
S&P Global

Market Intelligence

Container Port Performance

Quarterly Analysis – India Ports 2024Q1

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This report analyses performance at large and medium-sized container ports in India in 2024Q1. Performance is analyzed year-over-year, with the exception of the container dwell times, and compared with similar-sized ports in Southeast Asia and China*. The data used for the analysis is from S&P Global's Port Performance Program.

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**Please see appendix for ports list*

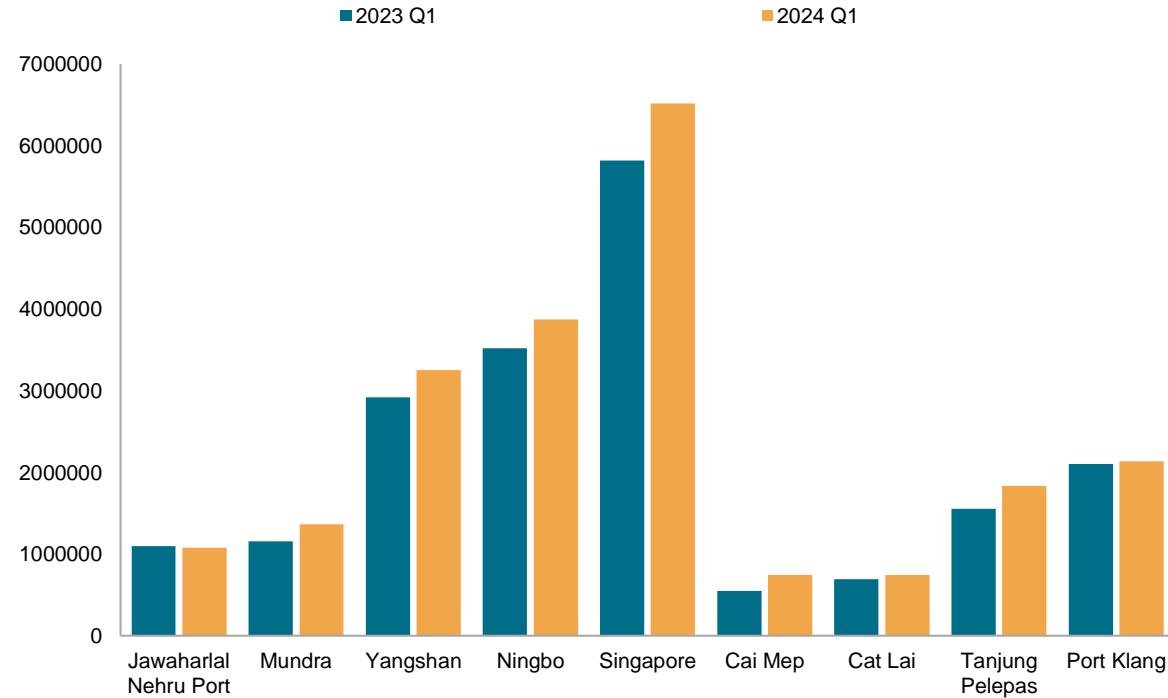
Executive summary

Port Performance India Ports 2024Q1

- The volume of container moves increased at most Indian ports year-over-year. The biggest increase was registered at Katupalli (+91%)
- Oceanside port productivity (port-moves-per-hour) generally improved among ports in the benchmark group. Jawaharlal Nehru Port registered a significant improvement in performance over the period (+36%)
- Berth productivity at the large Indian ports was generally stable YoY. Among medium-sized ports, Pipavav was the highest performer, delivering best-in-class average berth-moves-per-hour
- Significant improvement was observed in vessel waiting times at Indian ports and across the benchmark group as a whole
- India managed to reduce import dwell time for containers (- 22% larger ports; - 41% medium ports) at a greater rate than counterparts in Southeast Asia and China (-2.91% larger ports; +1.6% medium ports)
- Export dwell time for containers worsened at Indian ports. Median export dwell rose to more than 4 days from 3.5 days the previous year
- Transshipment dwell time almost halved at large Indian ports while at the same time increased by more than 45% at counterparts in Southeast Asia and China

The volume of Total Container Moves* increased at most Indian ports YoY

Complete Total Moves Development Large Ports

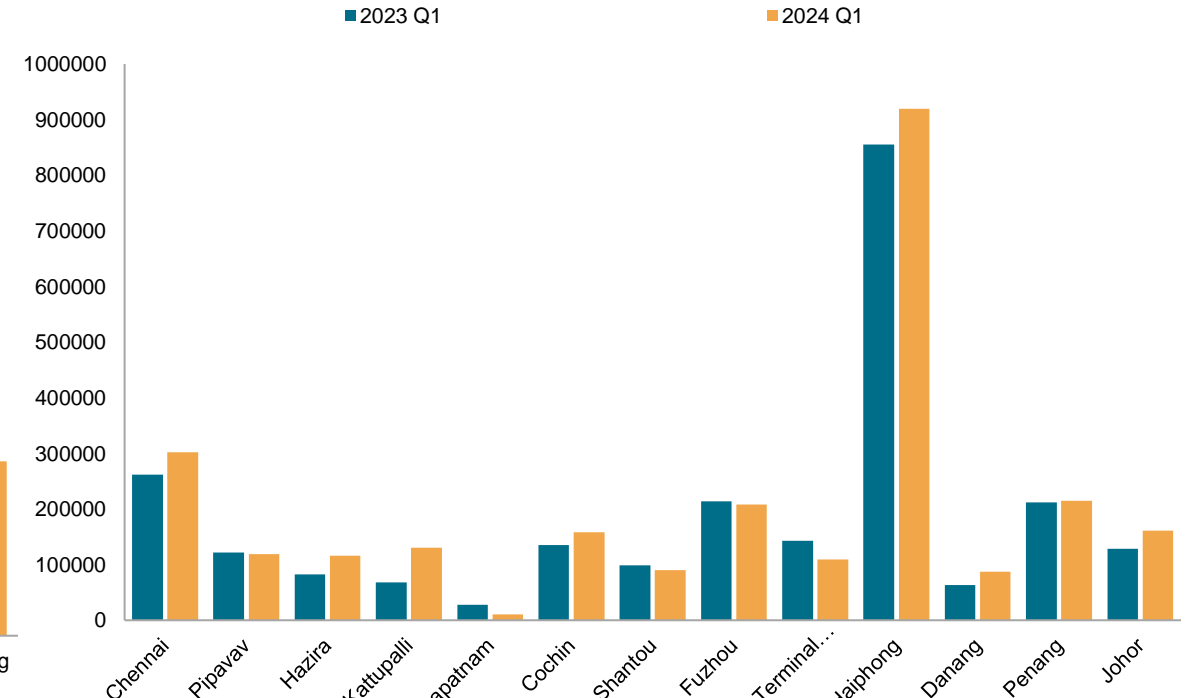


Data compiled May 6, 2024.

Source: S&P Global Market Intelligence.

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Complete Total Moves Development Medium Ports



Data compiled May 6, 2024.

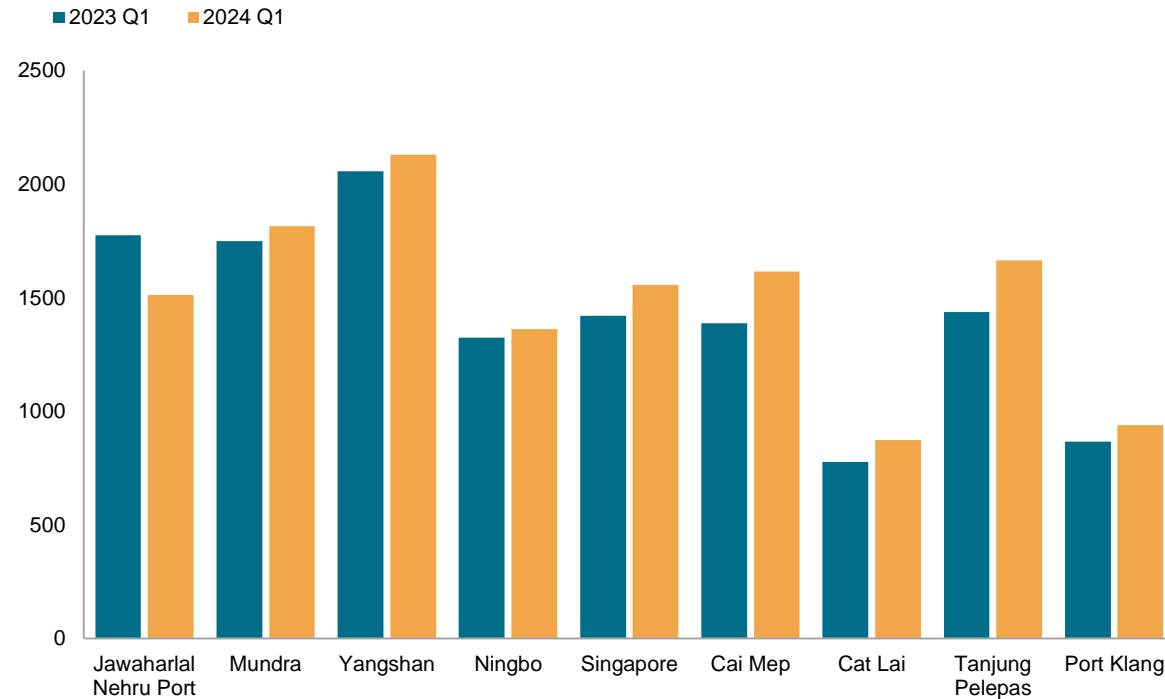
Source: S&P Global Market Intelligence.

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*Total container Moves. Load + discharge + re-stowage moves (excludes hatch covers, gear boxes, etc.)

Among Indian ports, only Jawaharlal Nehru Port experienced a decline in average call size* YoY

Call Size Development Large Ports

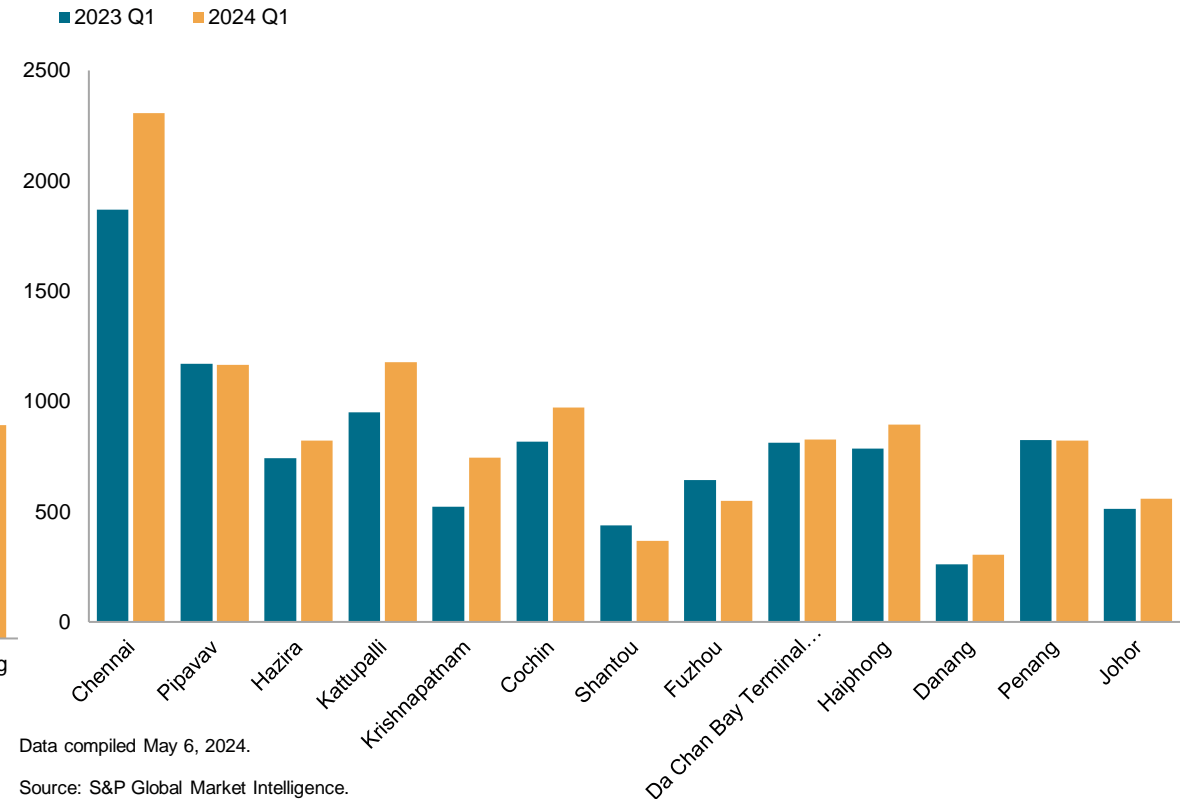


Data compiled May 6, 2024.

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Call Size Development Large Ports



Data compiled May 6, 2024.

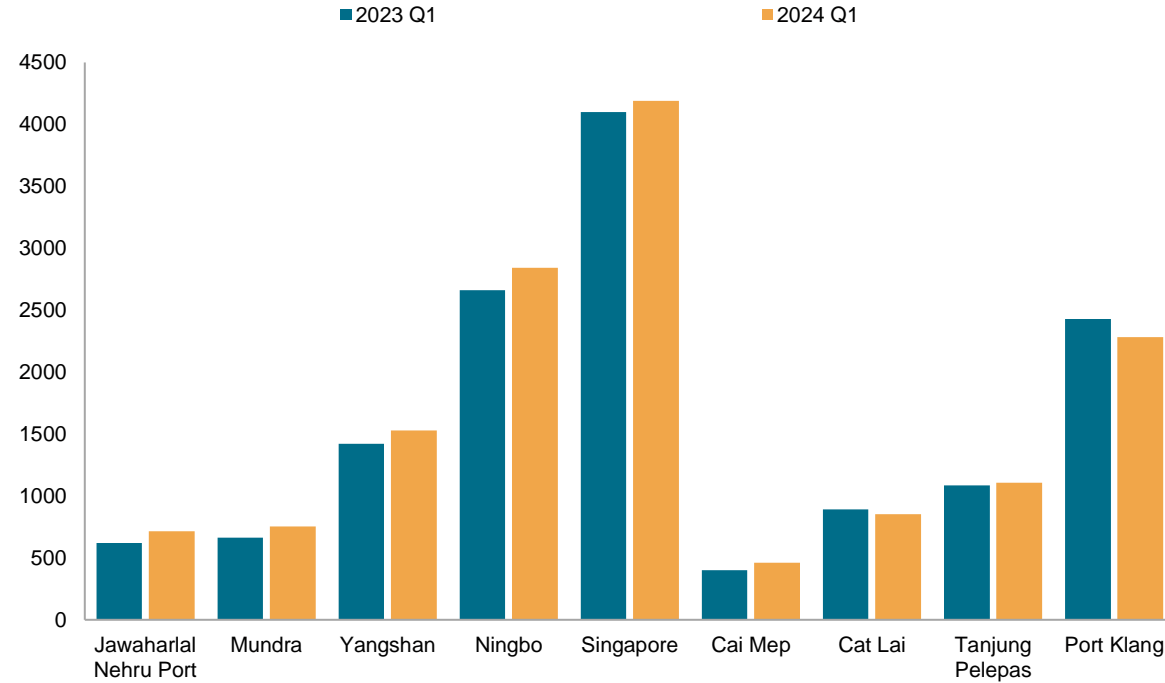
Source: S&P Global Market Intelligence.

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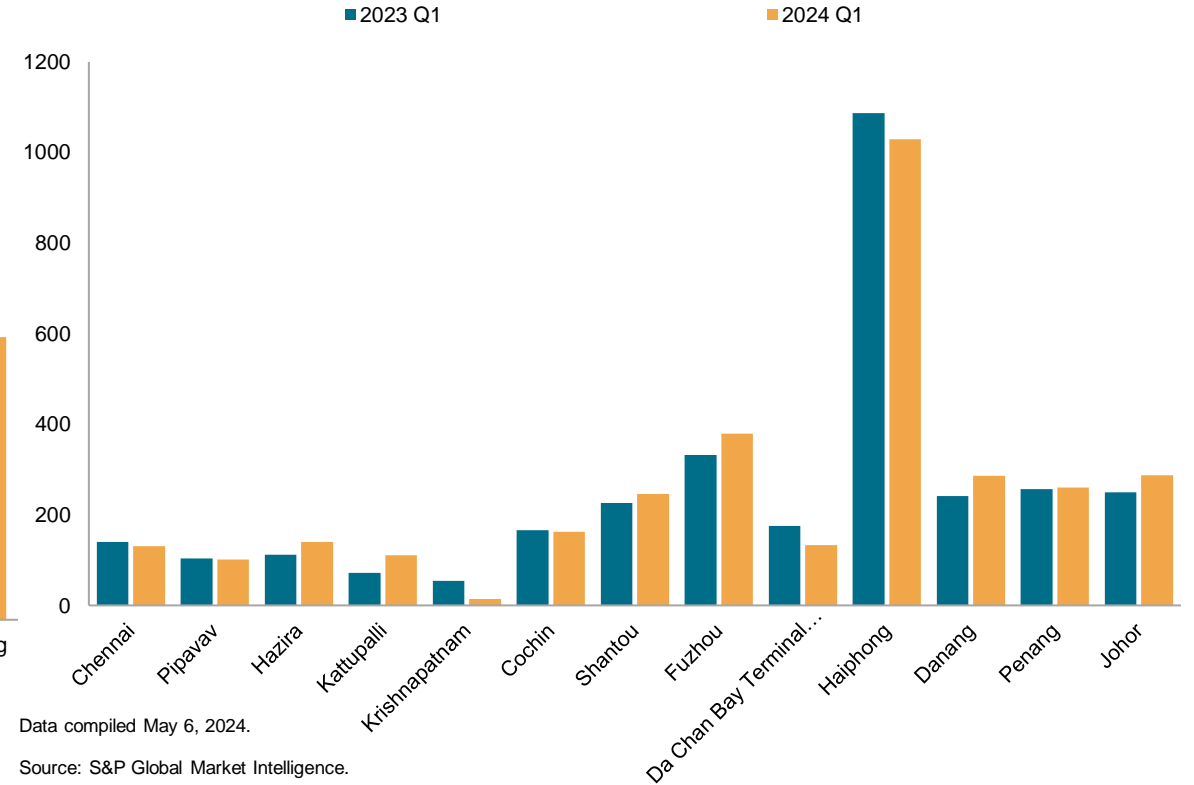
*Average Call Size shows average total moves (containers loaded + discharged + restowed) per port call

Jawaharlal Nehru Port and Mundra Port increased YoY vessel calls by a combined 15%

Complete Total Calls Development Large Ports



Complete Total Calls Development Medium Ports



Data compiled May 6, 2024.

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Data compiled May 6, 2024.

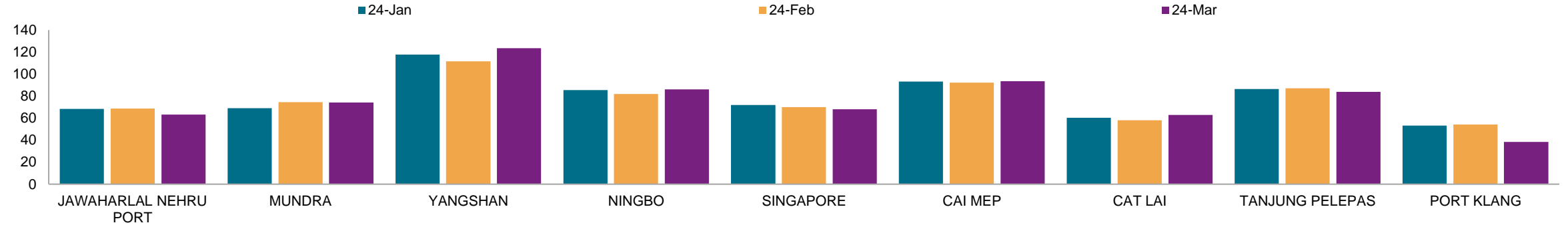
Source: S&P Global Market Intelligence.

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**Total container Moves. Load + discharge + re-stowage moves (excludes hatch covers, gear boxes, etc.)*

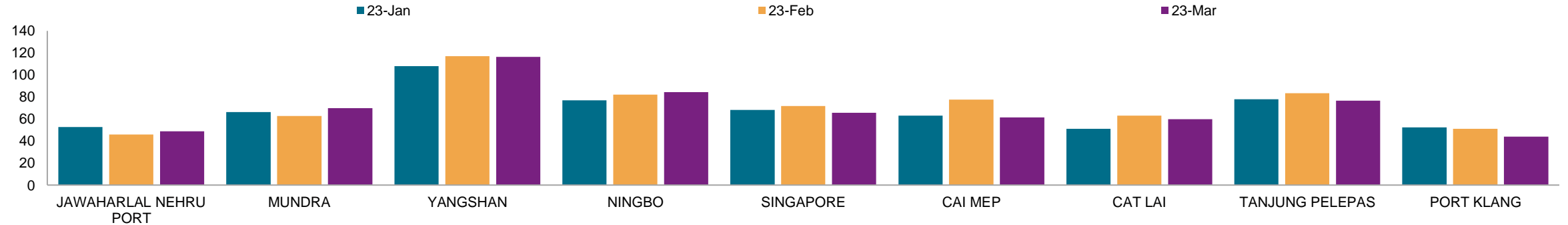
Oceanside port productivity improved at all large ports in the benchmark group. In India, Jawaharlal Nehru Port improved PMPH* by 36%

PMPH Development



Data compiled May. 05, 2024.
 Source: S&P Global Market Intelligence.
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PMPH Development

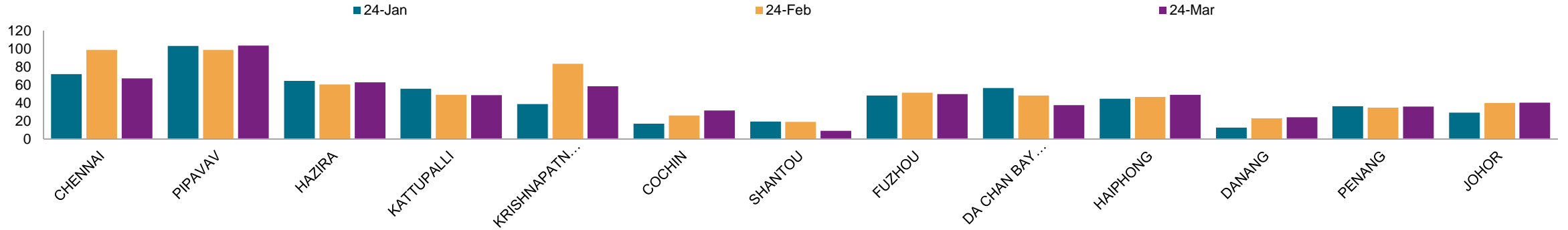


Data compiled May. 07, 2024.
 Source: S&P Global Market Intelligence .
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*Port-Moves-Per-Hour (PMPH) is the quantity of containers moved per hour a ship is in port. The higher the number the more efficient the port

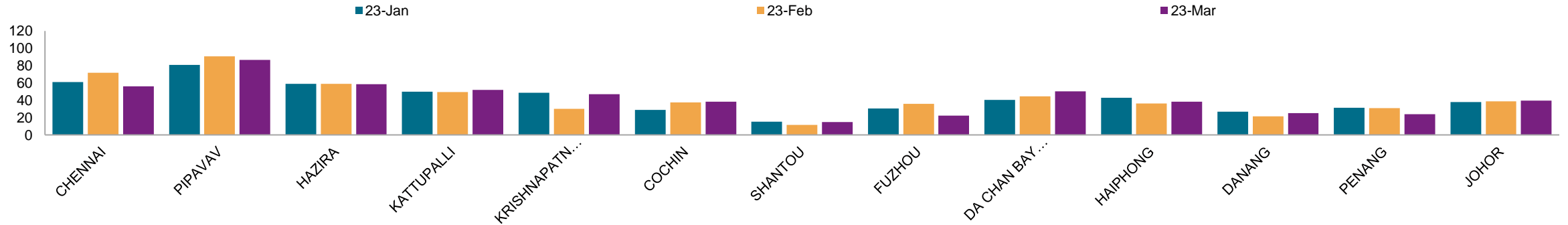
Oceanside productivity increased at most medium-sized ports in India, Southeast Asia and China, with improved PMPH* values

PMPH Development



Data compiled May. 05, 2024.
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PMPH Development

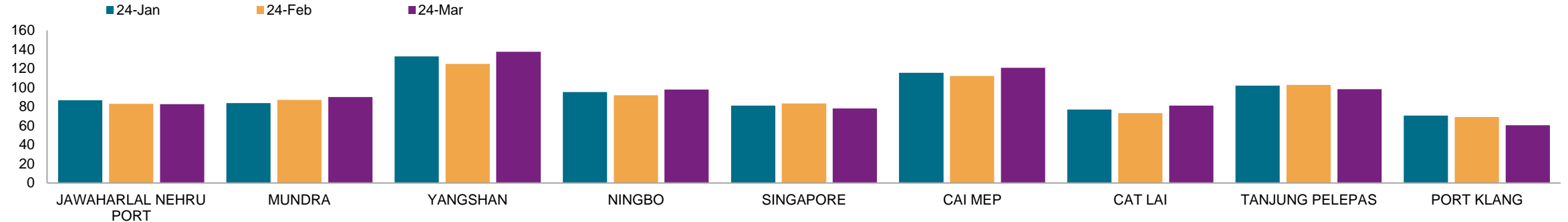


Data compiled May. 07, 2024.
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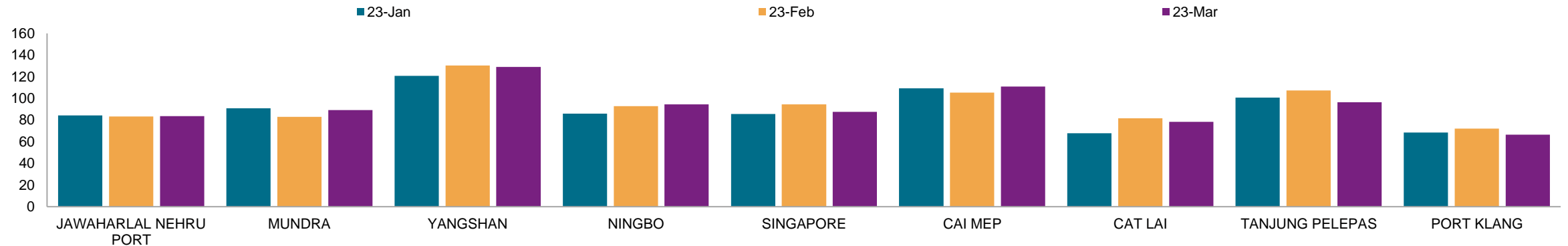
Berth Productivity* was relatively stable at Jawaharlal Nehru Port and Mundra Port

BMPH Development



Data compiled May. 05, 2024.
 Source: S&P Global Market Intelligence .
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BMPH Development

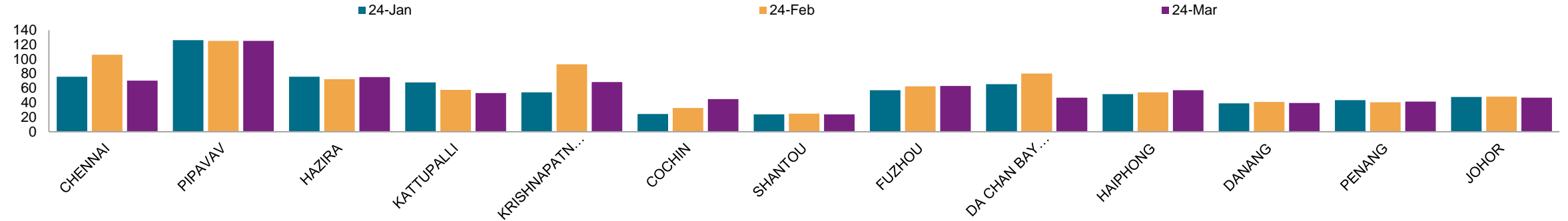


Data compiled May. 07, 2024.
 Source: S&P Global Market Intelligence .
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*Berth-Moves-Per-Hour (BMPH) is the quantity of containers moved per hour a ship is at berth. The higher the number the more efficient the terminal

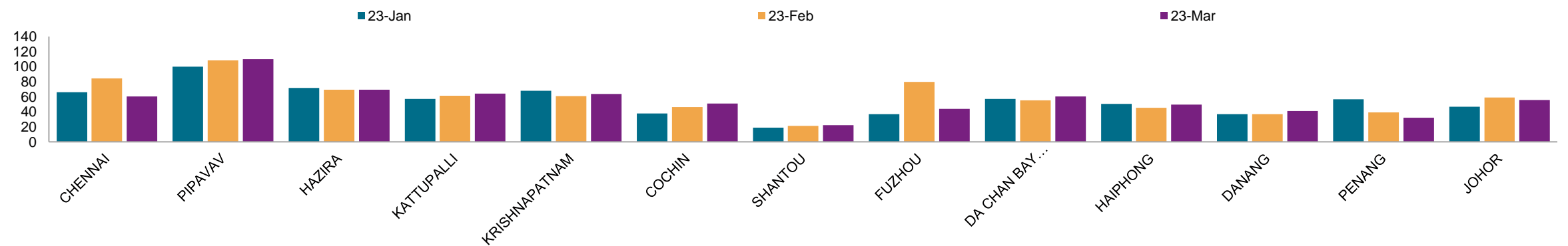
Among medium-sized ports, berth productivity* improved most at Chennai (+21%) and Cochin experienced the biggest decline (-17%)

BMPH Development



Data compiled May. 05, 2024.
 Source: S&P Global Market Intelligence .
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BMPH Development

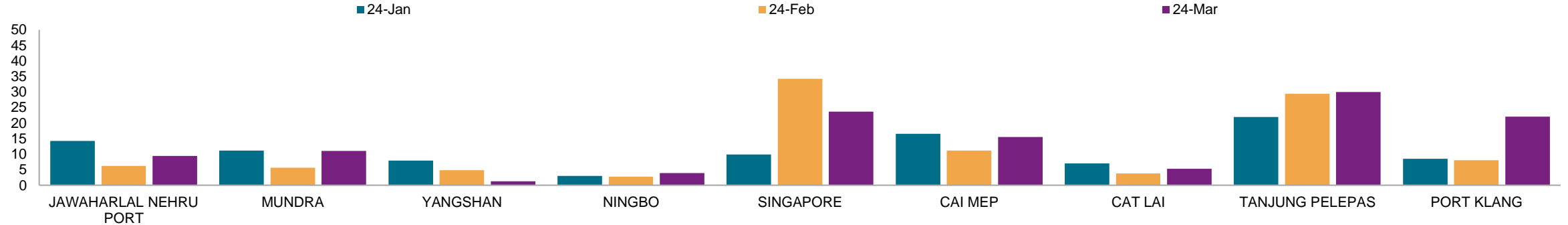


Data compiled May. 07, 2024.
 Source: S&P Global Market Intelligence .
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*Berth-Moves-Per-Hour (BMPH) is the quantity of containers moved per hour a ship is at berth. The higher the number the more efficient the terminal

Jawaharlal Nehru Port and Mundra Port both saw a significant decrease in vessel waiting time, as did most of the ports in the benchmark group

Waiting Time (Hours) Development

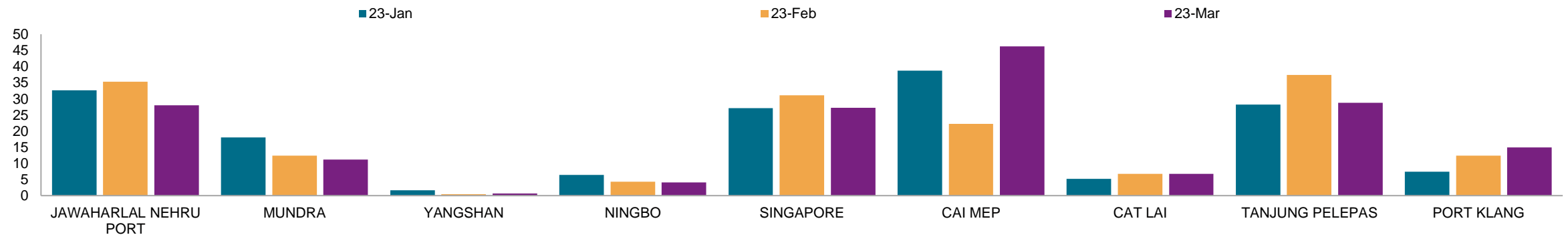


Data compiled May. 05, 2024.

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Waiting Time (Hours) Development



Data compiled May. 07, 2024.

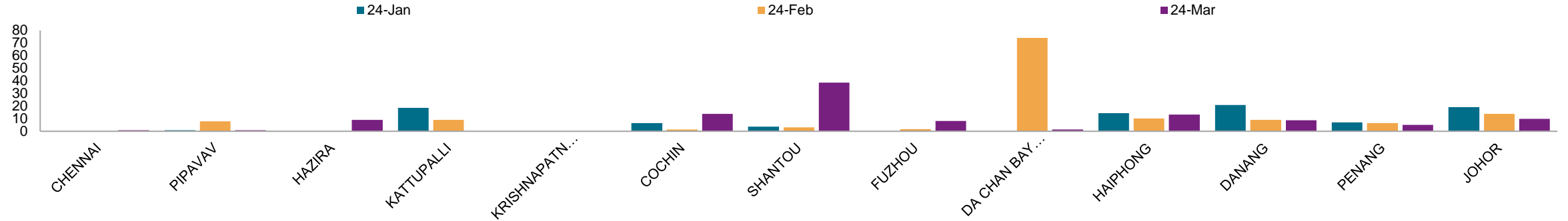
Source: S&P Global Market Intelligence .

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**Total elapsed time from when a ship enters the AIS defined anchorage zone to when ship departs anchorage zone (ship speed must drop below 0.5 knots for at least 15 min within the zone)*

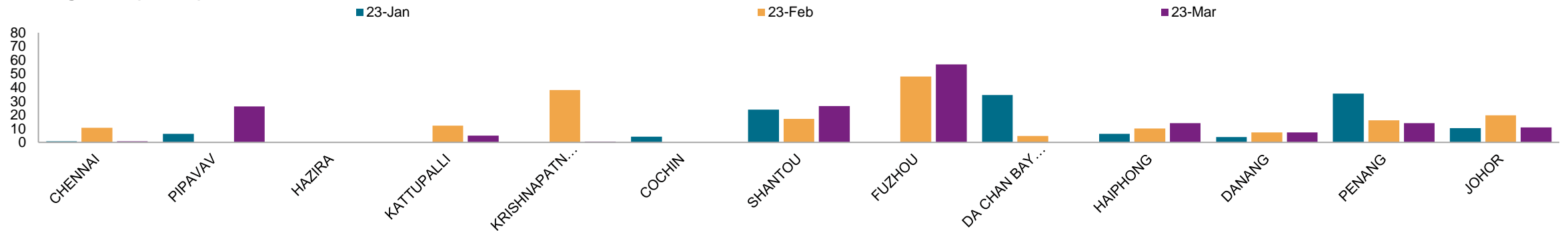
Medium-sized Indian ports also experienced lower YoY vessel waiting times, with major improvements at Pipavav (-69%), Chennai (-86%) and Krishnapatnam (-100%)

Waiting Time (Hours) Development



Data compiled May. 05, 2024.
 Source: S&P Global Market Intelligence .
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Waiting Time (Hours) Development

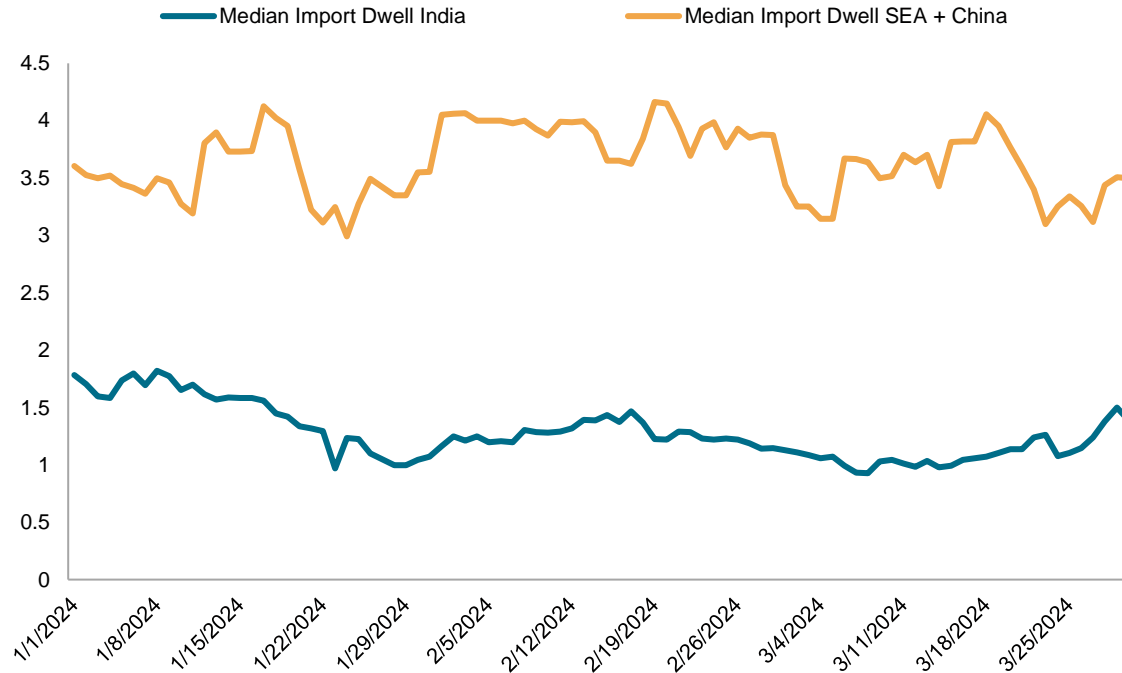


Data compiled May. 07, 2024.
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**Total elapsed time from when a ship enters the AIS defined anchorage zone to when ship departs anchorage zone (ship speed must drop below 0.5 knots for at least 15 min within the zone)*

India managed to reduce import dwell time for containers at a greater rate than counterparts in Southeast Asia and China over 2024Q1

Import Dwell Time Development (Days) for Large Ports

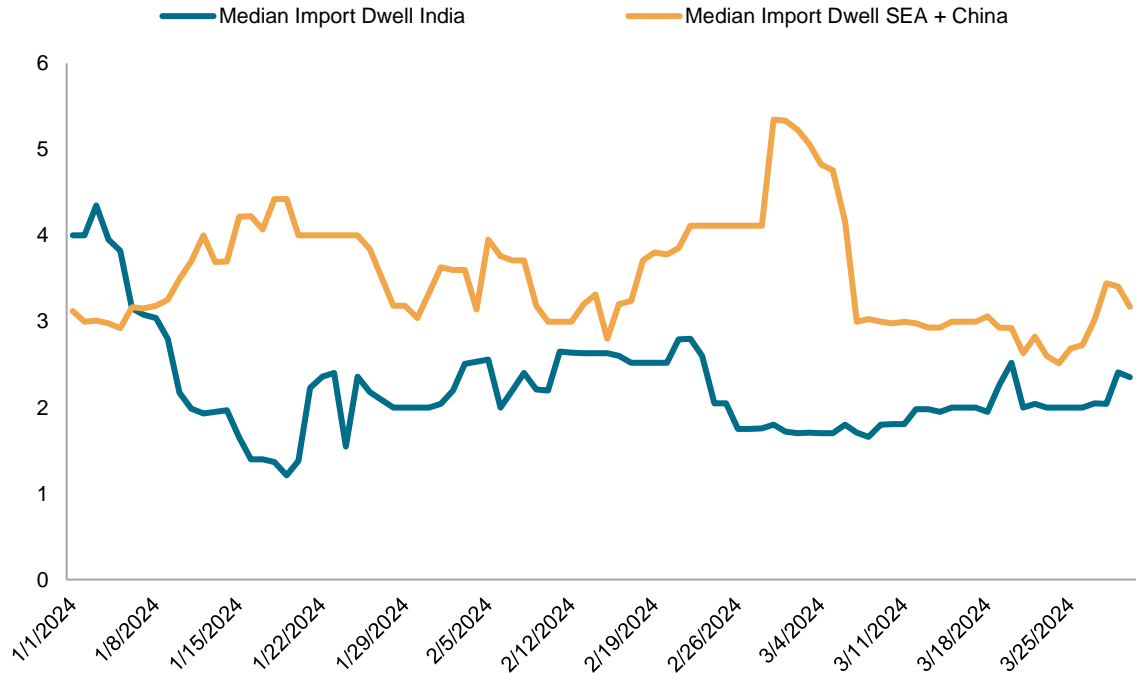


Data compiled May. 02, 2024.

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Import Dwell Time Development (Days) for Medium Ports



Data compiled May. 02, 2024.

Source: S&P Global Market Intelligence.

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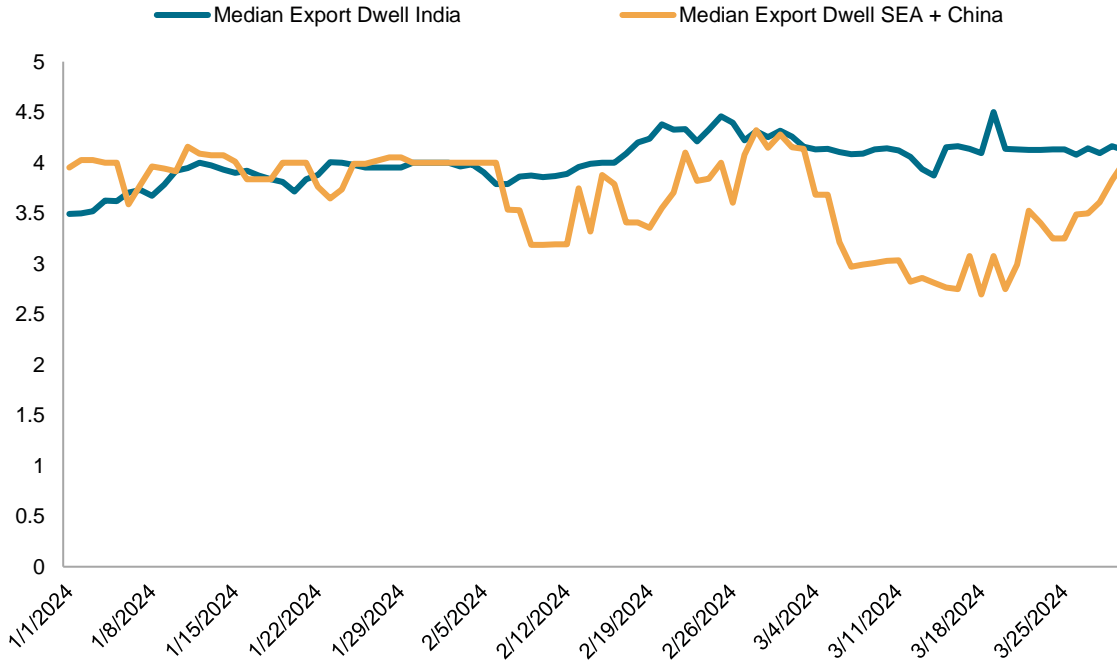
**Import Dwell Time is the elapsed time in days from offloading from the ship to gate-out.*

Export Dwell Time is the elapsed time in days from Gate-In to loading on the ship

Export container dwell time* increased at the larger Indian ports and at the same time decreased at ports in Southeast Asia and China

Medium ports in SEA and China had the biggest decrease in Export Dwell Time (-24.4%)

Export Dwell Time Development (Days) for Large Ports

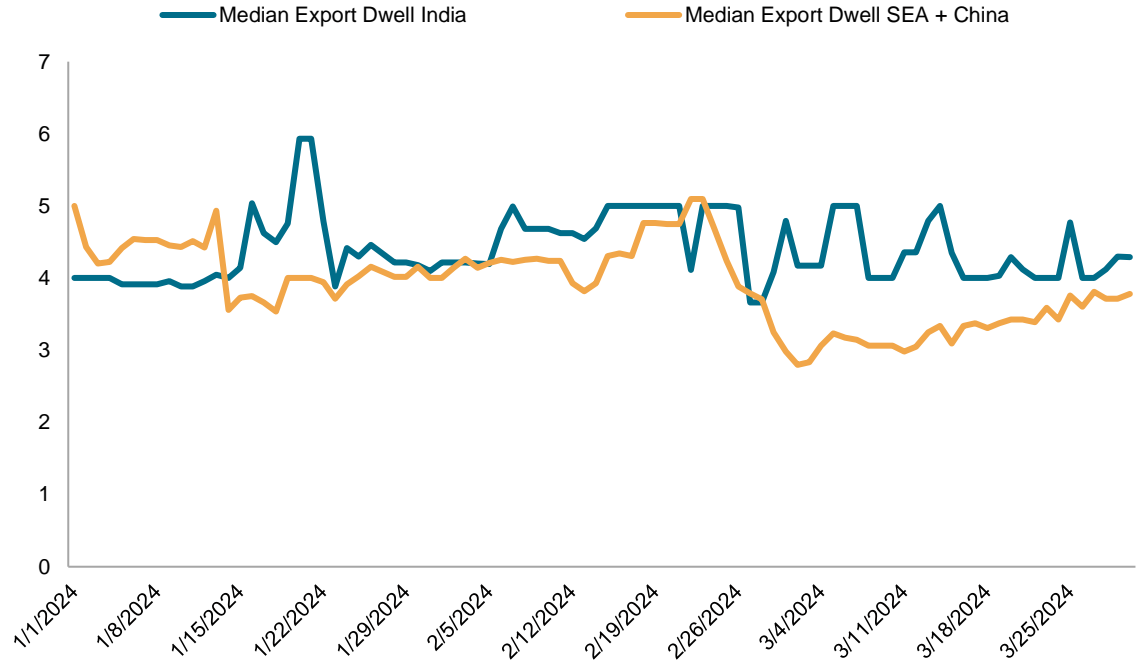


Data compiled May. 02, 2024.

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Export Dwell Time Development (Days) for Medium Ports



Data compiled May. 02, 2024.

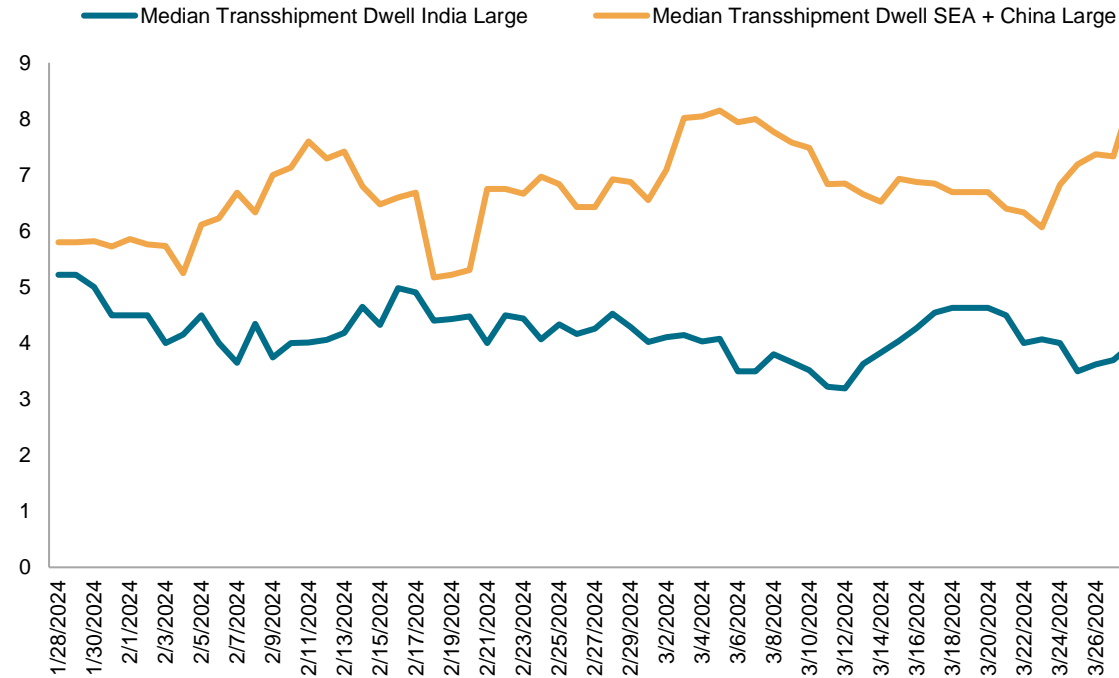
Source: S&P Global Market Intelligence.

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*Import Dwell Time is the elapsed time in days from offloading from the ship to gate-out.
Export Dwell Time is the elapsed time in days from Gate-In to loading on the ship

Transshipment dwell time almost halved at the larger Indian ports while at the same time increased by more than 45% at counterparts in Southeast Asia and China

Transshipment Dwell Time Development (Days) for Large Ports

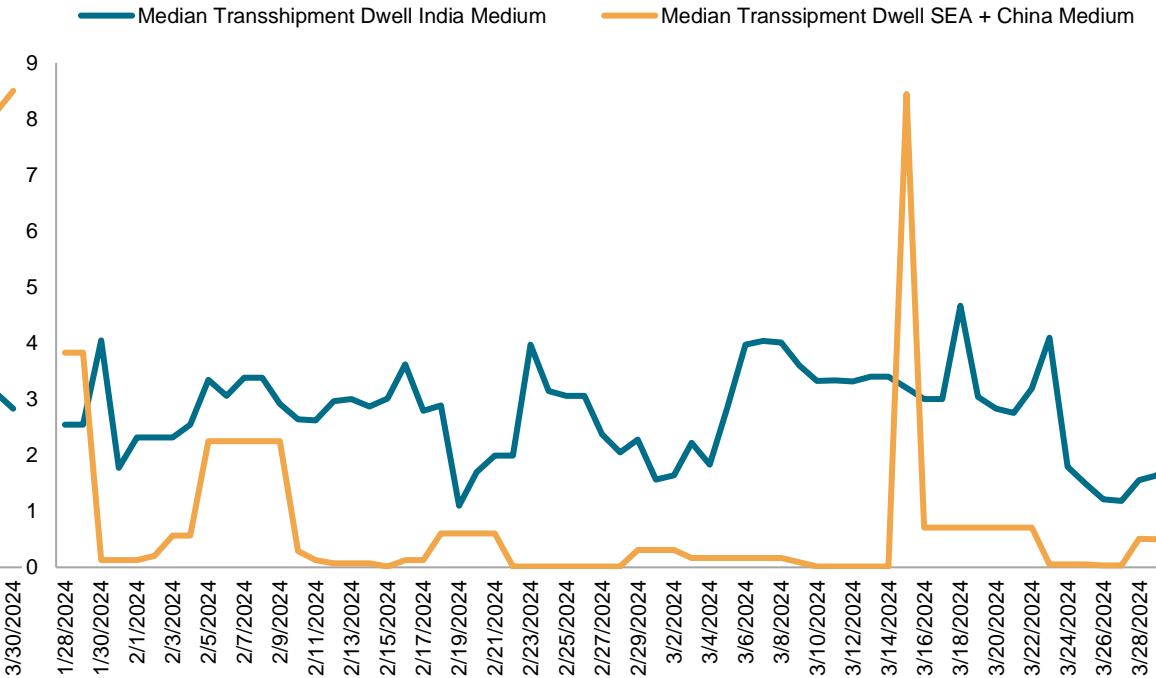


Data compiled May. 02, 2024.

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Transshipment Dwell Time Development (Days) for Medium Ports



Data compiled May. 02, 2024.

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**Transshipment dwell time is the time from Vessel Offloading to Vessel Loading within the same transshipment port*

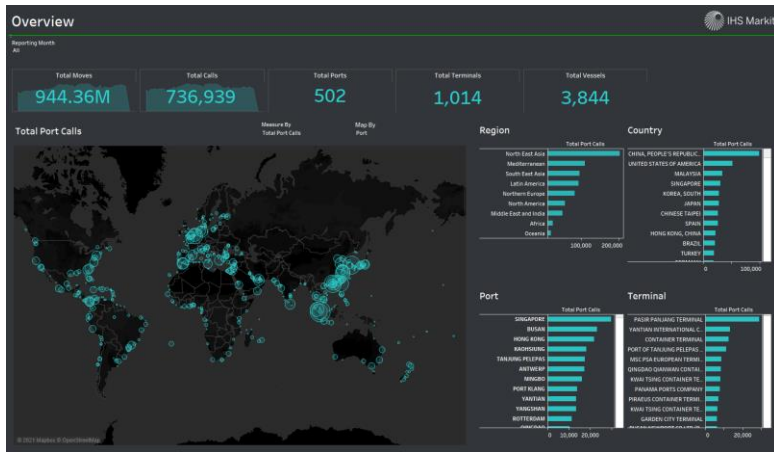
Appendix

Large Ports	Medium Ports
<i>Jawaharlal Nehru Port</i>	<i>Chennai</i>
<i>Mundra</i>	<i>Pipavav</i>
Yangshan*	<i>Hazira</i>
Ningbo	<i>Kattupalli</i>
Singapore	<i>Krishnapatnam</i>
Cai Mep	<i>Cochin</i>
Cat Lai	Shantou*
Tanjung Pelepas	Fuzhou
Port Klang	Da Chan Bay
	Haiphong
	Danang
	Penang
	Johor

**This port is excluded from the Container Dwell Time Charts*

Port Performance Program: Advanced Analytics

Benchmark global container port and terminal performance with empirical data



Row Labels	Sum of CALLS	Sum of TOTAL MOVES	Sum of BERTH HOURS
12 TANJUNG PRIOK	44	52294	1226.583333
13 TANJUNG PERAK	27	12049	395.6466667
14 TANJUNG EMAS	25	10864	346.3333333
15 BELAWAN	8	8052	211.85
16 PANJANG	1	215	11.1666667
Grand Total	105	83474	2191.55

- Container port and terminal performance benchmarking system
- Dataset and tableau dashboard with built in analytics



YEA	MMONTH	COUNTRY NAME	PORT NAME	SHIP SIZE RANGE	CALL SIZE RANGE	AIS FLAG	FIRST LAST MOVES FLAG
2017	1	INDONESIA	BELAWAN	0-5,399	0-999	Y	Y
2017	1	VIETNAM	CAI MEP	14,000 & OVER	1,000-2,999	Y	Y
2017	1	VIETNAM	CAI MEP	14,000 & OVER	0-999	Y	Y
2017	1	INDONESIA	TANJUNG PRIOK	0-5,399	0-999	Y	Y
2017	1	THAILAND	SIAM SEAPORT	0-5,399	0-999	Y	Y
2017	1	PHILIPPINES	MANILA	0-5,399	0-999	N	Y
2017	1	VIETNAM	HAIPHONG	0-5,399	0-999	Y	Y
2017	1	VIETNAM	HAIPHONG	0-5,399	0-999	N	Y
2017	1	THAILAND	BANGKOK	0-5,399	1,000-2,999	N	Y
2017	1	THAILAND	BANGKOK	0-5,399	0-999	Y	Y
2017	1	THAILAND	BANGKOK	0-5,399	0-999	N	Y
2017	1	INDONESIA	TANJUNG PRIOK	0-5,399	0-999	Y	Y
2017	1	PHILIPPINES	MANILA	0-5,399	0-999	N	Y
2017	1	INDONESIA	LAEM CHABANG	5,400-9,999	1,000-2,999	Y	Y
2017	1	THAILAND	CAT LAI	0-5,399	0-999	N	Y
2017	1	VIETNAM	CAT LAI	0-5,399	0-999	Y	Y
2017	1	VIETNAM	CAT LAI	0-5,399	1,000-2,999	N	Y
2017	1	VIETNAM	CAT LAI	0-5,399	1,000-2,999	Y	Y
2017	1	INDONESIA	TANJUNG EMAS	0-5,399	0-999	Y	Y
2017	1	THAILAND	LAEM CHABANG	0-5,399	1,000-2,999	N	Y
2017	1	THAILAND	LAEM CHABANG	0-5,399	3,000+	Y	Y
2017	1	THAILAND	LAEM CHABANG	0-5,399	0-999	N	Y
2017	1	VIETNAM	DANANG	0-5,399	0-999	Y	Y
2017	1	VIETNAM	DANANG	0-5,399	0-999	N	Y
2017	1	INDONESIA	TANJUNG PERAK	0-5,399	0-999	Y	Y
2017	1	INDONESIA	TANJUNG PERAK	0-5,399	0-999	N	Y
2017	1	VIETNAM	SAIGON	0-5,399	0-999	N	Y

- Compare port and terminal performance on multiple metrics
- Global coverage: 1000 terminals in 500 ports in all world regions

Port Performance Program, Metrics Tracked

Benchmark container port and terminal performance with empirical data

METRICS TRACKED

- Call Size and Vessel Size Development
- Port Hours by Call Size
- Minutes Per Container Move
- Arrival, Start, Cargo Operations, Finish, Time Splits
- Port Productivity and Berth Productivity
- Crane Moves Per Hour
- Crane Intensity
- Vessel Waiting Time, Percent of Calls that need to drop anchor
- Weekly Global Vessel Waiting Snapshot
- Filter by five Vessel Size and nine Call Size ranges
- Metrics to Global, Region, Country, Port, Terminal level
- Covers more than 1000 terminals in 500 ports worldwide

Port Throughput Analysis

- Total Container Moves and Calls, Updated Monthly

Container In-Port Dwell Times

- Daily Updates
- Container Import and Container Export Dwell Times
- Transshipment Dwell Times
- Empty Container Return ('Street Turn Time')
- Min, Median, Average, Max Values

Current Port Times

- Twice Daily Updates
- Port, Berth and Anchorage Hours
- Min, Median, Average, Max Values
- Vessel Endpoint Details (Vessels currently in port)

About S&P Global Market Intelligence

S&P Global Market Intelligence integrates financial and industry data, research, and news into tools that help track performance, generate alpha, identify investment ideas, understand competitive and industry dynamics, perform valuation, and assess risk.

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