

Project 1: Automated Container Transport system between Inland Port and Terminal (ACTIPOT)

Supported by METRANS

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Description: The purpose of this project is to study the development of a system known as ACTIPOT that involves dedicated lanes between an Inland Port and terminals where trucks would go back and forth under full automatic control. The study will concentrate on the development of longitudinal and lateral control systems for trucks as well as control systems for the infrastructure that will provide the appropriate routing and guidance of the automated truck system. We will study the related control, sensor and communication technologies as well as safety considerations, scheduling and dispatching issues associated with the transport of cargo between the two modes of transportation.

Figure 1 shows a possible layout for an ACTIPOT system. A feasible application of the ACTIPOT system is in the Long Beach area between the Intermodal Container Transfer Facility (ICTF), denoted by ① in Figure 2, as an inland port and Pier G, denoted by ②, as a container terminal. Simulations will be carried out to verify the proposed system.

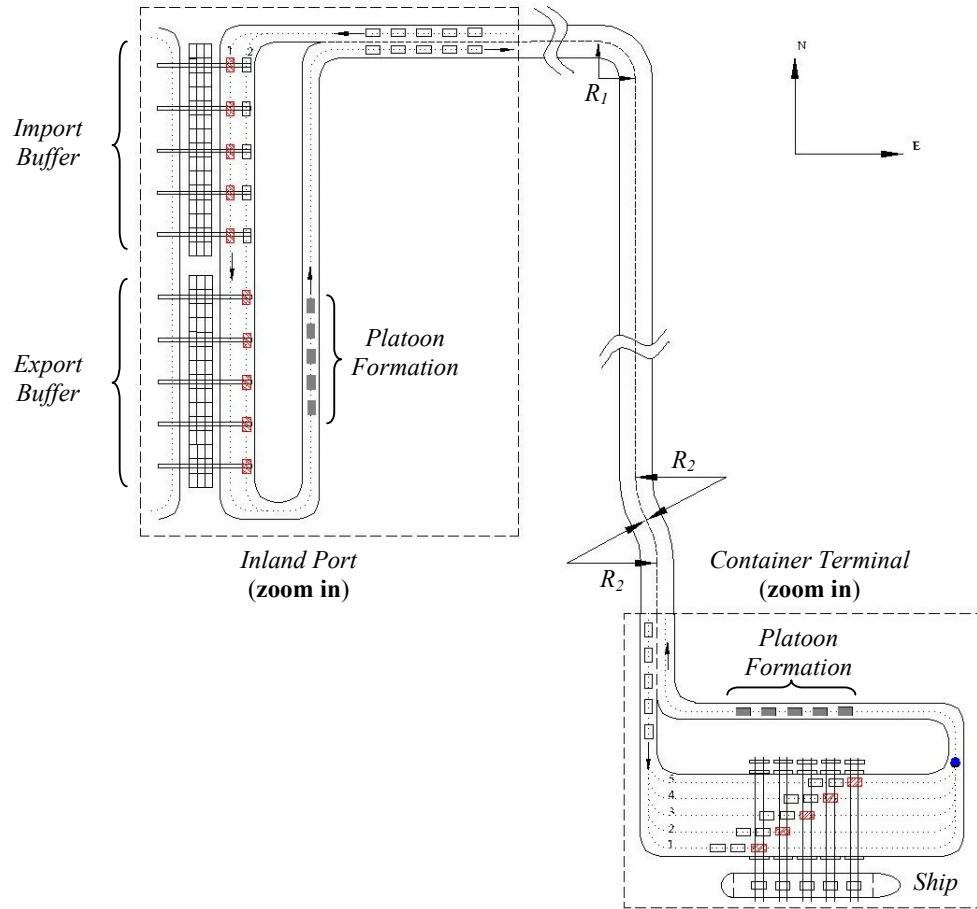


Figure 1 The ACTIPOT System



Figure 2. From ICTF to Long Beach Port