

وزارة المواصلات والاتصالات  
Ministry of Transportation  
and Telecommunications

# PORTS & MARITIME AFFAIRS

Annual Report

# 2022

Prepared by  
Commercial Affairs & Logistic Zone Directorate  
Port Development Section



## PORTS AND MARITIME AFFAIRS

# Executive Summary



Part of the Ministry of Transportation and Telecommunication, the Ports and Maritime Affairs is the responsible body for overseeing and regulating the maritime sector in the Kingdom of Bahrain, its role is to develop and regulate the market with the adoption of international standards and recommended practices. Ports and Maritime Affairs regulates the sector through the Ports Affairs and Maritime Affairs Directorates.

### **Ports Affairs**

The Ports Affairs is responsible for monitoring the seaports' performance, progress, and services and ensure compliance with international standards. Directorates of the Ports Affairs are responsible for overseeing the ports and private jetties' operations and performance, managing the issuing of licenses for port and marine services as well as overseeing the ports' commercial activities including the coordination between all the stakeholders and adopting ports' standards and recommended practices as per the international guidelines. The directorate is also responsible of marketing the Bahrain Logistics Zone for new investors through business development and ensuring tenants compliance to BLZ requirements and offer their services in full. As the zone offers local, regional, and international companies to operate within a bonded area.

### **Maritime Affairs**

The Maritime Affairs is responsible for overseeing the shipping and maritime activities – including the registration of ships under the Bahraini flag and the issuance of relevant certificates, as well as adopting and enforcing marine safety and environmental standards and practices as per the local legislation and International Maritime Organization's (IMO) conventions and guidelines.



## Performance Summary

The year 2022 was relatively good from an overall performance perspective, despite the decrease demonstrated in some performance measures. The operational performance of KBSP maintained its 2021 efficiency in which the berth productivity have reached an average of 73.9 moves per hour, a 1% decrease in comparison to the year 2021, the gate turn around time have decreased to 23.4 minutes 9% less waiting time in comparison to 2021 reflecting the ports efficiency, and the crane productivity have reached 36.05 moves per hour demonstrating a 2% decrease.

The total vessel traffic displayed a decrease of 10% compared to last years traffic, although cruise vessel traffic recommenced in the last quarter of 2022 with 7 cruise ships due to the resumption of cruise seasons post the COVID-19 pandemic.

Container Throughput as of 2022 has decreased by 5% vs 2021 due to global restraints on supply and the ease of land transport modals.

General Cargo traffic has decreased compared to 2021 by 35% mainly from project volumes such as the BAPCO Modernization Project completing the mobilization stage of the project. Whereas vehicle imports via KBSP have increased by 14% driven by improved sales and the delays occurring in Port of Damam in berthing RORO vessels.

The PMA closely monitors operations in private jetties. Their performance was positive in 2022 with a 3% increase in the volume of commodities handled during the year. Solid bulk cargo increased by 4% compared to 2021. When comparing 2021/2022 Liquid bulk cargo there is a 1% increase.

The performance of the new commercial licenses issued by the PMA has demonstrated a decrease in Commercial licensing related activities by 23% when compared to the year 2021.

The aim of this report is to evaluate the operational performance of the Ports and Maritime Affairs within the Ministry of Transportation and Telecommunication, supported by graphical analysis. This report illustrates the annual results of 2022 in comparison to the year 2021.



# Khalifa Bin Salman Port

## Performance

# Khalifa Bin Salman Port

## Dashboard

### Throughput Performance

Total Import  
Throughput



**191,219 TEU**

↓ -4% vs 2021

Total Export  
Throughput



**190,946 TEU**

↓ -4% vs 2021

Total Container  
Throughput



**383,435 TEU**

↓ -5% vs 2021

Total Vessel  
Traffic



**707**

↓ -10% vs 2021

Transshipment  
Throughput



**394 TEU**

↓ -92% vs 2021

Total RORO



**32,862**

↑ 14% vs 2021

Total General  
Cargo



**787,514 FT**

↓ -35% vs 2021

### Operational Performance

Berth  
Productivity



**73.9 Moves**

↓ -1% vs 2021

Gross Crane  
Productivity



**36.5 Moves**

↓ -2% vs 2021

Gate Turnaround  
Time



**23.4 Min**

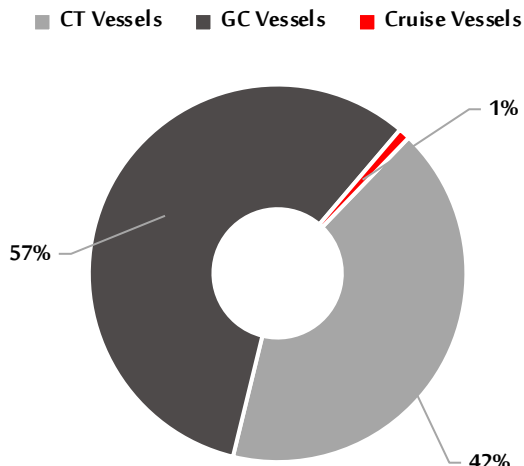
↑ +9% vs 2021

## KBSP Vessel Traffic

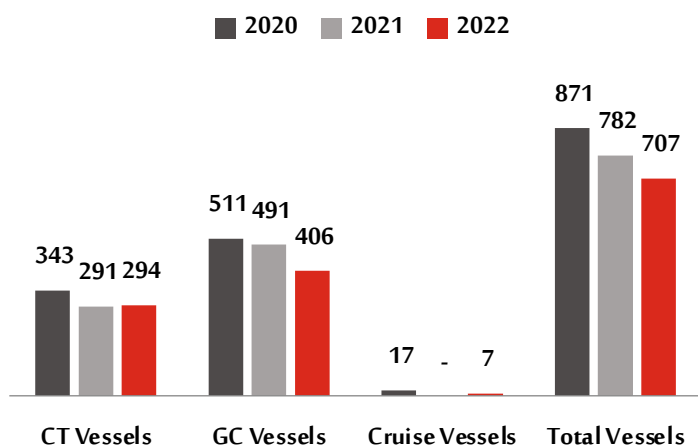
Total number of vessels berthing at KBSP in 2022 has reached **707** resulting in a 9.6 % decrease in comparison to the year 2021 which reached **782** vessels.

- Container vessels traffic has increased by 1% with a total of **294** vessels calling KBSP. Container vessel traffic represent 42% of the total KBSP vessel traffic.
- General Cargo vessels have decreased by 17.3% with a total of **406** vessels calling KBSP vs 2021 total **491** vessel calls , GC vessels represent 57% of all the vessel traffic calling KBSP.
- With Covid restrictions globally being lifted Cruise vessel traffic at KBSP resumed in November with the expectation of a strong season ahead in 2023.

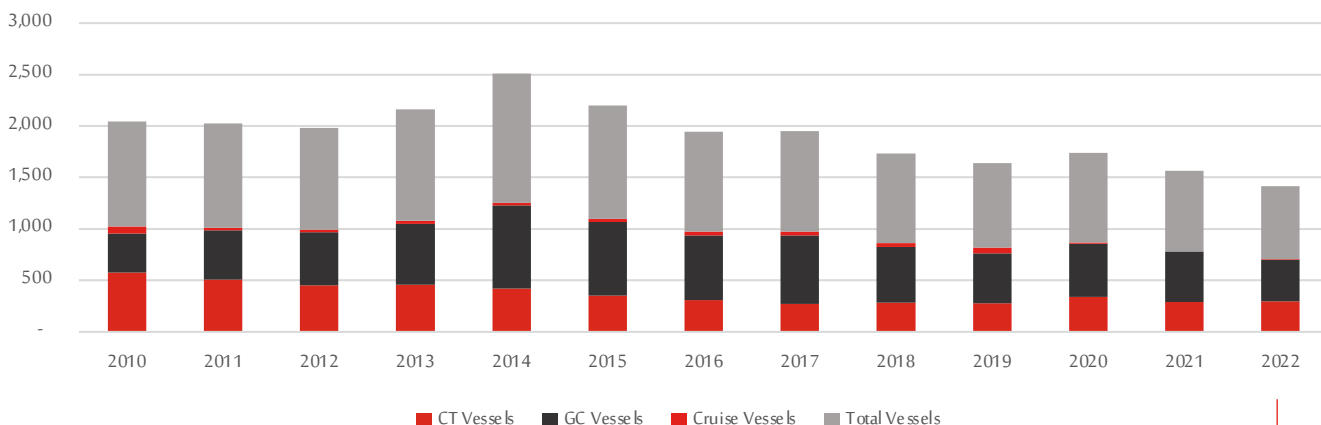
### KBSP Vessel Traffic Split YTD 2022



### KBSP Vessel Traffic



### KBSP Vessel Traffic



# Container Throughput

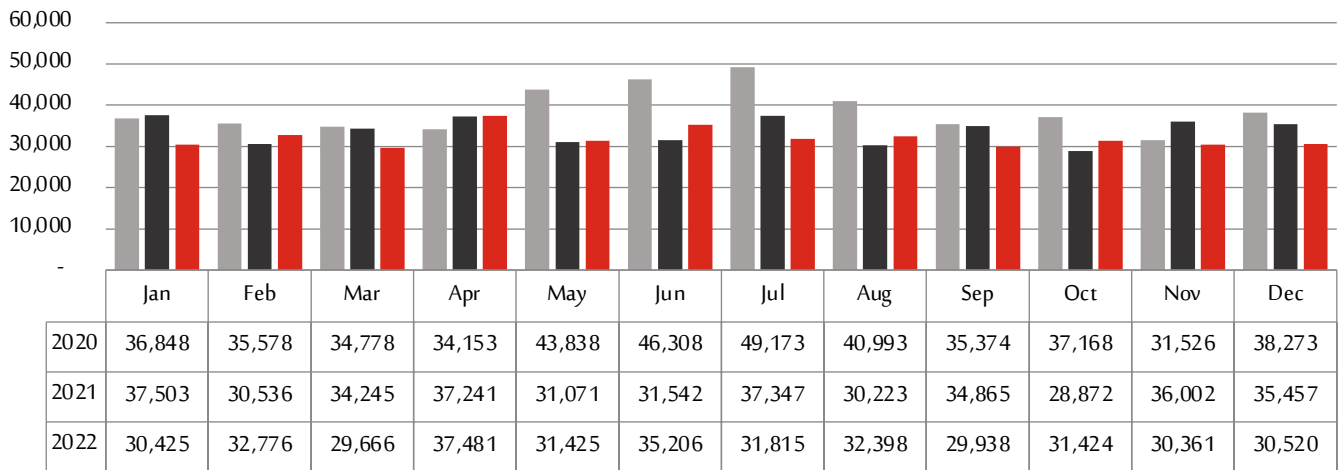
Container throughput is the measure of the total number of container TEUs (Twenty-foot Equivalent Units) handled in Khalifa Bin Salman Port, and the standard measure of productivity within a seaport. The total Container Throughput volumes recorded in 2022 was **383,435 TEUs** reflecting a decrease of 5% in comparison to 2021.

The drop is associated with several factors including the ease of other modal transports, the restraints on supply, and the outlook of the global economy.

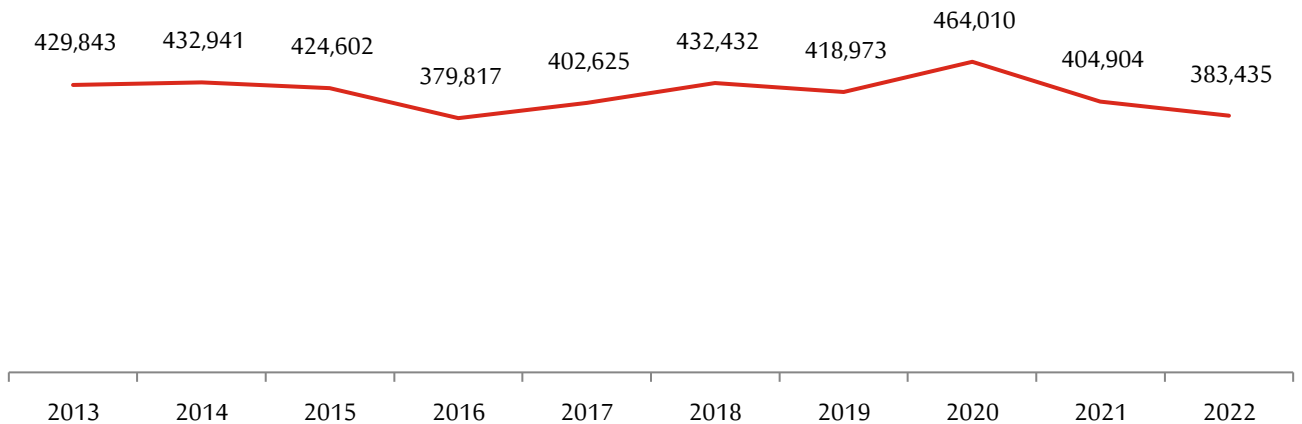


## Container Throughput

■ 2020 ■ 2021 ■ 2022



## Container Throughput Historical Volumes

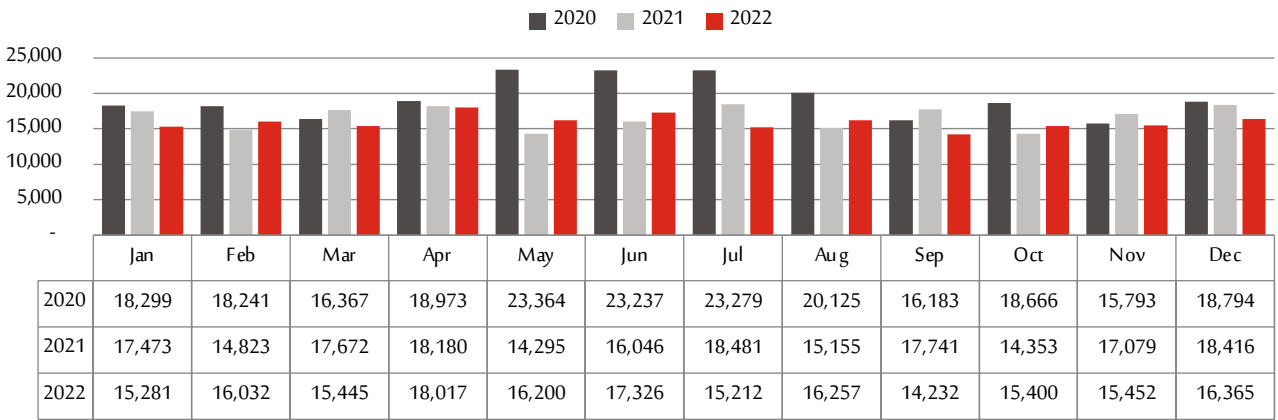


The graph above demonstrates KBSP container throughput volumes throughout the past 10 years, showing 2020 as exceptional operational year as a result of regional or global circumstances.

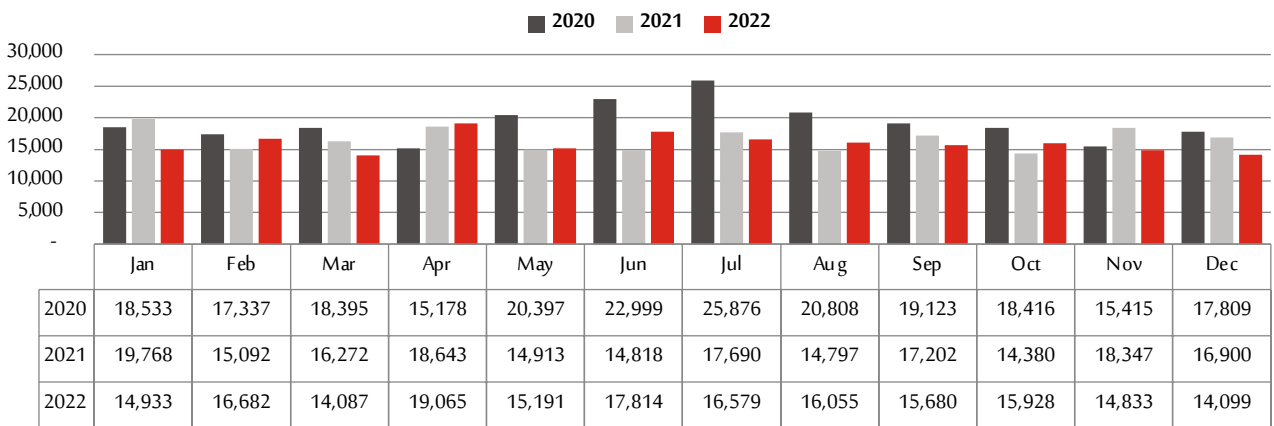
# Total Import / Export TEUs

Import volumes have registered a total throughput of 191,219 TEUs translating into a decline of 4% in comparison to 2021, however import volume trends exhibit a growth starting early Q4 and a drop end of Q2 due to market driven demand. Export volumes have registered a total throughput of 198,822 TEUs representing a decline of 4% in comparison to 2021, impacted by the global container shortage.

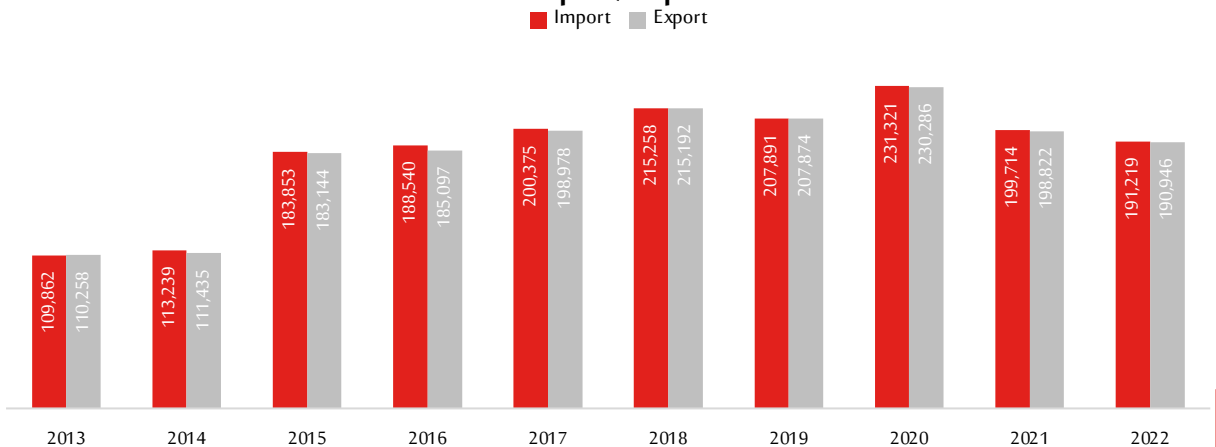
**Total Import TEUs 2020 - 2022**



**Total Export TEUs 2020 - 2022**



**Annual Import / Export TEUs**

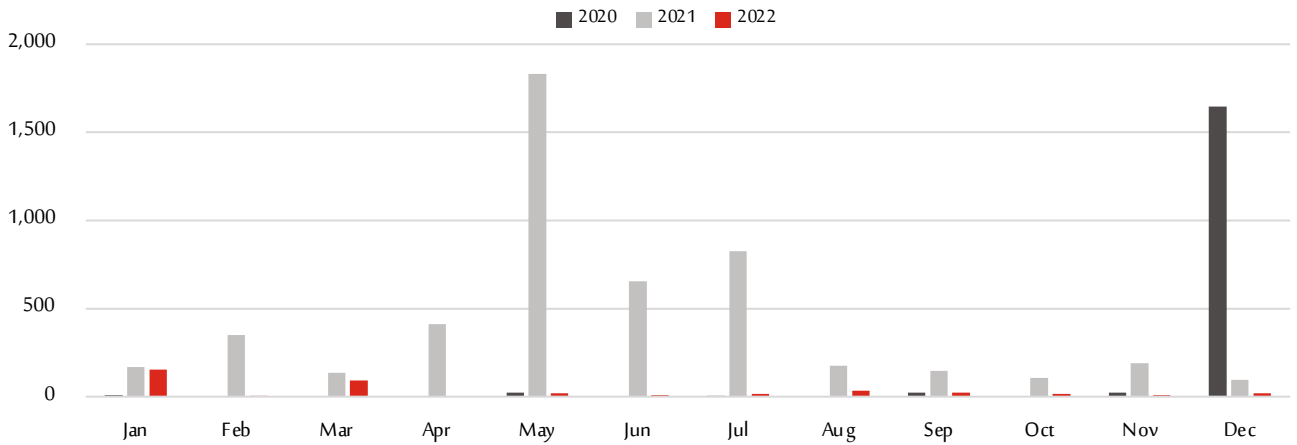




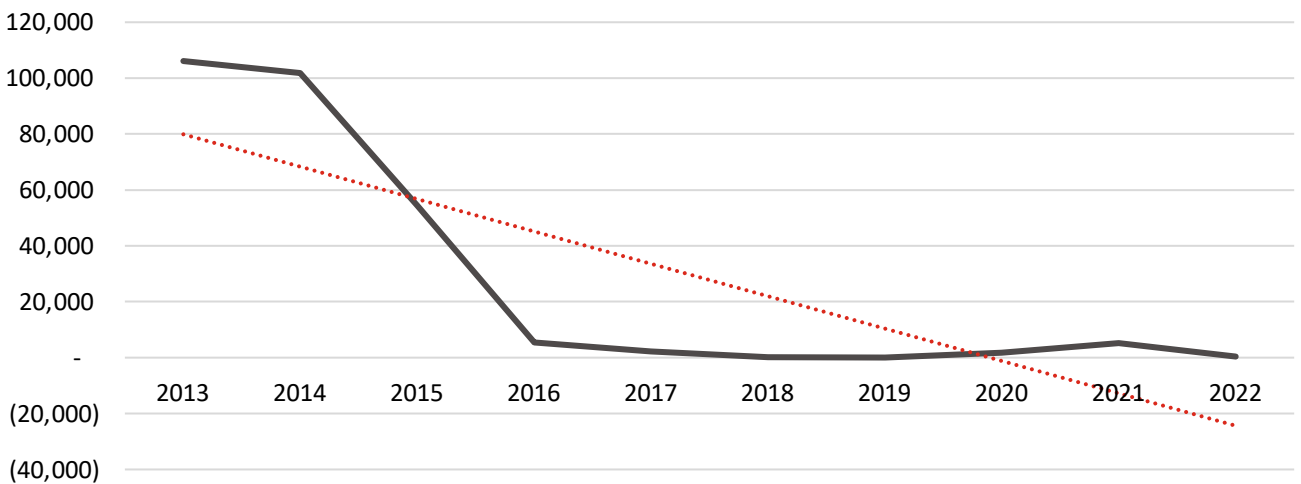
# Transshipment TEUs & Moves

Transshipment volumes accounted for **394 TEUs** in 2022, a 92% decrease in comparison to volume registered in 2021, this is primarily attributable to losing transshipment deal signed with CMA CGM in the year 2021.

### Transshipment TEUs



### Transshipment TEUs



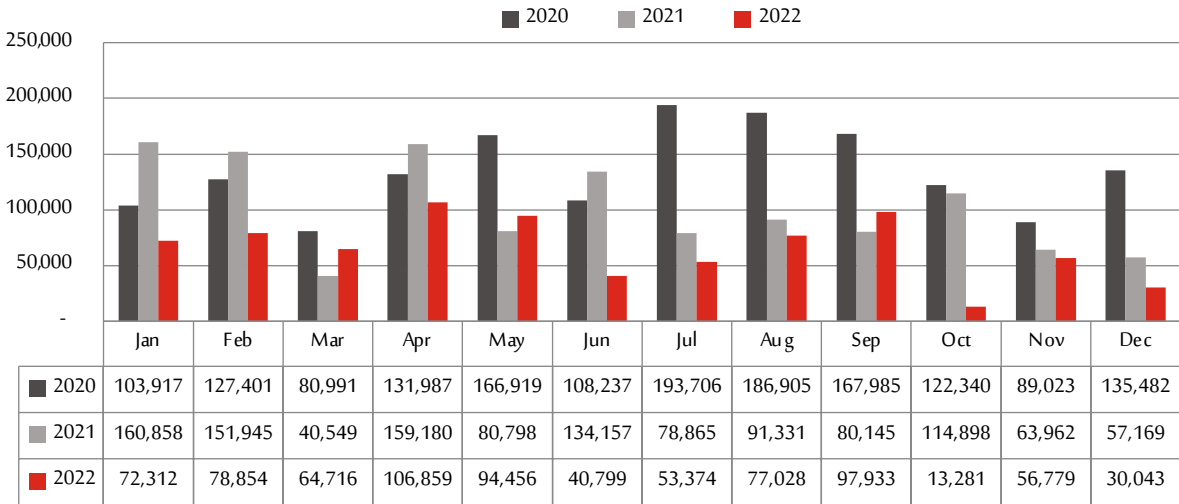
## General Cargo Throughput

General Cargo throughput is the measure of the number of Freight Tones (FT) handled in Khalifa Bin Salman Port, as part of the port productivity.

In comparison to 2021, the general cargo throughput recorded **787,514 FT** demonstrating a 35% decrease in the Freight Tons handled within KBSP in the year 2022 as shown in the graph below. This is mainly due to the completion of large national scale projects.

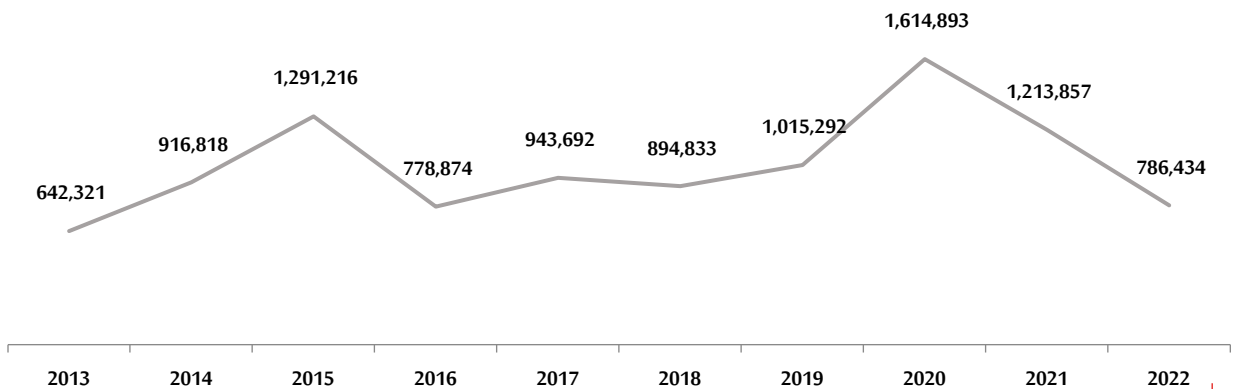


### GC Throughput FTs



The linear graph below demonstrates KBSP general cargo volumes throughout the past 10 years, showing the years 2015 and 2020 as exceptional operational years as a result of regional or global circumstances and an overall steady increase throughout the years.

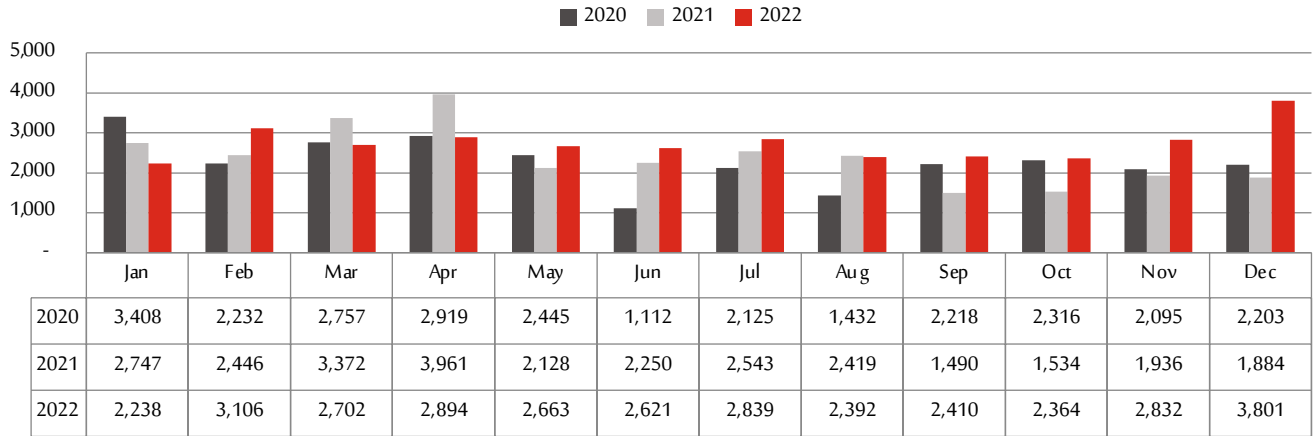
### General Cargo 10 Year Throughput FTs



## Vehicle Import Volumes (RORO)

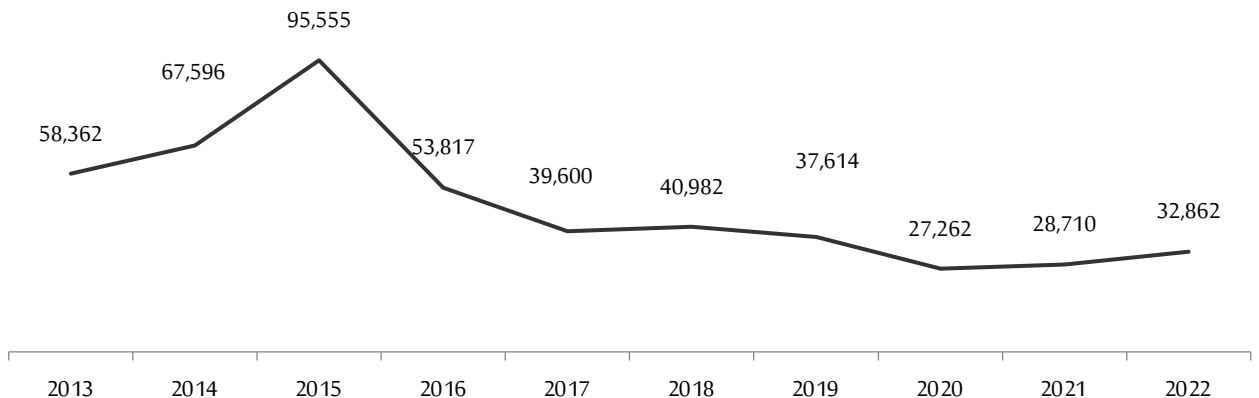
KBSP retains an adequate staging area for vehicles . The vehicle Import volumes (RORO) is the number of cars being handled within KBSP premises . In comparison to 2021, the number of vehicles handled within KBSP demonstrated a 14% increase in the vehicle import volumes for the year 2022 with **32,862** vehicles. The increase is driven by improved sales in the Kingdom and disruptions in Damam Port .

**RORO Volumes**



The graph below demonstrates KBSP RO-RO volumes throughout the past 10 years, showing the years 2015 as exceptional operational year .

**RORO Unit Volume**

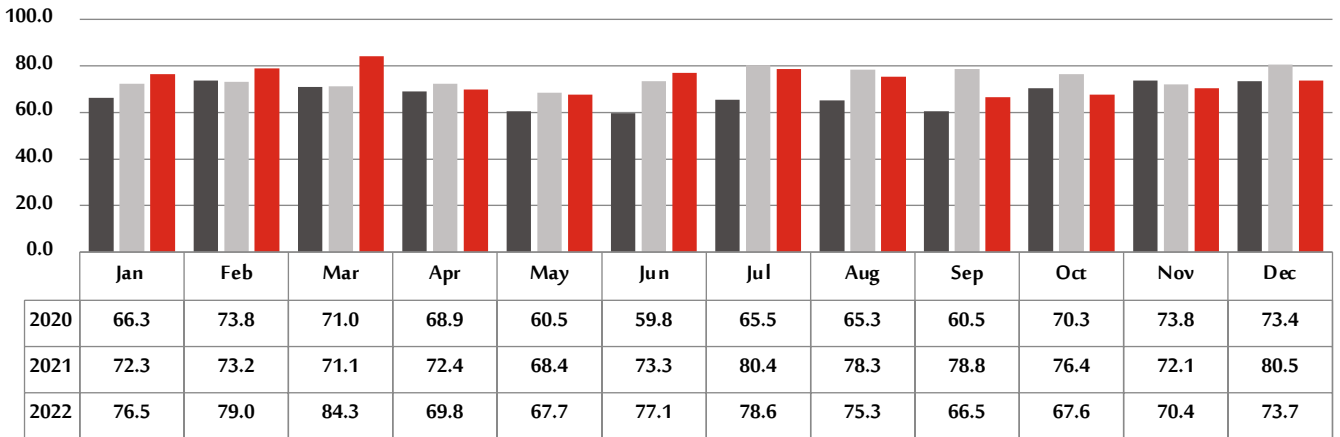


# Berth Productivity

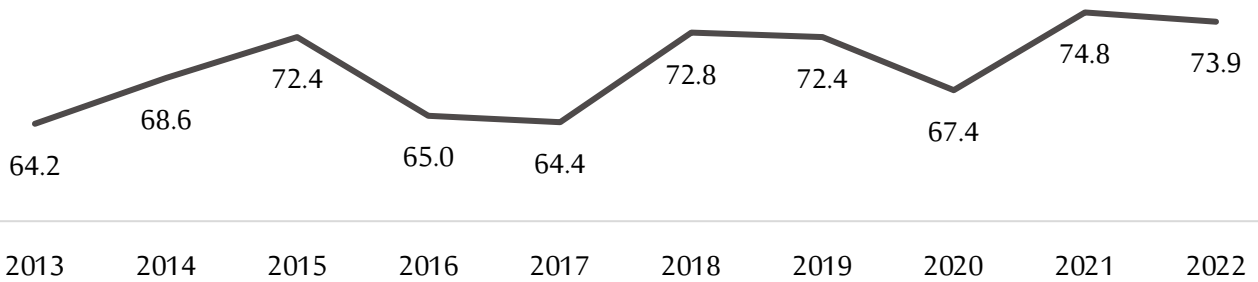
The berth productivity is defined as gross moves per hour for a single vessel call or visit, it is the total container moves (on load, offload, and repositioning) divided by the number of hours for which the vessel is at berth. More moves per hour demonstrates a better performance as it is the average calculation of moves per vessel. The berth productivity figures shown illustrates a 1% decrease in Khalifa Bin Salman Port berth productivity average of **73.9 moves** per hour in comparison to 2021.

## Berth Productivity

■ 2020 ■ 2021 ■ 2022



## Berth Productivity 2010 - 2020



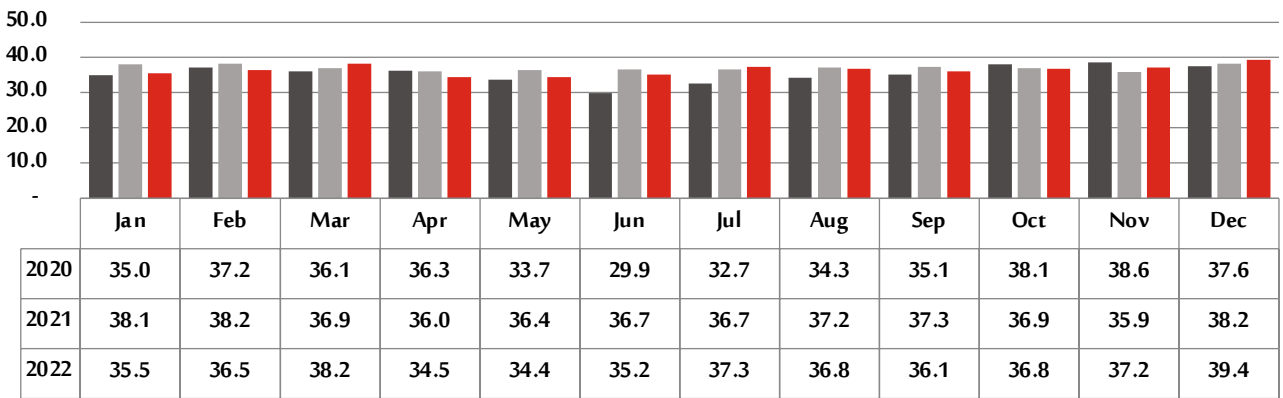
# Gross Crane Productivity (GCP)

The Gross Crane Productivity is the total number of moves per hour per crane, it is the determining factor of the port operation and performance efficiency . The Gross Crane Productivity figures shown illustrates a 1% decrease in Khalifa Bin Salman Port Gross Crane Productivity average of 36.5 moves per hour in comparison to 2021.

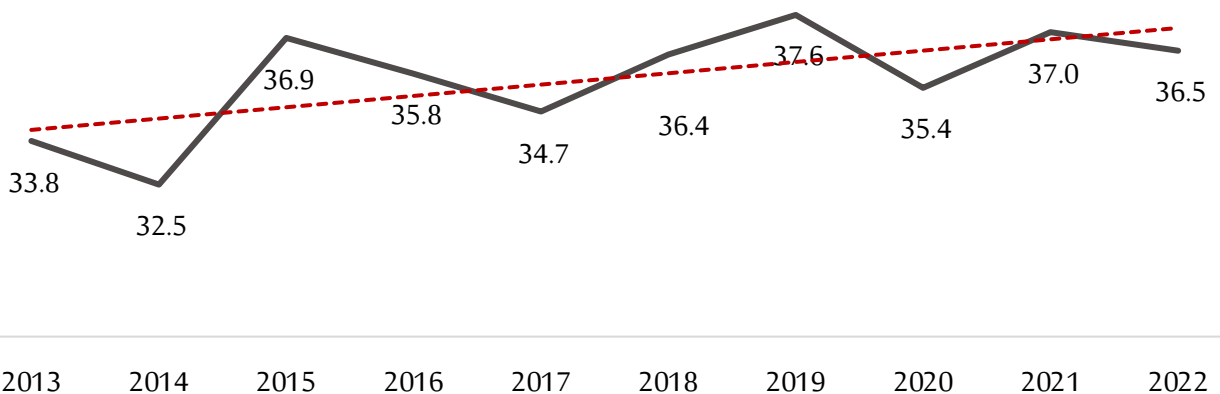


Gross Crane Productivity

■ 2020 ■ 2021 ■ 2022

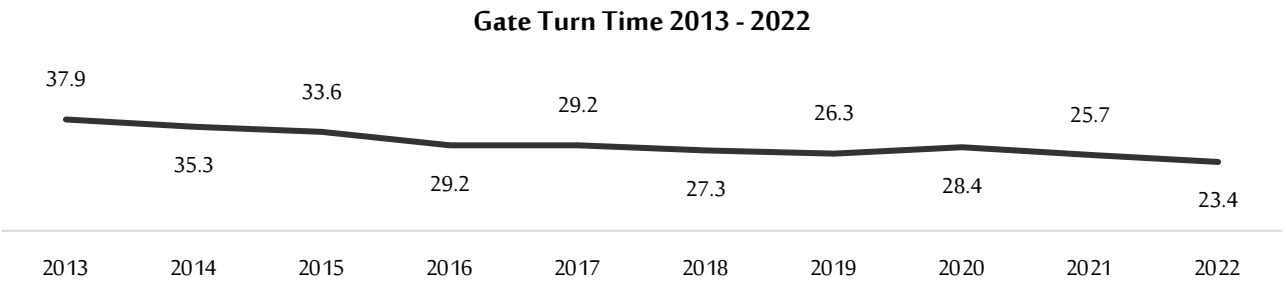
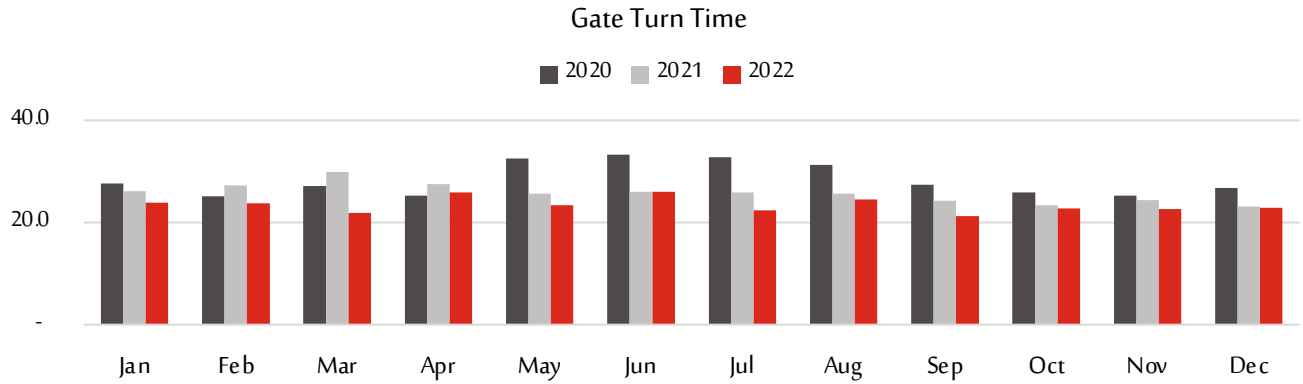


Gross Crane Productivity

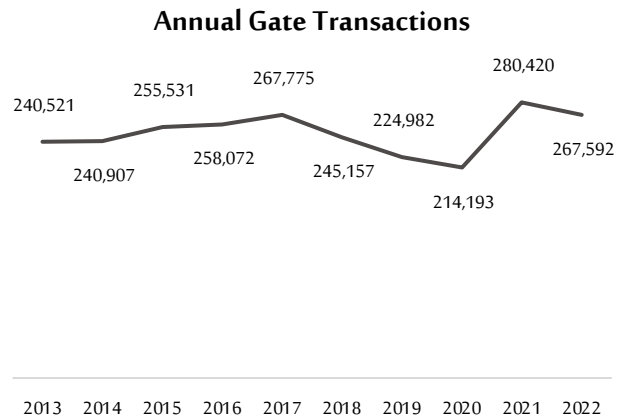
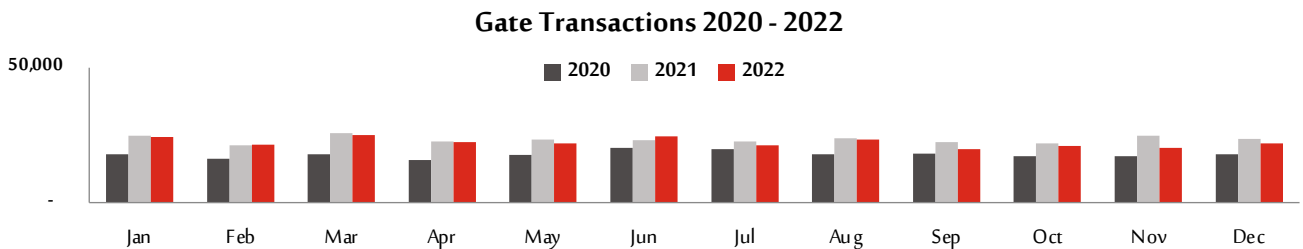


# Gate Transactions & Gate Turn Around Time

2022 Gate Turn Time average has decreased by 9% to 23.4 minutes in comparison to the 25.7 minutes average recorded in 2021. KBSP Gate Turn Around Time over the past 10 years has show a significant increase in performance, which is a good indicator of the operational capabilities of the port operator.



Gate Transactions is the total number of trucks which pass through the Port's gate.



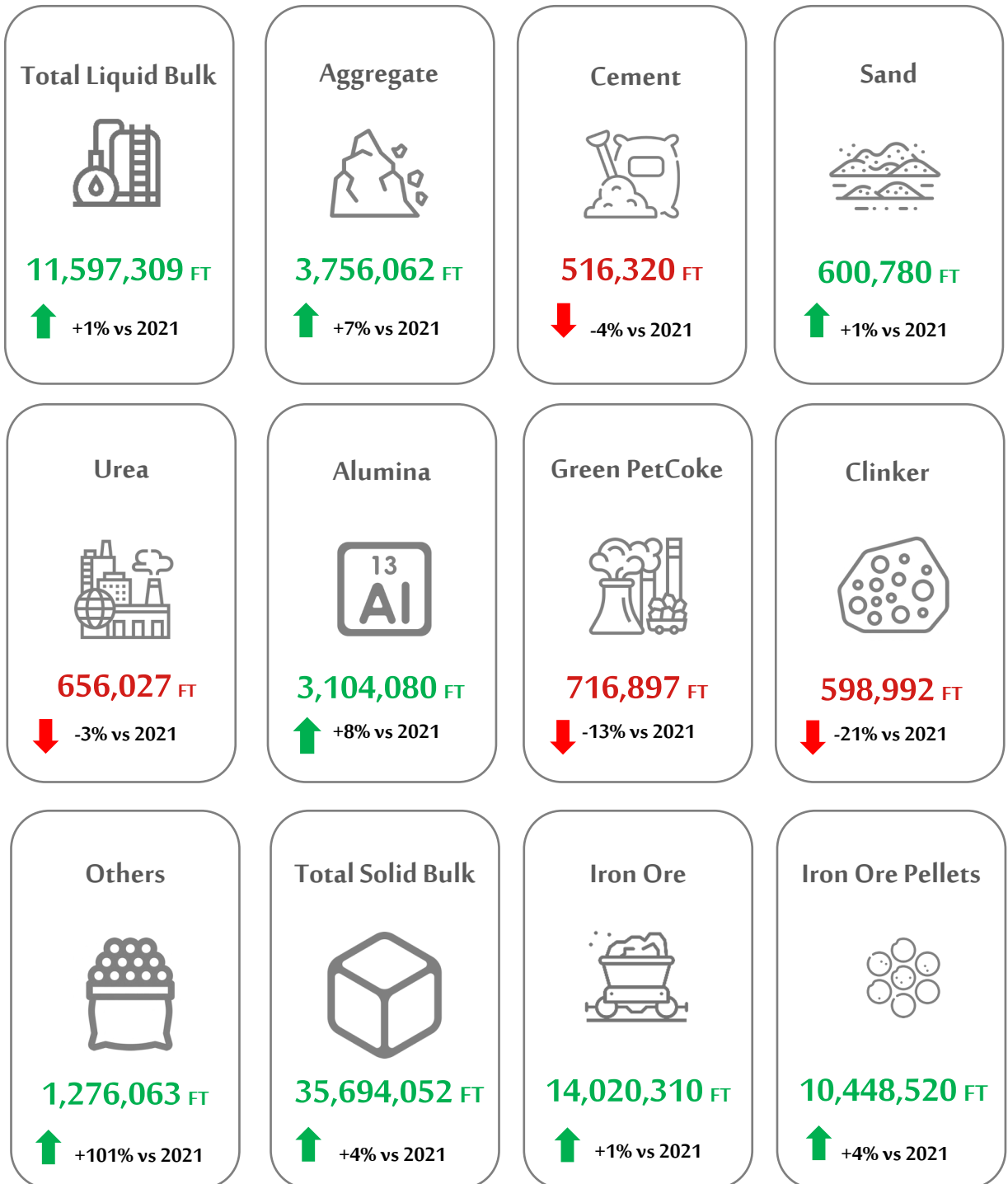


# Private Jetties Bulk Cargo Handling Performance

## Bulk Handling Total (Solid/ Liquid)

Private jetties are owned by companies to handle their own cargo shipments. In reference to bulk cargo, it is usually classified into dry and liquid. Dry bulk cargo refers to Aggregate, Cement, Sand etc. Whereas Liquid usually refers to Oil, Gas and pPetrochemical products.

The volume of total bulk commodities imported and exported in the Kingdom has increased by 4% vs 2021. Liquid Bulk increased vs 2021 by 1% and Solid Bulk materials increased by 4% vs last year.







# Ports & Maritime Affairs Performance



## PMA Performance Dashboard

BLZ Occupancy  
Rate



73%

↓ -3% vs 2021

Total Private  
Jetty Inspections



154

↑ +19% vs 2021

Total Active  
Licenses



222

↓ -23% vs 2021

Total  
Navigational  
Marks



141

↓ -5% vs 2021

Vessel Visits



2,749

↓ -8% vs 2021

Departure  
Certificates



2,089

0% vs 2021

Marine Permits &  
Certificates



295

↑ 24% vs 2021

Navigation  
Permits



8681

↑ 11% vs 2021

Total Vessels  
Registered  
(New + Renewal)



141

↑ 96% vs 2021

Boat Registration  
(New + Renewal)



2778

↑ +17% vs 2021

Ship & Facility  
Inspection



185

↑ 7% vs 2021

Pilot & Tug  
Master License &  
Exemption



40

↓ 15% vs 2021

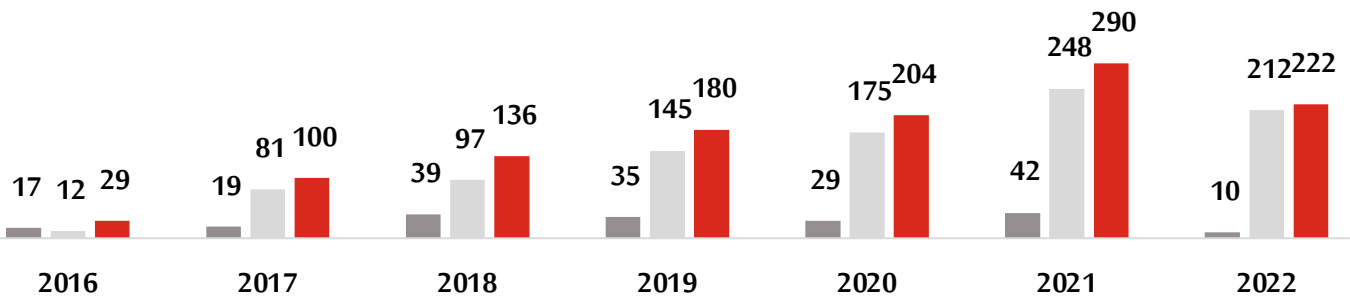
# Commercial Affairs

The Directorate of Commercial Affairs within the PMA issue different licenses to companies, who wish to carry out the relevant commercial activities in the ports, maritime and logistics industry. Given that the company applying for a license complies to all the rules and regulations and meets the set requirements of the PMA. Once all documents have been reviewed and approved, a license is issued to further allow the operations of the concerned company. It is to be noted that the Ports and Maritime Affairs and in reference to the ministerial regulation number (9) for the year 2017, is the licensing authority of 14 different marine activities;

- 2022 Total Licensing activities decreased by 23% vs 2021.
- In comparison to 2021, Total licensing renewals have decreased by 15% in 2022 due to POL license duration of 2 years.

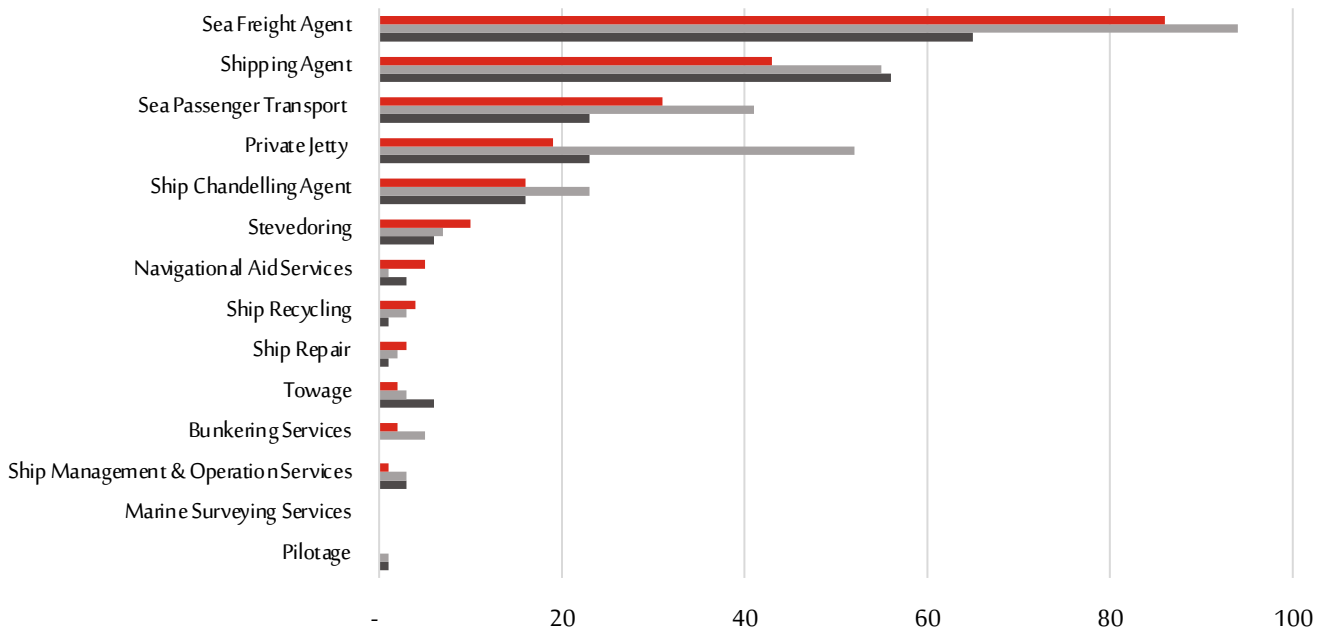
## Commercial Licensing Activities Performance Comparison 2016 - 2022

■ New Commercial Licenses    ■ Existing Licenses Renewals    ■ Total Transactions



## Commercial Licensing Breakdown By Activity

■ 2022    ■ 2021    ■ 2020



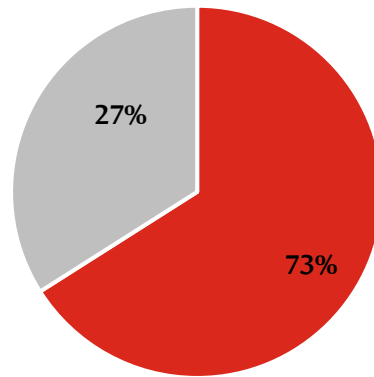
# Logistics Zones

Operated by the Ministry of Transportation and Telecommunications, Ports & Maritime Affairs, the Bahrain Logistic Zones is designed to offer local, regional, and international companies a base from which they can operate in a bonded (customs-free) area. The BLZ is the only dedicated customs – free, value-added logistics park in the Kingdom of Bahrain. Offering 24/7 efficient and fast-tracked Customs procedures, promoting Import, Export & Re-Export of goods to & from the Kingdom of Bahrain.

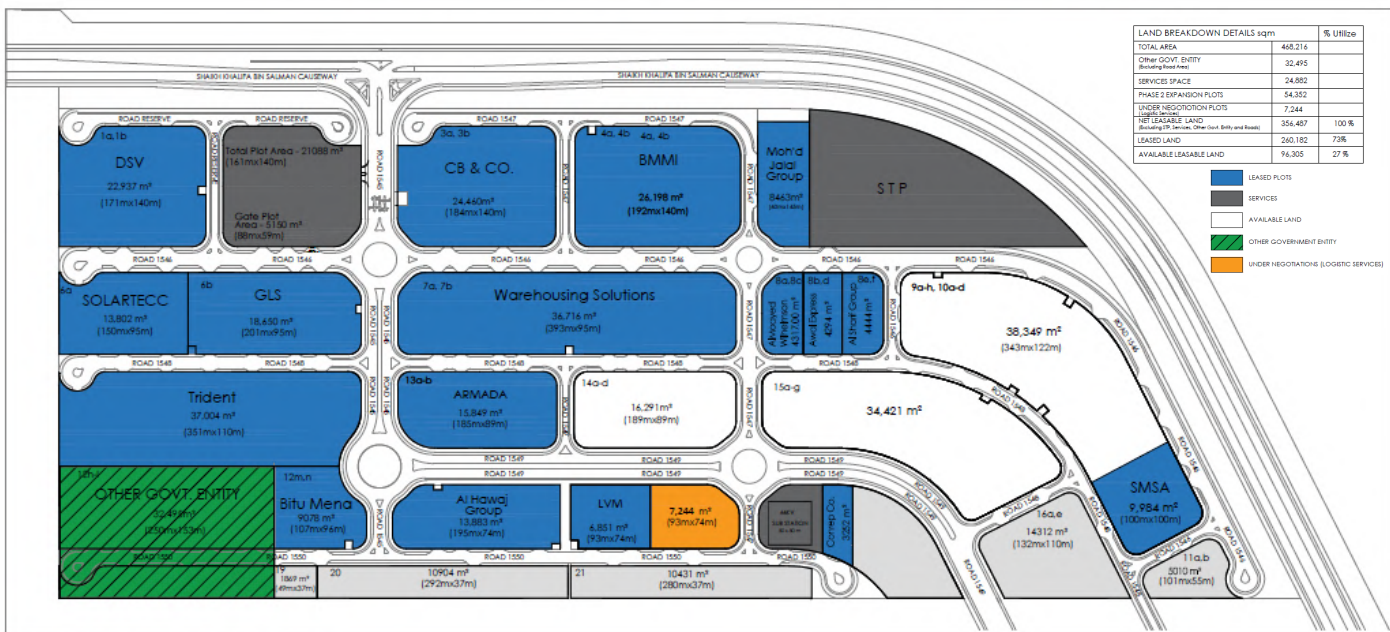
| BLZ Plot Status Summary | Area (M <sup>2</sup> ) | % Utilize |
|-------------------------|------------------------|-----------|
| Net Leasable Area       | 356,487                | 100%      |
| Leased Land             | 260,182                | 73%       |
| Land For Lease          | 96,305                 | 27%       |

■ Leased Land    ■ Land For Lease

- The available land for lease presented represents the total land space available at BLZ for leasing which is 356,487 m<sup>2</sup>.
- The total occupancy rate of the Bahrain Logistics Zone has reached 73% in 2022 with 27% remaining as 'available leasable land', consisting of 5 plots available.



## BAHRAIN LOGISTIC ZONE PLOT STATUS

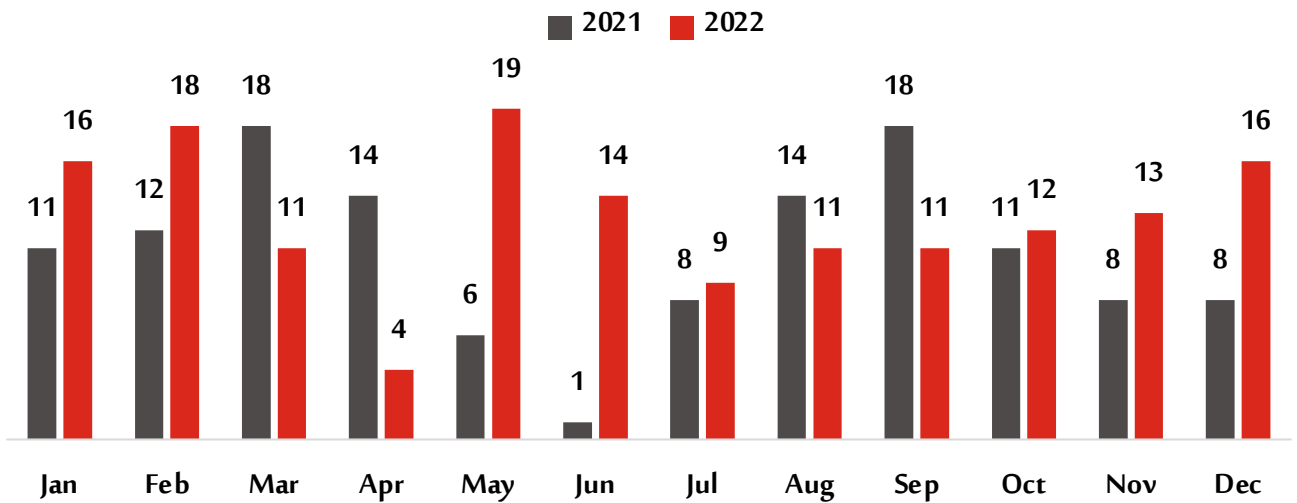


NOTE: The reflected plot dimensions (length & width) are approximate

# Port Operations

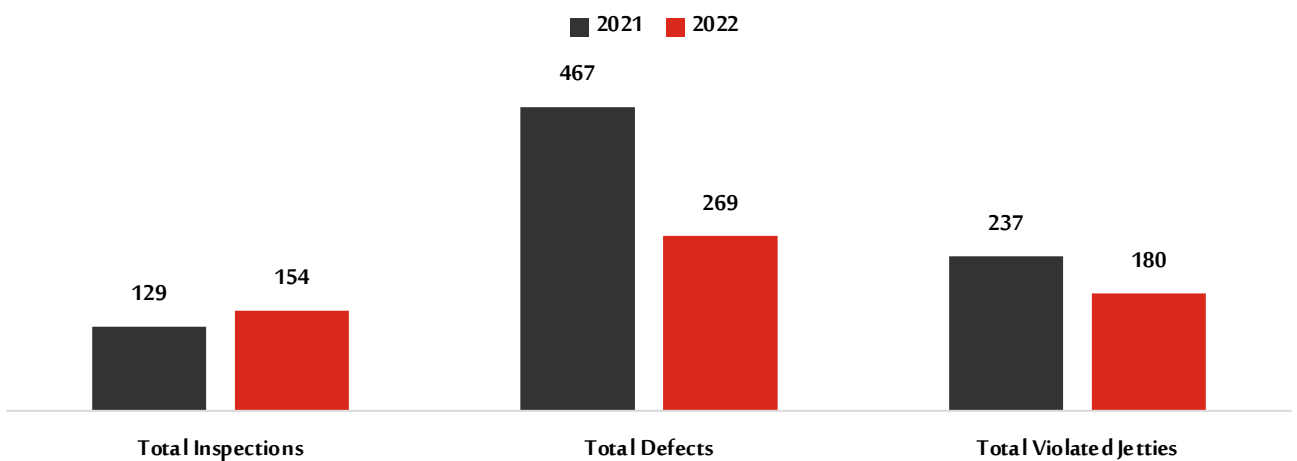
The Port Operations and Technical Services Directorate is responsible for monitoring the operations of all private jetties & ports to ensure the related laws and regulations are adhered to. Total inspections increased during 2022 due to lifting of covid related restrictions; the inspection plan was executed as per the set schedule, and all port facilities were inspected.

**Private Jetty Inspections Monthly 2021 - 2022**



The below graph illustrate the defects identified by the port operations and technical services directorate in the year 2022, the most common defect that was reported by the inspectors is Jetty infrastructure, plant & equipment and the least common defect identified was the general administrative defect. However, all defects reported by the directorate is followed up and resolved by the licensee in less than 2 weeks in average.

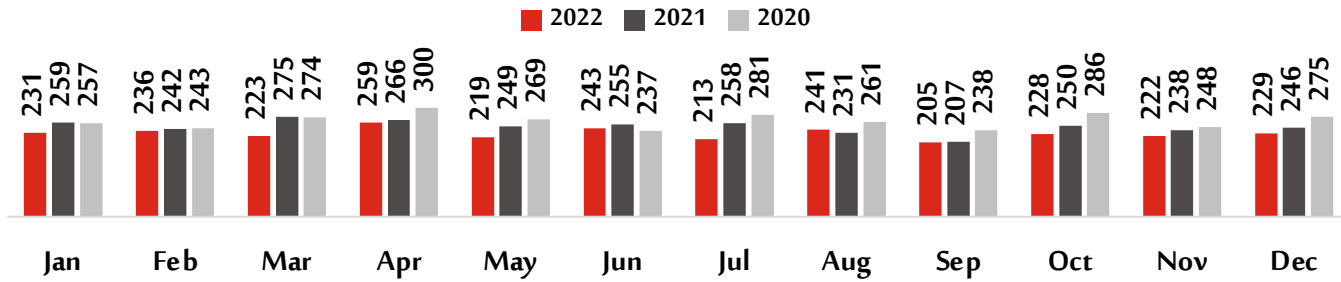
**Private Jetty Inspections, Defects, Violations**



# Marine Traffic Control

Vessel visits are the number of vessels including the tugs and barges that arrived or departed from the Kingdom's ports and private jetties as well as vessels anchored at the anchorage area.

## Vessel Visits

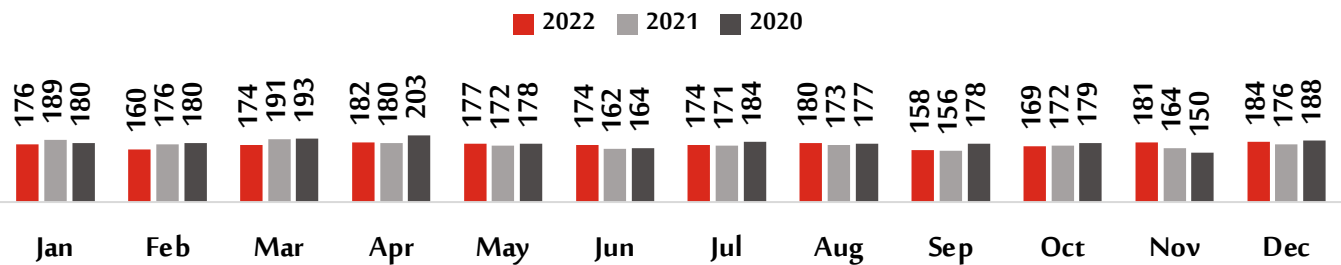


## Vessel Visits Annual 2016 - 2022

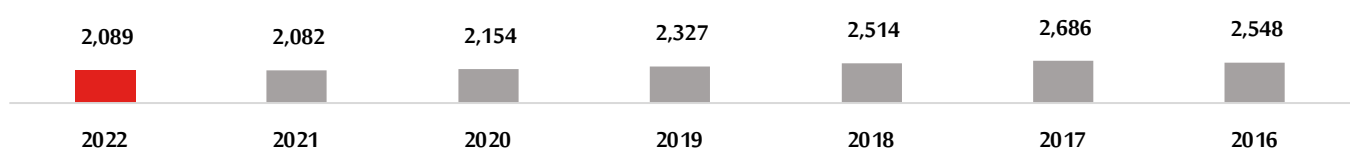


- Total vessel visits for the year 2022 was 2749 visits, which is a 8% drop vs 2021.
- The highest number of visits recorded in a month was in **April** with 259 visits.

## Departure Certificates



## Departure Certificates Annual 2016 - 2022



- Total departure certificates issued for the year 2022 were 2,089 which is a 0.3% increase vs 2021.
- The highest number of certificates recorded in a month was in **April** with 182 certificates.

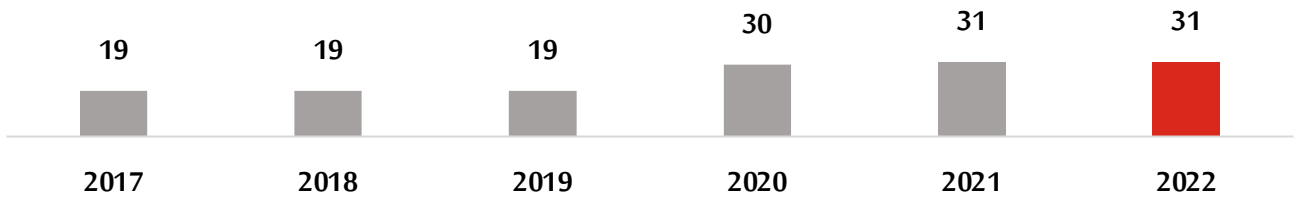
The difference in the total of vessel visits and departure certificate due to the following:

1. No departure certificate for the Navy Vessels
2. If a combination (Tug & Barge) sailing out of Bahrain, one departure certificate will be issued for the combination (I.e. if tug UCO 26 towing barge UCO C will leave Bahrain, one departure certificate under the name of UCO 26 + UCO C is issued.)

# Technical Services

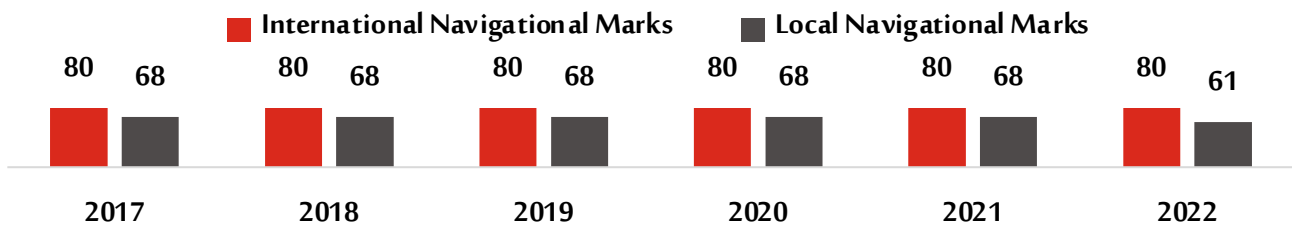
Mooring buoys are structure or buoys setups located in the territorial waters and may be used as an anchorage for ships offshore. In 2019, there were total of 19 mooring buoys which were installed within the territorial waters of the Kingdom of Bahrain, In 2022 total of 31 mooring buoys were allotted for private jetty operators due to the increase in the marine projects in the Kingdom and the need for additional mooring locations for their fleets.

**Mooring Buoys**

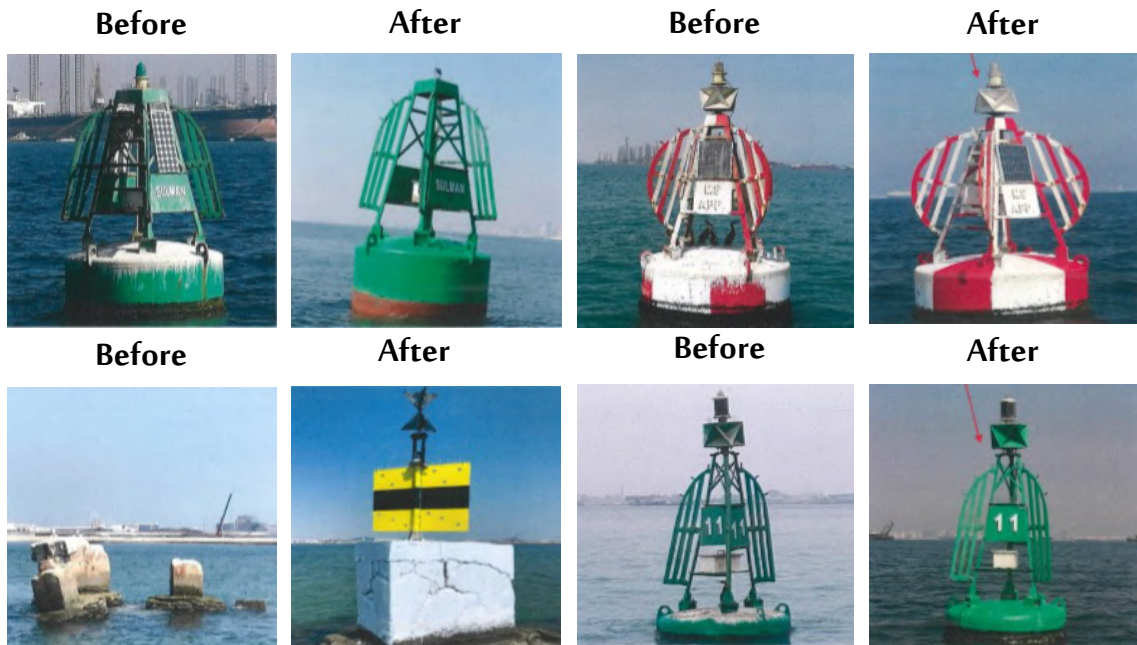


The Directorate of Port Operations and Technical Services conducts regular site visit for the international and local navigational marks within the territorial waters of the Kingdom of Bahrain. Additionally, these inspections are conducted to ensure and to follow up the continuity of the maintenance activities that are conducted by the ministry’s contractor The Middle East Navigation Aids Services (MENAS) and Ocean Diving and Marine Services. The current total number of the international navigational marks installed are 80 and the local marks are 61.

**Navigational Marks**

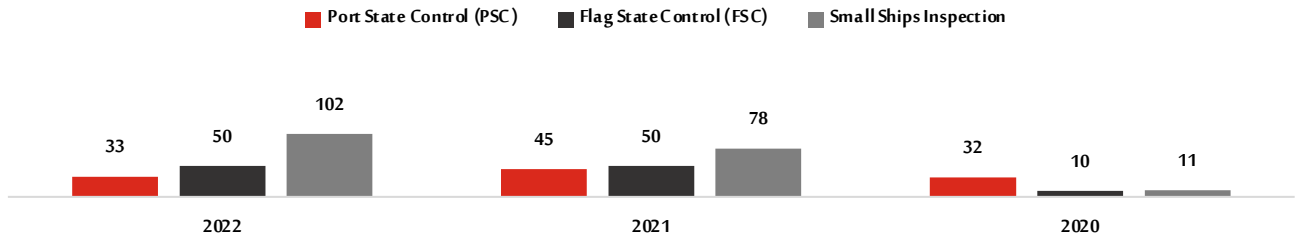


**Examples of maintenance work done based on POTSD site visits**

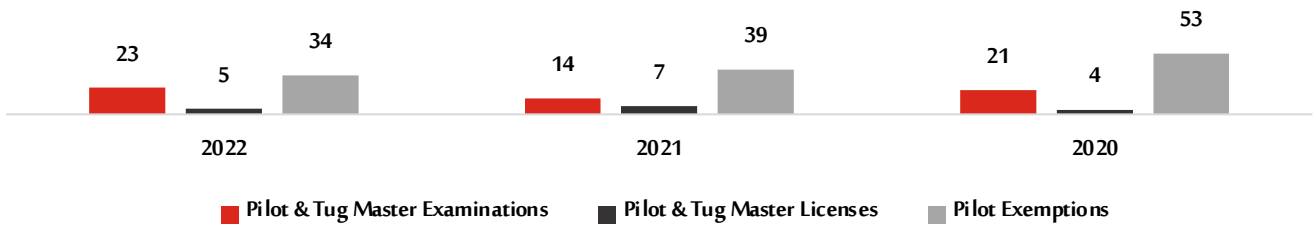


# Marine Safety & Environmental Protection

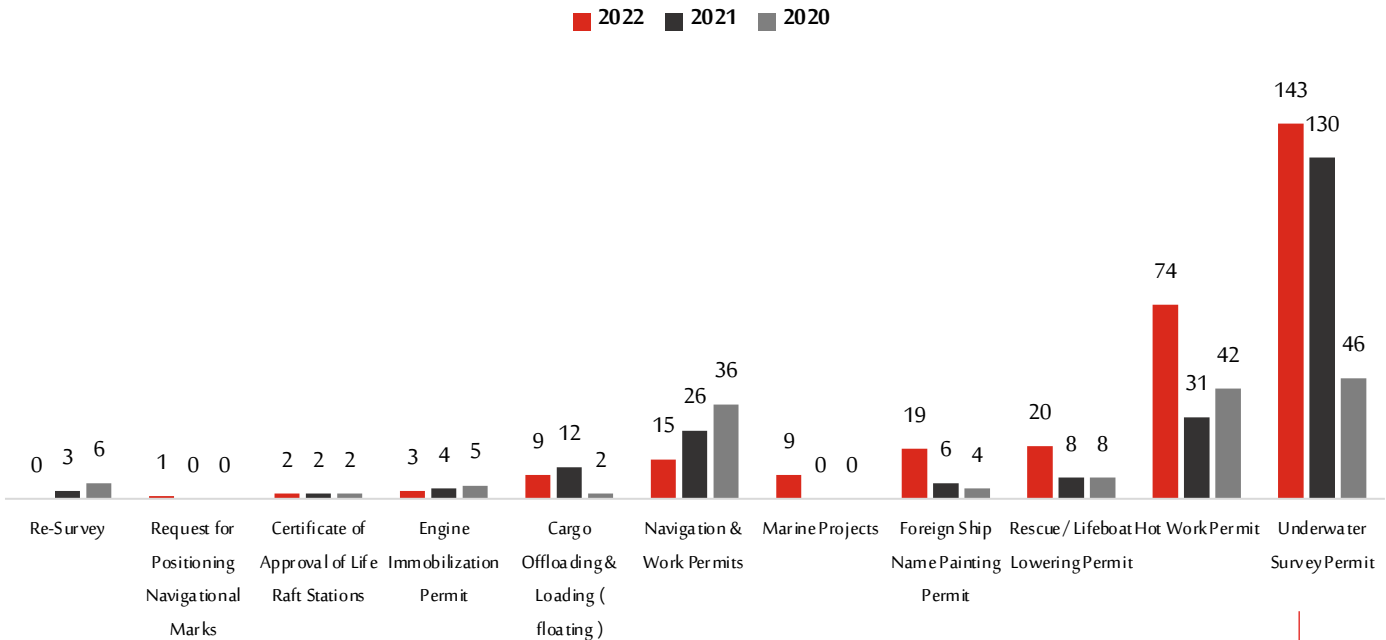
## Ship & Facility Inspections



## Pilot/Tug Master Licensing & Exemptions



## MSEP Miscellaneous Permits & Approvals

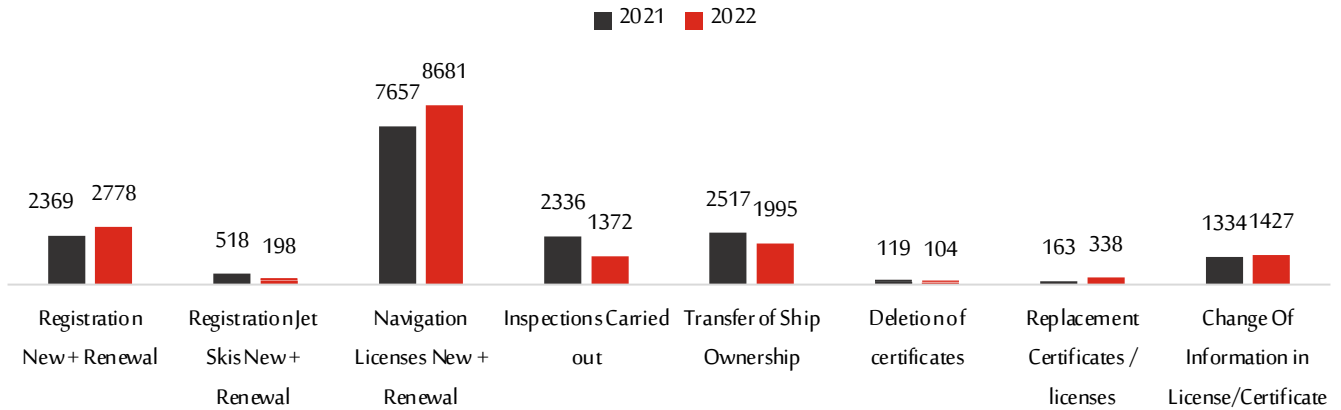




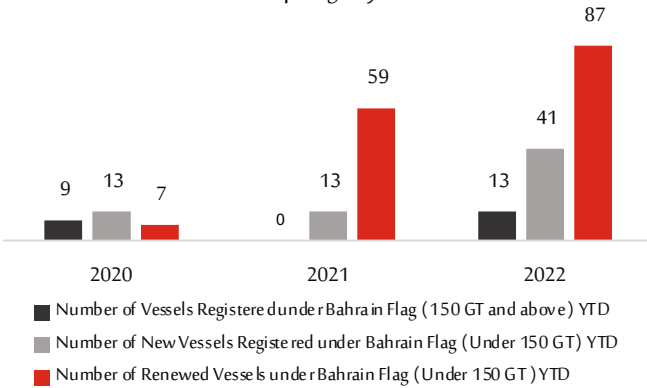
# Ship Registry & Seaman Affairs

The Directorate of Ship Registration and Seamen Affairs plays a valuable role in the marine industry by providing various services to all vessel and boat owners including pleasure boats, fishing boats, commercial boats and jet skis. The Directorate is responsible for all certificates issued for ships and boats in the Kingdom of Bahrain including registration/renewal, issuance/renewals of navigation license, inspection services, deletions, transferring the ownership and other services.

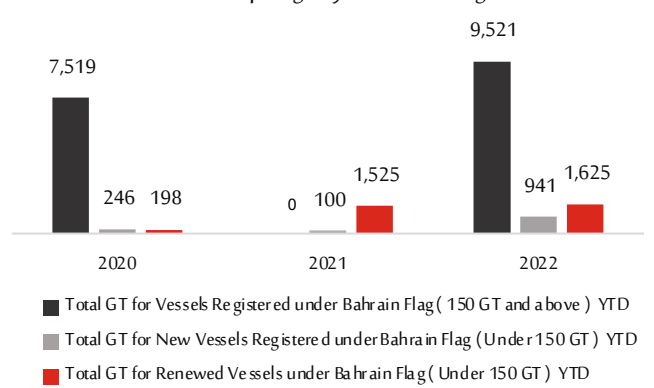
Boat Registration Office Transactions



Total Ship Registry Units

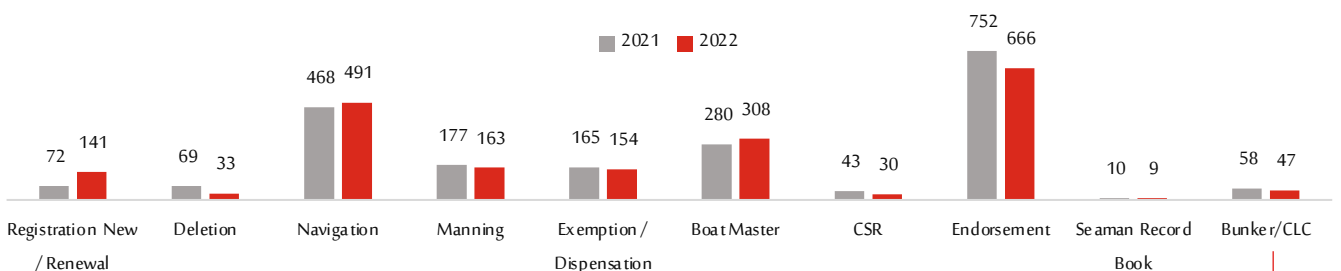


Total Ship Registry Gross Tonnage



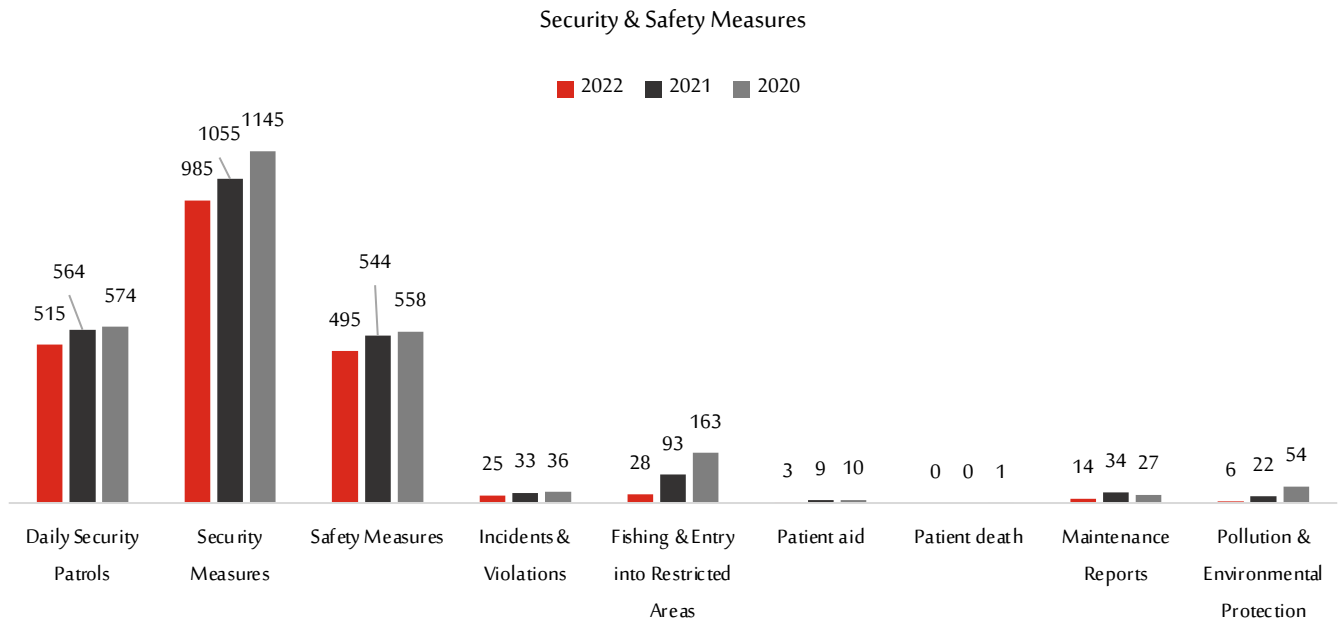
Ship registry performance in the year 2022 increased in comparison to 2021 due to several factors that came into play such as ease of COVID restrictions globally which resulted in higher registration, however not reaching pre-COVID numbers due to the reduction in number of maritime projects, and a decrease in marine tourism. Also, it is to be noted that the year 2021 was stagnant in registration due to COVID-19 restrictions, dropped oil prices, and the enforcement of rules and regulations in Saudi Arabia to flag all marine units under KSA flag in order to be engaged in any marine projects specifically, which reverted many vessel operators to reflag in Saudi Arabia.

Ship Registry Certificates



# Security & Safety

Security & Safety Directorate has implemented security and safety monitoring management system through physical inspection patrolling and continuous daily monitoring and follow-ups with Port Operators and Private Jetties Owners whilst strengthening our daily cooperation with law enforcement stakeholders and HSE Regulatory bodies. The number of security and safety including environmental incidents and violation in the Ports and Private Jetties between 2020-2022 showed a considerable drop while SSD remain engaged in continuous improvement and widening the scope of HSSE Management System in the Port Industry in year 2022.



Security and Safety Inspection Patrolling between 2020-2022 remain steady for inspecting security and safety for all areas of ports and private jetties and monitor the performance of the port operating companies, sub-contractors, labors, visitors to ports and private jetties, while maintaining communication devices that are connected 24/7 with the related government agencies to ports and private jetties, in the event of any emergency.

