

INTISARI

Perairan Indonesia memiliki sumber daya alam melimpah dan posisi yang strategis, mengakibatkan banyak kegiatan yang beraktivitas di perairan. Hal tersebut berpotensi menimbulkan dampak negatif dan resiko kerugian bila terjadi interaksi langsung antara dua kegiatan atau lebih. Kondisi yang sama terjadi di perairan sekitar Alur Pelayaran Barat Surabaya (APBS), selain meningkatnya jumlah dan ukuran kapal melintas akibat pengembangan pelabuhan.

Tujuan dari penelitian ini adalah untuk menganalisa jenis kegiatan yang beroperasi di sekitar APBS serta seberapa besar dampak kegiatan tersebut terhadap operasional pelayaran, merencanakan penataan alur yang efektif, efisien, aman dan selamat serta mampu mengakomodir lalu lintas pelayaran serta dampak kegiatan di perairan dan memberikan usulan rencana fasilitas pendukung operasional Alur dan pelabuhan yang termasuk dalam Rencana Induk Pelabuhan Tanjung Perak dan sekitarnya secara terintegrasi

Metode penelitian dengan mengumpulkan seluruh data kegiatan di perairan sekitar APBS baik yang sedang beroperasi maupun rencana pengembangan ke depannya (Rencana Induk) dan menganalisa untuk mengetahui lokasi dan besarnya area yang terdampak, merencanakan alternatif rencana penataan alur dan menggunakan analisa multi kriteria untuk memilih alternatif rencana penataan alur yang terbaik

Hasil penelitian berupa peta zonasi dampak yang menunjukkan area terdampak dan area yang aman bagi pelayaran serta rencana penataan alur dan fasilitas pendukung. Hasil perencanaan menghasilkan penataan alur yang mampu mengakomodir pelayaran dari barat, utara dan timur serta memiliki 3 belokan dengan sudut haluan $> 30^0$ dan menggunakan sistem rute 2 arah serta memiliki 7 kolam putar dan 8 area labuh kapal seluas $80,47 \text{ km}^2$ serta 88 unit sarana bantu navigasi pelayaran (SBNP) terpasang.

Kata kunci : Kegiatan di Perairan, Analisa Dampak, Keselamatan Pelayaran, Perencanaan dan Penataan Alur Pelayaran, Alur Pelayaran Barat Surabaya (APBS)

ABSTRACT

Indonesia waters have numerous natural resources and strategic positions, that cause many activities at waters. This matter has the potential to cause negative impacts and risk of loss if there is a direct interaction between two or more activities. The same condition occurs in the waters around the Surabaya Western Access Channel (SWAC), besides the increasing number and size of ships due to port development.

The purpose of this research is to analyze the activities that are operating around SWAC and how much impact these activities on shipping operations, to design an effective, efficient, secure and safe also able to accommodate marine traffic and the impact of activities at waters and provide proposed plans of operational support facilities for the navigation access channel and port included in the integrated Master Plan of Tanjung Perak Port.

Research methods by collecting all data of activities at waters around SWAC, include currently operating activities also future development plans (Master Plans) and analyzing to determine the location and size of the affected area, design the alternative plans of access channel and using multi-criteria analysis to select the best alternative plan of access channel.

The results of this research are an impact zoning area map that showing the affected areas and safe areas for shipping and access channel plan. The access channel planning resulted that navigation access channel design is able to accommodate marine traffic from west, north and east direction also has 3 curve with angle greater than 30^0 and uses a two way routeing system also has 7 turning basins and 8 anchorage areas with 80.47 square kilometers an area also 88 units aids to navigation (ATON) installed.

Keywords : Activities at Waters, Impact Analysis, Marine Safety, Navigation Access Channel Planning and Arrangement, Surabaya Western Access Channel (SWAC)