

# UNESCAP

## Time/Cost-Distance Methodology

### Preparation for TCD study

**Heini Suominen**  
*Associate Economic Affairs Officer*  
*Transport Facilitation and Logistics Section*  
*Transport Division*  
**UNESCAP**



# Presentation outline



---

---

## ❖ Steps required at the stage of preparation for Time/Cost-Distance study

- ▶ Defining the survey method
- ▶ Defining on the team or consultant or institution to conduct the study
- ▶ Choice of data sources
- ▶ Defining the commodity/commodities for the study
- ▶ Selection of the transport corridor or route

# The survey method:

---

---

- ▶ **Self-answering questionnaire**

- ✓ if respondents can freely and willingly provide data

- ▶ **Access to respondents**

- ✓ Obtaining direct access to respondents by face-to-face meetings or telephone interviews

# Institution for the study

---

---

- ▶ Association of transport carriers or freight forwarders
- ▶ University or research institute
- ▶ Individual consultant or team of consultants
- ▶ Government authority

# Sources of data :

---

---

- ▶ Trip diaries
- ▶ Independent survey
- ▶ Interviews
- ▶ Demonstration runs
- ▶ Pre-available data
- ▶ Government authorities' databases
- ▶ Satellite positioning records

# Data required:

---

---

- ▶ Origin and destination of the cargo
- ▶ Full routeing from origin to destination, with indication of the places where the cargo is essentially stationary (such as border crossings and points of intermodal transfer)
- ▶ Mode of transport for each leg
- ▶ Distances involved for each leg
- ▶ Transit time for each leg (in hours or days)
- ▶ Cost or quotes for each leg

# Data validity :

---

---

- ▶ Data triangulation, i.e. using different data sources
- ▶ Sampling, i.e. multiple shipment of the same products
- ▶ Multiple measurements at the same corridor/route

# Defining the commodity (commodities):

---

---

- ▶ Top 5 commodities
- ▶ Seasonality factor
- ▶ Means of transport



# Ranking the commodity (commodities):

---

---

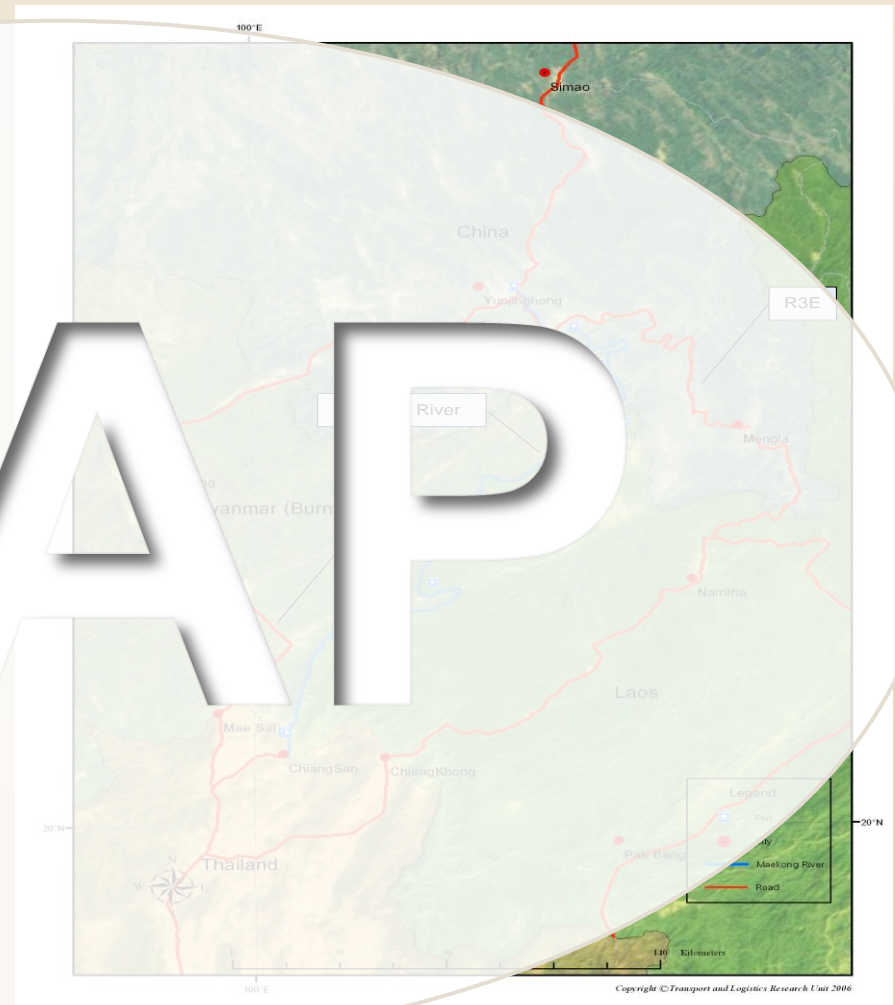
	Commodity	Value	Volume	Transport mode
1				
2				
3				

# Defining the corridor routes:

✓ Multiple routes along the same transport corridor

✓ Alternative transport modes

# MAP



---

**Thank you!**