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Desired Flow of Radioactive Materials from Logistics Service Quality Perspective

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Abstract : In recent years, due to an increased use of radioactive materials, radioactive sources are constantly being transported via air, road and ocean ways for medical, industrial, research etc. purposes throughout the world. The quantity of radioactive materials transported all around the world varies from negligible quantities in shipments of consumer products to very large quantities in shipments of irradiated nuclear fuel. Radioactive materials have been less attractive for social science researchers in literature. In this study, it is aimed to discover desired flow of radioactive materials from logistics service quality (LSQ) perspective. In doing so, case study approach will be employed by using secondary data collected from one of the world's leading transportation companies' customer care system reports. Movement of radioactive cargoes containing IR-192 and logistics process will be analyzed with the help of logistics service quality dimensions. Based on the case study that will be conducted, interaction between dimensions, the importance of each dimension in desired flow, and their relevance with desired flow of radioactive materials will be explained. This study will bring out the desired flow of radioactive materials transportation and be a guide for all other companies, employees and researchers.

Keywords : logistics service quality, LSQ dimension , radioactive material, transportation
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