

# What is Cross-Border Transportation Infrastructure?

## Background and expectations

Cross-Border Transportation (CBT) is transportation across international boundaries and Cross-Border Transportation Infrastructure (CBTI) is the basic infrastructure that allows and facilitates CBT.

Obvious examples are international ports and airports and international bridges such as the Mekong Friendship Bridge. In addition, CBTI also include the transportation network that links to these facilities as well as the software aspects of its operation.

CBTI supports the progressing global trend of regionalization through lowering of barriers (physical and non-physical) that prevent or hinder the smooth and cost-efficient movement of people and goods (i.e. CBT) thereby promoting economic interaction among nations in the region.

Regionalization promotes regional development and

is considered to reduce poverty and foster stability in the region.



Picture: Mekong Friendship Bridge over the Mekong River linking Nong Khal (Thailand) and Vientiane (Lao PDR)

## Elements of CBTI

The scope of CBTI extends over a wide-ranging area including systems/standards and operation/management in addition to the physical infrastructure such as hubs (e.g. border crossings and transshipment facilities).

The focus tends to be on the hardware components, but the software components are just as important to allow trade and traffic in both directions possible.

Elements and description of CBTI

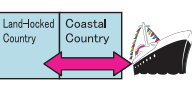
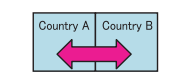
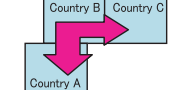
Element	Description
Mode of transportation/facilities	Transportation facilities (e.g. roads and ports) and mode of transportation (e.g. railways)
Hub facilities	Cross-Border facilities and transshipment facilities that transportation passes through.
Systems/standards	Establishment of various systems (e.g. immigration System and organization framework)
Operation/management	Operation and management of mode of transportation, facilities, and hub facilities.

## Purpose and Needs for the CBTI

The purpose and impacts of CBTI vary based on the structure and level of sophistication of interaction among stakeholder nations, which basically can be categorized into three types as follows:

- 1 For land-locked countries with no coastline to link with a coastal neighbor country for maritime transportation access
- 2 For two adjacent countries to link themselves so they can complement each other in terms of resources, workforce and consumers for economic development based on partnership
- 3 For multi-country linkages to enhance transportation among them to achieve regional economic development

Needs for CBTI

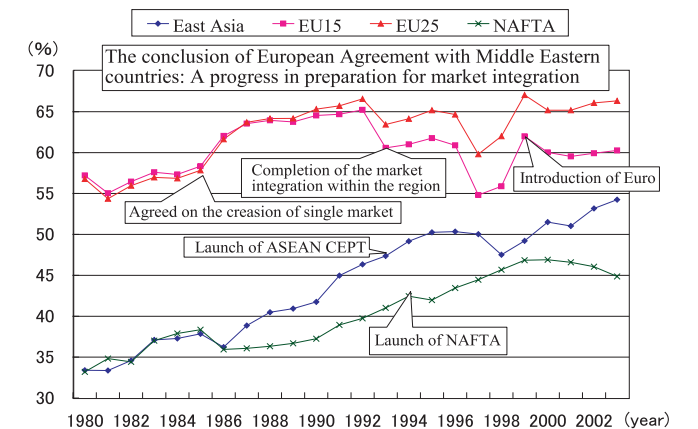
Types of Needs	Purposes and impacts	Examples
Connection between land-locked areas and sea 	Resource exported or imported from land-locked countries ➔Economic development in land-locked countries Prosperity of ports in coastal countries Development of traffic routes' roadside areas	Paraguay — Brazil Zambia — Tanzania Malawi — Mozambique, etc.
Connection between two countries next to each other 	Mutual supplement of economic resources between A and B countries ➔Economic development in both countries Development of traffic routes' roadside areas	Brazil — Argentina Paraguay — Argentina Laos — Thailand, etc.
Transportation conducive to regional integrity 	Mutual supplement of economic resources between countries in the region ➔Economic development in countries in the region Development of traffic routes' roadside area Integral prosperity in the region	EU:TEN-T Transportation projects of GMS, PPP, and SADC aims to fall into this category.

# CBTI conducive to the progress of regionalization

## Expansion of intra-regional trade

CBTI is a key component in inducing regionalization.

The chart to the right shows trends in intra-regional trade ratio in major regions. The EU has significantly increased its intra-regional trade volume in the latter half of the 1980's, when regional market integration and regional transportation network (Cross-Border Transportation Network) building evolved. Since then, along with the accession of new member states, intra-regional trade ratio has fluctuated but remained high. In ASEAN, as regional economy improved, intra-regional trade ratio increased especially after the 1990s when economic alliances were strengthened significantly. Moreover, CBTI is a major factor in the revitalization of passenger transportation. In Asia, the number of intra-regional air passengers is on the rise as airport/domestic transportation network was improved.



Notes: East Asia includes Japan, China, South Korea, Taiwan, and ASEAN 10 countries. Export/import data of each country and region with Taiwan as a standard targets the period from 1983 to 2003. Source) IMF "DOT". Board of Foreign Trade, Taiwan, Chinese Taipei "Trade Statistics" (<http://eweb.trade.gov.tw/default.asp>) (EU15 shown above means statistics of EU 15 member states and EU 25 for that of EU 25 countries.)

Intra-regional trade ratio in major regions

## Regionalization and transport infrastructure

EU has significantly increased its intra-regional trade volume since the latter half of the 1980's when regional market integration in the areas of transportation network, system and standards evolved in terms of both systems and facilities.

In Asian countries such as Singapore, Malaysia, and Thailand, system-oriented policies are in progress, including simplification of export and import procedures, which are believed to be conducive to regional economic development. In the GMS (Greater Mekong Sub-region) countries, east-west/north-south economic cross-border corridor development is underway and some have begun operation.

In South America, intra-regional transportation infrastructure is not necessarily smooth since it is often cut off at border points. Securing routes for export/import is essential for landlocked countries.

Africa has a small volume of intra-regional transportation due to its low regional economies and its under- developed transportation infrastructure.

The upgrading of domestic transportation network and linkage to the border is essential to the functionality of CBTI.

## Major features of CBTI

The CBTI focuses not only on its physical feature as a facility near the border but also on the function conducive to the progress of regionalization. The features of the CBTI are shown below.

### 1 Possible combination of more than one mode of transportation

Although airports and ports are infrastructure located at the border, they do not function by themselves. Smooth operations of roads, railways, etc. are indispensable for gaining an access to airports and ports and help cross-border transportation infrastructure function fully.

### 2 Domestic and international infrastructure as an integral network

Without depending on infrastructure building at border points, it is necessary to push ahead with domestic transportation infrastructure building at the same time. There is no distinction between domestic and international CBTI.

### 3 CBTI corresponds to regional needs based on a strategy of regional development

CBTI needs to be aligned with the fulfillment of a recognized need in the region for cross border transportation.