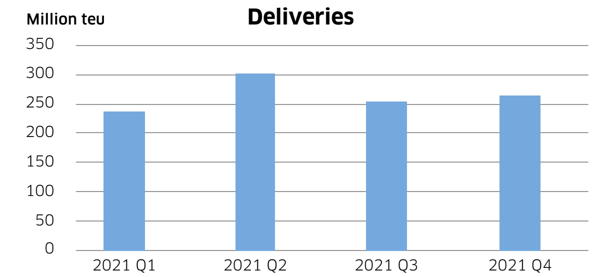
Containerships

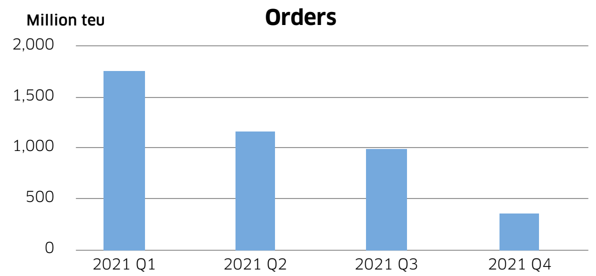
2021: an extraordinary year for container shipping

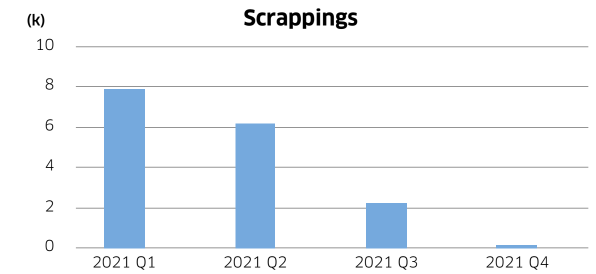
2021 was a historic year for container shipping. Non-Operating Owners (NOOs), liner operators and freight forwarders have all benefitted from an exceptional trading environment, enjoying the extraordinary post-Covid demand bonanza. However, this was a less rosy time for shippers who had to deal with a chronic dearth of capacity, prohibitive transport costs and massive shipment delays.

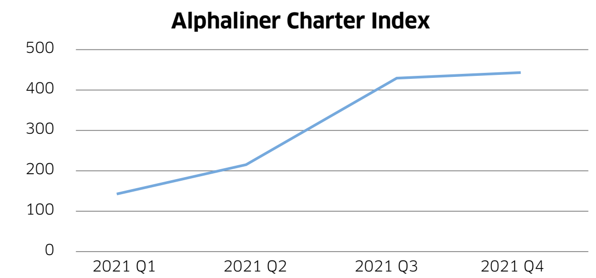
At 23,992 teu, the **EVER ACE** became the largest container vessel in the world when delivered in July.

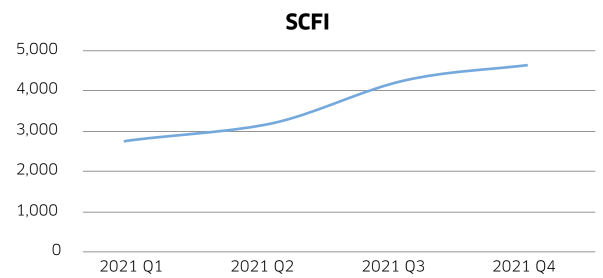
Photo: Finn Fuhrmann

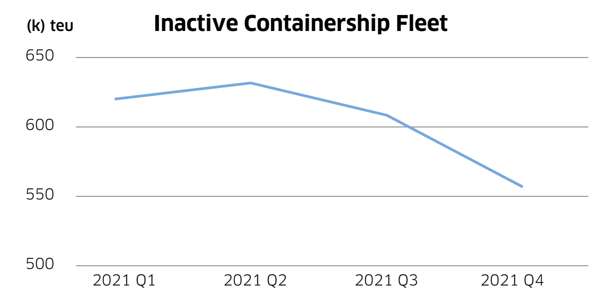












CHARTER MARKET

Non-Operating Owners have enjoyed an extremely strong demand for tonnage throughout the year, for virtually all sizes of ships. Although the recovery had already started in the summer of 2020, the rally gained further momentum in the first half of 2021, and went into overdrive from July onwards. In August and September charter rates reached levels unseen in the history of container shipping.

A two-tier market emerged, with a multi-year market on the one hand seeing most fixtures concluded for durations of 36, 48 and 60 months at historically high, five-digit, rates and, on the other hand, a short-term market seeing astronomical six-digit rates agreed. In early September a 4,250 teu 'Classic Panamax' unit was fixed at a jaw-dropping $200,000/day for a 2-3 month employment, an absolute all-time high.

A stellar year for liner operators

Liner operators have recorded historic results in 2021, posting earnings in the billions, on the back of unprecedented cargo volumes and historically high freight rates. The financial gains achieved, higher than those seen when the recovery started in 2020, were boosted by the most profitable peak cargo season on record.

The third quarter of 2021 was the best quarter ever in the history of container shipping. Illustrating this, French liner shipping giant CMA CGM recorded a net profit of $5.6 BN during this period, ten times higher than its 3Q20 results and 125 times the $45 M profit recorded in 3Q19. In Asia, South Korea's HMM posted a $1.9 BN gain, wiping out in only three months two thirds of the $3 BN losses it had accumulated since 2016. Others like Ocean Network Express (ONE) who logged $6.7 BN profit for the first half of 2021 and expect a mind-blowing total profit topping $12 BN for the whole year, nearly four times their 2020 performance! Finally, Singapore-based PIL, on the brink of bankruptcy in 2020, said it would be able to complete its $1 BN debt restructuring by the end of 2021, well ahead of schedule and is now embarking on newbuilding projects.

Globally, Alphaliner estimates that the ten leading carriers reporting public results could be on track to log operating profits of $115-120 BN for 2021, more than six times the amount recorded in 2020.

Despite this rosy environment, most liner operators suffered from a severe shortage of charter ships throughout the year, preventing them from meeting their tonnage requirements or starting new services. This prompted a number of shipping lines to purchase vessels instead, in order to shelter from the charter market uncertainties. MSC raided the sale and purchase market, buying a whopping 140 ships over twelve months. CMA CGM was also busy adding around 50 ships to its own fleet. Other shipping lines such as Wan Hai or T.S. Lines were also particularly active on the acquisition front.

Carriers were also hit by soaring bunker prices throughout the year, as well as crippling congestion issues on the US West Coast, although some operators managed to minimize the impact on their businesses.

Freight forwarders and shippers take control of their shipments

Freight forwarders have been battling hard the entire year to find transport capacities for their shipper clients. Some of them, such as DKT Allseas, Ellerman, Transfar Logistics or RIF Line were forced on many occasions to hit the market and charter ships themselves, usually for a few months at a time, rather than entrust lines with their volumes as they would usually do. The lack of prompt

CONTAINERSHIPS
CHARTER MARKET

tonnage forced some freight forwarders to fix the few available ships at astronomical time charter rates going up to $200,000/day for 4,000 teu units, $150,000 for 3,000 teu vessels and $120,000 for 1,800 teu ships. Never had such charter rates been seen in the past,

However, the historically high level of spot container freight rates, with the Shanghai Containerized Freight Index (SCFI) smashing records throughout the year and reaching an all-time high at 5,046 points on 31 December, more than sixfold its December 2019 level, guaranteed voyage profitability. Shipping a 40' teu container from Shanghai to the US West Coast in December 2021 cost $7,600 versus $1,405 in December 2019. On the Asia-Europe trade, a 20' teu box cost $7,700 versus $760 two years earlier, a tenfold increase.

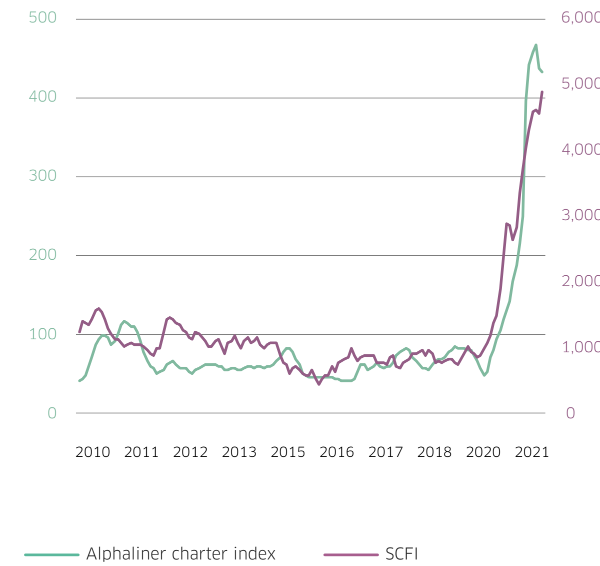
That being said, massive congestion issues, especially on the US West Coast saw charter costs spiral out of control, significantly denting voyage revenues.

Although freight forwarders did their best to secure transport capacity for their clients, some shippers lost patience and decided to take control of their shipments themselves in order to safeguard their supply. Big retail names such as IKEA, Amazon, Coca Cola, Walmart or Home Depot hit the market, trying to find carriage solutions directly with shipowners. Whilst very few of them chartered ships on their own, they entrusted their cargo volumes to non-liner shipping companies, most often multi-purpose or dry bulk operators. Amazon for example gave some cargo volumes to dry bulk operator G2Ocean, while Walmart had cargoes carried by forest product specialist Saga Welco AS.

Although these unusual shipment solutions have been of great help, 2021 will remain a painful year for shippers. Most had to face a shortage of transport capacities, prohibitive cargo rates and huge shipment delays caused by endemic port congestion issues, particularly on the US West Coast.

SCFI vs Alphaliner charter index 2010-2021

Comparative evolution of both indices



Why was demand so high in 2021?

The historic demand for container shipping in 2021 was caused by several factors. Firstly, the Covid pandemic saw consumers shifting their expenses from services to goods. Despite the lifting of lock downs around the world and a relative easing of travel restrictions, consumers have continued to buy goods in large quantities at the expense of services.

With most goods sourced from Asia, demand for container shipping went through the roof nearly overnight. Supply chains around the world could not cope with such exceptional volumes and started facing bottlenecks in various major places, both inland and in ports. In the US, the ports of Los Angeles and Long Beach, which account for 40% of all seaborne imports to the country faced severe congestion issues with, at some point, more than a hundred vessels waiting at anchor for an available berth. Port congestion quickly became a global issue with, at some point, 2.5 M teu of capacity estimated held up at ports around the world. This sizable removal of capacity from the market was the second major factor stimulating demand for container tonnage as carriers had to use charter vessels to cover positions unfilled by their own ships, or simply address the extra cargo demand.

Container operators: a lot of newcomers

The exceptional cargo demand throughout 2021 prompted a number of smaller regional container operators to foray into the highly profitable East-West trades. Among them were the Chinese regional carriers CULines, BAL Container Line and Shanghai Jin Jiang Shipping (SJJ) who started adhoc Asia-US West Coast, Asia-Europe, Asia-South America or Asia-Australia services, surfing on the highly remunerative freight rates and large volume overflows.

These carriers have however been badly hit by congestion issues on the US West Coast, with BAL having had a couple of ships waiting off Los Angeles/Long Beach in excess of two months before getting a berth for cargo discharge. With tonnage usually fixed at astronomical rates, accumulated charter costs have quickly spiraled out of control.

Congestion: a major headache for shipping lines

One of the most visible signs of the disrupted global supply chain was terminal congestion, which started affecting ports around the world in June. The US West Coast was hit the most with queues of ships gradually building up off Los Angeles and Long Beach during the second half of the year. In early December, in excess of 100 container vessels were waiting for a berth outside the twin US ports, with waiting times in some cases exceeding 18 weeks! The reasons behind this unprecedented bottleneck were numerous: exceptional high volumes of cargoes, a shortage of dockers, rigid working times on the docksides, a dearth of truck drivers and congested stacking areas. Meanwhile, ports in China also witnessed congestion, so did some ports on the US East Coast (notably Savannah) and in Europe. By early 2022, congestion in Los Angeles and Long Beach had barely eased, suggesting further months of troubles ahead for carriers.

The ill-timed grounding of the Ever Given

The much-publicized grounding of the giant container vessel Ever Given (20,388 teu) in the Suez Canal in March could not have happened at a worse time. The ship blocked the waterway with its bow and stern lodged into the canal's banks for a week, wreaking havoc on ocean liner schedules and led to a massive backlog of ships. It was estimated that 400 vessels of all types were blocked at the Canal entrances in the Mediterranean and Red Sea one week into the incident, among which numerous container vessels stuck with their cargoes on board. Despite the chaos, only twenty boxships were believed to have been re-routed via the Cape of Good Hope but the incident disrupted further the global supply chain which was already under severe pressure due to the high post-pandemic cargo demand.

Box spot rates and charter rates in synchronized rise

The synchronised rise of the SCFI and the Alphaliner Charter Rate Index (ACI) observed in the last quarter of 2020 continued throughout 2021.

However, whilst the ACI reached its historic peak in October at 467 points, the SCFI continued rising after a softening period, to reach an all-time high of 5,046 points on 31 December.

The Chinese export industry benefited from robust Covid pandemic-related demand, with shipments overseas in 2021 rising by about 30% compared with 2020. This extra flow of cargo pushed shipping rates to historical highs, with freight prices exacerbated by a shortage of ships and congestion issues around the globe.

Meanwhile, the ACI continuously smashed records during 2021, reflecting the uninterrupted rise of the charter market. From a low of 130 points at the beginning of 2021, the index reached a peak of 467 points in October, an all-time high. It then softened slightly before beginning to recover in the last days of the year.

Outlook for 2022

Although the container charter market started recovering in August 2020, as the world economy slowly exited Covid lockdowns, the real 'takeoff' only took place in 2021.

The first few months of 2021 saw charter rates initially rise at a brisk, but not exceptionally high pace. The market then abruptly picked up, with charter rates soaring exponentially from July onwards. With hot-boiling demand impacting all sizes of ships and supply getting increasingly thin, NOOs started obtaining rates for their ships that would have been unimaginable a few months earlier. Most fixtures were concluded for multi-year durations, typically up to 48 and 60 months for the larger vessels and 24 to 36 months for the smaller ones. A short-term market, for employments of typically 2-3 months also emerged in response to a strong demand for ad-hoc liner sailings.

Charter rates smashed records with every new fixture. Short duration deals in particular were concluded at historic, six-digit figures. The Alphaliner index meanwhile reached an all-time high in October at 467 points, up 259% from its January level, and a mind-blowing 567% higher than its June 2020 low, at the peak of the Covid pandemic. On average, charter rates for all sizes of ships increased three-to-fourfold between January and October 2021.

Short-lived softening

Despite a slight softening observed in the first weeks of November, the charter market has since rebounded. The outlook for 2022 remains bright for NOOs, as the market dynamics are unlikely to change in the coming months. Supply will be tight throughout 2022, especially for the larger units, as a substantial portion of the NOO fleet is now locked into long term charters extending well beyond 2022. In addition, the idle fleet remains low, with 42 ships for 150,000 teu commercially idle in early December, half of the January 2021 figure.

Picture: ***YARA BIRKELAND****, 120 teu, the world's first zero-emission container vessel. Photo: Yara International.*

Demand is expected to remain strong with a common view among the liner shipping operators that the current high cargo volume environment will continue until at least July 2022. Congestion issues around the world, which are unlikely to ease in the foreseeable future, will also contribute to supporting demand in the short term.

However, the second half of 2022 appears more uncertain while 2023 could be a very different year, with a raft of newbuilding container vessels due for delivery that could destabilize the market.

VLCS 7,500-11,000 teu

2021 review

The 'handy' VLCS segment (7,500-11,000 teu) was in high demand throughout the year. However, the dearth of prompt tonnage considerably restricted the volume of activity, with charterers forced to consider forward positions into 2022 to cover their needs. Charter rates have been on an uninterrupted rising trend, with 8,500 teu vessels starting off the year at $38,500 and reaching nearly $58,000 by August for 36 months charters. The length of period employments meanwhile gradually increased from 38 to 48, and then 60 months. In September a pair of 9,400 teu 'Bosphorus Max' units were fixed for 60 months at $65,000/day, a new high. A short-term, high-priced, market also developed, which saw a 10,000 teu unit obtaining a healthy $126,000 for 12 months, while an 8,800 teu unit fetched $180,000 for a six-months employment.

2022 outlook

Prospects for NOOs remain strong for 2022, as supply is expected to remain limited throughout the year. Meanwhile, as of 31 December, the orderbook stands empty.

A possible slow-down in demand from the second half of 2022 onwards is not expected to materially impact this segment, which remains in short supply and continues to be popular among carriers. However, with the market increasingly biased towards slightly smaller 7,000 teu units, or larger ones of 12,000 teu and above, the longer-term prospects of these 'in between' sizes appear unclear. The versatility of 7,500-11,00 teu ships, which allows their deployment on multiple long-haul or regional trade routes is certainly an asset, but the economies of scale obtained with larger units, especially where the volumes remain available, or the savings achieved by slightly smaller but more efficient vessels, could undermine their economics. That could explain, in part, the current lack of newbuilding projects.

LCS 5,300-7,499 teu

2021 review

The LCS segment (5,300-7,499 teu) was equally in high demand throughout 2021, but the scarcity of prompt tonnage significantly limited the volume of activity. Meanwhile, charter rates more than doubled over January to October, rising from $29,000 to $62,500 for standard 5,500 teu units, depending on the period fixed. Modern wide-beam tonnage enjoyed the same bonanza with rates soaring from $29,000 to $69,000 depending on the durations agreed. There were also a number of short charters, some of which were concluded in excess of $100,000/day.

2022 outlook

This segment went through a slight softening in November which coincided with the end of the peak cargo season. However, this was short-lived, with the market having since rebounded. Prospects for 2022 remain strong for NOOs as the availability of ships will remain low throughout the year. The orderbook, although consisting of 86 ships, is not an issue for now, since only ten units are currently believed to be uncommitted, and most vessels will only hit the water in 2023-24.

Meanwhile, a potential slowdown in demand in the second half of the year is not expected to heavily impact this segment, considering the persistent supply issues and the continued interest of charterers for this size of ships.

Of note, a highlight of the year was a wave of orders for a new family of compact, wide beam, 7,000 teu vessels, with 52 orders placed to date, according to Alphaliner data. These ships, most of which already have assignments in place, will contribute to the rejuvenation of this segment and could become the new 'workhorses' of the charter market in this size range.

Classic Panamax 4,000-5,299 teu

2021 review

Classic Panamaxes (4,000-5,299 teu) remained highly popular with charterers in 2021, with demand showing no signs of weakening throughout the year, while prompt ships were largely sold out. Charter rates more than doubled in the first six months, rising from $22,000/day for 24 months deals in January to low-$50,000/day for 36 months fixtures in August.

From June, 60-month fixtures became common, while a spot short-term market appeared, with rates reaching six-digit levels for charters of up to six months' duration. Some fixtures saw stratospheric prices being agreed such as the $200,000/day obtained by the 4,253 teu Synergy Oakland for a 60-80 day employment, an all-time record.

2022 outlook

Once considered obsolete further to the opening-up of larger locks at the Panama Canal, Classic Panamaxes have undergone a remarkable renaissance in recent times, having found a new lease of life on several North-South routes as well as on regional trades, particularly in Asia. We believe this class of ships will remain in high demand in 2022, especially in the first half of the year. Meanwhile, charter rates are expected to stay at historical highs but might soften in the later part of the year as supply rises. The orderbook is nearly empty, with only 18 ships of 4,600 teu on order for a Chinese owner, that are not expected to be traded on the charter market.

Over the longer term, Classic Panamaxes will increasingly face competition from new families of 5,000, 6,000 and 7,000 teu compact fuel-efficient newbuildings that might prove more cost-efficient to operate on high-volume routes.

3,000-3,500 teu

2021 review

The 3,000-3,500 teu niche segment is popular with charterers, who particularly value this size of ships for some specific North-South and regional trade routes. 2021 was no exception with continuous demand for such tonnage, but very few ships available for charter. The short supply of tonnage pushed charter rates to record highs, with standard 3,500 teu units fixable in August at $45,000/day for 36-months charters, up from $20,000/day at the beginning of the year. A short-term market meanwhile appeared in June, with sky-high, six-digit, rate levels being commonly agreed. Illustrating this was the fixture of the 3,091 teu MINNA for a five-month employment at a mid-blowing $150,000/day.

2022 outlook

Vessels of 3,000-3,500 teu are expected to remain in high demand in 2022, but the short supply of tonnage will limit the fixing possibilities for charterers, at least in the first half of the year. These ships are relatively insulated from any potential downturn as they are usually chosen for deployment on specific routes. As such, charter rates should remain high, albeit possibly softening in the second half of the year as supply rises. The orderbook, which currently consists of 67 vessels is meantime of little concern, since the dozen ships due for delivery in 2022 all already have employment in place. However, this might result in some charter market tonnage being displaced and redelivered to their NOOs.

2,700-2,900 teu

2021 review

The 2,700-2,900 teu segment performed very well in 2021, with demand consistently outstripping supply. This caused charter rates for standard tonnage ('Mipo 2800' – 'Aker CS 2700') to double from $19,000/day at the start of the year to $40,000/day in October, for charter employments of 36 months. Fuel-efficient 'Chittagong Max' tonnage recorded even higher figures, with one 2,756 teu 'MARIC 2700' unit obtaining in October a very healthy $54,000/day for a 30-month charter. Meanwhile a short-term charter market appeared in June, with several vessels fixed at historic six-digit figures in the $100-150,000/day range.

2022 outlook

Although this segment witnessed a softening in November, especially for short charters where rates have decreased significantly, prospects for 2022 remain bright for NOOs. Demand is expected to remain high, especially in Intra Asia where this size of ship is particularly popular. Supply meanwhile will remain low, especially in the first half of the year. The orderbook is of no concern, consisting of only twenty ships, of which four will be delivered in 2022.

2,000-2,699 teu

2021 review

2021 was the best on record for 2,000-2,699 teu vessels, which enjoyed historically strong demand. Supply was thin on the ground during the whole year, which pushed charter rates to unprecedented highs. Standard 2,500 teu vessels saw rates skyrocket from $17,000/day in January to $35,000/day by September. Fuel-efficient ships saw even higher figures, with one 2,190 teu 'SDARI 2100' type obtaining a staggering $80,000/day for a 12-month employment. Meanwhile, a short-term charter market appeared in June with rates reaching stratospheric levels of $100-150,000/day for periods of 3-5 months.

2022 outlook

The outlook for these sizes is generally good although a number of charterers seem to prefer the slightly larger 2,800 teu units or the smaller 1,700 teu ships. Irrespective of this, the continued short supply and strong demand should maintain charter rates at high levels in the first half of 2022, whilst prospects for the later part of the year are more uncertain. The orderbook currently consists of 85 ships, 30 of which will be delivered in 2022. Although all these ships already have employment in place, their introduction might be at the expense of some NOO tonnage.

1,500-1,999 teu

2021 review

Tonnage of 1,500-1,999 teu was in high demand throughout the year, making this segment one of the busiest. The continued shortage of ships supported a strong rise in charter rates, which benefitted both 'standard' and 'Bangkokmax' units. The former started off 2021 at $13,000/day for 12-months employments and peaked at $44,000/day in November. Periods of 36 months, which became increasingly common from the second half of the year, were meanwhile agreed at $30,000/day. Bangkokmax tonnage saw an equally bullish rally, with rates soaring from $17,000/day at the beginning of the year for a 12-month employment, to $35,000/day in August for 36-month charters.

Meanwhile, a short-term market supported by freight forwarders developed from June, with six-digit charter rates of up to $120,000/day paid for employments of typically 3-5 months.

2022 outlook

Demand prospects for 2022 remain strong for 1,500-1,999 teu tonnage, especially in Asia which will remain the leading market for these sizes. Bangkokmax tonnage remains extremely popular and will continue to be in high demand. The orderbook is nevertheless threatening the supply/demand balance, with a total of 102 ships currently on order, including 50 for delivery in 2022, of which fifteen are believed to be charter-free. Although the majority of vessels on order are for the account of liner operators, there will be an inevitable knock-on effect on NOO tonnage, with several vessels expected to lose their employment and return to the charter market.

1,250-1,499 teu

2021 review

Finding a ship in this segment was a challenge in 2021, considering the short supply of tonnage and the continued popularity of these sizes. The supply squeeze supported a fast rise in charter rates. Illustrating this, the 1,296 teu, high-reefer 'CV Neptun 1200' type saw their rates rise from $11,500/day at the beginning of the year for a 12-month employment to $26,500/day for a 36-month charter in the autumn.

2022 outlook

This niche segment is expected to enjoy continuously bullish conditions in 2022. This size of ships is particularly popular on certain trade routes (Americas, Caribbean, Southeast Asia) while some designs such as the 1,296 teu 'CV Neptun 1200' type are much sought after for their high-reefer intake. There is very little fleet replacement currently underway for this segment with only ten vessels of

1,380-1,400 teu on order. Only four of these vessels, whose deliveries are slated for 2023-24 are believed to be charter-free.

1,000-1,249 teu

2021 review

After many dull years, the 1,000-1,249 teu segment enjoyed an unprecedented recovery in 2021 with rates hitting historic highs. Against the background of strong demand and tight supply throughout the year, charter rates more than trebled for the standard, 1,118 teu 'CV 1100' type, rising from $9,500/day in January to $35,000/day in July for a typical 12-month charter. Besides, as the year went by, NOOs were able to obtain increasingly long employments of up to 36 months for which the 'CV 1100' type obtained rates as high as low-mid $20,000/day.

Fuel-efficient tonnage such as the 1,043 teu 'Dae Sun 1000' type experienced the same rally, with rates starting off the year at $11,000/day and peaking at $29,000 for 24-month charters and $35,000 for shorter employments.

2022 outlook

Despite a softening in November, which saw 12-month charter rates for 'CV 1100' tonnage falling to $26,000/day, the segment has rebounded somewhat, but has yet to recover its peak conditions of July and August.

Demand prospects are generally good for the coming months especially in Asia where this type of ship remains popular with many regional carriers including SITC, TS Lines or Sinokor. Meanwhile, supply is expected to remain tight, especially in the first half of 2022. The orderbook, which currently stands at 52 vessels, will see 21 units hit the market in 2022. Although most of this tonnage already has an assignment in place, their introduction will inevitably displace other ships, including NOO tonnage.

Sub-1,000 teu

2021 review

The sub-1,000 teu market smashed all records in 2021, with the highest charter rates and longest period employments ever seen for these sizes. This bonanza ended years of misery for NOOs, that were characterized by rock-bottom, OPEX-level, charter rates and short employments. The high demand and continued shortage of ships has pushed charter rates to ever higher levels. Illustrating this, the 868 teu 'Sietas Type 168' class saw its rates skyrocket from $9,500/day for a typical 12 month charter at the beginning of the year to $30,000/day at its peak in July. The duration of employments increased steadily throughout the year, with several vessels securing charters of 36 months, a particularly long duration for these sizes. Slightly smaller vessels of 700 teu have also enjoyed extraordinary conditions with charter rates peaking at $25,000/day, for a 6-month charter.

2022 outlook

The continued shortage of tonnage will support high charter earnings in the first half of 2022. Demand should remain good, although the prospects for the second half of 2022 are less clear. The orderbook is nearly empty with only nine cellular container vessels of 300-650 teu on order for Asian owners, and due for delivery in 2022. The longer-term outlook for this segment is uncertain. The lack of new orders is threatening the renewal of the fleet, which has now an average age of 16 years.

Picture: ***VUOKSI MAERSK****. Photo: CH. Mercier.*

Alphaliner - Cellular fleet as of 31st December 2021

- **The cellular fleet counts 5,515 ships of 24.97 million teu - of which 49.4% is chartered from non-operating owners**
- **The cellular fleet represents 98.6% of the total capacity deployed on liner trades in teu terms**
  > Total capacity active on the liner trades is 6,314 ships of 25.34 million teu and 303.8 million dwt
- **The orderbook counts 718 ships of 5.81 million teu representing 23.3% of the existing fleet (firm orders only)**
- **The orderbook includes 316 ships for 2.82 million teu with charter status representing 48.5% of the total orderbook**

31st December 2021 - Existing						31st December 2021 - Orderbook					
Size ranges	All		Of which chartered from NOO			All		Of which chartered from NOO			
teu	ships	teu	ships	teu	% Cht	ships	teu	ships	teu	% Cht	O / E
18,000-24,000	146	3,044,783	51	1,054,810	34.6%	52	1,233,320	16	384,928	31.2%	**40.5%**
15,200-17,999	58	954,669	10	165,977	17.4%	79	1,240,502	46	719,424	58,0%	**129.9%**
12,500-15,199	269	3,712,464	153	2,114,328	57.0%	122	1,740,800	63	920,760	52.9%	**46.9%**
10,000-12,499	190	2,071,533	123	1,326,251	64.0%	17	202,550	15	178,830	88.3%	**9.8%**
7,500-9,999	478	4,231,600	238	2,122,206	50.2%	0	0	0	0		**0%**
5,100-7,499	438	2,731,759	226	1,399,253	51.2%	88	577,565	54	352,765	61.1%	**21.1%**
4,000-5,099	625	2,832,567	307	1,380,079	48.7%	18	83,052	0	0		**2.9%**
3,000-3,999	261	906,282	153	535,203	59.1%	69	222,306	17	59,274	26.7%	**24.5%**
2,000-2,999	756	1,927,376	386	980,256	50.9%	101	250,805	36	93,072	37.1%	**13,0%**
1,500-1,999	644	1,115,334	302	530,702	47.6%	104	192,476	48	87,590	45.5%	**17.3%**
1,000-1,499	712	818,018	366	431,816	52.8%	57	65,059	18	21,577	33.2%	**8,0%**
500-999	765	566,760	376	288,844	51.0%	6	4,275	1	670	15.7%	**0.8%**
100-499	173	56,877	52	17 729	31.2%	5	1,370	2	420	30.7%	**2.4%**
Total	**5,515**	**24,970,022**	**2,743**	**12,347,454**	**49.4%**	**718**	**5,814,080**	**316**	**2,819,310**	**48.5%**	**23.3%**

Note: *The existing chartered fleet takes into account ships chartered out by non-operating owners to operators, thus it does not take into account 233 ships for 519,696 teu which are normally owned by an owner-operator but chartered out to another operator, either for operational reasons (operational exchanges within alliances or partnerships) or because they are surplus to their owners' requirements.*

Alphaliner Top 25 Operators as of 31st December 2021

		Total existing		Orderbook	
#	Operator	teu	ships	teu	ships
1	**APM-Maersk**	4,281,100	737	255,100	25
2	**Mediterranean Shg Co**	4,276,918	642	999,808	60
3	**CMA CGM Group**	3,167,922	567	491,657	54
4	**COSCO Group**	2,934,447	480	585,272	32
5	**Hapag-Lloyd**	1,751,027	253	415,120	22
6	**ONE (Ocean Network Express)**	1,542,261	210	321,692	24
7	**Evergreen Line**	1,477,644	204	607,406	67
8	**HMM Co Ltd**	819,790	75	161,088	12
9	**Yang Ming Marine Transport Corp.**	662,047	90	59,300	5
10	**Wan Hai Lines**	419,559	147	251,368	41
11	**Zim**	413,862	109	310,520	33
12	**PIL (Pacific Int. Line)**	266,667	83		
13	**KMTC**	161,248	69		

		Total existing		Orderbook	
#	Operator	teu	ships	teu	ships
14	**IRISL Group**	150,040	33		
15	**UniFeeder**	143,705	97		
16	**SITC**	142,602	95	67,958	36
17	**X-Press Feeders Group**	140,709	91	65,360	16
18	**Zhonggu Logistics Corp.**	124,621	100	83,052	18
19	**TS Lines**	105,653	51	108,768	30
20	**Sinokor**	105,394	74	33,587	17
21	**Antong Holdings (QASC)**	95,343	97	4,888	2
22	**China United Lines**	87,158	35	12,444	6
23	**RCL (Regional Container L.)**	79,904	39		
24	**Sea Lead Shipping**	70,954	21		
25	**SM Line Corp.**	70,594	14		

FLEET AND ORDERBOOK

As of 1 January 2022, the world cellular containership fleet stood at 5,515 ships, totaling 24.9 M teu. The fleet grew by 1 M teu compared with 1 January 2021, as 141 new ships hit the water, **including the 23,992 teu EVER ACE, which set a new size record**.

Scrapping meanwhile stood at historic lows, with only nineteen ships totaling 16,500 teu sold for recycling. Despite attractive demolition prices hitting $650/ldt on the Indian Sub-Continent and $350/ldt in Turkey, owners had little incentive to get rid of their ships in 2021, considering the massive profits they could achieve by trading their vessels in a historically strong charter market. 2022 will see the fleet growing at a similar pace to 2021 with just over 1 M teu expected to be delivered. Based on the expectation that the charter market will remain strong for a good part of the year, scrapping will meanwhile remain low, with only 60,000 teu projected to reach the beaches. However, 2023 could be different, with a spate of new building deliveries expected to push a greater number of older and smaller ships to the recycling yards.

Alphaliner - 2020-2021 - Cellular ships - Essential figures

	Ships	TEU	% Change YoY
Fleet as at 31 Dec 2021	**5,515**	**24,970,022**	**4.49%**
Orderbook as at 31 Dec 2021	**718**	**5,814,080**	**121.7%**
Orderbook as % of fleet		23.3%	
2021 - Containerships activity			
Ordered 2021	**556**	**4,249,796**	**306.3%**
Value of new orders (Est.)			
Delivered 2021	**153**	**1,075,290**	**25.7%**
Deleted 2021	**19**	**16,521**	**-91.9%**
Breakdown			
Scrapped	*18*	*13,778*	*-93%*
De-celled			
Lost	*1*	*2,743*	*14.5.3%*
Average idle fleet 2021		**606,410**	**-58.1%**
Idle fleet at end Dec	*165*	*564,021*	*-42.1%*
Idle fleet at end Dec		-	-
excl. scrubber idlings	-	-	-
Average SCFI 2021		**3,785**	**201.8%**
SCFI end Dec		*5,047*	*81.4%*
Av. Alphaliner charter index 2021		**310.1**	**306.4%**
Index at end Dec		*432.8*	*268.7%*
Average FO $/ton 2021 (Rtm/Sin)		**410**	**57.1%**
FO $/ton end Dec		*424*	*34.1%*
Average VLSFO $/ton 2021 (Rtm/Sin)		**527**	**50.6%**
VLSFO $/ton end Dec		*577*	*43.5%*

	Ships	TEU
Fleet as at 31 Dec 2020	**5,374**	**23,896,688**
Orderbook as at 31 Dec 2020	**313**	**2,622,359**
Orderbook as % of fleet	11.0%	
2020 - Containerships activity		
Ordered 2020	**100**	**1,045,838**
Value of new orders (Est.)		
Delivered 2020	**135**	**855,675**
Deleted 2020	**101**	**205,447**
Breakdown		
Scrapped	*89*	*197,743*
De-celled	*11*	*6,586*
Lost	*1*	*1,118*
Average idle fleet 2020		**1,449,243**
Idle fleet at end Dec		*975,014*
Idle fleet at end Dec	*83*	*352,817*
excl. scrubber idlings	*76*	*261,455*
Average SCFI 2020		**1,254**
SCFI end Dec		*2,783*
Av. Alphaliner charter index 2020		**76.3**
Index at end Dec		*117.4*
Average FO $/ton 2020 (Rtm/Sin)		**261**
FO $/ton end Dec		*316*
Average VLSFO $/ton 2020 (Rtm/Sin)		**350**
VLSFO $/ton end Dec		*402*

*Picture: **HMM DUBLIN**. Photo: Piet Sinke, www.maasmondmaritime.com.*

Historic ordering in 2021

Newbuilding orders placed in 2021 were, in capacity terms, their highest ever, totaling 556 vessels for 4.2 M teu. Never had so much capacity been ordered in such a short time frame, especially as regards large tonnage. Among the ships ordered in 2021 were sixteen units of 23-24,000 teu and a staggering 126 ships of 15-16,000 teu. There were also sixty orders for a new class of compact vessels of 7,000 teu and a spate of orders of Intra-Asia tonnage from 1,800 to 3,000 teu.

The total orderbook now stands at 5.8M teu for 718 ships, versus 2.6M teu and 313 ships on 1 January 2021, with an orderbook-to-fleet ratio of 23.3% versus only 11% one year ago.

En route to decarbonization

Throughout 2021, NOOs and liner shipping companies have continued to actively develop solutions to meet future decarbonization targets. Among the significant developments, German NOO Asiatic Lloyd placed an order for two 'ammonia ready' ships of 7,100 teu, the first of their type. Meanwhile Maersk ordered eight ships of 16,000 teu that will run on green methanol. MSC has also been active by increasingly switching to LNG for its newbuildings. It also purchased air lubrication devices for 30 vessels in a bid to cut fuel costs and reduce carbon emissions by 1.6 M tons. Finally, the world's first zero-emission, electrically powered container vessel, the Yara Birkeland (120 teu) carried out its maiden voyage in November while several carriers successfully completed marine biofuel trials.

SECOND HAND MARKET

Container Bonanza ...at last !!

A new record year

In 2021, we count more than twice as many transactions as in the previous record year 2004 (265 ships / 500,145 teu in total).

What we called in last year's *Review* a 'strong recovery' turned into a booming market.

We have read headlines such as, Sky is the limit,...

Soaring container ship demand for was fueled by various events, notably significant port congestion. We entered the 2nd year of the pandemic which drove a significative increase in container volumes. Indeed, this was driven by a change in consumer spending from services to goods. Furthermore, there was also the grounding of the Ever Given (20,124 teu) in the Suez Canal, which was followed by the closing of Yantian Port in early June.

All these events led to incredible charter rates and consequently raised second- hand prices. What was a blessing for the shipowner/ operator turned into a nightmare for the one sitting on the other end of the logistics chain as the shipper had to face incredible box rates.

The lack of container tonnage also resulted in creative solutions. We saw purchases of Handysize bulkers (open hatch box shaped), or MPPs, which are today employed in pure container trades.

The transaction outlook in 2022 is comparably low and should consequently come with higher prices. At the time of writing, Alphaliner anticipated only 550 ships becoming open during 2022.

If container freight rates on some routes remain at levels around $8,000/teu, second-hand prices are likely to strengthen further. To say it with different words, as long as these top prices pay off within less than a year, one can accept another hot year and top second-hand prices.

A very interesting question, to which we may see some answers this year is:

Will some of this freshly made money be re-invested into innovative projects? Particularly the container segment requires actions regarding their CO_2 emissions.

2020 Key numbers

Average age of units sold: 15.32 years

At the end of 2021 we count 553 Container ship sales with a total capacity of 1,891,594 teu. The 553 ships represent 7.5% of the total container fleet. The overall transaction rate of concluded sales more than doubled during the past year. (2020: 254 / 940,207 teu)

That was to be expected, only 17 ships (cellular ships) with a total capacity of 14,932 teu have been sold for recycling. At the end of 2021, 0.06% of the global teu capacity have been sold for demolition.

The average demolition age further increased by almost 4 years to 28.5 years. (2020: 24.8 years)

Picture: MSC DIANA*. Photo: Piet Sinke, www.maasmondmaritime.com.*

A peek at the top operators second-hand appetite.

	Operator	Units	Average Size / Age
1	**MSC**	125 units Q4:19 | Q3:48 | Q2:42 | Q1:16	3,500 teu / 17.8 years
2	**CMA CGM**	47 units Q4:17 | Q3:13 | Q2:14 | Q1:3	3,200 teu / 14.5 years
3	**Maersk**	10 units Q4: 4 | Q3:2 | Q2:4 | Q1:0	4,500 teu / 11.9 years
4	**COSCO**	0 units	
5	**Hapag Lloyd**	10 units Q4:0 | Q3:3 | Q2:2 | Q1:5	8,800 teu / 5.7 years
11	**Wan Hai Lines**	14 units (from 1,700-13,000 teu) Q4:3 | Q3:1 | Q2:4 | Q1:6	6,300 teu / 8.3 years

It is no surprise that once more, and by far, MSC takes first place. By end-2021 we aggregated under their name the incredible number of an additional 438,316 teu (23% of total teu sold in 2021).

We note that Wan Hai Line remained active and continued to quietly add 90,316 teu to their fleet (8 units in 2020). During the second half of the year Wan Hai also started to purchase Feeder ships in the famous size of 1,700 teu.

Traditional tonnage providers have become more active.

A peek at the tonnage provider

	Operator	Units	Average Size / Age
1	**Global Ship Lease**	23 units	4,200 teu / 14.9 years
2	**Conbulk**	15 units	2,000 teu / 18.3 years
3	**Costamare**	13 units	7,600 teu / 12.5 years
4	**Sea Consortium**	11 units	2,200 teu / 10 years
5	**OM Maritime**	10 units	5,100 teu / 14.9 years

We note that OM Maritime acquired 14 units over the past 2 years, a total of 71,384 teu. Their first second-hand deal dates to 4Q20. Since when they have been adding on average 3.5 ships every three months. The 14 ships represent an average size / age of 5,000 teu / 14.8 years. With the additional 10 ships acquired in 2021, they have even made their way up to become the fifth most active global tonnage provider over the past year.

Top three sellers by units

	Operator	Units	Average Size / Age
1	**Borealis Maritime**	26 units	2,700 teu / 14.2 years
		71,017 teu total	
2	**Lomar**	24 units	2,900 teu / 14.0 years
		69,881 teu total	
3	**SFL Corporation**	16 units	2,800 teu / 25.9 years
		45,540 teu total	

A look at the global list of sellers draws an obvious picture. So-called asset players took advantage of the extremely good market to cash in.

Followed by the top three, are a couple of German companies who have sold quite some tonnage across the year. Notably, we have linked 203 sales to companies based in, or in very close connection, to Germany. At the end of 2021 we count a total of 571,756 teu sold.

Never had so much capacity been ordered in such a short time frame

Picture: REN JIAN 23*, 4,275 teu,chartered by Chinese carrier CULines for their new Asia-Europe AEX service'. Photo: Dick Nootenboom.*

Analysis of 2021 transactions by size

Containers in short supply

Size	N° of transactions 2021 vs 2020	Variation
>10,000 teu	24 vs 11	+118%
Over Panamax	77 vs 60	+28%
3,000 – 5,100 teu	126 vs 42	+200%
2,000 – 3,000 teu	108 vs 29	+272%
900 – 2,000 teu	180 vs 77	+133%
< 900 teu	40 vs 35	+14%

Ships over 10,000 teu: 22 Sales (11 in 2020)

Average age of units sold: 3.4 years. Total teu capacity: 281,925.

After a not-so-active year in 2020, the number of transactions doubled. End of 2021, this segment was back at levels we have seen in 2019 (22 sales). Most activity happened during Q2 and Q3. The beginning and the end of the year was comparably calm. Seaspan slowed down on second-hand deals and only purchased 2 units compared with 8 units in 2020. The focus for them in 2021 was clearly set on placing newbuilding orders.

Out of the total of 22 ships, there are 6 units who will only be delivered to their new owners in in 2023-24. Another 5 units will be handed over in 2022.

Top three sellers and buyers per unit.

1. Capital Ship Management 7 units / Costamare | Hapag Lloyd 5 units
2. York Capital 5 units / Wan Hai Line 4 units
3. Enesel SA 3 units / SFL | Seaspan | RCL / 2 units

Unit breakdown per quarter

Q1: 2 I Q2: 11 I Q3: 8 I Q4: 1

The transaction outlook in 2022 is comparably low and should consequently come with higher prices

Over-Panamax: 77 sales (60 in 2020)

Average age of units sold: 15.1 years. Total teu capacity: 532,185.

The first 3 quarters were balanced with an average of 23 deals. Whereas in Q4, we have seen not even one third of the activity. Compared with the other segments, the transaction rate was low (23%).

In addition to the usual suspects, we have seen a youngster - OM Maritime who were very active. In total they purchased 5 units. One can even say they have bought themselves into this segment by paying top prices. In Q3 OM acquired from Cape Shipping the Cape Chronos IMO: 9719862, 2015 built, Hanjin 6900 design, for a price of $135 million.

Top three sellers and buyers per unit

1. Zeaborn Group 11 units / MSC 16 units
2. International Maritime Enterprises 9 units / Global Ship Lease 11 units
3. Zodiac 6 units / Danaos 6 units

Unit breakdown per quarter

Q1: 22 I Q2: 20 I Q3: 28 I Q4: 7

3,000-5,100 teu: 126 sales (42in 2020)

Average age of units sold: 15.1 years. Total teu capacity: 524,396.

This segment was extremely in-demand. Compared with last year, the transaction rate increased by over 200%. The number of sales remained balanced over the months. We counted an average amount of 31.5 units sold per quarter. We noticed increasing demand which naturally transferred into increasing prices. This is illustrated by the below example.

The 2007 built Hanjin 3.400 named Sphene (IMO:9333058), sold in February from Schulte Group to Taskos for the price of $13 million. Only 5 months later the new owners flipped the ship and sold her to Blues Star Group at the reported price of $39 million, an increase of 200%!

Another notable sale was that of the 2x wide beam blt'14 & 15 - Neptun 4800 - Design built in Zheijang Ouhua from Sea Consortium to MSC, reported in November for $105 million each. This was the highest price paid on a per teu basis over the entire year.

Below, to demonstrate that the availability of tonnage was an important benchmark and had quite some impact on the price, we compared two similar ships in size and interestingly note that the second-Hand price exceeded the newbuilding price.

Second-hand price per teu $21,500 vs newbuilding $11,800 per teu.

The extraordinary price development shown in the below example of a 10-year-old 4.500 teu unit.

Top three sellers and buyers per unit

1. SFL Corporation 9 units / MSC 36 units
2. Borealis 8 units / CMA CGM 15 units
3. Apollo | Asiatic LLoyd 6 units / Capital Ship Management 6 units

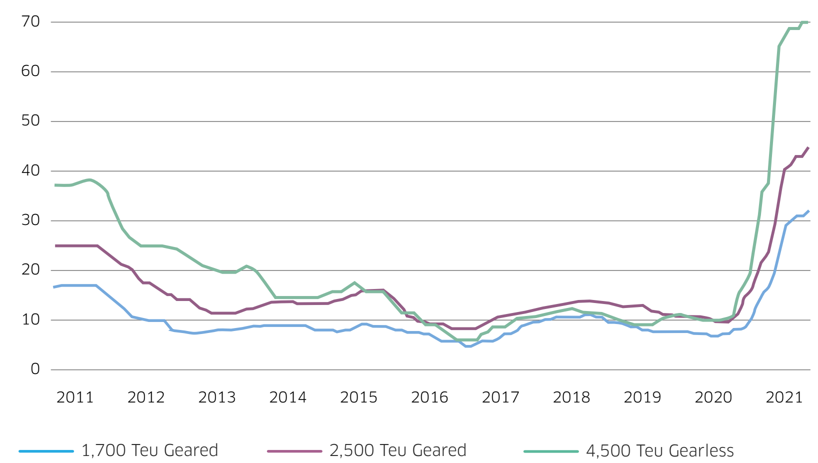
Unit breakdown per quarter

Q1: 35 I Q2: 37 I Q3: 34 I Q4: 20

Picture: SYNERGY OAKLAND, 4,253 teu, chartered in September 2021 for a 2-3 month employment at $200,000 per day, an all-time record. Photo: Euroseas.

Price development over the past 10 years

Million $



2,000-3,000 teu: 29 sales 108 sales (29 in 2020)

Average age of units sold: 15.7 years. Total teu capacity: 279,270.

With 108 concluded sales, this segment continued its upward trend and closed the year with the highest increase of transaction rate (+272%) we have seen over the recent past. Activity remained high throughout the year and peaked in Q2 with 45 sales. This is almost double the amount of transaction we counted for the entirety of 2020.

The oldest ship sold for further trading in this category was the 1994-in-Spain-built MSC NILGUN - 2,394 teu. It should be mentioned that the ship was controlled by MSC previously, and the purchase can be viewed as a buyout from the existing financing structure.

Units of the Hyundai 2.800 design saw ownerships change 14 times over the past year. In total, 53 ships of this design were built during the years 2002-08.

Top three sellers and buyers per unit

1. Lomar Corp. 12 units / MSC 36 units
2. Borealis 11 units / CMA CGM 11 units
3. Klaveness 6 units / Global Ship Lease 6 units

Unit breakdown per quarter

Q1: 19 I Q2: 45 I Q3: 23 I Q4: 20

900-2,000 teu: 180 sales (77 in 2020)

Average age of units sold: 15.7 years. Total teu capacity: 246,388.

The year started with a rush of activity during Q1 when 58 units were sold. The activity remained strong during Q2 and Q3 while lost some slight momentum during Q4. In terms of reported sales this segment finished the year as the most active.

We have been pinning one interesting deal where a 2005-built Dae Sun 960 was flipped within a couple of months of purchase. Rather uncommon in more normal markets but unsurprising in these times of promising profits. Veritas Shipmanagement bought the 2005-built Dae Sun 960 (IMO: 9332717) now named Fesco Yanian in April for the price of $8.5 million. Only four months later they resold her at a premium of $6 million to Fresco. The deal was reported in August at the price of $14.5 million)

At the end of November and beginning of December we noticed a first very slight softening in this smaller segment but at the time of writing, prices have been firming up again.

Top three sellers and buyers per unit

1. Vega 10 units / MSC 36 units
2. Borealis 7 units / CMA CGM 17 units
3. Lomar 6 units / Conbulk 10 units

Unit breakdown per quarter

Q1: 58 I Q2: 45 I Q3: 48 I Q4: 29

900 teu and less: 40 sales (35 in 2020)

Average age of units sold: 18.9 years. Total teu capacity: 27,430.

Sales activity remained consistent with 2020 last year with an average of 10 transactions per quarter. Despite the rising charter market, there was no significant increase in sales. The number of sales in 2019 (43 units) has not been beaten even in this otherwise-record year.

One obvious reason for this is that the fleet continues to age. Despite the increasing demand for tonnage in this segment, we saw only 2 newbuilding orders reported in 2021.

Top three sellers and buyers per unit

1. Heung-A 3 units / Doehle 3 units
2. JR Shipping 3 units / Langh Ship 3 units
3. Harren & Partners |Qingdao Pengteng 2 units / Transworld | HS Schiffhart 2 units

Unit breakdown per quarter

Q1: 12 I Q2: 22 I Q3: 10 I Q4: 7