond	
Enh: facili payr Pror amo chai Enh: throi relev	Share and apply appropriate technologies of information systems for the promotion of supply chain security initiatives. ance cooperation and communication between TFWG and CPTFWG to itate cross-border electronic transactions, information sharing, electronic ment, and electronic signatures. note relevant technologies for advanced information systems to be shared ing governmental agencies, shippers, and industry players in advancing supply in security initiatives. ance transport security and safety in the regional supply chain networks uph capacity building initiatives, technical networking, and regular exchange of ant technologies, best practices, and information.	2011					Beyond	Remarks RILS 27
Enharian facili payr Pror amo chai Enharian throuse releving Supp	Share and apply appropriate technologies of information systems for the promotion of supply chain security initiatives. ance cooperation and communication between TFWG and CPTFWG to itate cross-border electronic transactions, information sharing, electronic ment, and electronic signatures. Into the relevant technologies for advanced information systems to be shared and governmental agencies, shippers, and industry players in advancing supply in security initiatives. Into the relevant technologies for advanced information systems to be shared and governmental agencies, shippers, and industry players in advancing supply in security initiatives.	2011					Beyond	
Enharian facili payr Pror amo chai Enharian throuse releving Supp	Share and apply appropriate technologies of information systems for the promotion of supply chain security initiatives. ance cooperation and communication between TFWG and CPTFWG to litate cross-border electronic transactions, information sharing, electronic ment, and electronic signatures. Into the relevant technologies for advanced information systems to be shared and governmental agencies, shippers, and industry players in advancing supply in security initiatives. Into the relevant technologies for advanced information systems to be shared and governmental agencies, shippers, and industry players in advancing supply in security initiatives. Into the relevant technologies, shippers, and industry players in advancing supply in security initiatives. Into the relevant technologies, shippers, and information and regular exchange of land technologies, best practices, and information.	2011	2012	2013		2015	Beyond	
Enharacili payr Pror amo chai Enharacili payr Pror amo chai Supplogis	Share and apply appropriate technologies of information systems for the promotion of supply chain security initiatives. ance cooperation and communication between TFWG and CPTFWG to itate cross-border electronic transactions, information sharing, electronic ment, and electronic signatures. Into the relevant technologies for advanced information systems to be shared ing governmental agencies, shippers, and industry players in advancing supply in security initiatives. Into the relevant technologies for advanced information systems to be shared ing governmental agencies, shippers, and industry players in advancing supply in security initiatives. Into the regional supply chain networks and capacity building initiatives, technical networking, and regular exchange of the post introduction of IT functions to logistics centers to enhance intra-ASEAN strices.	2011	2012	2013	2014	2015	Beyond	RILS 27
Enharacili payr Prorramo chai Enharacili payr Prorramo chai Enharacili payr Enharacili	Share and apply appropriate technologies of information systems for the promotion of supply chain security initiatives. ance cooperation and communication between TFWG and CPTFWG to itate cross-border electronic transactions, information sharing, electronic ment, and electronic signatures. Into the relevant technologies for advanced information systems to be shared ing governmental agencies, shippers, and industry players in advancing supply in security initiatives. Into the relevant technologies for advanced information systems to be shared ing governmental agencies, shippers, and industry players in advancing supply in security initiatives. Into the regional supply chain networks agency transport security and safety in the regional supply chain networks agency transport security and safety in the regional supply chain networks agency transport security and information. Into the relevant technologies, shippers, and information into the security initiatives. Into the relevant technologies for advanced information systems to be shared in the supply chain networks agency transport security initiatives. Into the relevant technologies for advanced information systems to be shared in the supply chain networks agency that the regional supply chain networks are regional supply chain networks and information. Into the relevant technologies for advanced information systems to be shared in the supply chain networks and regular exchange of safety in the regional supply chain networks and regular exchange of safety in the regional supply chain networks and regular exchange of safety in the regional supply chain networks and regular exchange of safety in the regional supply chain sparts to be shared into shared in the safety in the regional supply chain sparts to be shared in the safety in the regional supply chain sparts to be shared in the safety in the regional supply chain sparts to be shared in the safety in the regional supply chain sparts to be shared in the safety in the regional supply chain sparts to be sh		2012	Time	enile	\$ 2012		RILS 27
Enharacili payr Pror amo chai Enharacili payr Pror amo chai Enharacili payr Encarefici factor Cone	Share and apply appropriate technologies of information systems for the promotion of supply chain security initiatives. ance cooperation and communication between TFWG and CPTFWG to itate cross-border electronic transactions, information sharing, electronic ment, and electronic signatures. Into the relevant technologies for advanced information systems to be shared ing governmental agencies, shippers, and industry players in advancing supply in security initiatives. Into the relevant technologies for advanced information systems to be shared ing governmental agencies, shippers, and industry players in advancing supply in security initiatives. Into the regional supply chain networks agency transport security and safety in the regional supply chain networks agency transport security and safety in the regional supply chain networks agency transport security and information. Into the relevant technologies, shippers, and information into the security initiatives. Into the relevant technologies for advanced information systems to be shared in the supply chain networks agency transport security initiatives. Into the relevant technologies for advanced information systems to be shared in the supply chain networks agency that the regional supply chain networks are regional supply chain networks and information. Into the relevant technologies for advanced information systems to be shared in the supply chain networks and regular exchange of safety in the regional supply chain networks and regular exchange of safety in the regional supply chain networks and regular exchange of safety in the regional supply chain networks and regular exchange of safety in the regional supply chain sparts to be shared into shared in the safety in the regional supply chain sparts to be shared in the safety in the regional supply chain sparts to be shared in the safety in the regional supply chain sparts to be shared in the safety in the regional supply chain sparts to be shared in the safety in the regional supply chain sparts to be sh		2012	Time	enile	\$ 2012		RILS 27

6.7 SUMMARY

Based on the review of ATAP, current transport status in AMSs, the emerging trend & challenges, and the six policy directions as discussed in earlier chapters, the specific goals and actions were proposed for each transport sector.

With an objective to establish safe, sustainable, efficient and integrated transportation system in ASEAN region, the ASTP proposed 10 actions, 6 actions, 8 actions and 13 actions for land transport, air transport, maritime transport and transport facilitation respectively. These are summarised in the Figure 6-3-1, 6-4-1, 6-5-1 and 6-6-1, which also shows the linkages between goals and actions for respective transport sectors. These inter-linkages are vital to understand the importance and relevance of each specific actions and its contribution in achieving the overall set goals. However, it is to be noted that considering the importance or non-accomplishment of few ATAP actions, the actions were carried forward in ASTP with minor modifications, if necessary. This revision was done to have better understanding and clarity of actions.

With the purpose of better understanding of actions and easy monitoring, each proposed actions were further sub-divided into measurable components and are allotted with a specific time-frame for the accomplishment of task. Table 6-3-1, Table 6-4-1, Table 6-5-1 and Table 6-6-1 provides further details with measurable milestones/components and time-frame for each action. On reviewing the details, the number of action's components/milestones will likely to go beyond the ASTP target year i.e. 2015. It is mainly either due to the lack of finance availability for the action or due to the nature or scope of action. For example, the action, 'Technical, Institutional and Human Capacity Enhancement' is a continuous process and will take few more years to reach at highest level. Similarly, in ASTP, number of studies are suggested which will require additional years for the implementation purpose and will likely go beyond the ASTP target year.

It is also to be noted that some of the specific goals such as accomplishments of ASEAN Highway, establishment of ITS, reduction in number of fatalities by 50%, establish SKRL network, etc. cannot be fully achieved during the ASTP duration. Hence, considering ASTP as a linkage point, the following next five-year transport plan i.e. for 2016-2020 will need to consider these goals for continuation and will have to translate or modify the ongoing/completed actions into effective actions so as to meet the overall set goals of establishing safe, sustainable, efficient and integrated transportation system in ASEAN region.