



## **MODEL FOR PROCUREMENT OF PORT'S MODERN EQUIPMENT**

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### **Abstract**

*Simulators is one option of evaluating port facilities where the actual port operation is simulated by computers and make believe machinery and best method of providing services and purchase of relevant equipment can be determined.*

*Shahid Rajaie Terminal as the Country's largest and most important port terminal and the main starting point of import and export containers is simulated by "ED" system of simulation and its services and operation of modern facilities is evaluated and controlled. By study of efficiency of operators of various equipment, the waiting time of ships and containers are closely monitored and if the waiting period is considerable, the procurement of new equipment is recommended in order to minimize waiting time. Consequently a system to acquire suitable equipment to improve services to ships and cut the time of in-port period, has been established.*

### **1- Introduction**

*Economic growth in many developing countries greatly depends on foreign trade which marine transport plays a major part. The cost of sea transport can increase the overall price of exported goods and an obstacle to international trade and decisive factor in reducing profits in foreign commerce. The port fees and dues which are directly or indirectly incurred by owners or shippers and receivers are part of overall expenses of marine transport and reducing and containing these cost by efficient ports is very important. Cost effective marine transport will result in reduction of price of commodities and promotes international trade.[1]*

*Mismanagement of port facilities caused by investing in unnecessary equipment, substandard operators and excessive maintenance and upkeep expenditure will subsequently increase the fees for loading and discharging of cargoes. These costly port fees and dues will lie on ship operators' shoulder. If the operators are native, it will be virtually borne by the nation's economy and if the ship operators are foreign, then they will trade with competitive ports in future and the expensive port will end up with few customers and near empty terminals. On the other hand, mismanagement of port may cause slower loads and offloads and other services and create long queues and lengthy delays for ships at anchor.*

*Every year substantial volume of money is invested for purchase of port equipment by PMO and private port operators without any decision making system of planning and approval. The rapid innovation in ships requires the service providers to coordinate themselves with these developments accordingly. This study can be a great help to providers of such services to make right choices of equipment when investing to upgrade port facilities and remain on top of events.*