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Interface Problems in Construction Projects

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Abstract : Interface problems among interacting parties in Indonesian construction projects have most often led to low productivity and completion delay. In the midst of this country's needs to accelerate construction of public infrastructure providing connectivity among regions and supporting economic growth as well as better living quality, project delays have to be seriously addressed. This paper identifies potential causes factors of interface problems experienced by construction projects in Indonesia. Data are collected through a survey involving the main actors of six important public infrastructure construction projects including railway, LRT, sports stadiums, apartment, and education building construction projects. Five of these projects adopt the design-build project delivery method and one applies the design-bid-build scheme. Interface problems' potential causes are categorized into contract, management, technical experience, coordination, financial, and environmental factors. Research results reveal that, especially in railway and LRT projects, potential causes of interface problems are mainly technical and managerial in nature. These relate to complex construction execution in highly congested areas. Meanwhile, coordination cause factors are mainly found in the education building construction project with loan from a foreign donor. All of the six projects have to resolve interface problems caused by incomplete or low-quality contract documents. This research also shows that the design-bid-build delivery method involving more parties in construction projects tends to induce more interface problem cause factors than the design-build scheme.

Keywords: cause factors, construction delays, project delivery method, contract documents

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