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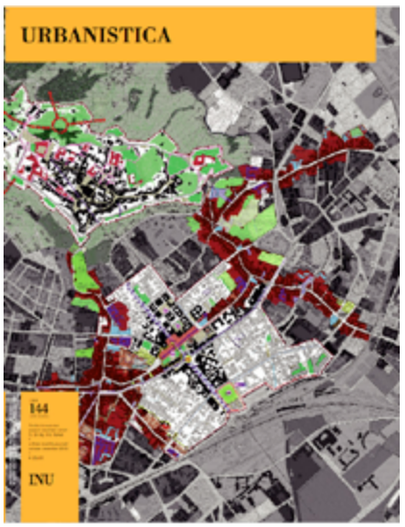

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By sea and by land. Towards an integrated system of transport

Rosario Pavia

In 1960, the quantity of goods travelling via rail, in Italy, accounted for approximately 25% of the national total. We do not know precisely what quota of this traffic originated in port areas, though in all likelihood it was more consistent than it is today. With the explosion of road-based transport, the role of the railway in the movement of goods has diminished significantly. In 1995, the percentage of total transport, calculated in tonnes per kilometre, was 13%; today this number is below 10%. If, instead of tonnes/km, we evaluate solely in terms of quantity, the percentage of traffic moving by rail is even more marginal (in 2005 goods travelling by rail accounted for 5.4% of the total, rail and road). Notwithstanding the marginality of goods transported by rail, the typologies of transport have changed; in recent years combined transport and containers accounts for approximately 40%. What are the reasons for this marginality, for this difference? Causes include: the pervasiveness and flexibility of road-based transport, the fragmentation of demand, the lack of investments, the elevated costs of interventions, the congestion of port areas, the lack of space for rail terminals, the slow liberalization of the rail network and, most likely, an anything but hidden conflict between italian port Authorities and Rfi (Italian state rail network). In the wake of law 84/94, the new institutional and managerial structure of port areas does not yet appear to have produced a true modernization of the presence of railways within our country's ports. The development of maritime transport (approx. 300 million tonnes in 1970 to 500 million at present), the affirmation of container traffic, the development of large trans-shipment ports, have yet to trigger a real process of integration and interconnection between port areas and the railway network, and between maritime and rail traffic.

Something is moving, though as we will see, intermodality, logistics and combined ship-road transport are advancing slowly and with greater difficulty. The last milestone, the interconnection between ports and highway and rail networks, is one of the crucial nodes of this system.

For the interconnection between ports and rail networks, the conditions are even more serious.

There is no certain data regarding goods transported via rail originating in ports, though Svimez (2009 Report) has estimated that containers transported via rail account for approximately 10% of the total.

This is no small number, yet it is fare below that of the ports of northern Europe (Bremen, Dunkirk, Zeebrugge, Hamburg, etc.).

Of twenty-four port authorities, only half boast active connections to a rail network. The morphology of italian ports, their insertion within strongly urbanized territorial contexts, limits the growth of rail terminals inside these same port areas. For this reason larger ports expand towards the interior of territories, with specially designed inland ports, or by seeking connections with intermodal transport hubs.

Logistics platforms centred on ports, inland ports and transport hubs all present significant critical points related to accessibility and interconnections between nodes and rail and road networks. This is the issue of the last mile, particularly complex in port areas. Few ports feature direct connections with the rail network: port rail terminals must make refer-ence to rail stations located outside the area of the port.

Inside ports, the formation of rail shuttles is a complex operation, requiring specialised machinery, loading/unloading tracks, tractors, cranes, specialized personnel and tracks connecting to rail stations.

What is more, prior to forming up a complete convoy within the transport hub of reference, there are a series of load breakdowns that increase the times and costs of the transfer. This is not the case in the large ports of northern Europe, where ports represent nodes within an extremely efficient intermodal logistics process. It is precisely a more organic interconnection between the port and rail, between ports and transport hubs located in strategic nodes of distribution, which renders the ports of the northern Range more competitive than their Mediterranean counterparts.

The two port systems, the northern Range and the Mediterranean, are impossible to compare: given the size and morphology of the ports; due to the diverse integration of logistics processes; due to their location within metropolitan and productive systems.

The future of Italy's ports depends upon the Mediterranean. Within the global market, the Mediterranean is home to the concentration of some 30% of international commerce; it is the space of transit for shipping routes between the east and west, and vice versa. The Mediterranean and the Alps condition, and will continue to condition the development of the integrated maritime-land shipping system. The question of mountain passes and the efficiency of interconnections between rail and road is determinant. Italy is not Europe's logistics platform. Currently, only 5% of all goods passing through Italian ports cross the Alps.