

## Layouting for Phase II of New Priok Project Using Adaptive Port Planning Frameworks

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**Abstract :** The initial masterplan of New Priok in the Port of Tanjung Priok was developed in 2012 is being updated to cater to new developments and new demands. In the new masterplan (2017), Phase II of development will start from 2035-onwards, depending on the future conditions. This study is about creating a robust masterplan for Phase II, which will remain functional under future uncertainties. The methodology applied in this study is scenario-based planning in the framework of Adaptive Port Planning (APP). Scenario-based planning helps to open up the perspective of the future as a horizon of possibilities. The scenarios are built around two major uncertainties in a 2x2 matrix approach. The two major uncertainties for New Priok port are economics and sustainability awareness. The outcome is four plausible scenarios: Green Port, Business As Usual, Moderate Expansion, and No Expansion. Terminal needs in each scenario are analyzed through traffic analysis and identifying the key cargos and commodities. In conclusion, this study gives the wide perspective for Port of Tanjung Priok for the planning Phase II of the development. The port has to realize that uncertainties persevere and are very likely to influence the decision making as to the future layouts. Instead of ignoring uncertainty, the port needs to make the action plans to deal with these uncertainties.

**Keywords :** Indonesia Port, port's layout, port planning, scenario-based planning

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