Modeling of Building a Conceptual Scheme for Multimodal Freight Transportation Information System

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Abstract : Modeling of building processes of a multimodal freight transportation support information system is discussed based on modern CASE technologies. Functional efficiencies of ports in the eastern part of the Black Sea are analyzed taking into account their ecological, seasonal, resource usage parameters. By resources, we mean capacities of berths, cranes, automotive transport, as well as work crews and neighbouring airports. For the purpose of designing database of computer support system for Managerial (Logistics) function, using Object-Role Modeling (ORM) tool (NORMA – Natural ORM Architecture) is proposed, after which Entity Relationship Model (ERM) is generated in automated process. The software is developed based on Process-Oriented and Service-Oriented architecture, in Visual Studio.NET environment.

Keywords : seaport resources, business-processes, multimodal transportation, CASE technology, object-role model, entity relationship model, SOA

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