

Asian Highway Database



Objectives of the Asian Highway Database

During the formulation of the Asian Highway (AH) network undertaken from 1993, it was observed that road conditions in countries varied and often substantially. In some countries, substandard sections affected road transport safety and operational efficiency. It also became apparent that the upgrading AH routes in some countries to a minimum AH standard was a necessity.

In this regard, the development of the AH database was considered to be of a significant practical value for the effective AH development since when completed, the AH database will:

- (a) Provide a choice of alternative AH routes from an origin to a destination across several countries;
- (b) Provide freight forwarders with an opportunity of immediate assessment of any AH route for possible transport of any type (ISO and Non-ISO) of containers as well as for transport of heavy loads;
- (c) Identify major problems of AH development, such as section(s) below minimum recommended AH standard, carriageway width, pavement type, river ferry/missing links, bridge and tunnel clearances;
- (d) Strengthen the position of a country in obtaining financial support from a donor for road improvement projects due to the fact that any major AH problem identified at the national level will constitute a problem area of a whole international route;
- (e) Function as an information source for planners and engineers as well as an effective tool for donors and banks to assess AH conditions in the countries along the AH routes;
- (f) Identify AH routes and sections requiring major upgrading/improvement.

AH Database software and architecture:

To meet the above mentioned objectives the PC based AH database architecture (Figure 1) and validated related software have been developed.

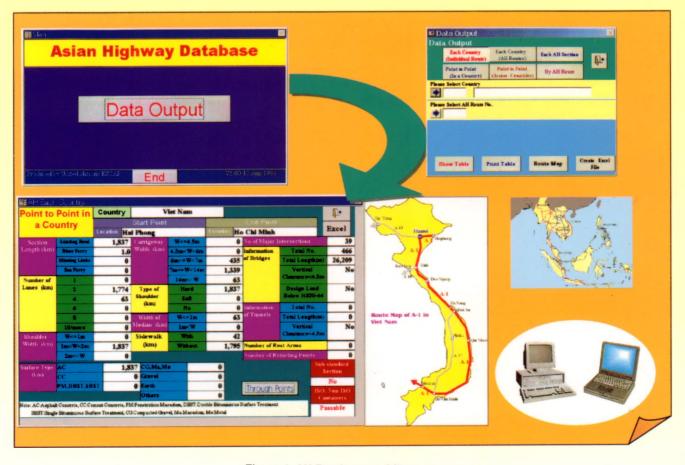


Figure 1 AH Database architecture

AH Database

Point in a Country (Figure 4)

Getting started: AH Database program

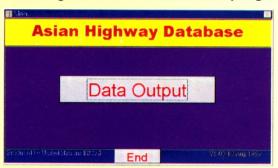
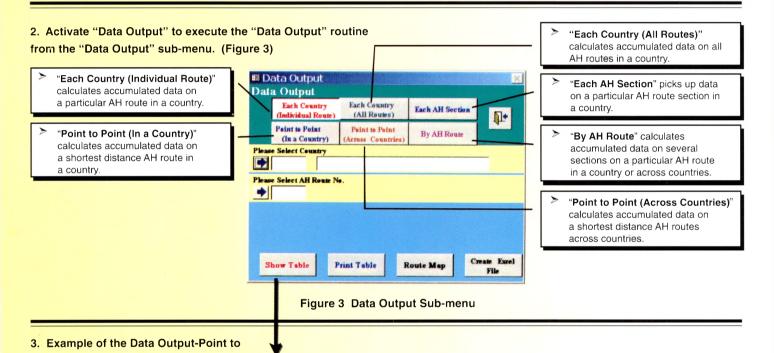


Figure 2 Main Menu

1. For execution of the programme, double click "AHUS-OUT.exe" file in CD-ROM by the Window Explorer for "Main Menu" of the Database program to appear on the display. (Figure 2)



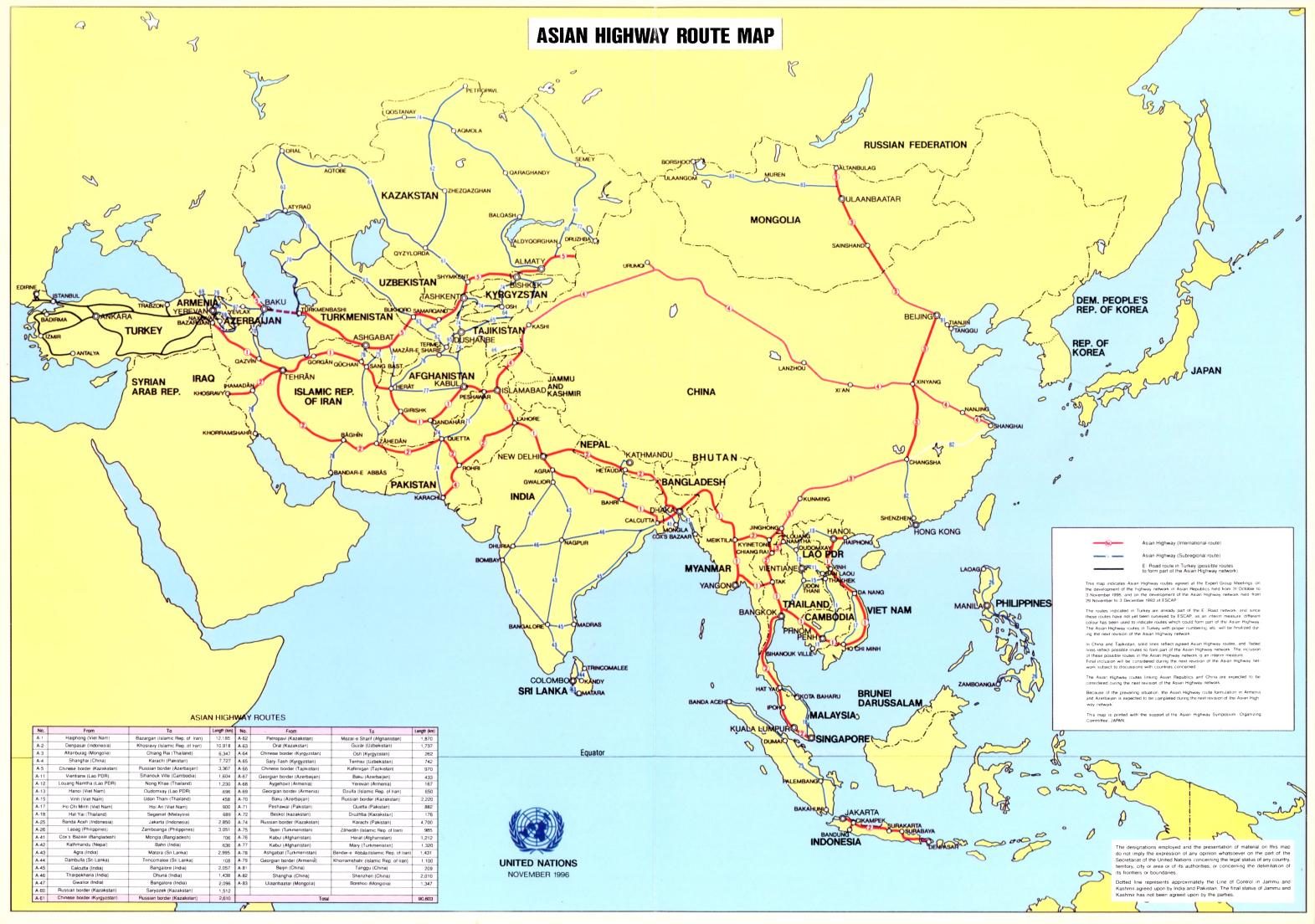
EAH Each Country Country Viet Nam Point to Point in 1+ Start Point a Country Excel Pocation Hai Phong Ho Chi Minh Section 1.837 Carrigeway No of Major Intersections 39 Length (km) Width (km) 1.0 0 Information 466 of Bridges 0 435 26,209 ⊂W<14r 0 1,339 Number of 0 63 Lanes (km) 1,774 Type of 1,837 No 63 0 0 **0** Information Total No. 0 f Tunnels Λ Width of W<=1m 63 Total Length(m) 0 Median (km 0 0 Vertical No Shoulder 0 Sidewalk 42 Width (km) 1m<W<2m (km) Number of Rest Areas 1,837 0 Number of Refueling Points 0 0 1,837 CG,Ma,Me 0 Section (km) 0 0 No M,DBST,SBST 0 0 Through Points ISO, Non-ISO ote: AC:Asphalt Concrete, CC:Cement Concrete, PM:Penetration Macadom, DBST:Double Bit Passable SBST Single Bituminious Surface Treatment, CG:Compacted Gravel, Ma:Macadom, Me:Metal

Output contents

- ◆ Length of section (km)
- Carriageway width (m)
- Surface type
- ♦ Number of lanes
- Information on Bridges and Tunnels
- Number of Rest Areas and Refueling Points
- ◆ Route map

etc.

Figure 4 Data Output



AH Database - Graphical Illustrations

1. Sub-regional map

A sub-regional route map with indication of major related problems can be shown on a display. (Figure 5)

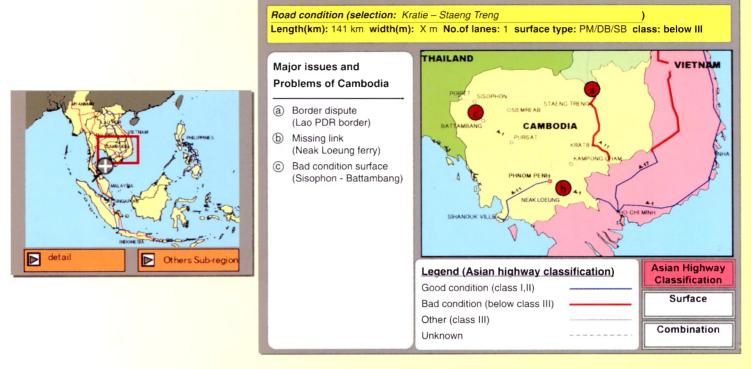


Figure 5 Sub-region Map (Example: Indochina sub-region, Image)

2. National map

A map of a particular route in a country with related information can be also shown on a display. (Figure 6)

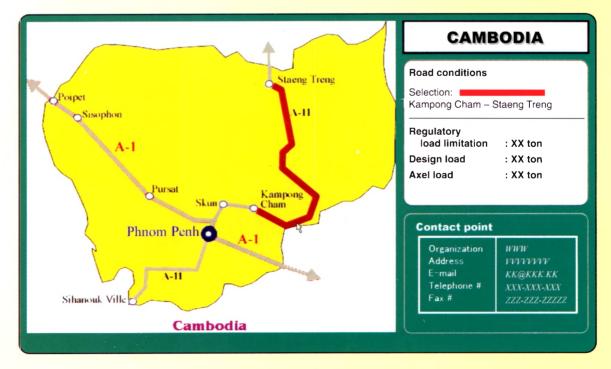


Figure 6 National Map (Example: Cambodia)

AH Database - Graphical Illustrations

3. Alternative routes

The AH database identifies (Figure 7) possible alternative routes from an original to a destination points.



Figure 7 Possible routes from an origin to a destination point (Example)

4. AH routes analysis for possible transport of ISO and Non-ISO containers as well as heavy loads

AH database has a feature to automatically identify (Figure 8) a possibility of ISO and Non-ISO container transport along any of AH routes with graphic illustration of possible routes for any origin to any destination points, and also indicate enroute obstacles against smooth transport of ISO and Non-ISO containers; thus to provide a shipper and user with a tool of practical importance. AH database has a similar feature with relation to heavy loads.



Figure 8 Possible routes for transport of ISO and Non-ISO containers (Example: Viet Nam, Image)

