



# The Indian dry ports sector, pricing policies and opportunities for public-private partnerships

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## ABSTRACT

At the time of writing (2010), the world is witnessing the aftermath of the most severe financial sector meltdown in modern economic history caused by the real estate bubble in the United States. Its consequences on the real economy, especially in Europe, are yet to be fathomed, and this of course includes the longer-term impacts on international ocean transportation, ports and the distribution of global production.

The economic recession has left the international shipping and port sectors with substantial overcapacity. This has resulted in drastic cost cutting measures on the one hand, and voluntary, often consensual, and coordinated reduction of supply on the other. These measures, together with a noticeable recovery in demand, are gradually leading again to improvement in prices charged by carriers and other transport service providers.

In view of the country's expanse; size of population; and regional inequalities, India's dry ports (inland cargo consolidation and distribution centres) are seen by the government as a pivot of export-led growth and economic development (Haralambides & Gujar, 2011). Moreover, public and private sectors alike see the coordinated development of dry ports as the only way forward in terms of easing pressures at congested coastal ports, thus improving supply chain efficiency. In spite of this, dry port development and operations are still dominated by the public sector, under prices, capacity, land acquisition policies and other conditions that make private sector participation risky and comparatively unattractive. In order to rationalize dry port capacity and prices, this paper argues in favour of greater devolution through competition-enhancing Public-Private Partnerships (PPPs). The paper puts forward recommendations for the necessary legal, regulatory and general economic policy interventions based on international best practice, while keeping Indian specificities in the right perspective.

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## 1. Introduction

Historically, economic growth and trade of countries has revolved around seaports. In India, especially following the advent of British rule, industry and commerce grew largely near and around the old port cities of Mumbai, Chennai and Kolkata. Spatial concentration of economic activity in these port cities has been a key feature of India's rapid economic development. It has been mainly the coastal regions of India that have benefited from the current phase of globalization, thus becoming important nodes in regional production-transport-distribution networks.

To relieve increasing seaport bottlenecks and facilitate the economic development of inland regions, Inland Container Depots

(ICD) and Container Freight Stations (CFS) have been developed and linked to coastal *outlets* and, through these, to global supply chains. *Dry ports* constitute one of several important instruments employed by the government for the purpose of consolidation and distribution of goods. Their functions are analogous to those of a seaport, thus also including customs procedures and other steps necessary to relieve congestion and delays at state border crossings and ports, reducing in this way supply chain costs for exporters and importers.

A dry port is the inland equivalent of a marine container terminal. The difference in the case of an inland *intermodal* terminal is that the transfer between transport modes does not require sea access. *Roso (2008)* define a dry port as *an inland terminal directly connected to seaport(s) with high capacity transport mean(s), where customers can leave/pick up their standardized units as if directly to a seaport.*

In Europe and North America, dry ports function as modal interchange and freight storage facilities, often located at close

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proximity to strategic rail and road hubs. They are termed differently in different countries, e.g. *Strategic Rail Freight Interchanges* in the United Kingdom; *Freight Villages* in some countries of Western Europe; and *Inland Ports* or *Multimodal Transport and Distribution Hubs* in the United States. The European freight villages were established in 1991, when the national freight village associations of France, Italy and Spain joined forces to form a Europe-wide association. *Euro Platform* currently represents 60 freight villages in 10 European countries (Denmark, France, Germany, Greece, Hungary, Italy, Luxembourg, Portugal, Spain and Ukraine), serving 2400 transport operators. A recent assessment of the European freight village concept (UNESCAP, 2006) discusses its essential functional characteristics as follows:

*'The main societal benefit claimed for European freight villages is that they have reduced urban traffic congestion by moving warehousing, distribution and some processing activities outside the cities, to locations that make maximum use of more cost-effective transport modes, such as rail. Best practice examples of freight villages operating at inland locations and involving a high degree of modal integration are to be found in the Bologna Freight Village, or Interporto Bologna (Italy), and at the Cargo Centre Graz, a strategic multimodal facility located in Graz, Austria. The wider economic benefits and multiplier effects of inland freight modal interchange facilities are eloquently presented in UNCTAD's enterprise cluster concept. A well thought out application of this concept to India, in view of the country's size and degree of economic development, could render user benefits much more profound and measurable than those of Europe's freight villages and logistics parks.'*

Dry ports can potentially nurture manufacturing and service clusters, for example, special economic- and export processing zones. Increasingly, dry ports are located close to existing or potential production or consumption centres. If properly planned, the number of dry ports should depend on geography, as well as on diversity and extent of economic activity. Indicatively, UNESCAP (2009) suggests one dry port per one million TEU handled at the country's seaports. The size of dry ports would likewise vary according to the industrial production and commercial transactions in the area served by the facility. The size of dry ports in the European Union is seen to vary from a yearly throughput of 40,000 TEU up to 2 million TEU; their land area similarly ranges between 30 and 200 ha; the number of associated user enterprises varies between 25 and 100; and the number of employees varies between 7000 and 37,000 persons.

## 2. Dry ports and Indian specificities

One of the main constraints in the expansion of Indian dry port capacity is the saturation of the Delhi-Mumbai road/rail link. In order to further improve connectivity between the gateway seaports of JNPT and Mundra on the west coast, and inland dry ports located in the heartland of North India, the government of India has embarked on an ambitious project. This concerns the USD 90 billion Delhi-Mumbai Industrial Corridor (DMIC) project, stretching over 436,500 sq. km, in six States. The project encompasses some 20 potential high-growth economic zones, to serve as manufacturing, services and export-oriented hubs. DMIC shall, *inter alia*, create a chain of free-trade warehousing zones, and freight logistics parks with rail and road network connectivity.

According to Haralambides and Gujar (2012), the hinterland containerization potential of major Indian seaports is estimated to be at least 70%, whereas the actual container penetration from and to hinterland locations is currently less than 35%. Furthermore, the rail-borne container movements between the dry- and gateway

ports is currently around 35%, while an ideal ratio has been established to be around 50% (Raghuram & Gangwar, 2007).

With growing incidence of outsourcing and offshore manufacturing, the market for containerizable cargo, in intermodal transport, has changed radically in recent years. Major manufacturers now go farther offshore in search of low labour costs, low taxes, better market accessibility, and other advantages. This has resulted not only in a large increase in containerized intermodal cargo but also in a significant increase in origin-destination distances (Notteboom & Rodrigue, 2005).

The advent of containerization has been rather late in India and the development of hinterland dry ports took place even later. The share of containers in Indian Railways (IR) freight traffic in 1988–89 was less than 0.2% by weight: of a total freight volume of 302 million tons, containerized traffic accounted for less than 0.5 million tons. At the same time, international trade required more transit-time sensitivity and 'small-volume customer' care than what IR, with its focus on large volumes of bulk commodities, could provide.

On realizing the importance and potential of containerization and intermodal business, the government of India decided to set up a separate government-owned corporate body for the facilitation and promotion of multimodal transport. Container Corporation of India Ltd (CONCOR) was consequently incorporated in March 1988, with the objective to manage change in India's logistics architecture; spearhead the container revolution in the country; build and operate infrastructure linkages for rapid and accelerated inland penetration of containerized international trade; develop and promote the use of ISO containers for intra-country domestic general cargo; aggregate cargo for unit-train operations on specified routes; and encompass the flexibility of road transport, along with robust and economical unit-train advantages of a countrywide rail network (UNESCAP, 2006).

CONCOR has joined hands with a number of private, as well as other public sector entities in order to develop synergies and strengths, cost reduction, and efficiency enhancements. *Ab initio*, there has been a strong participation of the private sector in the development of dry ports (ICD and CFS) in India. Of a total of 223 ICDs and CFSs approved by the Inter-Ministerial Committee (IMC), as many as 139 (more than 62%) are in the private sector; of a total of 131 functional ICDs and CFSs, CONCOR facilities account for only 20%. To set up satellite dry ports, the participation of agencies like the state and central warehousing corporations, and those of the private sector, was sought at locations where appropriate warehousing facilities were available. In the interim phase of development, stripping of import containers; customs inspection; and delivery were envisaged at some of the bonded warehouses, e.g., at Ludhiana, Jalandhar, Amritsar, Ahmedabad, Pune and Hyderabad. Private entrepreneurs were invited and encouraged to join hands with CONCOR in providing capital and trained manpower for the handling equipment (cranes, trucks, forklifts, etc.), at its dry ports.

Furthermore, CONCOR proposed to let private operators handle, on contract or under franchise, all transport of containers and cargo by road between the satellite CFSs and the rail-fed ICDs, and between ICDs/CFSs and shippers' premises. It also adopted a strategy of expanding business scope, by diversifying in allied areas by way of alliances and joint ventures with major shipping lines at strategic locations such as Dadri, in the vicinity of Delhi. CONCOR has thus entered into joint ventures with four shipping lines: Maersk Line, APL, CMA-CGM, and Transworld - with 49% equity participation - to develop CFSs. It has also entered into the development and operation of the third container terminal at JNPT, through a joint venture with Maersk, with 26% equity contribution. The terminal, with a capacity of 1.3 million TEU, became operational in March 2006. Another joint venture has been formed with DP

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