

# Strengthening Subregional Connectivity in East and North-East Asia through Effective Economic Corridor Management Training-Workshop Series: Workshop 1

## Lecture 1: Transport Corridors

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Learning Materials on  
**Transport Corridors**

# Outline

- Transport corridors: concept functions, governance
- Road transport and international corridors
- Road transport performance and costs
- Road transport and international corridors during COVID-19 pandemic
- Policies and measures to enhance international safe, secure and seamless road transport



# Types of corridors

- Development corridors
- Economic corridors
- Transport corridors
- Multimodal transport corridors
- Transit corridors
- Trade corridors
- Logistics corridor
- Core corridors and ancillary networks;



# Multimodal corridor concept

- The multimodal corridor concept looks at transportation from an integrated transport perspective:
- what are the overall transport requirements on a corridor that can be met by a combination of transport modes in an efficient and seamless way.



# Corridors and multimodal transport

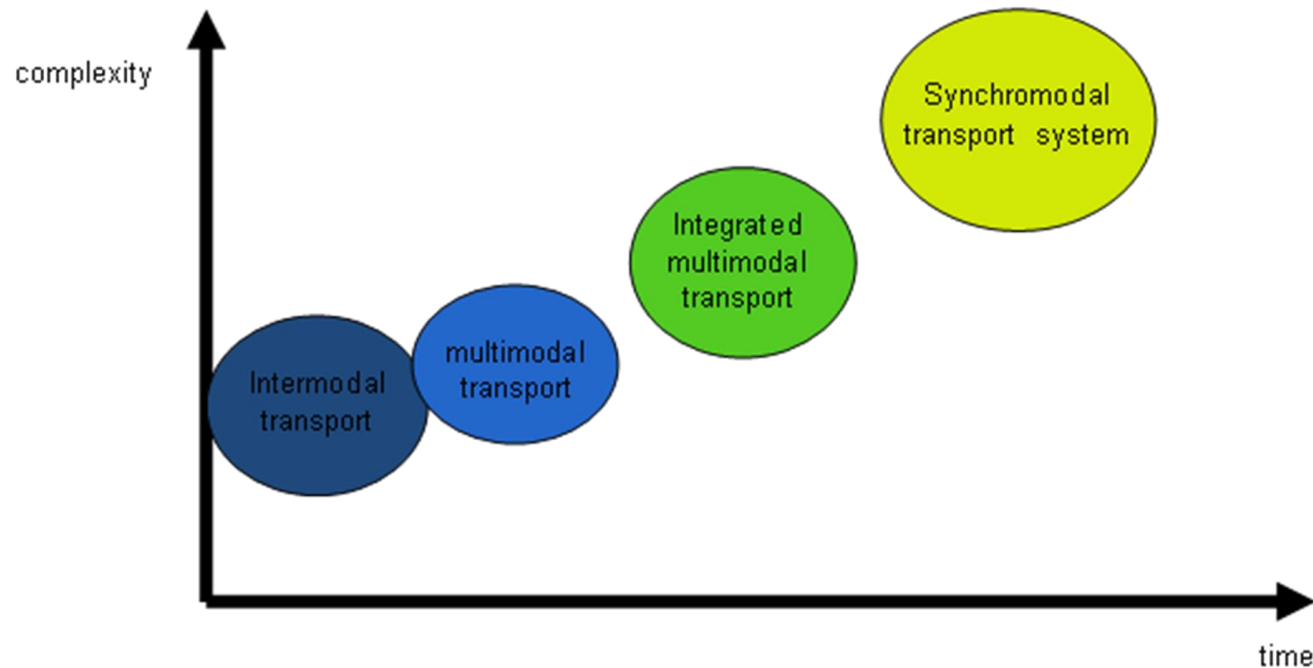


- Corridors have to take into account the latest developments in multimodal transport...

# Development of multimodal transport

- Combined transport: carrying a truck or trailer on train or barge
- Intermodal transport: one unit load (container, swap body)
- Multimodal transport: one bill of lading
- Synchromodal transport: using the right mode at any time

# Multimodal transport systems



# Synchromodality

- Optimal operational flexibility in transport system
- Active bundling of cargo
- Monitoring and control on the performance of the transport system
- Overall system approach to transport planning





# Multimodal transport corridor

In most countries and regions, the multimodal transport network is (still) a patchwork of single modal networks of roads, railways, waterways, airports and seaports.

Realizing efficient supply chains in practice is hampered especially by the:

- cross border or cross region infrastructures
- cross border or cross region operations
- different cross border regulatory and legal regimes
- technical interoperability
- integration of different transport modes

# Multimodal transport networks

The multimodal corridor networks typically link gateways (e.g. seaports) to the hinterland. It differs from hubs in such a way that hubs mostly consolidate cargo from various links of the same mode deeper in the network and gateways typically involve also a change of transport mode, such from maritime connections to road, rail or inland waterways.

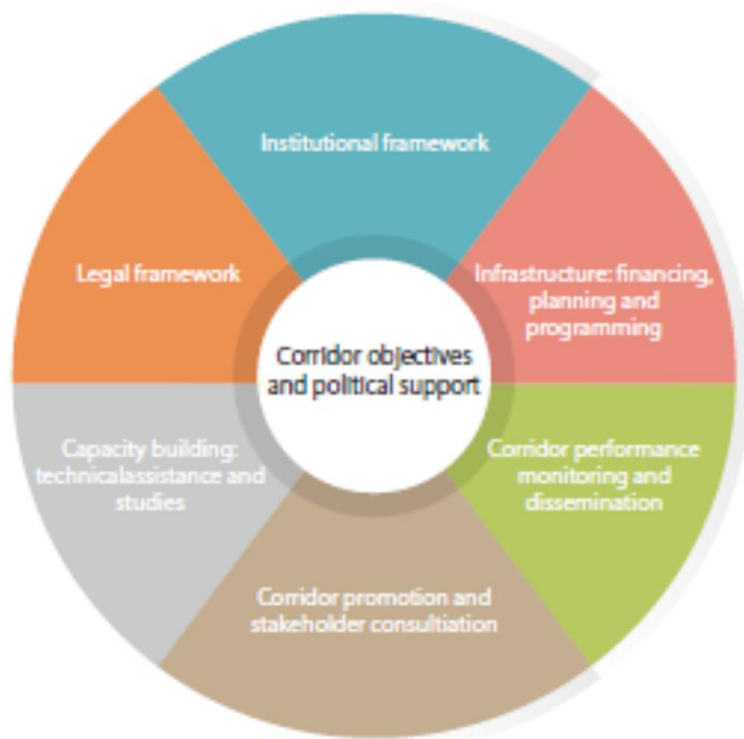
Therefore gateways connect multiple multimodal transport networks on a global scale and enable the import and export of cargo worldwide.

# Governance and management of corridors

The governance and management of corridors are critical success factors.

- *Corridor governance:* Governance deals with doing the right things and concentrates on high-level decision-making process, primarily setting strategic directions.
- *Corridor management:* Management concentrates on doing things right and concentrates on day-to-day administration and implementing the systems of governance.

# Governance and management of corridors: Conceptual framework



# Conceptual framework

At the core of the conceptual framework are the corridor objectives and the political support. The seven domains are:

1. Corridor objectives, political support
2. Legal framework
3. Institutional framework
4. Infrastructure: planning and financing
5. Corridor performance monitoring and dissemination
6. Corridor promotion and stakeholder consultation
7. Capacity building: technical assistance and studies

# International corridor management

- Planning, Infrastructure, Operations and Governance of Corridors
- Three steps: 1.coordination 2.cooperation 3.integration
- Characteristics of UNESCAP Corridors:
  - involving many countries
  - involving various modes of transport
- Challenges:
  - Language; communication; visa; legislation concerning use infrastructure, traffic, vehicle, driver, cargo; infrastructural connection (technical inter-operability); operational operability, border crossings; monitoring; etc.

# Governance domains

| Governance domains                                     | Components   |
|--|--|
| 1. Corridor objectives and political support           | <ul style="list-style-type: none"> <li>• Objectives of transport corridors: primary and secondary. The defined corridor objectives strongly affect the other six governance domains.</li> <li>• Transport corridors are included in national strategies and plans, as an indication of political support.</li> </ul> |
| 2. Legal framework                                     | <ul style="list-style-type: none"> <li>• The legal basis of the corridor (MoU, treaty) and the extent to which the agreement is binding.</li> <li>• Harmonisation of (legal) systems and procedures.</li> <li>• Mutual recognition of systems and procedures.</li> </ul>   |
| 3. Institutional framework                             | <ul style="list-style-type: none"> <li>• Organisation and characteristics, including presence of a corridor secretariat.</li> <li>• Involvement of stakeholders, including private sector and local government.</li> </ul>   |
| 4. Infrastructure: financing, planning and programming | <ul style="list-style-type: none"> <li>• Sources of finance available to effectively ensure governance of transport corridors.</li> <li>• Planning and programming of infrastructure (corridor vs national level).</li> </ul>  |
| 5. Corridor performance: monitoring and dissemination  | <ul style="list-style-type: none"> <li>• Measuring corridor performance, clear KPIs (Key Performance Indicators) defined.</li> <li>• Monitoring system to measure corridor performance.</li> <li>• Dissemination and making data and statistics publicly available.</li> </ul>                                       |
| 6. Corridor promotion and stakeholder consultation     | <ul style="list-style-type: none"> <li>• Promoting the corridor, by providing publications and organising events.</li> <li>• Consultation of stakeholders on a regular basis.</li> </ul>   |
| 7. Capacity building: technical assistance and studies | <ul style="list-style-type: none"> <li>• Build capacity by providing technical assistance and implement studies.</li> </ul>  |

Source: COMCEC (2018)

# Governance domains

| Governance domains                                     | Information exchange  | Coordination   | Cooperation  | Integration  |
|--|---|--|--|--|
| 1. Corridor objectives and political support           | Identifying common objectives among participants  | Broadly defined objectives and laid down in non-legally binding fashion          | Objectives defined in more detail and concrete plans for corridor management           | Defining broad range of specific objectives and management principles                  |
| 2. Legal framework                                     | Weak and developing in terms of bilateral and sub-regional agreements                     | Maturing, with focus on harmonization of regulations and standards               | Further developed, with mutual recognition (inspections, certificates, etc)            | A common and integrated legal basis  |
| 3. Institutional framework                             | Developing, for example, joint working groups, regional workshops                         | Developing, more formal structures, for example observatories                    | Further developed, for example corridor coordination committees                        | Integrated, for example corridor authorities with responsibility for the full corridor |
| 4. Infrastructure: financing, planning and programming | Informing, no dedicated funds available   | Increased coordination, joint projects   | More cooperation and increased corridor perspective, emerging of joint earmarked funds | Integrated planning and prioritization, dedicated funds available                      |
| 5. Corridor performance monitoring and dissemination   | Selected data is exchanged, no standards or formats                                       | More coordinated effort in exchanging data, with more harmonized standards       | Further integration, for example in joint publications.                                | Integrated systems for data collection and management and publication                  |
| 6. Corridor promotion and stakeholder consultation     | Little promotion, mainly to identify key stakeholders to set up corridor governance model | Joint promoting and attracting more stakeholder support for corridor development | Establishing institution for promotion and stakeholders approach                       | Advanced institutions for promotion and making sure stakeholders meet regularly        |
| 7. Capacity building: technical assistance and studies | Studies to establish corridor objective   | Coordinating studies, but mostly national  | Cooperative studies and establishing institution for technical assistance              | Studies published regularly and dedicated institution for technical assistance         |





# Governance domains: Exercise

**Exercises:** Please make an assessment of the present state and performance of the China-Mongolia-Russia Economic Corridor based on the seven governance domains and the four levels of integration using the information of this chapter. Do not forget to read [Annex A](#).

**Note:** Complete the tables below.

Assessment of the China-Mongolia-Russia Economic Corridor

| Governance domains                                     | Information exchange | Coordination | Cooperation | Integration |
|--|----------------------|--------------|-------------|-------------|
| 1. Corridor objectives and political support           |                      |              |             |             |
| 2. Legal framework                                     |                      |              |             |             |
| 3. Institutional framework                             |                      |              |             |             |
| 4. Infrastructure: financing, planning and programming |                      |              |             |             |
| 5. Corridor performance monitoring and dissemination   |                      |              |             |             |
| 6. Corridor promotion and stakeholder consultation     |                      |              |             |             |
| 7. Capacity building: technical assistance and studies |                      |              |             |             |



# Governance domains: Exercise

**Recommendations** What kind of activities would you propose to improve the performance of the China – Mongolia – Russia

Economic Corridor?

| Governance domains  | I n f o r m a t i o n<br>exchange | Coordination | Cooperation | Integration |
|---|-----------------------------------|--------------|-------------|-------------|
| 1. Corridor objectives<br>and political<br>support              |                                   |              |             |             |
| 2. Legal framework  |                                   |              |             |             |
| 3. Institutional<br>framework                                   |                                   |              |             |             |
| 4. Infrastructure:<br>financing, planning<br>and programming    |                                   |              |             |             |
| 5. Corridor<br>performance<br>monitoring and<br>dissemination   |                                   |              |             |             |
| 6. Corridor promotion<br>and stakeholder<br>consultation        |                                   |              |             |             |
| 7. Capacity building:<br>technical<br>assistance and<br>studies |                                   |              |             |             |



# Road transport and international corridors

The main challenges regarding:

- infrastructure,
- border crossing posts,
- operational gaps,
- road transport permits
- international harmonisation of road transport standards

# Eurasian Northern Corridor



## Northern Corridor

- Northern Corridor: cities
- Northern Corridor: road
- Northern Corridor: railway

## Asian Highway Routes

- Agreed route
- Ferry link
- ..... Potential route

## Trans-Asian Railways Status

- In operation
- Planned / Under Construction
- ..... Potential route

This figure is based on the Asian Highway and Trans-Asian Railway source files as provided by ESCAP Secretariat in October 2016 and reflects the state of infrastructure as per July 2017. It serves for illustrative purposes to show in a simplified manner the corridors covered by the study and thus is not aimed at showing all existing transport nodes, border crossings, road and railway segments.

The railway section Almaty – Altyntol (Kazakhstan) – Horgos (China) is in operation but is not yet included in the TAR Agreement.

The designations employed and the presentation of material on this figure do not imply the expression of any opinion whatsoever on the part of the secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not been agreed upon by the parties.

# Eurasian Northern Corridor





# Eurasian Northern Corridor



Ministry of  
Foreign Affairs  
of Mongolia

## Railway Transit Corridors



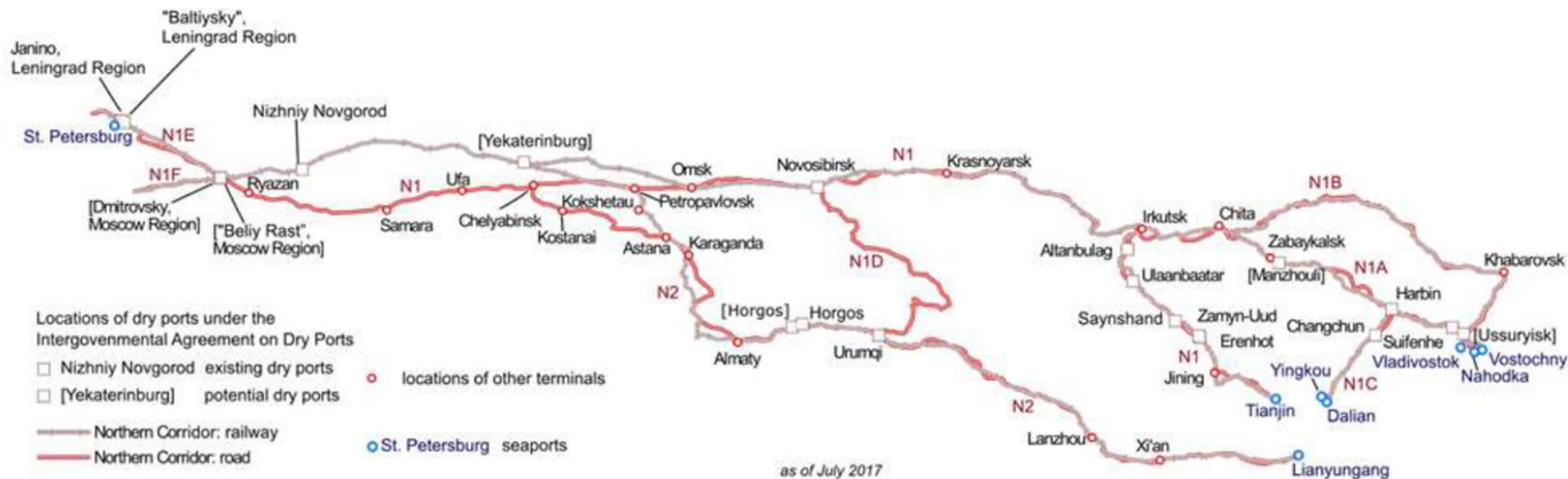
[www.mfa.gov.mn](http://www.mfa.gov.mn)

# China-Mongolia-Russia Economic Corridor

Is also part of:

- ESCAP Eurasian Northern Corridor
- Central Asia Regional Economic Cooperation (CAREC)
- Greater Tumen Initiative (GTI)
- Euro-Asian Transport Linkages (EATL)
- Intergovernmental Organization for International Carriage by Rail (OTIF)
- Organization for Cooperation between Railways (OSJD)

# Dry ports, terminals and seaports along the Eurasian Northern Corridor





# Asian Highway design standards

| Highway classification                |              | Primary<br>(4 or more lanes) |                |                    |              | Class I<br>(4 or more lanes) |     |      |   | Class II<br>(2 lanes)   |     |      |    | Class III<br>(2 lanes)      |    |            |    |
|---------------------------------------|--------------|------------------------------|----------------|--------------------|--------------|------------------------------|-----|------|---|-------------------------|-----|------|----|-----------------------------|----|------------|----|
| Terrain classification                |              | Level<br>(L)                 | Rolling<br>(R) | Mountainous<br>(M) | Steep<br>(S) | L                            | R   | M    | S | L                       | R   | M    | S  | L                           | R  | M          | S  |
| Design speed (km/h)                   |              | 120                          | 100            | 80                 | 60           | 100                          | 80  | 50   |   | 80                      | 60  | 50   | 40 | 60                          | 50 | 40         | 30 |
| Width (m)                             | Right of way | (50)                         |                |                    |              | (40)                         |     |      |   | (40)                    |     |      |    | (30)                        |    |            |    |
|                                       | Lane         | 3.50                         |                |                    |              | 3.50                         |     |      |   | 3.50                    |     |      |    | 3.00 (3.25)                 |    |            |    |
|                                       | Shoulder     | 3.00                         |                | 2.50               |              | 3.00                         |     | 2.50 |   | 2.50                    |     | 2.00 |    | 1.5 (2.0)                   |    | 0.75 (1.5) |    |
|                                       | Median strip | 4.00                         |                | 3.00               |              | 3.00                         |     | 2.50 |   | N/A                     |     | N/A  |    | N/A                         |    | N/A        |    |
| Minimum radii of horizontal curve (m) |              | 520                          | 350            | 210                | 115          | 350                          | 210 | 80   |   | 210                     | 115 | 80   | 50 | 115                         | 80 | 50         | 30 |
| Pavement slope (%)                    |              | 2                            |                |                    |              | 2                            |     |      |   | 2                       |     |      |    | 2 - 5                       |    |            |    |
| Shoulder slope (%)                    |              | 3 - 6                        |                |                    |              | 3 - 6                        |     |      |   | 3 - 6                   |     |      |    | 3 - 6                       |    |            |    |
| Type of pavement                      |              | Asphalt/cement concrete      |                |                    |              | Asphalt/cement concrete      |     |      |   | Asphalt/cement concrete |     |      |    | Double bituminous treatment |    |            |    |
| Maximum superelevation (%)            |              | 10                           |                |                    |              | 10                           |     |      |   | 10                      |     |      |    | 10                          |    |            |    |
| Maximum vertical grade (%)            |              | 4                            | 5              | 6                  | 7            | 4                            | 5   | 6    | 7 | 4                       | 5   | 6    | 7  | 4                           | 5  | 6          | 7  |
| Structure loading (minimum)           |              | HS20-44                      |                |                    |              | HS20-44                      |     |      |   | HS20-44                 |     |      |    | HS20-44                     |    |            |    |

# Bottlenecks at Border Crossing Posts (BCPs) for international transport

- Different laws and regulations apply between countries and also inspection regimes are often different.
- Coordination and cooperation between the border posts of the two countries would facilitate the border crossing of persons, vehicles and cargo.

# Bottlenecks at Border Crossing Posts (BCPs) for international transport

- Mutual recognition of each other's licenses, permits, inspection documentation would be helpful to guarantee smooth and seamless border crossing.
  - type of documentation refers to: immigration; transport (import, export and transit freight; technical vehicle standards; driver license) and trade (trade documentation, health regulation, phyto-sanitary requirements, certificates of origin, etc.)
- Some countries are even building one-stop border posts and avoid duplication of procedures and inspections
  - the inspection by an agency at one side of the border post is recognized by the agency at the other side of the border post; in some case there is even only one agency

# Border crossing operations N1 (ESCAP, 2017)

- Kyahta (Russian Federation) – Altanbulag (Mongolia) road BCP

*Kyahta BCP is open 24 hours a day for cars and passengers, and 12 hours a day for trucks. The design capacity of the BCP is 1,500 passengers and 500 vehicles/day, but in 2016 the BCP operated above capacity. On peak days these numbers almost tripled. Kyahta has five transport lines and Altanbulag 11; queuing is common and, therefore, Russian Customs considers modernization in order to increase capacity. It takes about 2 hours to cross from the Mongolian side to the Russian side at Altanbulag, and this figure could increase in the coming years to around 4 hours. Altanbulag is equipped with an X-ray inspection system, while Kyahta is not. Altanbulag is also a free economic zone.*

# Border crossing operations N1 (ESCAP, 2017)

- Zamin-Uud (Mongolia) – Erenhot (China) rail and road BCP

*On 1 November 2015, Erenhot and Zamin-Uud started to exchange cargo manifests electronically, and to mutually recognize weight certificates and X-ray diagrams. A revision of the Customs Law in Mongolia improved the road transport environment; drivers have to present less papers when crossing borders. The result of these efforts is a reduction of border crossing times at the Zamin-Uud – Erenhot road BCP, from 12 hours in 2014 to 4 hours in 2015. Border crossing costs for road transport along the Sukhbaatar – Ulaanbaatar – Erenhot corridor dropped by 43 per cent, from \$267 to \$151.*

# Estimated cost of investments in priority transport infrastructure for Mongolia along the Eurasian Northern Transport Corridor

| Infrastructure | Route                     | Length (km) | Cost (USD million) |
|----------------|---------------------------|-------------|--------------------|
| Road           | Altanbulag-Choir          | 527.6       | 820                |
|                | Hovd-Bulgan               | 360         | 1,400              |
|                | Ulaanbaishint-Hovd        | 260         | 1,300              |
| Dry Ports      | Ulaanbaatar and Zamin-Uud |             | 200                |
| Total          |                           |             | 3,720              |

Source: Compiled based on ESCAP: Comprehensive Planning of Eurasian Transport Corridors to Strengthen the Intra- and Inter-Regional Transport Connectivity; Study Report 2017.

# Eurasian Northern Corridor: coverage by subregional agreements







# International harmonization of technical standards for weight, dimensions and emissions of heavy-duty and commercial vehicles

|                    | Maximum Width, mm  | Maximum Height, mm | Maximum Length, mm |                                | Maximum Gross Weight, tonnes |                                | Maximum Axle Load, tonnes |                     |
|--------------------|--------------------|--------------------|--------------------|--------------------------------|------------------------------|--------------------------------|---------------------------|---------------------|
|                    |                    |                    | Rigid truck        | Articulated Vehicle/Road Train | Rigid Truck                  | Articulated Vehicle/Road Train | Group Axles               | Single Axle         |
| China              | 2,550              | 4,000              | 12,000             | 20,000                         | 31.00                        | 49.00                          | 24.00 <sup>i</sup>        | 11.5 <sup>iii</sup> |
| Mongolia           | 2,500              | 4,000              | 12,000             | 18,750                         | -                            | 44.00                          | N.A.                      | 11.5                |
| Russian Federation | 2,550 <sup>i</sup> | 4,000              | 12,000             | 20,000                         | 35.00                        | 44.00                          | 26.00 <sup>i</sup>        | 11.5                |
| EU                 | 2,550 <sup>i</sup> | 4,000              | 12,000             | 18,750                         | 32.00                        | 44.00                          | 24.00 <sup>i</sup>        | 11.5                |

Source: National standards as indicated in the footnotes to the Annex I.

Notes:

i – for tridem axle

ii – 2,600 mm for truck with isothermal or refrigerator body

iii – for powered axle

N.A. – data are not available.

- the limit is not set by the standard.

# ESCAP study proposed minimum emission standards: Euro IV

| Stage    | Date             | Test      | CO    | HC   | NOx  | PM                | PN                   | Smoke |
|----------|------------------|-----------|-------|------|------|-------------------|----------------------|-------|
|          |                  |           | g/kWh |      |      |                   | 1/kWh                | 1/m   |
| Euro I   | 1992, ≤ 85 kW    | ECE R-49  | 4.5   | 1.1  | 8.0  | 0.612             |                      |       |
|          | 1992, > 85 kW    |           | 4.5   | 1.1  | 8.0  | 0.36              |                      |       |
| Euro II  | 1996.10          |           | 4.0   | 1.1  | 7.0  | 0.25              |                      |       |
|          | 1998.10          |           | 4.0   | 1.1  | 7.0  | 0.15              |                      |       |
| Euro III | 1999.10 EEV only | ESC & ELR | 1.5   | 0.25 | 2.0  | 0.02              |                      | 0.15  |
|          | 2000.10          |           | 2.1   | 0.66 | 5.0  | 0.10 <sup>a</sup> |                      | 0.8   |
| Euro IV  | 2005.10          |           | 1.5   | 0.46 | 3.5  | 0.02              |                      | 0.5   |
| Euro V   | 2008.10          |           | 1.5   | 0.46 | 2.0  | 0.02              |                      | 0.5   |
| Euro VI  | 2013.01          | WHSC      | 1.5   | 0.13 | 0.40 | 0.01              | 8.0×10 <sup>11</sup> |       |

a - PM = 0.13 g/kWh for engines < 0.75 dm<sup>3</sup> swept volume per cylinder and a rated power speed > 3000 min<sup>-1</sup>

Source: DieselNet: Emission Standards; EU: Heavy-Duty Truck and Bus Engines  
<https://www.dieselnet.com/standards/eu/hd.php>

# Some of the main non-infrastructure road transport and customs impediments along the Eurasian Northern Corridor: Roads

- Regulatory mismatches occur at the borders of countries along the Corridor during international road transport operations.
  - Differences in weight standards, and requirements for the translation of national driving licenses for international transport to occur can lead to decreased efficiency, and an increase in the number of documents needed for international transport along with respective costs.
- There are geographical restrictions on entry to partner countries in some country pairings along the Corridor: Mongolian trucks can enter China only up to certain points.
- Cabotage is forbidden in all countries.

# Some of the main non-infrastructure road transport and customs impediments along the Eurasian Northern Corridor: Customs

- Customs requirements between China, Mongolia and the Russian Federation differ, complicating the environment for transit.
  - The three countries' authorities are taking steps towards improving the situation through the holding of trilateral meetings.
- Treatment of Mongolia-bound cargoes
- Requirements for the temporary importation of vehicles and cargoes

# Monitoring road transport performance and road transport costs

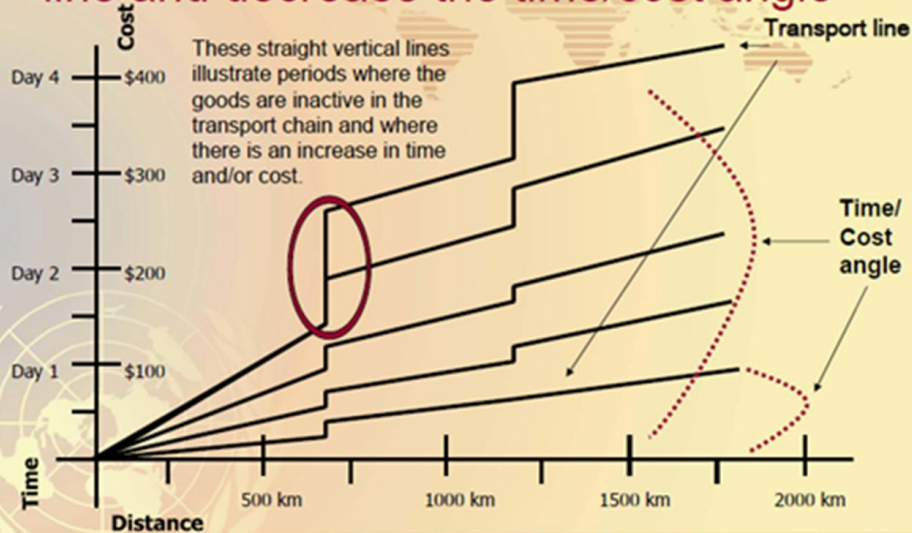
- It is good international practice to set-up an observatory along the main transport and trade corridors to monitor road transport performance and related transportation and logistics costs.
- There are worldwide many good practices of establishing such observatories. Some of these observatories sometimes monitor driving and waiting times in real time using chip technology and present the real-time data on a website.

# The ESCAP Time/Cost-Distance Methodology

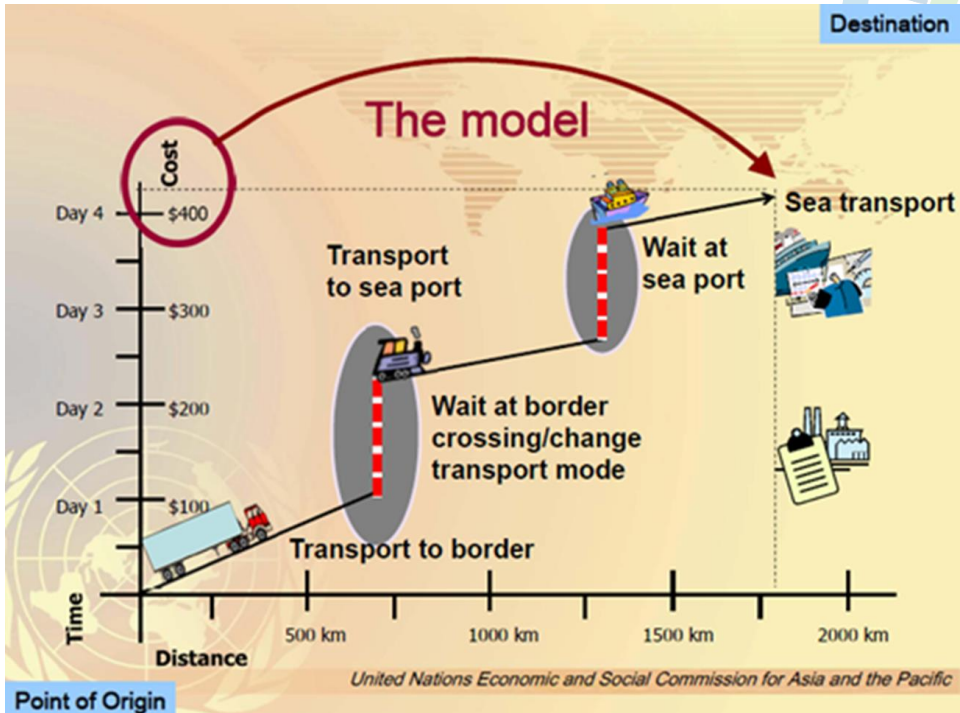
- The purpose of the methodology is to identify inefficiencies and isolate bottlenecks along a particular transit route by looking at the cost and time characteristics of every section along a transit route.
- The methodology requires a minimum amount of information: the route from origin to destination, including stops and border crossings, the mode of transport of each leg of the trip, the distance travelled, and the travel time, and the cost of each leg and node by mode of transport.
- The methodology enables policy makers to: compare—over a period of time—the changes of cost and/or time required for transportation on a certain route; compare and evaluate competing modes of transport operating on the same route; and compare alternative transit routes.

# The ESCAP Time/Cost-Distance Methodology

Objective to straighten the transport line and decrease the time/cost angle



United Nations Economic and Social Commission for Asia and the Pacific



United Nations Economic and Social Commission for Asia and the Pacific

# Case Study: CAREC Corridor Performance Measurement and Monitoring (CPMM)

## Developing a CAREC CPMM methodology

The first CAREC Transport and Trade Facilitation Strategy 2008-2017 mandated the monitoring and periodic measurement of the performance of the six priority transport corridors:

- identify the causes of delays and unnecessary costs along the links and nodes of each CAREC corridor, including Border Crossing Points (BCPs) and intermediate stops;
- help authorities determine how to address the identified bottlenecks; and
- assess the impact of regional cooperation initiatives.



# Case Study: CAREC Corridor Performance Measurement and Monitoring (CPMM)

The CPMM methodology identifies four Transport Facilitation Indicators (TFIs)

- **TFI 1:** Time taken to clear BCP
- **TFI 2:** Costs incurred at a BCP
- **TFI 3:** Costs incurred while traveling along a corridor section
- **TFI 4:** Speed of travel along a corridor section

# Trade Facilitation Indicators for Mongolia (2017-2019)

|      |   | Road Transport |       |       |   | Rail Transport |       |      |   |
|------|---|----------------|-------|-------|---|----------------|-------|------|---|
|      |   | 2017           | 2018  | 2019  |   | 2017           | 2018  | 2019 |   |
| TFI1 | Time taken to clear a border-crossing point (hour)                            | 3.2            | 3.5   | 3.7   | ● | 13.3           | 18.1  | 19.0 | ● |
|      | Outbound  | 2.9            | 2.9   | 2.9   |   | 7.6            | 11.7  | 8.7  |   |
|      | Inbound   | 3.2            | 3.5   | 3.7   |   | 16.6           | 20.4  | 21.4 |   |
| TFI2 | Cost incurred at border-crossing clearance (\$)                               | 93             | 93    | 97    | ● | 48             | 49    | 52   | ● |
|      | Outbound  | 12             | 13    | 12    |   | -              | 27    | 11   |   |
|      | Inbound   | 104            | 104   | 109   |   | 48             | 49    | 54   |   |
| TFI3 | Cost incurred to travel a corridor section (\$, per 500 km, per 20-ton cargo) | 1,034          | 1,512 | 1,373 | ● | 827            | 1,030 | 720  | ● |
| TFI4 | Speed to travel on CAREC corridors (km/h)                                     | 28.5           | 33.5  | 26.2  | ● | 13.6           | 14.1  | 19.1 | ● |
| SWOD | Speed without delay (km/h)  | 46.5           | 50.2  | 40.8  | ● | 22.7           | 20.9  | 24.1 | ● |

Legend: ● Improved by at least 3% ● Deteriorated by at least 3%

- = no data, CAREC = Central Asia Regional Economic Cooperation, km = kilometer, km/h = kilometer per hour, SWOD = speed without delay,

TFI = trade facilitation indicator.

Source: Asian Development Bank.

# Border-Crossing Performance in Mongolia (2017-2019)

| BCP            | Corridor | Direction of Trade | Duration (hours) |      |      | Cost (\$) |      |      |
|----------------|----------|--------------------|------------------|------|------|-----------|------|------|
|                |          |                    | 2017             | 2018 | 2019 | 2017      | 2018 | 2019 |
| Road Transport |          |                    |                  |      |      |           |      |      |
| Yarant         | 4        | Outbound           | 3.0              | 3.1  | 2.9  | 57        | 55   | 55   |
|                |          | Inbound            | 3.4              | 3.9  | 3.3  | 201       | 201  | 198  |
| Zamiin-Uud     | 4        | Outbound           | -                | -    | -    | -         | -    | -    |
|                |          | Inbound            | 3.5              | 4.0  | 4.5  | 123       | 121  | 133  |
| Altanbulag     | 4        | Outbound           | -                | -    | -    | -         | -    | -    |
|                |          | Inbound            | 2.5              | 2.2  | 1.9  | 5         | 10   | 12   |
| Bichigt        | 4        | Outbound           | -                | -    | -    | -         | -    | -    |
|                |          | Inbound            | 1.7              | 1.4  | 1.4  | 11        | 6    | 7    |
| Rail Transport |          |                    |                  |      |      |           |      |      |
| Sukhbaatar     | 4        | Outbound           | -                | -    | -    | -         | -    | -    |
|                |          | Inbound            | 11.1             | 7.4  | 6.2  | 11        | 8    | 5    |
| Zamiin-Uud     | 4        | Outbound           | 7.6              | 11.8 | 8.7  | -         | 27   | 4    |
|                |          | Inbound            | 18.9             | 22.9 | 24.2 | 63        | 34   | 36   |

- = no data, BCP = border-crossing point.  
Source: Asian Development Bank.

# Key Findings CAREC CPMM survey

- (i) In 2019, both road and rail transport reported mixed performance for Mongolia, displaying an increase in border-crossing time and cost compared to 2018, while total cost declined. Road transport suffered from lower speeds in 2019, while rail transport benefited from higher speeds.
- (ii) For road transport in 2019, border-crossing time increased slightly from 3.5 hours to 3.7 hours year-on-year, due to border crossing at Zamiin-Uud for inbound cargoes, which experienced an increase from 4.0 hours to 4.5 hours during 2018–2019. Border security (1.2 hours) and customs controls (1.8 hours) were the main culprits of delay.
- (iii) Average border-crossing costs crept up from \$93 to \$97 during 2018–2019 and were likewise due to the Zamiin-Uud BCP, where fees per truck averaged \$133, up from \$121 in 2018—payments to border control and customs controls were key factors. However, total average cost decreased from \$1,512 to \$1,373 during 2018–2019.
- (iv) Speeds dropped in 2019, falling from 50.2 km/h in 2018 to 40.8 km/h for SWOD, and from 33.5 km/h in 2018 to 26.2 km/h for SWD.
- (v) In 2019, rail transport saw a slight increase in average border-crossing time from 18.1 hours in 2018 to 19.0 hours, affected by changes at Zamiin-Uud BCP. While outbound cargo time was shorter, the average time to handle inbound cargoes grew from 22.9 hours in 2018 to 24.2 hours in 2019, largely due to the shortage of wagons, marshaling, and the time required to load goods.
- (vi) Average border-crossing cost rose from \$49 to \$52 in 2019. Commercial inspection and the change in gauge operation at Zamiin-Uud were the key cost drivers.
- (vii) Total transport cost lowered from \$1,030 to \$720, showing that rail freight tariffs have reduced in 2019.
- (viii) Both speeds reported higher levels in 2019 compared with 2018 data. SWOD increased from 14.1 km/h to 19.1 km/h and SWD increased from 20.9 km/h to 24.1 km/h. This was achieved despite the longer average border-crossing time.



# Road transport and international corridors during COVID-19 pandemic

- The road transport sector plays a very important role in times of crisis such as the COVID-19 pandemic.
- It is crucial that supply chains are maintained, in particular for essential commodities such as food, medical supplies and petrol.
- Road transport, however, could theoretically also be a vector for the national and international spreading of the disease if no precaution measures are taken into account.

# Examples of facilitation measures introduced to fight the COVID-19 outbreak

## Georgia

Within the frames of the measures to prevent the spread of COVID-19, movement of the freight vehicles through the customs checkpoint on Georgian-Azerbaijani border (including transit and rail freight traffic) is ensured according to the specially developed protocol in 24-hour regime.

## China

Transport facilitation measures taken include removing all road tolls (including for bridge and tunnels) across the country for all vehicles, until the pandemic ends; putting in place a no-stop, no-check, toll free policy for vehicles transporting emergency supplies and essential personnel and cutting operational costs of international air cargo, including exemptions from the civil aviation development funds as well as reduction of airport charges and air traffic control. Passenger airlines are also encouraged to turn passenger planes into all-cargo freighters for carrying out freight transportation to make up for the shortage of air freight capacity amid the escalating pandemic.

## India

Special facilitation measures at main ports. To ensure smooth flow of supply chain of essential items during national lockdown to fight COVID-19, clarifications were provided to ensure that stakeholders in logistics and warehousing receive necessary assistance to continue their operations.





# Examples of facilitation measures introduced to fight the COVID-19 outbreak

## Republic of Korea

To address delays at airports and seaports, allowing cargo to be transported directly to manufacturing plants without entry into the terminal after arrival in order to solve the problems of delayed unloading and shortage of storage space at airports and seaports driven by the concentration of imports.

## Russian Federation

A headquarters has been set up at Russian Railways to provide operational support to shippers and ensure coordination of all links in the transport chains in the context of preventing and eliminating the spread of new coronavirus infection. Temporary exemption from weight control of vehicles carrying essential goods and temporary cancellation restrictions on the movement of such vehicles and their loading and unloading within the city limits.

## Singapore

The Singapore-Malaysia Special Working Committee has agreed that the transport of all types of goods between Malaysia and Singapore will be facilitated during the duration of Malaysia's Movement Control Order. As such, those conveying essential services, or supplies (e.g. lorry drivers, vegetable supply truckers, frozen supply truckers) via land and sea crossings will be exempted from the Ministry of Manpower's (MOM) entry approval and quarantine ("Stay Home Notice" (SHN)) requirements.



# Examples of facilitation measures introduced to fight the COVID-19 outbreak

The European Commission of the European Union issued on 16 March 2020 guidelines for border management measures to protect health and ensure the availability of goods and essential services at the same time.

- Transport of goods and services
- Supply of goods
- Health-related measures
- External borders
- Internal borders



# Exercise and discussion

- Which measures taken by countries would be useful for the China-Mongolia-Russia Economic Corridor?
- Which measures could realistically be implemented on the China-Mongolia-Russia Economic Corridor?
- Which measures would only be useful in times of pandemics?
- Which measures would apply also in times without pandemics?
- Are there any other measures that you would propose?

# Health related measures under COVID-19 proposed by the industry

Measures proposed by the industry:

- Associations of road transport operators
- Freight forwarders associations
- Associations of Providers of logistics services
- Shippers' associations



# Exercise and discussion

- Which recommendations would be useful for the China-Mongolia-Russia Economic Corridor?
- Which measures could realistically be implemented on the China-Mongolia-Russia Economic Corridor?
- Which measures would only be useful in times of pandemics?
- Which measures would also apply in times without pandemics?
- Are there any other measures that you would propose?

# Towards more safe, secure and seamless road transport

- Exchange of information
- Coordination, cooperation and integration
- Observatories to monitor corridor performance
- Border crossings along the corridors
- Safe and secure parking places along corridors
- Sanitary conditions
- Gender

# Exercise and discussions

## Reference Videos – Working conditions for truck drivers; a serious concern for everyone!

- Exploitation across Europe in road transport supply chain automotive industry (14 m. 50 s.) <https://www.youtube.com/watch?v=Z4LOLVdf4dY>
- The Pandemic in Road Transport (14 m. 26 s.) <https://www.youtube.com/watch?v=apP1CDIGpd0>
- Truck driving in Mongolia: Ulaanbaatar to Mumbai – Mongolia's rough roads (3 m. 24 s.) <https://www.youtube.com/watch?v=21oN267DjCU>
- About a Chinese truck driver: Shanghai to Ulaanbaatar: The road is open (3 m. 30 s.) <https://www.youtube.com/watch?v=ofKgnH6wrjo>

## What are your thoughts on:

- measures towards more safe, secure and seamless road transport?
- improving working conditions for international truck drivers?

# Thank you

