

EVALUATION OF THE ASIAN HIGHWAY NETWORK DEVELOPMENT

I. INTRODUCTION

1. The present document contains internal qualitative assessment and updated information on the work of the member countries and the secretariat in implementing activities to promote and develop the Asian Highway. As part of ESCAP's revitalization process, the organization is enhancing its monitoring and evaluation of programme activities.
2. The Asian Highway has been evaluated in 2003 (E/ESCAP/CMG/10), 2005 (E/ESCAP/CMG(2)/10) and 2007 as part of JECF evaluation.
3. This evaluation is prepared for ESCAP internal management to help streamline the planning and resource needs for the Asian Highway and related projects. This desk review considers the recent progress and achievements and lessons learned and recommendations for future project planning and implementation.
4. This evaluation is prepared based on the review of existing progress reports and documents, review of earlier evaluation reports and feedback received from the participants to the recent meetings related to the Asian Highway.

II. RECENT PROGRESS AND ACHIEVEMENTS

5. The Asian Highway network now comprises over 142,000 km of roads passing through 32 member countries.
6. The Intergovernmental Agreement on the Asian Highway Network, which was adopted in November 2003 and opened for signature in April 2004, entered into force on 4 July 2005.
7. Currently, 25 States are Parties to the Intergovernmental Agreement on the Asian Highway Network. Bangladesh has recently acceded to and the Islamic Republic of Iran has ratified the Agreement. Democratic People's Republic of Korea, Singapore and Turkmenistan are yet to accede to the Agreement while the domestic process for ratification, acceptance or approval of the Agreement is progressing in Indonesia, Malaysia, Nepal and Turkey. In addition, Brunei Darussalam has shown interest to join the Agreement and is participating Working Group and other meetings organized by the secretariat. Papua New Guinea and Timore Leste are two potential countries to join the network.

8. The third meeting of the Working Group on the Asian Highway was held in Bangkok on 4 September 2009, during which amendments relating to AH4 route Yarantai – Takeshkan in China connecting Mongolia, AH48 route Jaigaon – Phulbari in India connecting Bhutan and extension of AH61 Martuk – Zhaisan in Kazakhstan were adopted. The Secretary General has issued a circular notification [C.N.732.2009.TREATIES-2 (Depositary Notification)] relating to the above amendments on 14 October 2009.

9. One of the obligations of the Parties to the Agreement is to place route signs along the Asian Highway. Cambodia, Republic of Korea and Thailand have installed Asian Highway route signs in compliance with the Agreement and the Philippines is planning to install soon.

10. The Intergovernmental Agreement on the Asian Highway Network is making it easier for countries to secure financial resources to upgrade relevant roads and highways through their territories. Development of the AH network has been incorporated into national plans or strategies in a number of countries (see boxes 1). In this regard, the secretariat will step up its collaboration with member countries, potential donors and international financial institutions to pipeline priority projects and help ensure that investment requirements are met.

Box 1. Selected projects along the Asian Highway

- Following the decision of the 3rd meeting of the Working Group on the Asian Highway (Bangkok, 4 September 2009) to include a link between India and Bhutan, the Asian Highway network now connects to all landlocked countries of the region. The upgrading of route AH48 (Thimphu-Phuentsholing Highway) in Bhutan to class III standards is expected to be completed by 2010.
- The feasibility study of the Padma Bridge (6,150-m span) along AH1 in Bangladesh is ongoing. The construction is expected to be completed by 2013 at an estimated cost of \$1.8 billion.
- India has already upgraded 5,550 km of Asian Highway to four lanes (Class I standard) and is planning to upgrade a further 3,695 km to the four-lane standard under various phases of the National Highway Development Programme and the Special Accelerated Road Development Programme in the north-east region of the country.
- Nepal is constructing a dry port at Kakarbhitta (AH2) near the border in eastern Nepal. The Government of Nepal also plans to construct the Birgunj – Kathmandu fast-track road, which will shorten the length of AH42 by 105 km, as well as the new Koshi Bridge near Chatara on AH2.

- The feasibility study of North-South Transport Corridor development in Armenia is ongoing, with a plan to upgrade 550 km of road (Meghri – Kapan – Yerevan – Gyumri – Bavra (AH81 and AH82) as well as a connection to Georgia and the Batumi port on the Black Sea at an estimated cost of \$1.38 billion.
- China is implementing the National Expressway Network Plan, which comprises a total length of 85,000 km and covers most of the Asian Highway routes in the country.
- Georgia has recently completed the construction of a 670 m tunnel on the Poti – Batumi – Sarpi road along AH5 and plans to rehabilitate 300 km of AH5 connecting the capital, Tbilisi, with Armenia and Turkey.
- Various sections of the Asian Highway routes in Turkey are being upgraded to four lanes, including the sections of Gerede – Merzifon (AH5), Samsun – Kavak – Merzifon (AH5), Kirikkale – Delice – Yerkoy (AH1) and Sivrihisar – Afyon – Izmir (AH87); these improvements are expected to be completed by 2013.
- The detailed design of the Mekong River Bridge (2,500-m span) at Neak Loeng in Cambodia is ongoing and will be completed soon. The installation of Asian Highway road signs in the Philippines is expected to begin in 2010.

11. Much progress has been made in the development and upgrading of the Asian Highway network. Various sections of the network in member countries have been improved to higher class standards. For example, during 2004-2006 about 10,000 km have been upgraded to meet the minimum standards, thereby reducing the percentage of Asian Highway routes below the minimum standards of class III from 16 per cent to 9 per cent. The preliminary assessment of the Asian Highway database (2008) with data received from 20 countries indicates that, over the period 2007-2008, at least another 10,000 km of the Asian Highway have been upgraded to higher standards, including about 1,000 km that were upgraded to meet the minimum standards. However, about 11,000 km (8 per cent of the network) still need to be upgraded to Class III or higher standards. Most significantly, the Asian Highway network now connects to all landlocked countries of the region. Figures 1 and 2 show the current status of the Asian Highway.

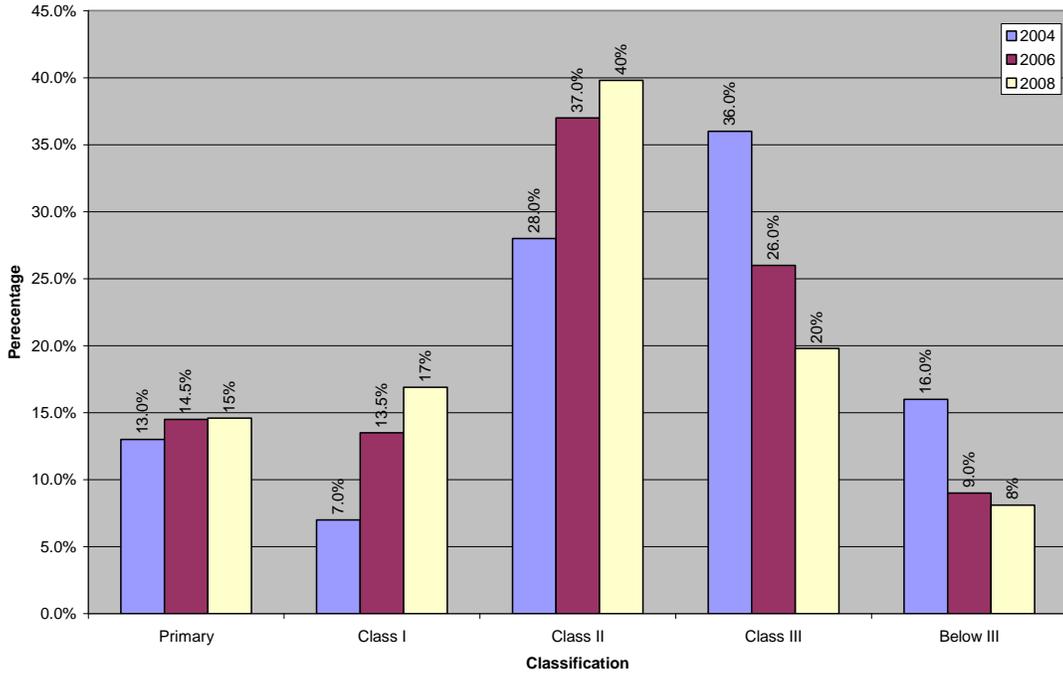


Figure 1: Progress in upgrading of the Asian Highway network

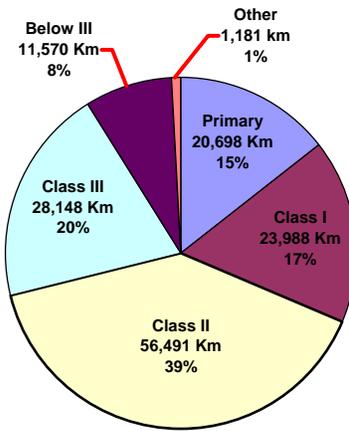


Figure 2: Status of the Asian Highway network

12. A review of investment done in 2005 identified a shortfall of US\$ 18 billion in the funds required to upgrade and improve about 26,000 km of the Asian Highway.

13. International donors, such as ADB, the World Bank, the Japan Bank for International Cooperation and the Islamic Development Bank, are giving priority attention to Asian Highway routes in planning investments in member States.

14. Asian Development Bank has recently prepared a working paper¹ on “Roads for Asian Integration: Measuring ADB’s Contribution to the Asian Highway Network.” It states the need for regional approach for infrastructure development and cite Asian Highway as a prime example of regional cooperation and integration and acknowledge that “ADB has a major role to play in closing infrastructure gaps in the AH network.”

15. Asian Highway routes are increasingly forming the basis for negotiating bilateral or subregional road transport facilitation/transit agreements such as the Agreement between the Governments of the Shanghai Cooperation Organization member States on Facilitation of International Road Transport and Memorandum of Understanding for operationalization of international intermodal transport in North-East and Central Asia.

16. While direct extra budgetary support for the Asian Highway has recently ceased, activities related to AH are being implemented as part of other projects. For example the project “Promoting the role of the Asian Highway and Trans-Asian Railway: Intermodal interfaces as focus for development” included consideration for development of dry ports along the Asian Highway. The project on “Operationalization of international intermodal transport corridors in North-East and Central Asia” aims to establish and implement cooperative mechanisms for the development and operationalization of the priority intermodal transport corridors. The routes of the Asian Highway formed the basis for identification of highway routes along the corridors and take intermodal approach in promoting and facilitating international transport. The MOU is currently being considered by member countries along the corridors for possible signature during the first session of Forum of Asian Ministers of Transport in December 2009 in Bangkok. Similarly, the UNDA project entitled “Improving Global Road Safety: Setting regional and national road traffic casualty reduction targets” also focus on improving safety along the Asian Highway. ESCAP regional road safety goals, targets and indicators include a goal related to the Asian Highway (see table below).

Goal 7: Developing the Asian Highway as a model of road safety	
Targets	Indicators
a). Reduce the total number of fatalities and road crashes on the Asian Highway.	32. Total number of road fatalities and road crashes on the Asian Highway in each country per year.
b). Reduce the number of fatalities on <i>all</i> Asian Highway segments to below 100 per billion vehicle-kilometres.	33. Number of fatalities per billion vehicle-kilometres for each Asian Highway segment per year.
c). Increase resource allocation for road safety-related measures along the Asian Highway.	34. Amount of resources allocated to safety-related works for the Asian Highway segments from government and donors

¹ Madhur et al, Roads for Asian Integration: Measuring ADB’s Contribution to the Asian Highway Network, November 2009, ADB, Manila

d).Improve Asian Highway road segments to be forgiving to road users if a crash occurs. Demonstrate best practice.	35. Information on road safety assessment and rating programme for the Asian Highway.
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17. The project entitled “Promoting regional and economic cooperation in North-East Asia with particular focus on DPRK” includes two components related to highway.

18. With regular budgetary resources, the Asian Highway Database has been regularly updated and a seminar on road maintenance and working group meeting on the Asian Highway were organized.

19. As recommended by earlier evaluation the secretariat has explored mobilization of funds through various donors, in this regard, the Republic of Korea and the Russian Federation has shown interest in supporting highway related activities. Two projects supported by the Russian Federation are in pipeline and one projected to be funded by the private sector in the Republic of Korea is in conceptual stage.

III. LESSONS LEARNED AND RECOMMENDATIONS

20. ***Further strengthen coordination and collaboration.*** As still 11,000 km of the Asian Highway needs to be upgraded to meet the minimum standards, the secretariat need to expand and strengthen collaboration with international financing institutions and development partners as well as private sectors for mobilization of resources for upgrading of the priority sections of the Asian Highway. In this regard, pilot prefeasibility and feasibility studies of selected sections of the Asian Highway would assist member countries and help to promote investment.

21. ***Promote sustainable road maintenance:*** Once road are developed it is increasingly important to manage and maintain these valuable assets. However, many developing countries and transition economies in Asia lack resources, policies, technology, and necessary skills required for managing and maintaining road networks. To enhance efficiency of highways use there is a greater need to promote sustainable road maintenance policies in member countries.

22. ***Promote sustainable road transport development:*** As road transport contributes to the climate change as well as it is affected by climate events, the secretariat needs to work in the area of sustainable transport development through advocating and creating awareness of environmental impacts of transport development and operation, streamlining adaptation measures in national policies and planning to reduce impacts of climate change on transport, mitigation measures to reduce green house gas emissions from road transport operations.

23. ***Improve road safety along the Asian Highway:*** As part of the regional road safety goals, ESCAP should encourage member countries to develop the Asian Highway as a model of road safety. In this regard, the secretariat needs to promote installation of road signs, plan safety campaigns along the Asian Highway and may consider developing a pilot section of safe Asian Highway for possible replication and demonstration in partnerships with member countries and interested organizations.

24. ***Periodic updating of the Asian Highway Database:*** Updating the database is important for monitoring the progress of development of Asian Highway in member countries. The secretariat will continue to collaborate with member States to update the Asian Highway Database regularly.

25. ***Promoting intermodal transport operation:*** As intermodal transport operation is gaining prominence, the secretariat should consider further implementing projects to promote intermodal transport operation and organization of demonstration runs of container trucks. In this regard, the secretariat could work to further promote construction and development of ICDs and dry ports along the Asian Highways and extend the experience of implementing corridor projects in North-East and Central Asia to other subregions.

26. ***Extend additional funding support to the Asian Highway:*** To address all issues related to the highway development continues funding support and programme approach is required (JECF evaluation). Extra-budgetary funding support for Asian Highway has recently been decreased. The human resources deployed to the division for AH activities also decreased, as earlier the work on the Asian Highway was being supported/assisted by NRL experts from Japan and ROK. There is a need to explore ways to mobilize additional financial as well as human resources to the Asian Highway initiatives including from non-traditional donors.
