The Meanings of the Northeast Asia Transportation Corridors

- Economic Growth and Transportion Infrastructures -

Hideo KAYAHARA

Chairman,

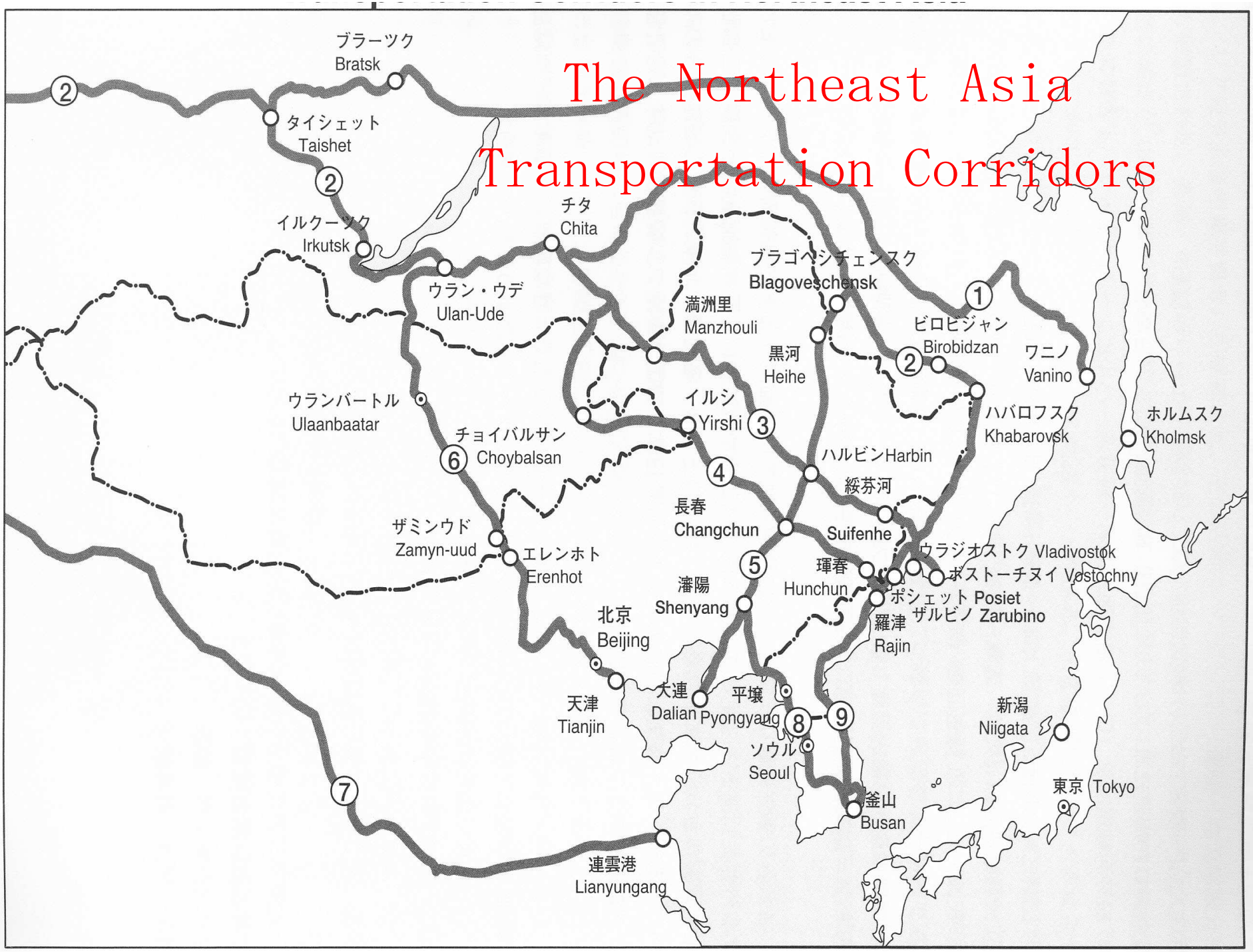
Transportation and Physical Distribution Subcommittee

(Northeast Asia Economic Conference Organizing Committee)

Adviser of ERINA

The Northeast Asia Economic Conference

- The Northeast Asia Economic Conference (1990～)
- The Organizing Committee
- Transportation and a Physical Distributi Subcommittee


The Northeast Asia
Transportation Corridors
ブラーツク
Bratsk
タイシェット
Taishet
イルクーツク
Irkutsk
チタ
Chita
ウラン・ウデ
Ulan-Ude
ブラゴベシチェンスク
Blagoveschensk
満洲里
Manzhouli
黒河
Heihe
ビロビジャン
Birobidzan
ワニノ
Vanino
ハバロフスク
Khabarovsk
ホルムスク
Kholmsk
ウランバートル
Ulaanbaatar
チョイバルサン
Choybalsan
イルシ
Yirshi
ハルビンHarbin
綏芬河
Suifenhe
長春
Changchun
ザミンウド
Zamyn-uud
エレンホト
Erenhot
瀋陽
Shenyang
琿春
Hunchun
ウラジオストク Vladivostok
ボストーチヌイ Vostochny
ポシェット Posiet
ザルビノ Zarubino
羅津
Rajin
北京
Beijing
天津
Tianjin
大連
Dalian
平壌
Pyongyang
ソウル
Seoul
釜山
Busan
新潟
Niigata
東京 Tokyo
連雲港
Lianyungang
1
2
3
4
5
6
7
8
9

Final status of the Northeast Asia Transportation Corridors(NATC)

① a network in which transportation can take place throughout the whole region as smoothly as it does within a single country

② enhanced and expanded containerization of transportation

③ a network that is effectively connected to transportation networks outside the region

Discontinuous Points(miss link)
(DCPS)

① unconnected railways or roads

② differences in railways gauge

③ CIQ inspections

④ limitation of range for truck's driving in

Table -1 Outline of the Northeast Asia Transportation Corridors

Name of Corridors	Functions	DCPS
1.Vanino/ Taishet	Alternative route of SLB	①②
2.SLB	Alternative route of All Water Asia/Europe route	②③
3.Suifenhe	Exit to the sea for Heilongjian Prov.	②③④

Table -1 Outline of the Northeast Asia Transportation Corridors-continue

Name of Corridors	Functions	DCPS
4.Tumen River	Exit to the sea for Mongolia & Jilin Prov.	①②③
5. Dalian	The main artery running through 3 NE provinces of China	①
6.Tianjin/ Mongolia	Shortest route of Mongolia to seaports	①②③

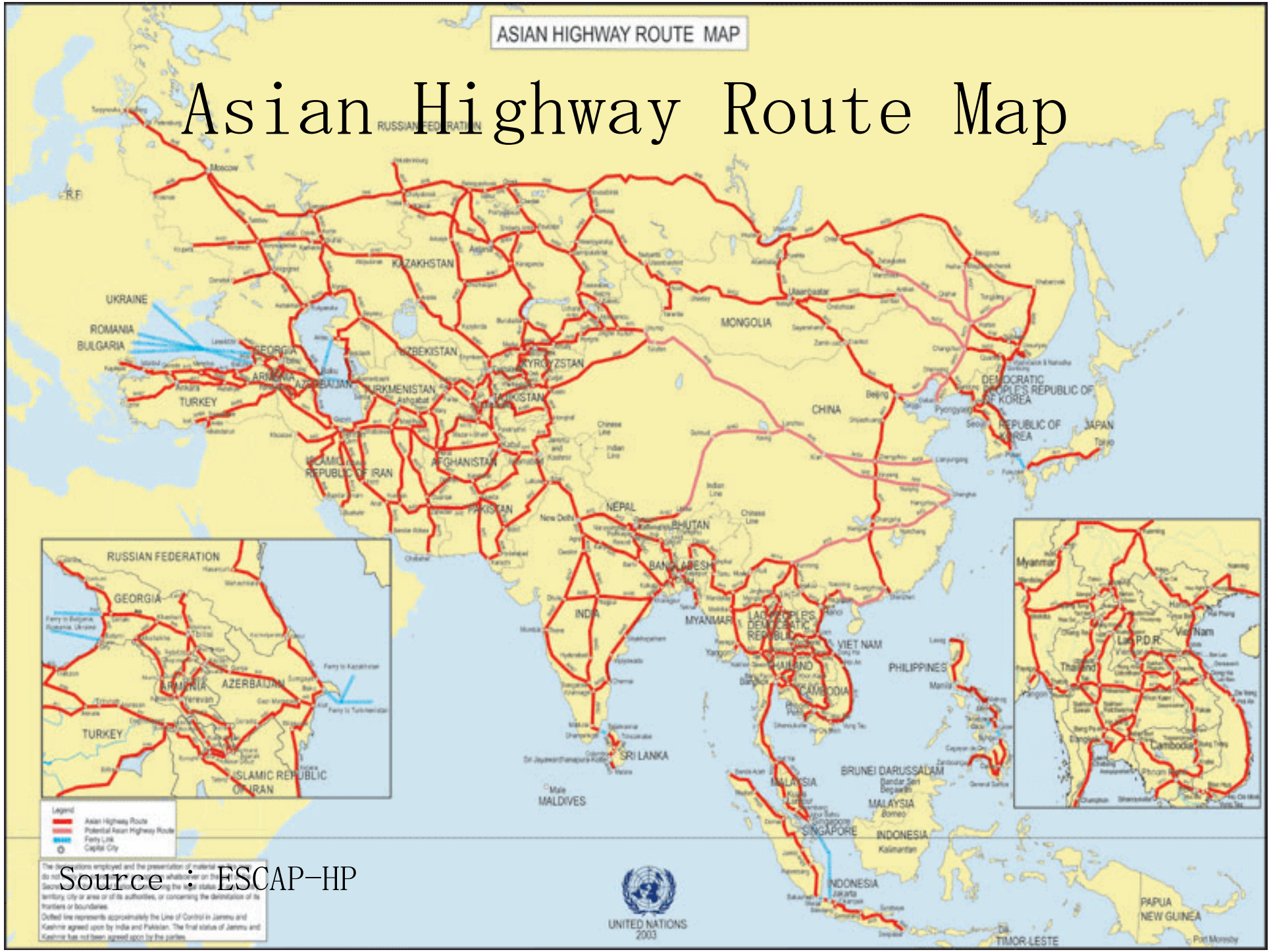
Table -1 Outline of the Northeast Asia Transportation Corridors-continue

Name of Corridor	Functions	DCPS
7.China Land Bridge(CLB)	Exit to the sea for Mongolia & Jilin Prov.	②③
8.Korean Peninsula West	Connecting to SLB. Diversification of the routes for East Asia to Europe	①③
9. KP East		①②③

The Existing Transportation Corridor Visions

- Asian Highway Project
- Crete Corridor
- MERCOSUR

Asian Highway Route Map



Source：ESCAP-HP

Asian Highway Project (AHP)

- AHP was suggested by Japan and the United Nations adopted it in 1959.
- At the beginning it was aiming to form an integrated road network through specifying the existing roads as a part of AHP and the road policy of each country being communalized.

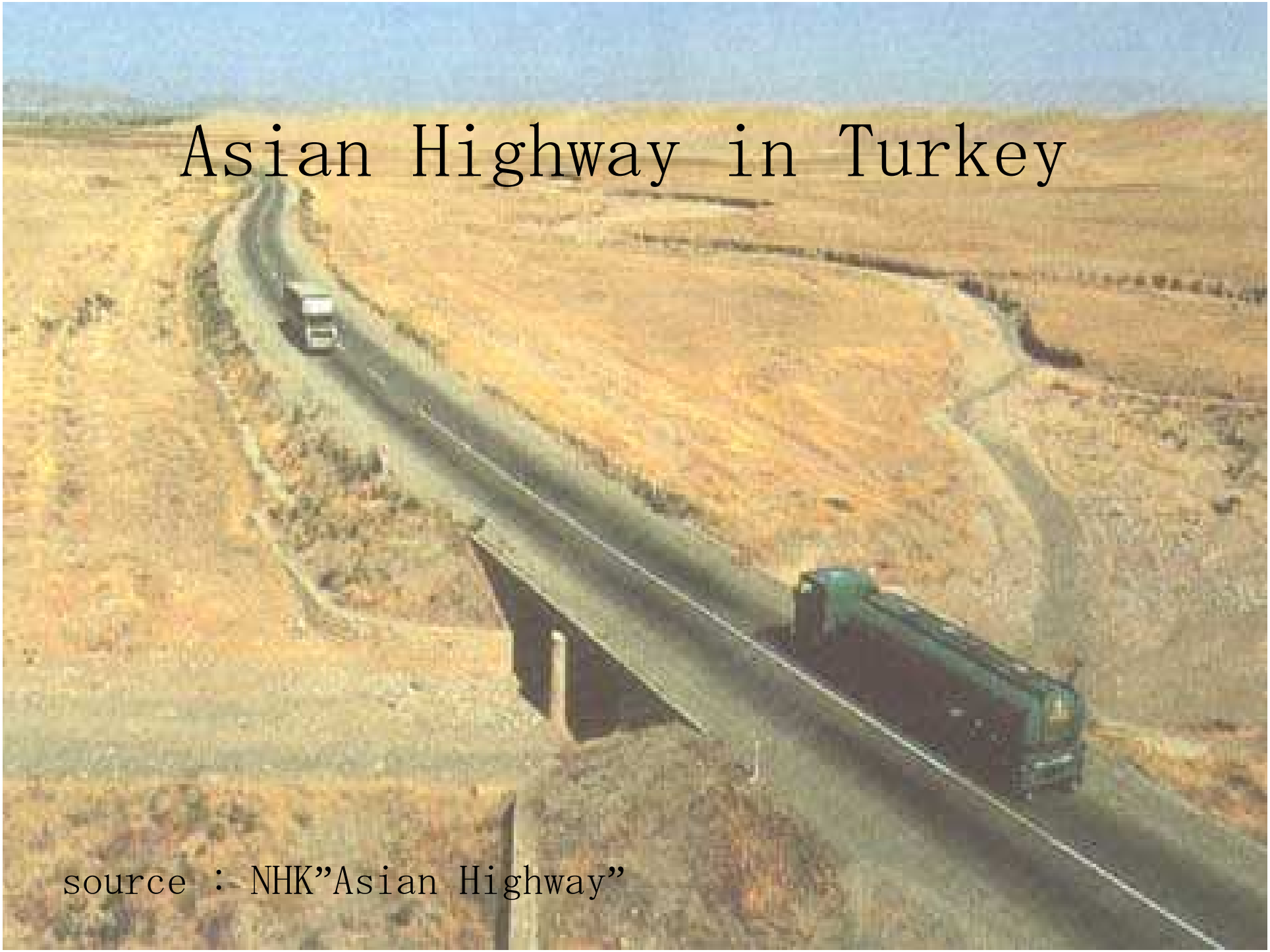
(AHP)

- The ESCAP cabinet-members meeting in 2001 decided to conclude an agreement that defines the signs and standards of a road.
- The contents of the agreement were determined by the meeting of specialists in 2003.

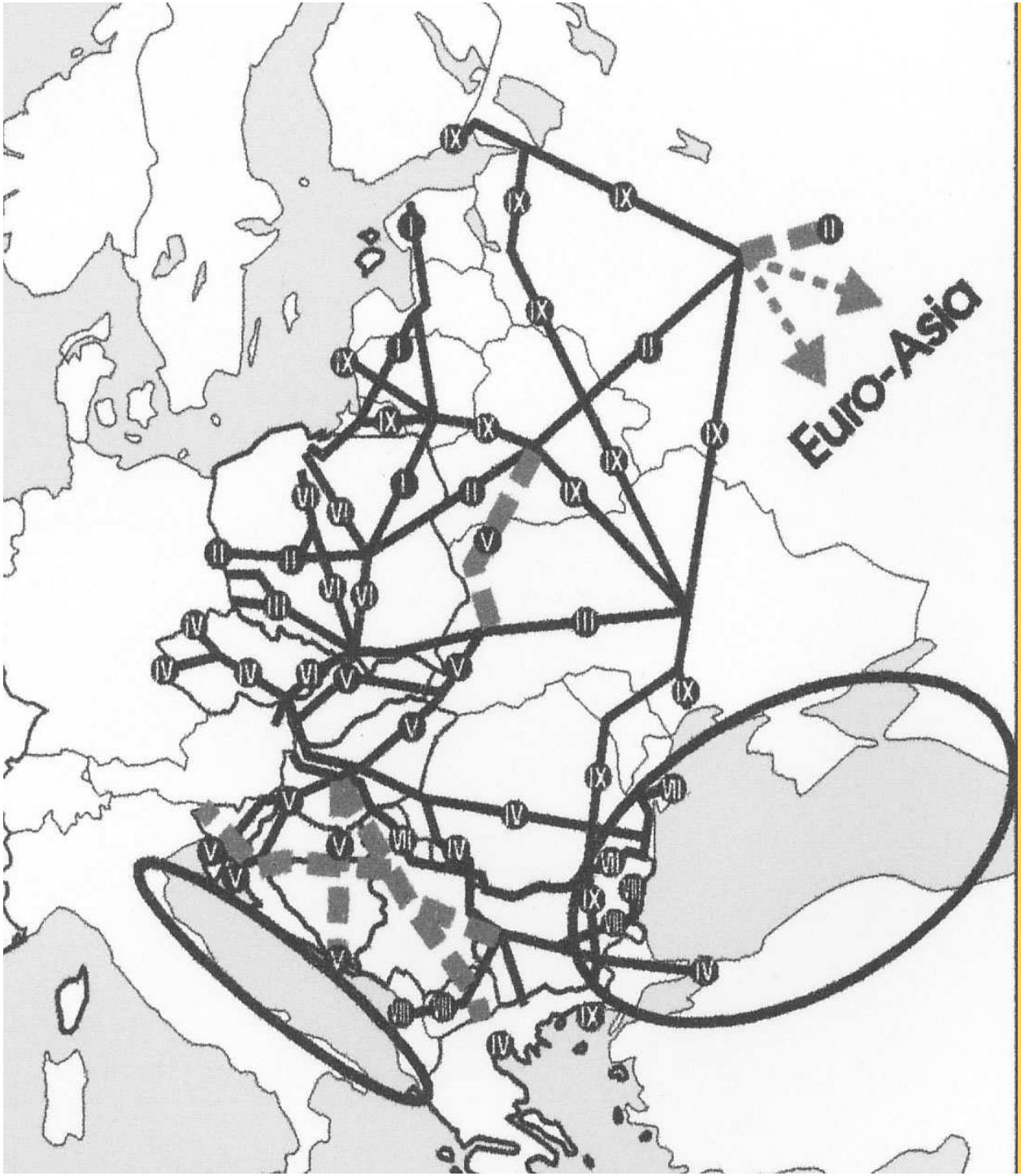
(AHP)

- In 2004, an intergovernmental agreement was signed by 23 nations (include Japan and China) at the ESCAP general meeting in Shanghai.
- The road network (about 140,000km and connects 32 nations) began to move.

Asian Highway in Turkey



source : NHK”Asian Highway”



Crete Corridor

Ⅰ: Hel.-Rig.-Gdn./War.

Ⅱ: Berlin-War.-Moscow

Ⅲ: Ber./Dresden-Kiey

Ⅳ: Ber./Nurnberg-Prag..-Con./Ist./Thes.

Ⅴ: Venice/Tri.-Bud.-Lviv.(-Minsk)

Ⅵ: Gdn.-War./Lod.-Zilina

Ⅶ: Danube River

Ⅷ: Albania-Bulgaria

Ⅸ: Hel.-Mos./Pskov-Alexandropolis

Ⅹ: Salzburg-Thes.

◎: Pan-European Cor.

Crete Corridor

- A vision determined in the 2nd Pan-Europe Transportation Meeting held in Crete in 1994.
- EU has placed emphasis on improvement and unification of a standard for trunk roads and rail networks in Central and Eastern Europe (European Corridors).

(Crete Corridor)

- In 1994, Pan Europe Transportation Meeting determined to expand the European Corridors towards Eastern Europe and selected nine corridors (later ten).

Pan-European Transport Corridors(Crete Corridor)

No.	Route
Ⅰ	Helsinki-Tallin-Riga-Kaunas-Warsaw
Ⅱ	Berlin-Warsaw-Minsk-Moscow
Ⅲ	Berlin-Krakow-Kiev
Ⅳ	Berlin/Nurnberg-Praha-Budapest-Constanta/Thessaloniki/Istanbul
Ⅴ	Venice-Ljubljana-Budapest-Liviv(-Minsk)

Pan-European Transport Corridors (Crete Corridor-con.)

No.	Route
Ⅵ	Gdansk-Warsaw/Lodz-Zilina(Slovakia)
Ⅶ	Germany-Austria-Slovakia-Hungary-Croatia-Romania (Danube River)
Ⅷ	Durres(Adriatic Sea)-Tirane-Skopje-Varna(Black Sea)
Ⅸ	Helsinki-Moscow-Kiev-Alexandroupolis
Ⅹ	Salzburg-Zagreb-Beograd-Thessaloniki

MERCOSUR

- The customs union formed in 1995. (Brazil, Argentina, Uruguay and Paraguay. Later Chili and Bolivia joined it through a FTA.)
- In order to realize a common market, they share a trunk road & railroad network vision.

Major Road Networ in MERCOSUR

High Priority Routes(1)

No.	Name of Axis	Major Cities & Regions
Ⅰ	Mercosur	SaoPaulo-Montevideo- Buenos Aires-Santiago
Ⅱ	Andes	Caracas-Bogoda-Quito-Lima-Lapaz
Ⅲ	Pacific & Atlantic Ocean	Sao Paulo-Campo Grande-Santa Cruz-
Ⅳ	Venezuela-Brazil-Guyana-Surinam	N/A
Ⅴ	3 Big Rivers	Orinoco, Amazon, La Plata
Ⅵ	Amazon Multimodal	Brazil, Colombia, Ecuador, Peru

High Priority Routes(2)

	Name of Axis	Major Cities & Regions
Ⅶ	Atlantic Coast	N/A
Ⅷ	Pacific Coast	N/A
Ⅸ	Newken-Concepcion	Newken-Concepcion
Ⅹ	(No Name)	Porto Alegre-Antofagasta
ⅩⅠ	Bolivia-Parguay-Brazil	N/A
ⅩⅡ	Peru-Brazil	Arica-Rondonia

Meaning of a transportation corridor vision

- Smooth and efficient movement of people and goods transport is the most fundamental requirements for the economic development.
- Transportation infrastructure, such as roads, railways and water transport, is indispensable for development.

- Especially in developing countries, such infrastructure is inadequate in quantity as well as quality.
- There is a limit to the funding that can be injected into developing it.
- It is indispensable to coordinate the purposes and to unify standards of the participating countries.

- Considering such conditions, it is necessary to select some trunk routes in this area, and Invest financial and human resources to devwlop those routes intensively.
- Transportation corridor plan is of great significant to the development of the region, especial the take-off stage of developing economy.

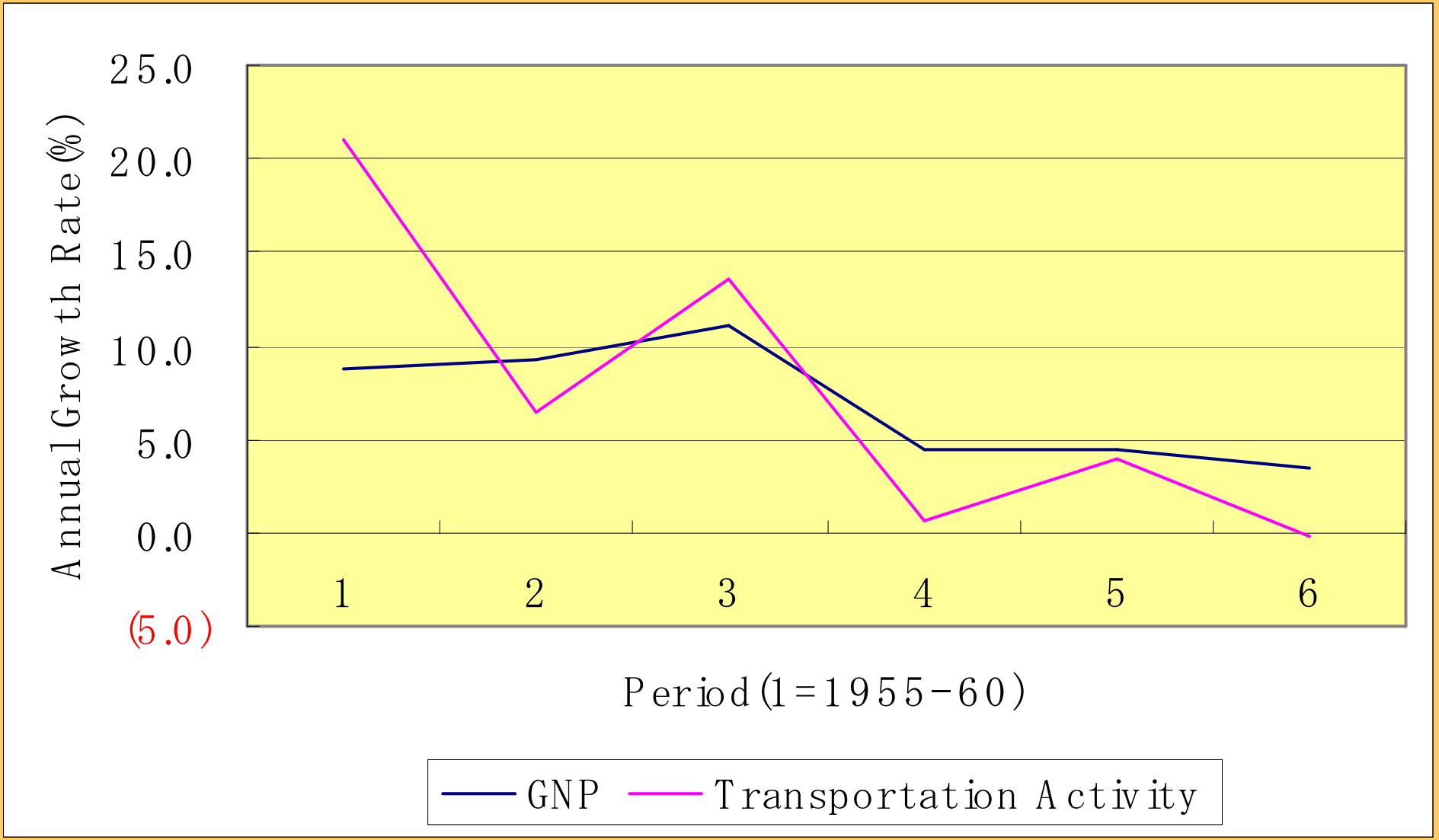
2. Economic Growth and Transportation Infrastructure

- In the 1950's Japan experienced Inadequate growth in transportation infrastructure, which did not maintain pace with the growth in traffic.
- The transportation sector therefore did not function smoothly, and economic growth was adversely affected.

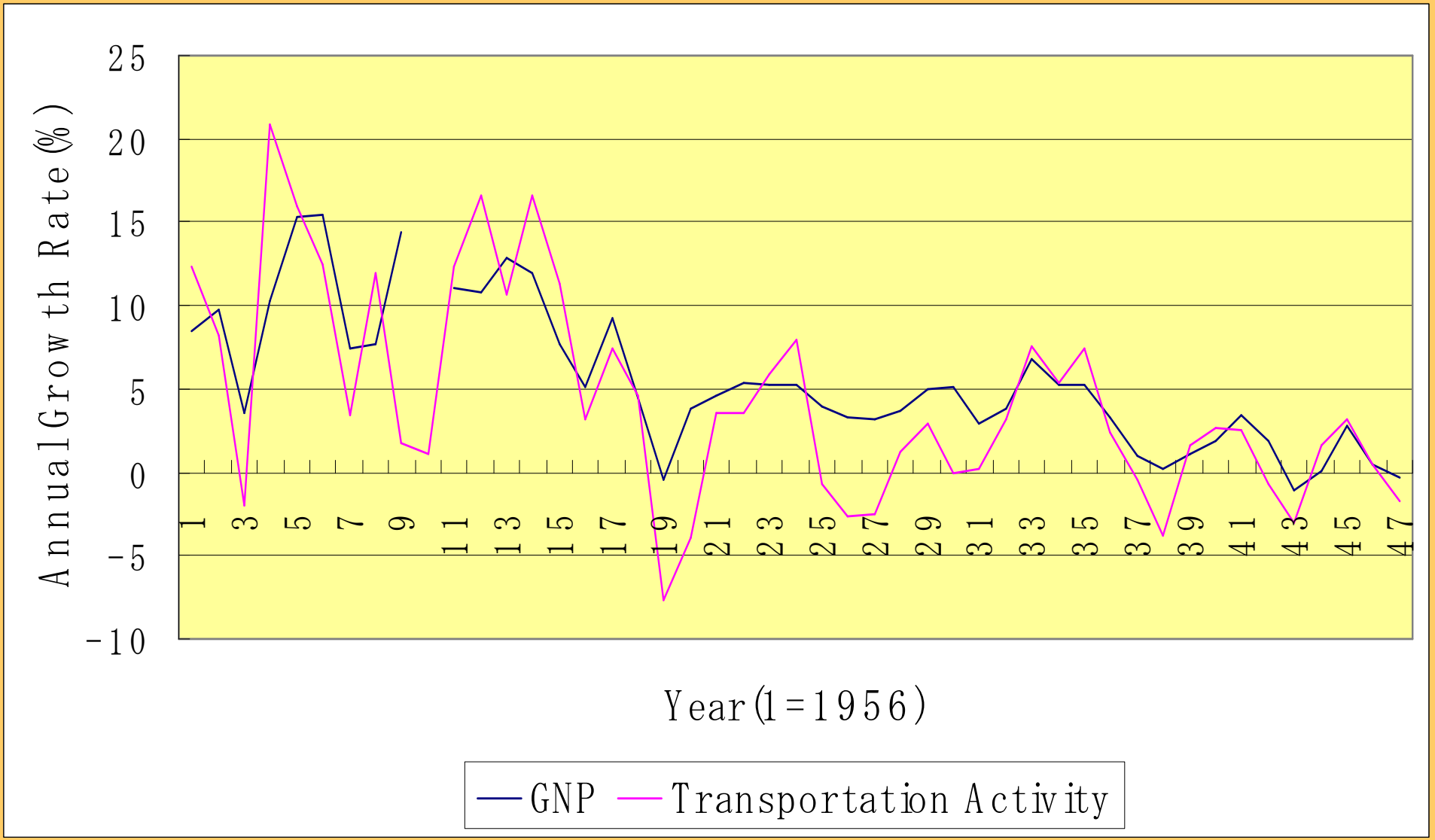
- When the Second World War ended in 1945, the transportation infrastructure of our country suited the very inferior situation caused by war damages and lack of maintenance and repairs during wartime.
- For example, port facilities in 1946 had fallen to one-third of the level of prewar days.

- High economic growth started in the second half of the 1950's.
- A lot of demurrage phenomena occurred at the major ports, and it become a big social problem.

Economic Growth and Transportation Activities(1)



Economic Growth and Transportation Activities(2)



Bottleneck of Economic Growth

- “National Income Doubling Plan” was decided in 1960
- Overcoming the bottleneck of economic growth was one of fundamental policies
- Improvement of social capital such as transportation and communication was most important issues

Five Year Plan for Port and Harbor Improvement

- Based on the economic plan, national long-term plans were determined by the government
- The development of a transportation infrastructure was to be advanced purposefully and intensively

2-2 Transportation and Logistics

Two Examples :

- “Kanban System” of Toyota Motors
- “Logistics of actualizing the potential value” of Sony Corp.

2-2 Transportation and Logistics

“Kanban System” of Toyota Motors

- Attaching the tag (Kanban) to parts.
- Removing the Kanban In the stage used for manufacture.
- Returning the Kanban to a part supplier.
- A part supplier sends out the following lot to the assembler when he receives the Kanban.

Kanban system in Toyota Motors(continue)

- Kanban system is an effective method for minimizing the stock by supplying the required parts In the required quantity and just in time for the production process.
- It is a system realized only after efficient and smooth transportation is guaranteed.

“Logistics of actualizing the potential values”

- Mr. Yasumasa Mizushima, ex-general manager of transportation in Sony.

- Title “Logistics that actualize the potential values”.

Logistics of actualizing the potential values(con.)

- The essential role of physical distribution is to actualize the potential value of goods.
- If the customer cannot obtain goods that will fulfill his conditions of time, place and quantity, the goods will be unacceptable regardless off their value.

Logistics of actualizing the potential values(con.)

- The worth of goods is actualized by moving them in time and space, so that the value inherent in the goods can be recognized.

Physical distribution

- Six basic functions of physical distribution :

  transporting, stocking, handling, packaging, distribution processing and information processing.

Logistics

- Logistics is the term of dealing with the physical distribution strategically.

Mr. Norio Ooga, ex-chairman, Sony

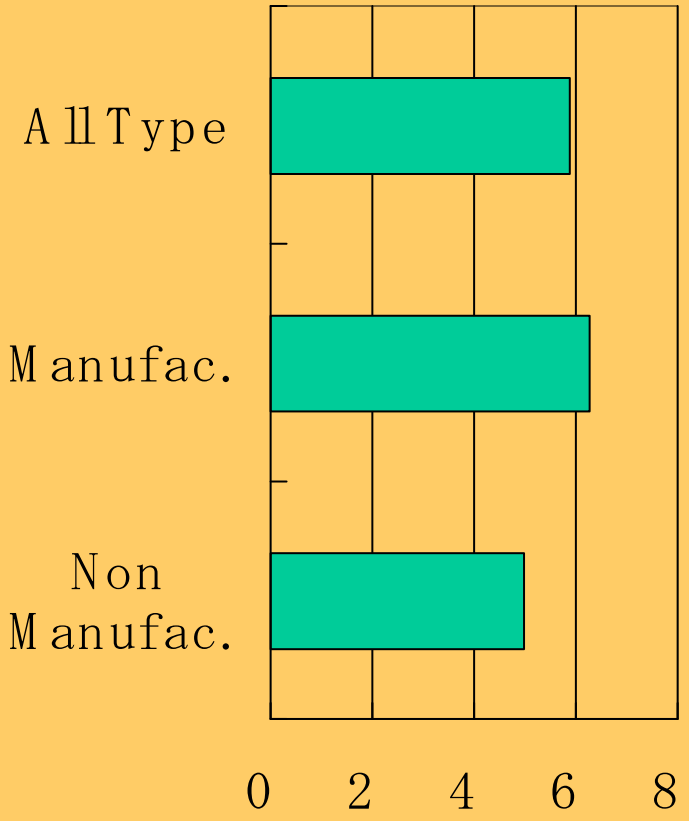
- Managers in the manufacturing industries of Japan have tried hard to reduce production costs.
- The production costs of the manufacturing Industry in Japan are among the most competitive in the world.

Managers in the ...

- However, there are few at the top who pay attention to transportation.
- They do not pay attention to the fact that transportation costs and inventory costs during transportation are reflected in the price.

Table –3 Ratio of the physical distribution cost in sales

Type	Ratio
All Type	5.87%
Manufact-uring	6.26
Non Manufact-uring	4.99



Reduction of transportation cost

- Reduction of manufacturing cost have reached the limit.
- In order to arouse the demand (and increase the production), reduction of physical distribution cost is a big issue.

Conclusion

Efficient and smooth transportation (realize by the corridors) is indispensable for favorable economic development.