Ministry of Public Works and Transport

Asian Highway Status and its Implementation in Cambodia

By SINARA HONG
DDG, MPWT
Cambodia has signed the Intergovernmental Agreement on the Asian Highway Network in 26 April 2004.
Present status of AH1 & AH11
CAMBODIA ROAD NETWORK

1-Digit Roads
2-Digit Roads
Provincial Roads
Rural roads

Road density: 0.26km/km²
<table>
<thead>
<tr>
<th>Road Type</th>
<th>Road length, km</th>
<th>AC/DBST Pavement</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Digit national roads: 1,2,3,4,5,6,7,8,9</td>
<td>2,258</td>
<td>2,115</td>
<td>94%</td>
</tr>
<tr>
<td>2 Digit national roads</td>
<td>3,342</td>
<td>1,868</td>
<td>56%</td>
</tr>
<tr>
<td>Provincial roads</td>
<td>6,607</td>
<td>1,000</td>
<td>15%</td>
</tr>
<tr>
<td>Rural roads</td>
<td>35,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total length</strong></td>
<td><strong>47,207</strong></td>
<td><strong>4,983</strong></td>
<td></td>
</tr>
<tr>
<td>Road density: 0.26 km/km²</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Gross Vehicle Weight: 25 T</td>
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</tr>
</tbody>
</table>
Southern Economic Corridor Improvement Projects

- Southern Economic
- NR1 Improvement
- Neak Loeung Bridge
- NR5 Upgrading
- PPenh Ring Roads Expansion
- AH1
<table>
<thead>
<tr>
<th>NR no.</th>
<th>Highway No</th>
<th>Section Description</th>
<th>Length (Km)</th>
<th>Activity</th>
<th>Start</th>
<th>End</th>
<th>Resources</th>
<th>US. Mil.</th>
<th>Origin-Destination</th>
<th>No. of lane</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>AH 1</td>
<td>section 1</td>
<td>30</td>
<td>on-going</td>
<td>2012</td>
<td>2015</td>
<td>PRC</td>
<td>36</td>
<td>Phnom Penh – Prek Kdam</td>
<td>4 Lanes</td>
<td>6 %</td>
</tr>
<tr>
<td>5</td>
<td>AH 1</td>
<td>section 2</td>
<td>337</td>
<td>on-going</td>
<td>2011</td>
<td>2013</td>
<td>Japan</td>
<td></td>
<td>Survey study for construction of NR5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>AH 1</td>
<td>section 3</td>
<td>47</td>
<td>Planning</td>
<td>2013</td>
<td>2016</td>
<td>Japan</td>
<td></td>
<td>NR5-north sect.(Battambang-Serey Sophoan)</td>
<td>4 lanes</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>AH 1</td>
<td>Ring road</td>
<td>36.5</td>
<td>Planning</td>
<td>2015</td>
<td>2018</td>
<td>Japan</td>
<td></td>
<td>Battambang - Mungkul Borei - Srey Sophoan</td>
<td>2 lanes</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>AH 1</td>
<td>section 4</td>
<td>130</td>
<td>Planning</td>
<td>2016</td>
<td>2018</td>
<td>Japan</td>
<td></td>
<td>NR5-mid. section (Battambang-Thlea Maam)</td>
<td>2-4 lanes</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>AH 1</td>
<td>section 5</td>
<td>139</td>
<td>Planning</td>
<td>2014</td>
<td>2017</td>
<td>Japan</td>
<td></td>
<td>NR5-south section(thlea Maam-Prek Kdam)</td>
<td>2-4 lanes</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>AH 1</td>
<td>Neak Loeung Br.</td>
<td>2.55</td>
<td>on-going</td>
<td>2011</td>
<td>2015</td>
<td>Japan</td>
<td></td>
<td>Lower Mekong Bridge (Cable Stage)</td>
<td>2 lanes</td>
<td>65 %</td>
</tr>
<tr>
<td>2</td>
<td>AH 11</td>
<td>782 km</td>
<td>NR4 (214km), NR7 (570km)</td>
<td>40</td>
<td>on-going</td>
<td>2012</td>
<td>2014</td>
<td>PRC</td>
<td>NR6</td>
<td>Phnom Penh - Thnal keng (NB-4km and PRC-36km)</td>
<td>4 lanes</td>
</tr>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(Phnom Penh - Thnal keng)</td>
<td>4 lanes</td>
<td></td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>(40km)</td>
<td>PRC</td>
<td>NR6</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Thnal keng – Skun</td>
<td>4 lanes</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Phnom Penh – Sihanouk Ville</td>
<td>4 lanes</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>AH 123</td>
<td>297 km</td>
<td>NR 48 (157 km), NR 3, 33 (40km)</td>
<td>124</td>
<td>on-going</td>
<td>2012</td>
<td>2015</td>
<td>BOT</td>
<td>NR4</td>
<td>4 lanes</td>
<td>6 %</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Phnom Penh – Sihanouk Ville</td>
<td>4 lanes</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(Korea)</td>
<td>KOREA Rep.</td>
<td>4 lanes</td>
</tr>
</tbody>
</table>

TOTAL: 1,486.8km
- **Rehabilitation of AH1 Section Phnom Penh City to Cam/VN Border (167km)**

For facilitating the flow of goods and passengers moving from Phnom Penh City to the Eastern province as well as tourists travelling from PPenhh to Hochiminh City, the Royal Government of Cambodia has been reconstructing the AH1 route (National Road No.1) section from Neak Loeung ferry (Lower Mekong River) to Cambodia Viet Nam border by using the ADB loan and the section between Neak Loeung to Phnom Penh City was rehabilitated by Japanese Grant Aid.

- The improvement condition of National Road No.1(AH1) with the assistance of Japan is currently in stage 4 (4km) from the Monivong Bridge (PP City) to “Kdey Takoy” (about 4 mill USD). The civil work is expected to start in the coming time and will be completed by 2015.

- **Construction of Neak Loeung Cable Stayed Bridge (2,215m)**

The construction of Neak Loeung cable stayed bridge is to improve the bottleneck of traffic flow at lower Mekong river ferry along the AH1, in order to cope with the increasing of traffic demand and improving the traffic capacity across Mekong River. The AH1 is the most important route in Cambodia and serving for the Southern economic corridor for the GMS sub-region.
Schedule of the implementation:

a) Date for starting the construction January 2011
b) Expected Date for finishing the construction March 2015
c) Expected Date for the operation March 2015

4. Major coverage of work in the construction of the Neak Loeung Bridge are as follows:

(1) Main Bridge
   Bridge Type : Cable-Stayed Bridge
   Length : 640 meters
   Span Length : 155m + 330m + 155m = 640 meters
   Height of Pylon/ Pier : 130 meters (from E.L.0m)
   Navigation Height : 37.50 meters (from H.W.L.)
   Type of Foundation : Cast-in-Place Piles (d=2.5m)

(2) Approach Bridge
   Bridge Type : Composite PC Girder
   Length : 1,575 meters
   Span Length : West : 20 @ 45 = 900 meters
   East : 15 @ 45 = 675 meters
   Height of Pylon/ Pier : 8 ~ 32 meters
   Type of Foundation : Cast-in-Place Piles

(3) Embankment
   No. of Lanes : 2 Lanes
   Total Length : 3.10 kilometers
   Width (per 1 lane) : Carriageway : 3.50 m
   Motorbike Lane : 2.50 m
   Shoulder : 1.0 m
   Embankment Height : 0 ~ 10 meters
   Design Speed : 80 km/h

5. Financial source of the project: Japanese ODA (Grant Aid)

6. Project Progress up-to-date (As of end of September, 2013): Actual progress is 65%.
   Approach Road, Fabrication of Bottom and Side PCa Panel of Cable Stayed Bridge, and Prefabricated Vertical Drain for Soft Ground Treatment of the East Approach Road.
PROGRESS PHOTOGRAPHS

WEST APPROACH BRIDGE
Construction Progress of Neak Loeung Bridge

WEST APPROACH BRIDGE
PROGRESS PHOTOGRAPHS
Expansion of AH1(NR5) Section from Phnom Penh to Cambodia to Thai border:

- Due to the traffic booming between Cambodia and Thailand border along with the increasing of economic and trade, as well as tourism interring to Cambodia; the royal government is starting to expand 2 lanes road into 4 lanes road as showing below.

- NR5 Poipet – Serei Saophoan Section: Rehabilitation of this section was completed with 2-lane AC pavement by ADB Loan in 2008.

- NR5 Serei Saophoan – Battambang Section (Northern Section): The section was repaired by ADB Emergency Flood Rehabilitation Project in 2004 with 2-lane DBST pavement. However, last year the Japanese and Cambodian Government signed a loan agreement on the Improvement of National Road No.5 North Section (from Battambang-Serei Saophoan). The process of selecting consultants is on-going, but we have already shortlisted the consultants. The 4 lanes AC pavement will be utilized on this section with two bypasses in Battambang and Serei Saophorn town. The construction period is supposed to start at early of 2015.

- NR5 Battambang – Thlea Ma’Am Section (Middle Section): The section was rehabilitated by ADB loan with 2-lane DBST pavement in 2003, and the feasibility study of this section is on-going with the Japanese Assistance.

- NR5 Thlea Ma’Am – Prek Kdam Bridge Section (Southern Section): The section was restored by Cambodian Government and ADB Emergency Flood Rehabilitation Project in 2003 and 2004 respectively. Recently this section was maintained with DBST pavement by ADB RAMP project in 2011. For the long-term improvement of this section, Preparatory Survey (Feasibility Study) supported by Japanese Assistance have already been completed as well as the Final Report. The 4 lanes AC pavement will be used as well in this section, and the loan agreement is supposed to be signed in March 2014.

- NR5 Prek Kdam – Phnom Penh Section: The section was restored by Cambodian Government in 2003 and recently maintained by ADB RAMP project in 2011. The section is to be improved and widened to 4 lanes with AC pavement under China Soft Loan in 2012.

- Expansion of 2 lanes into 4 lanes road Section from Phnom Penh to Skun AH11(75km) and further to Siem Reap world heritage center using Chinese loan.
Proposed new AH Route from Quy Nhong to VN/Cam border (O Yadav) - Ratanakiri - Stung Treng - Preah Vihear - Siem Reap - Poi Pet (Cam/Thai) border
The present status of the proposed new route AH21(NR78)
AH21(NR78) continue
AH21 (NR78) continue
AH21 (NR9)  
(upper Mekong Bridge is in progress of 81%)
AH21 (NR62)
Location Map of the Proposed New Route for Intergovernmental Agreement on Asian Highway Network

Proposed New Road for Inter-Governmental Agreement on Asian Highway Network (Serei Sophean-O yadav: 816 Km)

NATIONAL ROADS

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Projects title:
Study on Bypasses along the AH21 (new route connecting to the AH Network), covering National Road No.78, NR9, NR62, NR64, NR6

Project description: To avoid the traffic congestion at populated areas, we proposed five (5) diversion bypasses along the new route of AH17 as follows:
1- Preah Vihear Provincial town; 2- Dam Dek Market; 3- Siem Reap City; 4- Kralanh market; 5- Krong Serei Sophoan, 6- the section from Srayang to Damdek need to be upgraded of about 100km.

Financial modality: Grant Aid (Technical Assistance)

Project Indicator: Prefeasibility Study

Technical Specification: AH Class II standard

Project Duration: 1 year or more

Contact agency: Public Works Research Center, Ministry of Public Works and Transport, Cambodia
The Installation of AH1 & AH11
Projects under Korea Loan rolling plan 2013-2017
Thank you