ENHANCING ASEAN CONNECTIVITY MONITORING AND EVALUATION

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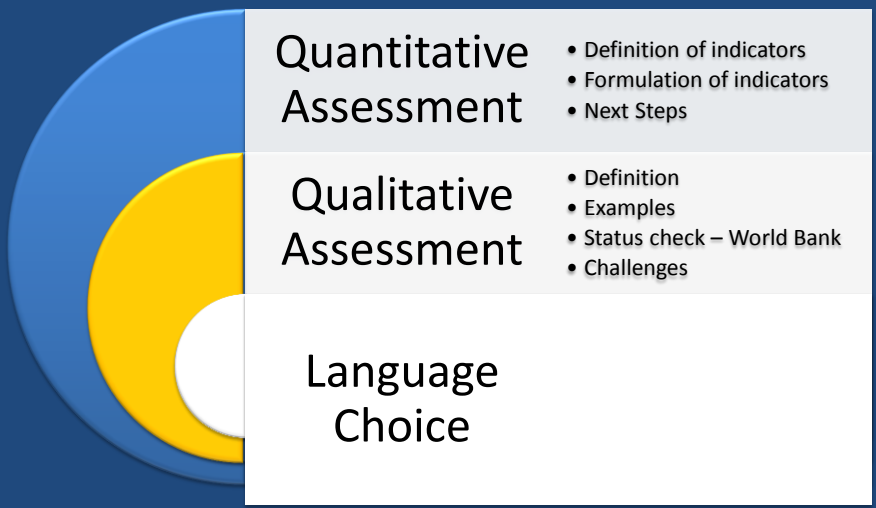
Background

- Master Plan for ASEAN Connectivity (MPAC) adopted in October 2010
- Includes three dimensions – physical, institutional and people-to-people.
- ASEAN Connectivity Implementation Matrix/Scorecard (ACIM) developed to track implementation of the key actions of the MPAC
- The World Bank was engaged by ASEAN to provide technical assistance to enhance the ACIM.

What does "Enhancing" the ACIM Mean?

- **Stay** true to the MPAC deliberative process
- **Assess** the existing ACIM
- **Evaluate** language choice for monitoring purposes
- **Develop** a qualitative and quantitative assessment strategy
- **Propose** appropriate output and outcome indicators
- **Implement** a capacity building plan

Structure of the Report



Initial Qualitative Assessment

Connectivity Dimension	Strategy
Physical	1. Complete the ASEAN Highway Network 2. Complete the implementation of SKRL project 3. Establish an efficient and integrated IWT network 4. Accomplish an integrated, efficient and competitive maritime transport system 5. Establish integrated and seamless multimodal transport system to make ASEAN the transport hub in the East Asia region 6. Accelerate the development of ICT Infrastructure and services in each of ASEAN Member States 7. Prioritise the processes to resolve institutional issues in ASEAN energy infrastructure projects

Initial Qualitative Assessment

- In terms of physical connectivity a check–list of what is missing would have been sufficient to reflect upon the actual physical links

But

- It is not enough if the goal is to understand the output and outcome of such physical connectivity.

Initial Qualitative Assessment

Institutional	1. Fully operationalize the 3 framework Agreements on transport facilitation (AFAFGIT; AFAFIST; AFAMT) 2. Implement initiatives to facilitate inter–state passenger land transportation 3. Develop the ASEAN Single Aviation Market 4. Develop an ASEAN Single Shipping Market 5. Accelerate the free flows of goods within ASEAN region by eliminating barriers to merchandise trade. 6. Accelerate the development of an efficient and competitive logistics sector, in particular transport, telecommunication and other connectivity–related services in the region 7. Substantially improve trade facilitation in the region 8. Enhance border management capabilities 9. Accelerate further opening of ASEAN member states to investments within and beyond the region under fair investment rules 10. Strengthen institutional capacity in lagging areas in the region and improve regional–sub–regional coordination of policies programmes and projects.

Initial Qualitative Assessment

- The concept of institutional connectivity requires additional specification.
- Many of the devised key actions focus upon following up on ASEAN member states in terms of ratification, implementation of agreements and how liberalized market access can be followed through as per the various strategies.
- The devised key action can only reflect the status or the possible direction and requires that additional attention be paid to the formulation of each action to enable the monitoring effort.

Initial Qualitative Assessment

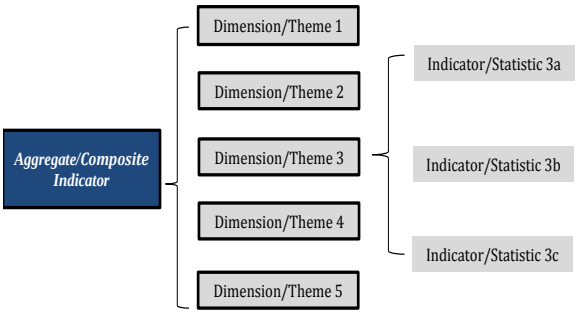
People to people	**1. Promote deeper intra–ASEAN social and cultural understanding** **2. Encourage greater intra–ASEAN people mobility**

- The formulation of the actions under the people–to–people dimension is more precise than the physical or institutional connectivity, which readily facilitates the monitoring process.
- However, the people–to–people dimension requires additional work to identify and specify output and outcome indicators.

Moving towards composite indicators

Composite indicators combine data from multiple dimensions and indicators into one single indicators

Figure 1: *Schematic Overview of a Composite Indicator*



Advantages and Disadvantages of Composite Indicators

Advantages	Disadvantages
• Summarize complex issues, in view of supporting decision–makers.	• May send misleading policy messages, if they are poorly constructed or misinterpreted.
• Easier to interpret than trying to find a trend in many separate indicators.	• May invite drawing simplistic policy conclusions, if not used in combination with the indicators.
• Facilitate the task of benchmarking performance across a range of sectors/regions/countries.	• May lend them to instrumental use if the various stages are not transparent and based on sound statistical or conceptual principles.
• Assess progress of countries over time on complex issues.	• The selection of indicators and weights could be the target of political challenge.
• Reduce the size of a set of indicators or include more information within the existing size limit.	• May disguise serious failings in some dimensions of the phenomenon, and thus increase the difficulty in identifying the proper remedial action.
• Place issues of countries performance and progress at the center of the policy arena.	• May lead wrong policies, if dimensions of performance that are difficult to measure are ignored.
• Facilitate communication with ordinary citizens and promote accountability.	

Quantitative Indicators for Physical Connectivity

- The Enhanced ACIM for MPAC will include three types of indicators at the level of key actions, strategies and dimensions.
- Output Indicators – measures specific outputs e.g. roads built
- Outcome Indicators – measures the impact of MPAC on regional level connectivity, e.g. travel time reduction on roads.
- Composite Indicators – Aggregates all outcome indicators by dimension for better measurement.

Figure 3: *Output indicators for the Physical Connectivity Dimension in the ACIM*

Strategy	Name	Key Action	Action	Output indicator	Formula output indicator
1	Complete the ASEAN Highway Network	1	Upgrade all "below Class III" sections of AHN —BC3R—	Percentage of BC3Rs upgraded	$OUTP111 = \left(\frac{Kilometers\ of\ BC3Rs\ upgraded}{Kilometers\ of\ BC3Rs\ in\ 2010}\right) * 100$
		2	Install common road signs in all designated routes	Percentage of Transit Transport Routes —TTRs— using common road signs	$OUTP112 = \left(\frac{Kilometers\ of\ TTRs\ using\ common\ signs}{Kilometers\ of\ TTRs\ in\ ASEAN}\right) * 100$
		3	Upgrade high traffic "Class II or III" roads —HTR— to "Class I"	Percentage of "Class II and III" roads upgraded	$OUTP113 = \left(\frac{Kilometers\ of\ Class\ 2\&3\ roads\ upgraded}{Kilometers\ of\ HTRs\ Class\ 2\ \&\ 3}\right) * 100$
		4	Complete the missing links of AHN	Percentage of missing links of AHN completed	$OUTP114 = \left(\frac{Kilometers\ of\ missing\ links\ completed}{Kilometers\ of\ missing\ links}\right) * 100$
2	Complete the implementation of SKRL project	1	Construct the missing sections of rail.	Percentage of missing sections of rail constructed	$OUTP121 = \left(\frac{Kilometers\ of\ rail\ sections\ constructed}{Kilometers\ of\ missing\ rail\ sections}\right) * 100$
3	Establish an integrated inland waterways network	1	Regional plan for developing inland waterways in ASEAN	Report: Regional plan for Inland Waterways Development —RPIWD—	
4	Accomplish an integrated maritime transport system —IMTS—	1	Enhance performance and capacity of 47 selected ports	Increase Annual Port Throughput —APT— in ASEAN region	$OUTC141 = \left[\left(\frac{Average\ APT\ in\ 2015}{Average\ APT\ in\ 2010}\right) - 1\right] * 100$
5	Establish an integrated multimodal transport system	1	Complete the East West Economic Corridor (EWEC).		
		2	Promote the Mekong-India Economic Corridor (MIEC)	Percentage of needed road and bridges constructed	$OUTP152 = \left(\frac{Kilometers\ of\ road/bridge\ constructed}{Kilometers\ of\ roads\ and\ bridges\ needed}\right) * 100$
		3	Identify and develop a network of ASEAN dry ports	MAP: Network of ASEAN dry ports	
6	Accelerate the development of ICT Infrastructure and services	1	Establish an ASEAN Broadband Corridor		
		2	Establish an ASEAN Internet Exchange Network		
7	Prioritise the processes to resolve institutional issues in energy infrastructure projects	1	Trans-ASEAN Gas Pipeline —TAGP—	TAGP infrastructure project compleated	$OUTP171 = \left(\frac{TAGP\ projects\ compleated\ by\ 2015}{Number\ of\ TAGP\ project\ required}\right) * 100$
		2	ASEAN power grid —APG—		

Figure 4: *Outcome indicators for the Physical Connectivity Dimension in the ACIM*

Strategy	Name	Key Action	Action	Outcome indicator	Description outcome indicator
1	Complete the ASEAN Highway Network	1	Upgrade all "below Class III" sections of AHN —BC3R—	Reduction in freight transport time —FTT—	$OUTC111 = \left[\left(\frac{AHN\ \ average\ speed\ in\ 2014}{AHN\ \ average\ speed\ in\ 2010}\right) - 1\right] * 100$
		2	Install common road signs in all designated routes		
		3	Upgrade high traffic "Class II or III" roads —HTR— to "Class I"	Reduction in freight transport time —FTT— in HTRs	$OUTC113 = \left[\left(\frac{HTRs\ average\ speed\ in\ 2014}{HTRs\ \ average\ speed\ in\ 2010}\right) - 1\right] * 100$
		4	Complete the missing links of AHN	Optimization of road freight routes	$OUTC114 = \left(\frac{Optimal\ Road\ Route\ (time)}{Suboptimal\ Road\ Route\ (time)}\right)$
2	Complete the implementation of SKRL project	1	Construct the missing sections of rail.	Optimization of rail freight routes	$OUTC121 = \left(\frac{Optimal\ Road\ Route\ (time)}{Suboptimal\ Road\ Route\ (time)}\right)$
3	Establish an integrated inland waterways network	1	Regional plan for developing inland waterways in ASEAN	Increase in Freight Volume using Inland Waterways —FVIW—	$OUTC131 = \left[\left(\frac{FVIW\ in\ 2015}{FVIW\ in\ 2010}\right) - 1\right] * 100$
4	Accomplish an integrated maritime transport system —IMTS—	1	Enhance performance and capacity of 47 selected ports	Change in Liner shipping connectivity index —LSCI— trend	Time series model to detect structural change on the LSCI trend due to the IMTS
5	Establish an integrated multimodal transport system	1	Complete the East West Economic Corridor (EWEC).	Increase in Cargo flows coming in and out of Yangon and Da Nang Ports	$OUTC151 = \left[\left(\frac{Volume\ of\ cargo\ handle\ in\ 2015}{Volume\ of\ cargo\ handle\ in\ 2010}\right) - 1\right] * 100$
		2	Promote the Mekong-India Economic Corridor (MIEC)	Increase in truck traffic in the MIEC	$OUTC152 = \left[\left(\frac{Number\ of\ trucks\ per\ day\ in\ 2015}{Number\ of\ trucks\ per\ day\ in\ 2010}\right) - 1\right] * 100$
		3	Identify and develop a network of ASEAN dry ports		
6	Accelerate the development of ICT Infrastructure and services	1	Establish an ASEAN Broadband Corridor	Change in Broadband Penetration —BP— trend: "Broadband subscribers per 100 inhabitants"	Time series model to detect structural change on the BP trend due to the ASEAN Broadband Corridor
		2	Establish an ASEAN Internet Exchange Network	Change in Internet Users —IU— trend: "Internet Users per 100 inhabitants"	Time series model to detect structural change on the IU trend due to the ASEAN Internet Exchange Network
7	Prioritise the processes to resolve institutional issues in energy infrastructure projects	1	Trans-ASEAN Gas Pipeline —TAGP—		
		2	ASEAN power grid —APG—	APG Semi-elasticity of ASEAN shortfalls	Time series model to estimate the percentage reduction in shortfall due to the implementation of Total Integrated APG

Indicative Timeline of Activities