

**ANALISIS PERENCANAAN PENGEMBANGAN SISI DARAT  
(LANDSIDE) DAN SISI UDARA (AIRSIDE) BANDAR UDARA  
INTERNASIONAL SUPADIO PONTIANAK DI TAHUN 2035**

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**ABSTRAK**

*Penelitian ini bertujuan untuk menghitung pergerakan penumpang dan pesawat serta kebutuhan luasan maupun jumlah fasilitas yang dibutuhkan pada sisi darat (landside) dan sisi udara (airside) Bandar Udara Internasional Supadio di tahun 2035.*

*Analisis peramalan pada penelitian ini menggunakan metode peramalan trend dan teknik analisis data menggunakan Microsoft Excel. Tingkat error yang dihasilkan dari metode peramalan dihitung menggunakan perhitungan kesalahan yang terdiri dari mean absolute deviation (MAD), mean squared error (MSE), mean absolute persentage error (MAPE) dan U theil untuk mengendalikan hasil peramalan.*

*Dari penelitian ini didapatkan hasil peramalan pergerakan penumpang dan pesawat di tahun 2035 yaitu sebanyak 6.357.872 penumpang kedatangan domestik, 3.135.536 penumpang keberangkatan domestik, 2.013.260 penumpang kedatangan internasional, 2.028.465 penumpang keberangkatan internasional, dan 75.900 pergerakan pesawat. Berdasarkan hasil perhitungan terhadap penambahan luasan sisi udara dan sisi darat dibutuhkan perpanjangan runway sepanjang 1.008 m , apron seluas 94.221 m<sup>2</sup>, hall keberangkatan 6.218,4 m<sup>2</sup>, ruang tunggu internasional 539,58 m<sup>2</sup>, baggage claim area domestik 54,4 m<sup>2</sup>, dan hall keberangkatan 3.312,75 m<sup>2</sup>. Kebutuhan fasilitas tambahan pada sisi darat dan sisi udara didapatkan check in counter 37 unit, imigrasi counter kedatangan 4 unit, imigrasi counter keberangkatan 12 unit, conveyor belt domestik 2 unit, conveyor belt internasional 1 unit, tempat duduk ruang tunggu 1633 unit, security gate domestik 3 unit, security gate 19 unit, dan parking stand sebanyak 8 unit tambahan.*

**Kata Kunci** : peramalan, runway, parking stand, apron, terminal

**ANALYSIS OF THE LANDSIDE AND AIRSIDE DEVELOPMENT  
PLANNING PONTIANAK INTERNATIONAL AIRPORT IN 2035**

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**ABSTRACT**

*This research aims to calculate the movement of passengers and aircraft as well as the area requirements and the number of facilities required on the landside and airside of the Supadio International Airport in 2035.*

*Forecasting analysis in this research uses trend forecasting methods and data analysis techniques using Microsoft Excel. The error rate resulting from the forecasting method is calculated using an error calculation consisting of the mean absolute deviation (MAD), mean squared error (MSE), mean absolute percentage error (MAPE) and U theil to control the forecasting results.*

*From this research, the results of forecasting passenger and aircraft movements in 2035 are as many as 6.357.872 domestic arrival passengers, 3.135.536 domestic departure passengers, 2.013.260 international arrival passengers, 2.028.465 international departure passengers, and 75.900 aircraft movements. Based on the calculation results of the additional area of the air and land sides, it is necessary to extend the runway along 1.008 m, apron area of 94.221 m<sup>2</sup>, departure hall 6.218,4 m<sup>2</sup>, international waiting room 539.58 m<sup>2</sup>, domestic baggage claim area 54,4 m<sup>2</sup>, and departure hall 3.312,75 m<sup>2</sup>. The need for additional facilities on the landside and the airside is obtained by check-in counters 37 units, 4 units arrival immigration counters, 12 units of departure immigration counters, 2 units of domestic conveyor belts, 1 unit of international conveyor belts, 1633 units of waiting room seats, domestic security gate 3 units, 19 units of security gate, and 8 additional parking stands.*

**Key :** *forecasting, runway, parking stand, apron, terminal*