

**Country Response Sheet**

Initiatives/achievements made by the countries in relation to the recommendations made in the *Aichi Statement*

2<sup>nd</sup> Regional EST Forum, 11-12 December 2006, Yogyakarta, Indonesia

Name of the Country: Myanmar

Name of the Ministry/Ministries: Jointly prepared by NCEA and Ministry of Rail Transportation

EST Thematic Areas	Aichi Statement Recommendations	Policy relevant questions	Country responses (Please provide policy initiatives, achievements, measures, best practices, etc for each of these questions. Additionally, you may wish to attach relevant reports, good case studies to supplement your response.)
a. Public health	<ul style="list-style-type: none"> <li>• Promoting integrated transport policies that mitigate the negative human health impacts of motorized transport</li> <li>• Recognizing the high costs incurred to the national health system due to non-sustainable transport modes</li> <li>• Strengthening the coordination and cooperation among health and transport agencies</li> </ul>	<p>1. Are public health and road safety integral part of the transport policies? Is public health given high priority in the current transport policies, future transport plans, or strategies in pipeline?</p>	<p>There are policy-like statements in transportation sector of Myanmar and officials from Ministry of Health at different administrative levels are members of the Traffic Rule Enforcement supervisory Committee. (TRESC)</p> <p>Public health is given in priority in the work of committee.</p>
		<p>2. What is the coordination mechanism between Ministry of Health, Ministry of Transport and Ministry of Environment on public health and safety issues?</p>	<p>Monthly work coordinating meeting is held among the committee members so that to review the state of transportation including traffic accidents. The inclusion of environmental official to the committee is under consideration.</p>

		3. Are there studies available to show the adverse health impacts (i.e. disease, injury and death due to vehicular emissions (e.g. PM, NOx, HC, Pb, etc.), noise, traffic crashes and other factors related to transport?	Will be answered later.
		4. Is there any effective public awareness campaigns and information dissemination mechanism on public health impacts caused by transport and traffic?	Yes. The TRESA holds public awareness campaign on public health impacts once in every 2 years regularly.
		5. Are there studies available to show positive health effects of non-motorized transport?	No. There are no studies available to show public health effect of non-motorize transport.
		6. Is the economic burden to the national health system due to health impacts of transport estimated, and if so is it on increase or decline?	Yes. Myanmar has worked out the economic burden by health impacts caused by traffic accident. In the year 2003, the lost for traffic accidents and its related casualties amounted to 93 million Kyats (3% of National GDP) to the public health impacts caused by transport. The burden is on increase.
b .Land-use planning	<ul style="list-style-type: none"> <li>• Accepting a vision of cities for people rather than for cars, with a focus on the movement of people and goods rather than vehicles</li> <li>• Supporting urban planning with a particular emphasis on</li> </ul>	7. What is the percentage of green area (i.e. parks, roadside plantations, vegetation, etc) in major cities? What type of cities does your country want to realize by 2020 – cities with more public spaces or more vehicles or more green zones? Are there any city master plans?	3 to 5%of total planning area for Yangon city. More space for public use are intended. A 30-year master plan was prepared for Yangon city. A new master plan for Nay Pyi Taw has also been prepared.

	<p>public transport, non-motorized transport, traffic safety and environmental control</p> <ul style="list-style-type: none"> <li>• Encouraging the integration of both land-use and transport planning to reduce the unplanned, low-density expansion of urban areas</li> <li>• Promoting urban revitalization through mixed-use development, favouring concentrated development around public transport nodes</li> </ul>	<p>8. Are there any specific land use planning policies to reduce the average trip distance within cities?</p>	<p>Yes. Land-use planning policies to reduce average trip distance within cities are-</p> <ul style="list-style-type: none"> <li>⊕ Road hierarchy</li> <li>⊕ Zoning planning to distribute major traffic generators</li> <li>⊕ Locating high-way buses terminal at the fringiest of the cities.</li> <li>⊕ Decentralization of sub-centres away from the cities centres towards the outer ring.</li> </ul> <p>Development of industrial zones near the new town settlement to create job opportunities in also facilitating with the social and commercial infrastructure such as schools, markets, clinic, etc. to reduce long distance commuting trips.</p>
		<p>9. Are there any specific measures in place to promote mixed-use development (i.e. locating residence with commercial areas, important facilities such as schools, hospitals, etc)?</p>	<p>Yes. Every resettlement and aerial development project contains commercial and social infrastructure.</p>
		<p>10. What are the current and future measures to avoid uncontrolled urban sprawl?</p>	<p>Some measures taken so that to avoid uncontrolled urban sprawl are construction of multi layer housing estate in heart area of the city while low cost housing plan is implemented in sub-urban area.</p>

		<p>11. Are there currently any plans to promote transit-oriented development (concentrated development around public transport nodes)?</p>	<p>The current plan to promote transit –oriented development projects are the development of ware houses, shopping complexes and shopping centres near the high-way bus terminals and interchange of the major cities.</p>
		<p>12. Is there in place or is there any intention to introduce Transport Impact Assessment and/or Planning Obligations with respect to traffic restraint/reduction?</p>	<p>Road Transport Department has conducted Transport Impact Assessment and /or Planning Obligations with respect to traffic restraint/reduction</p>
<p>c. Environment and people friendly urban transport infrastructures</p>	<ul style="list-style-type: none"> <li>• Providing affordable and socially acceptable transport infrastructure and facilities in urban areas</li> <li>• Recognizing that overprovision of infrastructure can induce additional travel by private motorized vehicles and result in increased pollution and congestion, unless appropriate consideration is made</li> <li>• Acknowledging the importance of mass transit systems in meeting the needs for increased mobility in an environment friendly manner</li> </ul>	<p>13. What is the percentage of important junctions/traffic intersections provided with traffic signals and crossings? Do these crossings also include dedicated signal control for pedestrians?</p>	<p>30 % of important junction has been provided with traffic signals and crossing in Yangon City. However, there are only 13 dedicated signal control for pedestrians.</p>
		<p>14. How many kilometres of priority public transport infrastructure have been built (e.g. exclusive bus ways, bus lanes, etc.)?</p>	<p>No. There is no exclusive bus way in Yangon</p>
		<p>15. How many kilometres of dedicated cycle ways have been constructed?</p>	<p>No. dedicated cycle way in Yangon. But cycle ways are built in Mandalay and Pyay.</p>
		<p>16. How many square metres of fully pedestrianised space is available to urban residents?</p>	<p>There are some areas left for pedestrians. Area estimated for the said context in unavailable.</p>
		<p>17. What is the percentage of public transportation facilities (e.g. bus stations, railway stations) equipped with facilities for handicapped, the elderly people, pregnant women, and children?</p>	<p>Not in existence. But the handicapped are in priority stage in our social consideration.</p>

		18. Are there any policies or mechanisms to promote more environment and people friendly transport infrastructure?	Development of policies to promote more environment and people friendly transport infrastructure is under consideration.
		19. Which are the best examples of environment and people friendly transport infrastructure in your country (please provide digital photographs if readily available)?	Not in existence.
d. Public transport planning and transport demand management (TDM)	<ul style="list-style-type: none"> <li>Maintaining or increasing the share of public transport by improving the quality of such services</li> <li>Controlling the demand for private motorized travel through a combination of policies, such as regulatory measures (manage demand for road space), fiscal policies (such as parking fees, vehicle taxes, road or congestion charging, and fuel taxes, etc.), and infrastructure design measures</li> <li>Recognizing Bus Rapid Transit (BRT) as a low-cost mass transit option which can be</li> </ul>	20. What is the percentage of people using public transportation modes in major city centres? What is the current modal split in major city -centres? (bus, railway, private cars, 2-3 wheelers, NMT)	Bus at <b>82,4%</b> Taxi at <b>9.4%</b> Ferry <b>1.2 %</b> Urban railways 3.9% and Non-motorized vehicles at <b>3%</b> .
		21. What percentage of the urban transport budget is spent on: <ul style="list-style-type: none"> <li>- metro (where applicable)</li> <li>- road construction</li> <li>- road maintenance</li> <li>- bus system</li> <li>- bicycle facilities</li> <li>- pedestrian facilities</li> </ul>	Yangon City Development Committee gives its budget more on road construction and maintenance than pedestrians facilities bus systems and bicycle systems.
		22. Which measures are in place to restrict vehicle use in your cities (e.g. parking fees, vehicle taxes, road or congestion charging, license tag restrictions by day, fuel taxes)?	Levying parking fee alone is in place to restrict vehicle use.

	<p>implemented quickly to meet the growing demand for mobility</p> <ul style="list-style-type: none"> <li>Recognizing Mass Rapid Transit (MRT) as a mass transit option which can be implemented to meet the growing demand for mobility, where appropriate</li> </ul>	<p>23. What are the good regulatory measures and fiscal policies currently in place to promote use of public transport facilities?</p>	<p>Less taxation to bus and taxi imports than private vehicle importation may be identified as a good fiscal measure to promote use of public transport facilities.</p> <p>30 % for bus /taxi vehicle 300% for private vehicle import.</p> <p>Public transportation facilities are still in necessity due mainly to financial and technical constraint to meet ever growing public demand.</p>
		<p>24. Are there any prospective BRT implementation plans in the future? Also are there any major programmes in promoting MRT (including Light Rail Transit, renovation of railways, etc.)</p>	<p>Bus Rapid Transit (BRT) in Yangon is under consideration in future. MRT, for Myanmar, is still far from our consideration.</p>
<p>e. Non-motorized transport (NMT)</p>	<ul style="list-style-type: none"> <li>Acknowledging the dependence of all-income groups on non-motorized transport and its importance as an environmentally sustainable mode of transport</li> <li>Aiming to maintain or enhance the existing role of non-motorized transport, especially in dense urban areas, especially for short trips</li> <li>Encouraging the provision of</li> </ul>	<p>25. Do the current transport policies give adequate consideration to NMT (non-motorized transport) and pedestrians?</p>	<p>Yes.</p>
		<p>26. Are there any initiatives or programmes to promote trips by bicycles (e.g. safe and exclusive bicycle lanes)?</p>	<p>Not yet.</p>
		<p>27. Are there any initiatives to promote safe and exclusive sidewalk or footpath lanes in major cities?</p>	<p>Yes. There are some initiative to promote safe footpath lane in Yangon and Mandalay cities.</p>

	<p>higher-quality infrastructure and the development of city-level master plans for footpaths and cycle ways</p> <ul style="list-style-type: none"> <li>Increasing safety for non-motorized transport</li> </ul>	28. How many pedestrians and cyclists are killed each year?	Will be answered later.
f. Social equity and gender perspectives	<ul style="list-style-type: none"> <li>Acknowledging the need for, and contribution of, safe and affordable urban transport systems to the alleviation of poverty and the promotion of social development</li> <li>Recognizing that public transport has to address the conditions of women and the need to build the institutional capacity to better include gender aspects in urban transport planning</li> <li>Providing infrastructure that particularly caters to the needs of the most vulnerable users, including children, the elderly, and the physically disabled</li> </ul>	29. Do your current transport policies and measures give adequate consideration to aspects such as secure affordable movements of low-income families? Is it possible for a woman to travel safely and comfortably with several children? Please give some examples.	Yes. Low bus fare in Yangon and Mandalay cities make low income families affordable to move from place to place. It is possible for a woman with 4-5 children to travel safely in Yangon but not comfortably.
		30. Women often travel at other times and to other destinies than men do. To what extend are the demands of women taken into account and provided for?	No gender discrimination is in existence in Myanmar. Women can safely travel in the country.
		31. Is there public transport making it possible for women (at different ages) to travel alone to educational and health care institutions?	Yes.
		32. Do your current transport policies and measures give adequate consideration to social equity and poverty eradication? Please give some concrete examples/cases.	Low bus fare makes relief to some extent for poor income people. But it is hard to say that this systems reduces poverty in the country
g. Road safety and maintenance	<ul style="list-style-type: none"> <li>Creating appropriate inter-agency coordination and management mechanism to address the road safety in transport policies and programmes</li> <li>Acknowledging road safety as a primary guiding principle for</li> </ul>	33. Is there a systematic road safety program in the country?	There is road safety programme in Myanmar follow up activities to ASEAN ADB road safety programmes are being undertaken in the country.
		34. Do you have any time bound target towards reduction of road accident or fatality number?	Yes. We have time-bound target towards reduction of road accidents-by 2009

	<p>transport planning</p> <ul style="list-style-type: none"> <li>Mobilizing resources for formulation and implementation of multi-stakeholder integrated road safety action plans</li> </ul>	<p>35. Are there an accident, traffic injury and fatality data base system in the country or in major cities?</p>	<p>There are accidents, traffic injuries and facilities database system in Myanmar. Information on the said context is gathered by Police Force at different regions. The information is reviewed at every 4 months by Road Transport Administration Department (RTAD).</p>
		<p>36. Do you have sound financing of road safety policies?</p>	<p>No special financial allocation for road safety policy is in existence. It is conducted by regular budget supports</p>
		<p>37. Is the mortality rate due to traffic accidents on the increasing or decreasing trend during last 5 years?</p>	<p>The mortality rate due to traffic accidents is slightly increasing during the last 5 years.</p>
		<p>38. Is there a national multi-sector Road Safety Council or Committee in place? Is there a national road safety action plan in place? Are the Council/Committee and the action plans adequately financed and effective?</p>	<p>No national multi-sector road safety council or committee is in existence. As mentioned before, TRESs are formed at different regions (States and Divisions) and the committees act as necessary road safety measures locally</p>
<p>h. Strengthening road side air quality monitoring</p>	<ul style="list-style-type: none"> <li>Improving road side air quality monitoring in urban city centres to</li> </ul>	<p>39. Do you have road side air quality standards?</p>	<p>No road side air quality standards in Myanmar</p>



and assessment	<p>better understand the impacts of road side pollution on people travelling on the roads and people working or living close to the roads</p> <ul style="list-style-type: none"> <li>Improving and harmonizing road side monitoring methodologies in line with the internationally standardized methodologies for ambient air quality monitoring</li> </ul>	40. Do you have road side air quality monitoring and assessment (for key pollutants such as SPM, PM, Pb, NOx, CO, HC) capabilities in major cities?	NCEA (National Commission for Environmental Affairs) jointly with meteorological department, public health department and Road Transportation Administration Department (RTAD) are carrying out a plan financed by UNEP to measure air quality in Yangon.
		41. Are there studies available to show the health impacts and casualties among the road side dwellers?	There are few case studies relating to health impact and causalities among the road side dwellers
i. Traffic noise management	<ul style="list-style-type: none"> <li>Improving traffic noise monitoring in urban city centres to better understand the impacts of road side noise on people travelling on the roads and people working or living close to the roads</li> <li>Acknowledging the need for standards on noise levels and the enforcement of such standards by establishing management mechanisms</li> <li>Promoting the prevention of excessive</li> </ul>	42. Do you have traffic noise standards in place? How are they enforced?	Yes. Myanmar adopts ASEAN traffic noise standards at 115 dB (A). The RTAD make inspection to vehicles for this issue yearly at the time of vehicle license renewal.
		43. Do you have traffic noise monitoring and assessment in urban city centres?	Noise detectors are employed to access the traffic noise in Yangon, but no elsewhere in Myanmar. An instruction to make Yangon as "Free Horn Zone" has been issued Yangon TRESA since 2003
		44. Do you have example of cities where appropriate land use planning is introduced to reduce the impact of traffic noise?	No example

	noise through the promotion of non-motorized modes and high-quality public transport	45. What are the types of noise barriers (e.g. concrete, wooden, metal, vegetation) are in place in major cities?	Vegetation is used as noise barriers in Yangon and Mandalay cities.
j. Cleaner fuel	<ul style="list-style-type: none"> <li>Phasing out leaded gasoline as rapidly as possible, and phasing down sulphur levels in gasoline and diesel as required to achieve advanced vehicle emission standards</li> <li>Acknowledging the contribution of alternative fuels such as Compressed Natural Gas (CNG) and biomass-derived ethanol and biodiesel as a means to reduce vehicle emissions</li> <li>Planning for an eventual transition to renewable fuels</li> </ul>	46. Has lead (Pb) been eliminated from gasoline in the country? If not, do you have a road map for elimination of lead?	Not yet. Limited use of leaded gasoline prevails in the country
		47. Do you have fuel quality standards corresponding to the latest emission standards (if you have emission standards)?	Myanmar adopts ASTM standards.
		48. Do you have any roadmap for fuel quality improvement?	Not yet.
		49. Do you have policies to introduce/promote alternative cleaner fuels (e.g. CNG, biofuel such as ethanol, FAME, LPG, DME, GTL, CTL, BTL, etc)?	Myanmar is using alternative cleaner fuel (CNG). A total of 11,000 vehicles, mainly buses and taxis, has been changed to CNG gas-driven cars. And 20 CNG filling stations are operating in Yangon. To produce bio-fuel from physic nuts ( <i>Jatropha carcus</i> ) are being grown across the country with the active people participation.
		50. What are the regulatory, fiscal policies and instruments that are in place to promote use of cleaner fuels?	Environmental law is in process and strict rules for use of cleaner fuel is not enacted.
k. Vehicle emission control, standards, and inspection and	<ul style="list-style-type: none"> <li>Rapidly phasing-in strict emission standards for new vehicles, with due</li> </ul>	51. Do you have mass emission standards for new vehicles in line with internationally accepted standards (e.g., Euro)?	Myanmar adopts and uses ASEAN emission standards < 50% BOSCH unit.

maintenance (I/M)	<p>regard to manufacturing lead times and to the provision of compatible fuels</p> <ul style="list-style-type: none"> <li>• Adopting and enforcing vehicle inspection and maintenance programmes for vehicle emissions and safety, based on high-volume, test-only inspection centres with stringent quality control</li> <li>• Reducing emissions from in-use vehicles by retro-fitting of emission control devices and/or the conversion to lower-emitting fuels</li> </ul>	52. Do you have any road map for progressively strict mass emission standards for new vehicles?	Not yet
		53. Do you have a system of mandatory inspection of 'in-use' vehicles for emissions? Is it a centralized or decentralized system?	Yes, we have. In accordance with the rules for Motor Vehicle Act (1989), every vehicle in-use is required to be inspected by the authority concerned yearly. It is a decentralized system.
		54. If it is decentralized, how many of these are available in each city? Are these privately owned or government owned and are they of the 'test only' type?	61 RTAD offices are open to make vehicle inspection across the country. They are government-owned bodies. RTAD also makes vehicle inspection occasionally by assigning mobile RTAD squads.
		55. If it is decentralized, do you have a programme and/or a road map to change over to centralized high volume test-only centres?	No programme
		56. What are the current regulatory requirements (for both emission and safety checks) for vehicle inspection and maintenance (I/M)? Is safety check an integral part of the regulatory requirements of the overall I/M?	Requirements for safety check in place are having good breaking, lighting systems, engine running, and emission testing and power train system.
		57. Do you have policies and programmes to promote retrofitting emission control devices and/or conversion to lower-emitting fuels?	Not yet
I. Strengthening knowledge base, awareness, and public participation	<ul style="list-style-type: none"> <li>• Promoting coordination and cooperation among groups collecting or managing information on EST through a decentralized network of knowledge providers</li> <li>• Developing and</li> </ul>	58. Number of NGOs and research institutions working in the area of transport and environment issues?	Myanmar Red Cross Society (MRCS) as NGO. And Yangon Technological University (YTU) and University of Forestry for environmental studies.

	<p>disseminating best practice on EST</p> <ul style="list-style-type: none"> <li>Increasing the understanding and awareness of the civil society and decision-makers on the beneficial aspects of EST with the aim to accomplish changes in policies, investment decisions, and personal behaviour</li> </ul>	<p>59. What are the government programmes and initiatives to encourage participation of the private/business sectors (vehicle manufacturers, transport companies, oil companies, etc) in vehicle emission control?</p>	<p>Awareness raising on emission control is undertaken by the Government to the regional vehicle producers.</p>
		<p>60. What are the notable government responses and measures to raise public awareness on transport and environment issues?</p>	<p>Demonstration for road safety activities, exhibitions, essay competitions are done.</p>