

# **PLANNING, DEVELOPMENT AND OPERATION OF DRY PORTS OF INTERNATIONAL IMPORTANCE**

Report on trends in the development of inland ports and policies underlying their  
development in selected countries of the UNESCAP region



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## Section A: Planning, Development and Operation of Dry Ports

### 1. Introduction

An assessment of dry port (or inland port) development and of the policies underlying and assisting this development was undertaken as a basis for discussion at the First Meeting of the Working Group on Dry Ports in Bangkok from 25-26 November 2015.

This assessment is based on information obtained during fact-finding missions to five countries of the region: Australia, People's Republic of China, India, Republic of Korea, and Thailand, which were considered to have achieved some measure of success in the establishment and operation of dry ports. It was expected that the experience of these countries could be used to assist other countries of the region whose experience is fairly limited and which might benefit from applying best practice planning techniques and policy formulation to the development of dry ports.

### 2. Dry Port – definition and function

For the purpose of the Intergovernmental agreement on Dry Ports, a *dry port of international importance* “refers to an inland location as a logistics centre connected to one or more modes of transport for the handling, storage and regulatory inspection of goods moving in international trade and the execution of applicable customs control and formalities” (*Article 1 of Inter-governmental Agreement on Dry Ports*).

Dry Ports can be considered as an essential part of an inland trade distribution system. Such a system is illustrated in Figure 2.1. Although the Inter-governmental agreement provides a standardized definition of a dry port, in fact a number of different terms are in use throughout the UNESCAP region to describe facilities which have the functions of a dry, or inland, port.

Thus, the terms: “Dry Ports”; “Inland Container Depots”; “Inland Clearance Depots”; and in a limited number of cases, “Container Freight Stations” are used almost interchangeably within the region to describe such facilities. It is important to note that inland trade distribution systems of the type illustrated in Figure 2.1 may be, and are being, developed for the handling of *all types of cargo*, i.e. containerized, non-containerized break-bulk and bulk cargoes – not just for containerized cargoes, although these tend to dominate the composition of foreign trade.

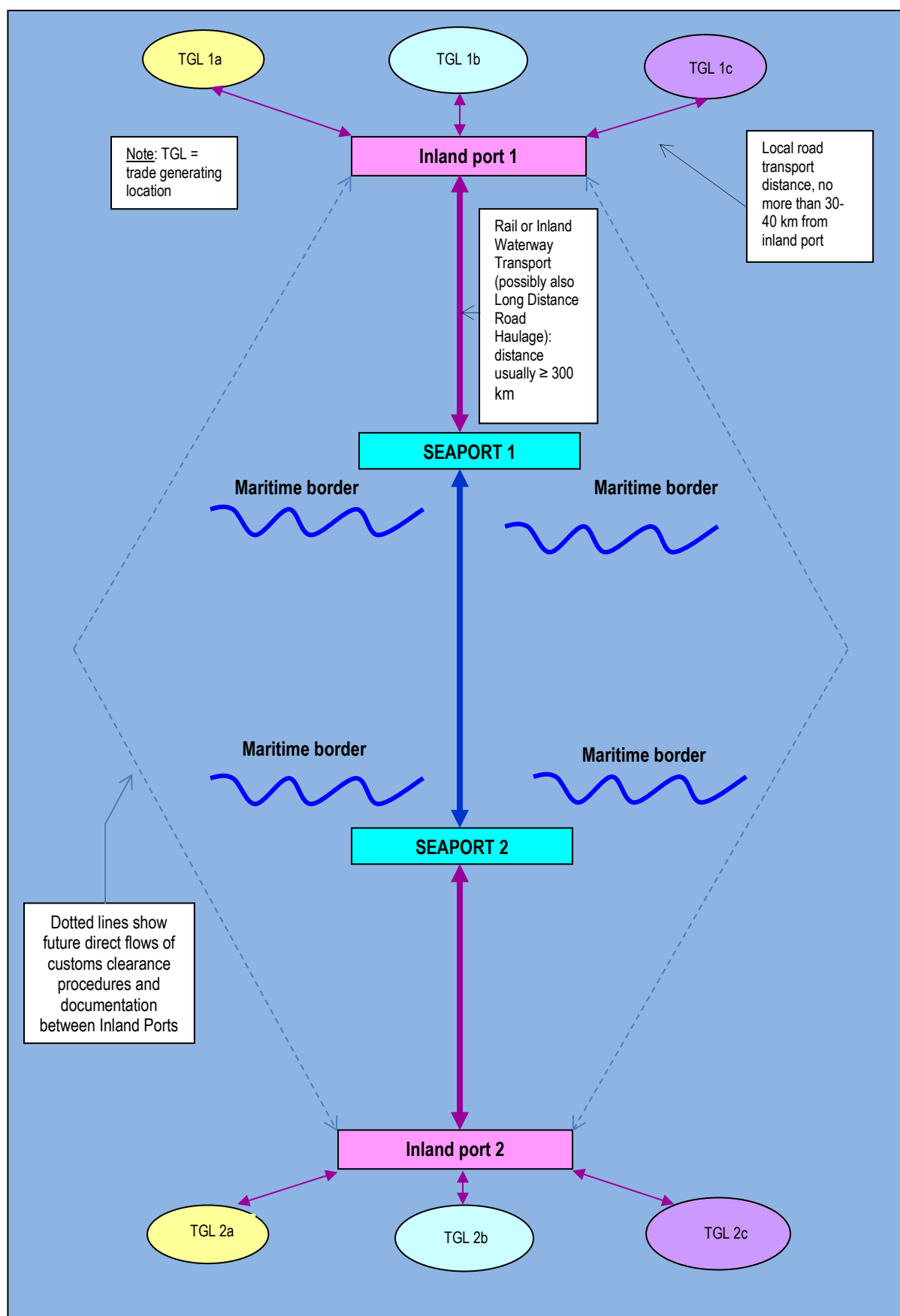
In reality, different types of inland trade distribution facilities offering a range of different services will be required depending on the type of cargo to be transported. *However, all*

*share the common characteristic that their main functions are to complete customs and other border crossing formalities for traded cargo and to transfer this cargo between the different modes used for transportation between a port origin and an ultimate inland destination, or vice versa.* In the longer term, the Inter-governmental Agreement on Dry Ports will offer the benefit that trade consignments will be directly transported and customs cleared between an inland port in one country and another inland port in another country, as illustrated in Figure 2.1.

If an inland trade distribution facility is used solely for the handling of containers and container cargoes, it is almost exclusively referred to as an Inland Container Depot, or ICD. An exception to this is the use in India of the term “Container Freight Station”, or CFS, to describe a small container handling terminal usually located close to ports and served solely by road transport. Normally, however, a CFS is not a stand-alone unit, but rather is an operating component within an ICD, providing facilities for the stuffing and de-stuffing of containers.

In reality, ICDs are a sub-set of Dry Ports, as is apparent from Tables 1 and 2 which outline the characteristics of both types of inland trade distribution facility.

**Figure 2.1: Inland trade distribution and customs clearance within UNESCAP region**



Source: Based on UNESCAP, *Promoting the role of the Asian Highway and Trans-Asian Railway: Intermodal interfaces as focus for development*, August 2007

### 3. Trade growth and development of inland trade distribution systems

Several countries of the UNESCAP region depend on their hinterlands as a source of foreign trade. Rapidly increasing foreign trade in many of these countries, especially over the past two decades, has generated a requirement for long distance transport feeder services between major inland trade generating centres and the seaports. Similarly, the strong foreign trade growth of the landlocked countries of Central Asia and Mongolia has generated a requirement for the connection of the trade sources of these countries with seaports in neighbouring countries.

The distances involved can be vast: for example, some of the major inland manufacturing and commercial centres of China and India are 1,400 – 1,800 km from the seaports, while the international trade of Central Asia must travel between 1,000 and 8,000 km to find an outlet to the sea.

By contrast, in other countries, such as the Republic of Korea and those of Southeast Asia, distances between trade origins or destinations and seaports are comparatively short, in some cases being in the range of 100-300 km.

Increasingly in China, as well as in the Russian Federation, established dry ports are also serving as terminals for Asia-Europe container traffic along the Trans-Asian Railway.<sup>1</sup>

Since railways can offer significant cost efficiency for freight (including container) haulage over distances in excess of 300 km, rail is assuming an increasingly important role in trade feeder transport. It is being supported in this role by truck transport which assumes a local feeder role, involving the local distribution of traded commodities between inland ports stations and the trade originating and terminating locations, designated as Trade Generating Locations (TGL), over distances which rarely exceed 50 km. Effectively these facilities operate respectively as “hub” and “spoke” facilities, as shown in Figure 2.1.

*The viability of dry ports will in no small measure depend on whether they are well located to serve international trade customers and minimize total transport costs.* Whether the distances between dry ports and seaports or other trade origins or destinations are short or long, certain principles must be applied in determining the location of dry ports, including:

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<sup>1</sup> In July 2015, the first Yunnan- Europe container train departed from Kunming to the Port of Rotterdam, following other similar services originating in Chengdu, Zhengzhou, Wuhan and Yiwu (Yunnan Express Newspaper).

**Table 1: Definition and attributes of a Dry Port**

Type/Brief Description	Location	Component Facilities	Types of cargo handled	Served by (mode)		Services provided
				Line-haul	Local Feeder	
<p><b>Dry Port (DP).</b> As the name implies, a "Dry Port" provides all of the services of a port except for the loading of cargo to and from seagoing ships. It may be distinguished from an ICD (below) in that it can accommodate all types of cargo, whereas an ICD specializes in the handling of containers and containerized cargo</p>	<p>Usually remote from seaport(s), but close to trade sources.</p> <p>Example: Pakistan – Lahore (1,220 km by rail from Port of Karachi);</p>	<ul style="list-style-type: none"> <li>• CY (with or without reefer points)</li> <li>• CFS</li> <li>• Access roads, railway link and sidings, IWT berths</li> <li>• Breakbulk receiving/storage area (open)</li> <li>• Warehouses, bonded and unbonded (for storage of breakbulk cargo)</li> <li>• Bulk receiving and storage area</li> <li>• Administrative office with space for banks, forwarders and cargo agents</li> </ul>	<ul style="list-style-type: none"> <li>• Containers international and domestic (ISO and non-ISO)</li> <li>• Breakbulk freight for unloading from or loading into containers</li> <li>• Non-containerized breakbulk freight (e.g. steel, general merchandise on pallets, bagged cement)</li> <li>• Bulk freight *</li> </ul>	<ul style="list-style-type: none"> <li>• Rail (most)</li> <li>• IWT (some)</li> <li>• Road (some)</li> </ul>	<ul style="list-style-type: none"> <li>• Road</li> </ul>	<ul style="list-style-type: none"> <li>• Container handling and storage</li> <li>• Container stripping and stuffing</li> <li>• Breakbulk cargo handling and storage</li> <li>• Bulk cargo handling and storage</li> <li>• Customs inspection and clearance</li> <li>• Container light repairs</li> <li>• Freight forwarding and cargo consolidation services</li> <li>• Banking/insurance/financial services</li> </ul>

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development, August 2007