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**To : The President of the Stock Exchange of Thailand**

**Subject : Submitting the Annual Review 2012 of Precious Shipping Public Company Limited**

## **ANNUAL REVIEW**

**Bloody Red:** Ren Yuan Lin, the CEO of Yangzijiang Shipbuilding in China, mentioned in an interview that 2011 was black, 2012 was grey but 2013 would be bloody red for shipbuilding. 2012 began with the 78 year old Sanko Steamship filing for protection under US Chapter 11 for the second time in its history. This was followed in the middle of the year by the bankruptcy of 283 year old Stephenson Clarke, the oldest shipping company in existence. Overseas Shipholding Group, a 1948 startup, embraced Chapter 11 towards the end of the year. We are afraid that these are not good omens for 2013 which will be characterized by continued bankruptcies; bank repossessions; and older ships being valued at scrap. Bloody Red 2013 could be an apt description for almost the entire Maritime world. Large scale scrapping of ships over 15 years of age will be the only solution that will bring back a cyclical recovery.

**Shipping banks** have contributed to the current debacle with 'easy loans', during the boom years prior to and including 2008, allowing ship owners to over-order/buy ships with little equity and no forward contract coverage. Banks are now struggling to extricate themselves from these 'easy-loans-now-turned-bad' as asset values decline. The banks have managed this by following a strategy of 'amend, pretend and extend' applied to 'easy-loans-now-turned-bad' rather than face the music. Restructuring, inside or outside the bankruptcy courts, has happened in a few cases and others are in negotiation. But with banks converting debt to equity, shipping companies will be owned by banks without any reduction in the overall supply of ships, prolonging the recession. Ship finance is, therefore, not going to get any easier. The case of Omega Navigation Enterprise (ONE), details of which have been obtained from various publicly available news articles/analysts reports, is instructive on this point. ONE was established in 2005; went public via an IPO on NASDAQ in April 2006 raising USD 147.83 million; filed for Chapter 11 in June

2011 with assets valued at USD 390 million; and after 18 painfully long months converted to a Chapter 7 liquidation case. ONE had borrowed USD 243 million from HSH, a leading Ship lending bank, against a mortgage on their ships; about USD 43 million under a second mortgage on the same ships from BTMU and NIBC Bank; and had some unsecured creditors. Under Chapter 7, HSH will get the ships that were mortgaged to them currently valued at around USD 180 million; HSH will shell out a further USD 10 million to cover outstanding legal fees and other expenses at ONE during Chapter 11; BTMU and NIBC Bank will get nothing; all three banks will not have recovered any interest since 2011; and the unsecured creditors will get USD 500,000. With such losses being typical, ship lending banks will be loath to lend any more funds to our industry. The lack of current/future bank finance and absence of new equity sources will help to stabilize the markets, but the economic outlook for world trade suggests recovery will not arrive prior to 2014 at the earliest.

The situation at the **newbuilding shipyards**, especially those that had been newly developed in the recent past, has become impossible. Those that have managed to survive have reduced their existing capacity via consolidation; some have gone back to block-building and ship repairing; and others have converted to 'green' recyclers. Newbuilding shipyards are actively marketing their vessels as 'eco friendly' and describing them with speed and consumption figures that have previously never been achieved and appear very attractive for ship owners and charterers. In other parts of our report we have listed some energy saving measures which can be used effectively. While many of these methods have been incorporated with the superior technology available today, the figures being bandied about tend to be somewhat inflated and are more realistic when corrections for variables such as calorific value of fuel, design and scantling draft and 'Sea margins' are taken into consideration. According to Clarksons Research, at the end of 2008 there were 955 active newbuilding shipyards, an increase from 354 yards at the start of 2000. By the end of 2012 the number of active newbuilding shipyards would have dropped to 538, a drop of over 40%. By the time we reach the bottom of the cycle in 2013 we could see the number of active newbuilding shipyards return to pre-boom levels of around 350.

China and South Korea are home to many newbuilding shipyards that have been reported in the shipping press as being in financial distress.

**Scrapping** in 2012 had a stellar all time record of 35.97 MDWT dry bulk ships being torched. **Slippage** is the difference between the DWT of new ships on order at shipyards at the beginning of the year and the actual deliveries of DWT of new ships at the end of the same year. Slippage in 2012 came in at 29% a bit lower than the average for the past 4 years. As a result, the net increase in supply for 2012 was 70.47 MDWT with a yearend number of 692.74 MDWT! This amounted to an 11.3% net

increase in the World Dry Bulk fleet. With slippage and scrapping demonstrating such volatility, the net increase in DWT of ships in future years will remain difficult to predict. We think that slippage and scrapping will retain their unpredictability and will fluctuate inversely with the strength of the Baltic Dry Index (BDI). If we assume annual slippage at 30% and scrapping at 35 MDWT, then net increase in the Dry Bulk Sector may touch a low of 5% or 35 MDWT to 728 MDWT at the end of 2013 with hardly any growth predicted for 2014.

On the demand front, the large clouds on the horizon have begun to dissipate. China, the big mainstay of the dry bulk markets, has struggled with GDP growth falling to 7.8% in 2012. China's economy in 2013, however, is expected to improve and grow between 8 and 9% based on the twin assumptions of the continuation of modest easing and prudent monetary policy. The fact that the once-in-a-decade political transition occurred in the middle of a five-year economic plan suggests that there will be no fundamental change in economic policy and economic reforms will continue under the New Leadership. China is trying to stimulate its domestic economy and curb its dependence on the export markets of the EU and USA. According to various reports, crude steel production is forecast to rise to 750+ MMT and iron ore imports are expected to reach 780/790 MMT in 2013.

Economic traction is beginning to take hold in the USA, the largest market in the world, where the Federal Reserve has embarked upon QE4 to further stimulate the economy. The EU, including the UK, continues to struggle with their economies. Lingering debt problems at the sovereign and household levels in the UK and EU suggest that public and consumer spending will remain subdued for some more time. As such, demand from the EU/UK is expected to be muted.

The unintended consequence of diminished demand would be a dramatic increase in the scrapping of older ships. Before the end of 2015, 18% of the current dry bulk fleet of 692.74 MDWT would be over 20 years of age, equal to 126.71 MDWT, and could head for the scrap yards. During 1986, when the BDI averaged an all time low of 715 points, some dry bulk ships as young as 10 to 14 years of age were scrapped, with the majority between 15 to 19 years of age. If we were to apply the 1986 age profile for scrapping to the world fleet in 2013, at least 29% of the world dry bulk fleet older than 15 years or 200.15 MDWT would be ready to head for the scrap yards before the end of 2016. As can be seen, from the anecdotal examples provided in other parts of this report, ships as young as 15 years old have already been sent for scrap and hence the need to consider potential scrap candidates with this age profile in mind.

To keep things in perspective with regards to PSL, we would like to highlight the annual net profit/loss over the past few years.

Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Av. BDI	1,137	2,617	4,510	3,371	3,180	7,065	6,390	2,617	2,758	1,549	920
Net Profit \$m	(0.5)	24.8	110.10	154.2	92.6	125.1	148.1	88.1	35.5	23.6	4.5
Av. No. of Ships	29.22	28.39	44.63	52.89	54.00	44.97	44.12	32.79	21.39	21.91	30.44
Net Profit/Ship \$m	(0.02)	0.87	2.47	2.92	1.72	2.78	3.36	2.69	1.66	1.08	0.15

Our results for 2012 must be viewed against the average BDI for the year of 920 points, being the third lowest figure in BDI history! Whilst most of our peers were seeking protection under Chapter 11 or undergoing restructuring of some sort or the other, we managed to turn in a tidy, though small, profit. 2010 and 2011 will be remembered as the 'consolidation years' when we shrank our balance sheet, reduced our fleet size and prepared for the rejuvenation of our fleet with modern, efficient and craned ships.

## AWARDS AND ACCOLADES:

**The Seatrade Asia Awards** Ceremony was held in Singapore at the Shangri-La Hotel on the 23rd April when our Managing Director, Mr. Khalid M Hashim was accorded **The Lifetime Achievement Award for 2012**, "in recognition of his outstanding contribution to the industry over many years, in Asia and beyond." PSL was also one of the three nominees for The Dry Bulk Operator of the year award at the same function. Seatrade has for many years been involved in developing awards programs for the maritime industry, recognizing excellence in a variety of different fields. The original Seatrade Awards program was established in London in 1988, with the full support of the IMO, and the Secretary General remains the Chairman of the judging panel to this day. The Asia Awards program was launched in 2008 to raise the profile of maritime development across Asia and to underscore excellence in the fields of innovation; commitment to safety and quality; social and environmental responsibility; enterprise and achievement, as well as education and training.

**PSL is 2012's Best Ship Operator, Lloyd's List Asia Awards.** According to Lloyd's List PSL got this award due to the Company's ability to endure, stabilise, and improve its fleet and push

its business forward in the most difficult shipping market since the 1980s. We were a first-time winner in the Lloyd's List Asia Awards. The judges cited our ability to hold down operating costs and intensify risk management despite the challenges faced by dry bulk ship operators in the current environment. In the view of the judges, we avoided the most dangerous of "the seven deadly sins" by not buying assets during the bubble, and can now buy very good secondhand ships at low prices at the bottom of the market.

**The Marine Money June/July 2012** 'worldwide ranking' issue had PSL as the 23<sup>rd</sup> best shipping company in the whole world based on results for 2011. The methodology used by Marine Money for their rankings was a simple aggregate of 6 criteria: Total return to shareholders, Asset turnover, Profit margin, Return on Equity, Return on Assets and Price to book value. We were ranked 5<sup>th</sup> in the Financial Strength ranking which indicates that we continue to remain financially strong. If you were to combine the Performance Ranking with the Financial Strength Ranking of the Top 25 Companies in both rankings, then you would see that PSL would have been ranked 9<sup>th</sup> best shipping company in the world on a Risk Adjusted basis! This indicates that we are well poised to implement our fleet rejuvenation plan successfully without undue risks or strain on our financial position.

## **FINANCIAL HIGHLIGHTS (THAI BAHT TERMS) AND REVIEW OF THE YEAR:**

In terms of operations, during the year under review, the Total Revenues of the Company were Baht 3,828.02 million [2011: Baht 3,433.51 million] and the Company earned a Net Profit of Baht 141.03 million [2011: Baht 718.52 million]. The Shareholders' Equity of the Company is Baht 14,484.23 million [2011: Baht 15,356.50 million] and the Total Assets of the Company have increased during the year to Baht 24,029.69 million [2011: Baht 22,893.25 million] mainly due to the delivery of 11 Ships in 2012. The increase in Total Assets would have been higher had internal cash reserves not been utilized for prepayment of loans, payment of dividends and part-payment of Ships acquired during the year. It is also to be noted that Total Assets in Thai Baht (Reporting Currency) being restated from U.S. Dollars (Functional Currency) was lower due to appreciation of the Thai Baht against the U.S Dollar as at the end of year 2012 as compared that at the end of year 2011.

During the year, the Company earned Baht 150.83 million as Net Profit before Exchange Loss of Baht 5.65 million [2011: Exchange Loss of Baht 5.45 million] and Income Tax of Baht 4.15 million [2011: Baht 3.64 million]. In terms of the Earnings, the Company's ships achieved an average time-charter equivalent earnings of USD 8,221 per day per ship as compared to USD 11,265 per day per ship for year 2011. The

Net Ship Operating Income (net of voyage disbursements and bunker consumption) in absolute terms was higher than that of the previous year, mainly due to higher average ships operated in 2012 (30Ships) as compared to 2011 (22 ships). However average time-charter equivalent earnings per day per ship in year 2012 was lower as compared to year 2011. Absolute ship running expenses (Opex), also increased by about 44%, mainly due to an increase in average number of Ships operated in 2012 as compared to 2011. However average ship running cost per day per ship (Average Opex per Day) during the year was lower as compared to 2011. The technical downtime was an average of 10.3 days per Ship, which is very good considering the average age of the fleet of about 11 years in 2012. As a result of the profitability and steady cash flows, the Company continues to maintain a high level of liquidity during 2012 and has paid dividends of Baht 467.70 million during the year 2012.

We also undertook an “in-house” exercise to determine Total Return to Shareholders, which was calculated for the 19 years that we have been operating as a listed entity. Based on the closing share price as on Friday the 16th September 2012 of Baht 13.20 per share (we started trading on the SET on the 16th September 1993) and assuming you had subscribed at the IPO, then, at the end of 19 years, you would have 11.95 times your initial investment!! This return does not assume any re-investment of the dividends into shares or any interest on the dividends received.

## **FLEET REJUVENATION:**

The volatility of shipping values, which is an inherent part of our business, was demonstrated by the sale of the Capesize newbuilding ‘Alberta Della Gatta’ (175,125 DWT prompt delivery 2012 from New Times Shipyard in China) which was sold from the mortgagee bank (vessel was ex-Deiulemar) for a price of \$38m. This price is considerably lower than December 2007 when a prompt resale Cape bulker was valued at \$165m; a 10 year old Caper was valued at \$110m; and a 20 year-old Cape at \$64m. In the middle of July 2012, a 15 year-old Cape size bulker was sent to the recycling bin for just \$8.8m! This example highlights, if that was indeed required, the crucial importance of rejuvenating your fleet at the right time and, obviously, at the right price.

**The Fleet Rejuvenation Plan** of replacing the aging ships from our fleet with younger, better geared, economical and larger units began with the sale of 35 older ships since 2007. The replacement program has progressed well with the purchase of 7 second hand ships (average 5 years old) in the 30/34K range, 2 brand new 34K re-sales, and 6 brand new 57K re-sales during 2010/2012. Two brand new 34K ships from ABG have also joined our fleet during the same period.

At the start of 2013, our fleet had 36 ships (6 Supras and 30 Handy sizes) with an aggregate capacity of 1,156,109 DWT. This works out to an average 32,114 DWT per ship, and an average age of about 11 years. If we looked at just the Supras they had an average 56,639 DWT per ship and an average age of 1 year. The Handies had an average 27,209 DWT per ship and an average age of 13 years.

In a highly capital intensive business with very high leverage characterized by unpredictable and wildly swinging cycles, the timing of the purchase of ships is possibly the single most important decision that has to be made. Once this is done in a successful manner, the economic viability and security of the Company would be assured for the next few decades, as we would have replaced the majority of our older fleet at historically low price levels. To complete the renewal program and expanding our fleet to between 60 and 65 ships, we plan to buy additional ships if the price remains at current or lower levels. On the one hand, money is scarce and on the other, no one wants the new ships they had ordered in great excitement and haste just a few years ago. In this environment, we can complete our renewal plan by arranging good deals for second-hand ships from weakened sellers, or for troubled new building re-sales. This will be the last piece of the puzzle to fall into place, and should stand the Company in good stead for years to come.

**ABG Shipyard:** The first 34K ship was delivered in the middle of June 2011 and the second in the end of March 2012. The third 34K was delivered in January 2013 with a reduced price of USD 23m when compared to the contract price of USD 30m. We have profitably 'sold', through novations, five shipbuilding contracts (3X34K and 2X54K) to an unrelated third party. Three sales were booked in 2011 and two in second half of 2012. Another four contracts (2X34K and 2X54K) have been profitably 'sold' with receipt of some part of the novation proceeds in Q4 2012 with the balance expected in Q1 2013. That leaves six bulk shipbuilding contracts (4X34K and 2X54K) that ABG has to deliver to us during 2013 or early 2014. Under our Ship Building Contracts, we always have the option of cancelling the ships that are built later than their contractual delivery dates, re-selling these 'late' ship building contracts to others, or re-negotiating a fresh contract/price for these 'late' ships.

## **HIGHLIGHTS OF 2012:**

**The dry bulk market** did not get off to a good start in 2012 with 78 year old Sanko Steamship of Japan slipping into Chapter 11 for the second time in its history. This was followed by the oldest existing shipping company, the 283 year old Stephenson Clark, shuttering its doors in the UK by the middle of the year. Then it was the turn of 1948 incorporated Overseas Shipholding Group of the USA embracing

Chapter 11 by the end of the year. The shipping malaise, apparently, is not bound by any geographical constraints.

**The Supply Side** numbers are finally showing light at the end of the proverbial dark tunnel. A total of 1,371 dry bulk ships or 106.44 MDWT entered the supply side during 2012. At the same time, owners have been forced to make extraordinary efforts to recycle as many ships as possible. Scrapping this year has smashed the previous record of 33.3 MDWT for demolition volumes with 77 Capesizes, 124 Panamaxs, 90 Supramaxes, 118 Handymaxes and 334 Handysizes torched, equivalent to 35.97 MDWT! This has resulted in the global dry bulk fleet strength, at the start of 2013, reaching 692.74 MDWT. 2013 and 2014 have 100/31 MDWT of brand new ships scheduled for delivery. If we assume annual scrapping of 35 MDWT and apply a 30% slippage in expected annual deliveries, 2013 ends with a world fleet of 728 MDWT for a growth rate of just 5% over the year. Under the same twin assumptions, 2014 ends with 736 MDWT for a growth rate of just 1% over the end-year total of 2013. The tsunami of newbuilding deliveries has finally come to an end!

The 172,900 DWT 'Shagang Sunrise' built 1997 sold for scrap in July 2012 is the youngest cape size bulker, at just 15 years old, to meet such a fate in the last two and half decades. This reminds us of the mid 1980's, the last time when markets were so bad, that 15 year old ships were sent to the scrap yard. Just five months after one of its sister vessels attained the same distinction, the 2000 built CMA CGM owned box ship 'Soraya' has gained the dubious distinction of becoming the youngest ship, at just 12 years old, to be scrapped during the current down turn. Scrapping is set to have a calming effect on the supply side.

The effect of the **Global Financial Crisis** still lingers with various Sovereign States catching the equivalent of an economic cold. The EU has taken the route of fiscal tightening coupled with tight monetary policy as a way out of their current predicament. This has reduced demand from these countries. The US has gone the other way with reasonably positive results and firm economic traction taking hold in their economy. The US has 'opened the taps' with QE3 and QE4 using monetary stimulus to pave the way to better economic health. In the meanwhile, China has deflated the bubble in the real estate sector (without popping it) and now needs to stimulate domestic consumption to make up for the lack of growth in their erstwhile booming export markets.

**India**, the country that always flatters to deceive, may yet prove its support for the Dry Bulk markets as more and more coal fired port based Power Plants come on stream. With the infamous power outage in summer a not too distant memory, depriving almost 700 million people of electricity in peak summer weather for almost 7 hours, these port based power plants could not have come on stream at a more

opportune moment. Reports by the Paris-based International Energy Agency suggest that India could overtake China as the world's biggest buyer of seaborne coal and increase its 2012 annual coal imports from the 107 MMT mark to the 250-300 MMT mark before the end of 2016. The US is already exporting record volumes of coal to Asia and Europe because it prefers to use its cheap, cleaner and abundant domestically produced Shale Gas as an energy source. This trend has boosted trade for dry bulk carriers adding to the tonne-mile equation. It therefore appears that King Coal will remain a strong supporter of the Dry Bulk Markets for years to come.

**China**, the big mainstay of the dry bulk markets, has struggled with GDP growth figures decreasing quarterly from 8.1% to 7.6% to 7.4% before finally rounding off the year at 7.9% for an annual average of 7.8%. However, China's economy in 2013 is expected to grow between 8 and 9% based on the twin assumptions of the continuation of modest easing and prudent monetary policy. The fact that the once-in-a-decade political transition occurred in the middle of a five-year economic plan suggests that there will be no fundamental change in economic policy and economic reforms will continue under the New Leadership.

China's Iron Ore imports were an astonishing 745.5 MMT in 2012 or about 8.7% higher than the 686 MMT in 2011! The December 2012 import figure of 70.9 MMT of iron ore was the highest monthly figure ever! According to various reports, China is expected to import between 780 and 790 MMT of Iron Ore in 2013. This import figure is contingent on import pricing parity versus domestic production and transportation costs. Provisional Chinese steel production for 2012 reached a staggering figure of about 716.5 MMT or about 4.8% higher than the already phenomenal figure of 684 MMT in 2011. According to various reports, China's steel production is expected to grow between 4% and 6% to reach a phenomenal 750 MMT of Steel in 2013. Coal represents about 80% of China's energy requirements. Historically, China was self-sufficient in coal, but that is no longer the case. China imported 126 MMT of coal in 2009, 164 MMT in 2010, 182 MMT in 2011, and a whopping 288.9 MMT in 2012; making it the single largest importer of coal in the world, two years in a row, and displacing Japan from the pole position it had occupied continuously since 1975! Coal imports are expected to grow steadily but are contingent on import pricing parity versus domestic coal production/transportation costs. In a country that currently produces and consumes some 3,800 MMT of Coal per annum, with the figure expected to grow to 4,150 MMT by 2015, even a small change in China's coal imports could have a dramatic impact on the Dry Bulk freight markets.

**The BDI** ended the year at 699 points, 57% lower than its start at 1,624 points. The BDI bottomed out at 647 points, a post Lehman Brothers low, on February 3, 2012. The BDI managed a recovery

during the year hitting 1,162 points on July 9, 2012 due to a restocking of iron ore imports into China. It was the international price of iron ore that had fallen to a low of about USD 87 pmt during July 2012, compared to the cost of domestic production around the USD 120 pmt mark, which drove the restocking process in China. This of course led to an inordinate amount of congestion in the Cape size sector with the September 2012 import figure of 65 MMT of iron ore into China being the second highest monthly figure ever. Another factor supporting the index was the 290 MMT of Coal that China imported during the year from places as far away as the USA and the ton-mile impact of this change from being an exporter to becoming the largest importer.. Finally, it was the scrapping of 36 MDWT of dry bulk ships that kept the BDI on life support.

The BDI average for 2012 was 920 points, 41% below the 1,549 points recorded in 2011, and the third lowest average in BDI history! Only the average BDI for 1985 (906 points) and 1986 (715 points) have been lower than what we have experienced in 2012. To give this some perspective, the long term average for the BDI (1985 – 2003) prior to the recent Bull Run was 1,358 points; including the Bull Run period (1985 – 2010) was 2,133 points; and during the Bull Run (2004 – 2010) was 4,265 points.

We had suspected that 2011, and maybe 2012, would not be so kind, with many entities being forced to the wall due to the pressures being exerted on the freight market. We have therefore not been surprised by the spate of financial restructuring and bankruptcies that we have seen during 2012, but will be shocked if this does not escalate during 2013 before normalizing in 2014. Be warned, there is more pain on the horizon.

The Time Charter Equivalent (TCE) earnings of our Fleet during 2012 averaged USD 8,221 per day per ship which was much better than our forecast of USD 7,150. In terms of daily average Operating Expenses (Opex), we almost achieved our target of USD 4,400 per day per ship reaching a figure of USD 4,481 per day per ship.

**Market Segmentation/Benchmarking:** During 2012, the Baltic Handy Size Index (28,000 DWT Index Ship) averaged 516 points derived from the average Time Charter (TC) rate of USD 7,626. Compared to that, our Handies (27,209 DWT, 2.8% smaller than the Index Ship) earned USD 7,981 outperforming the BHSI TC rate by 4.7%! Further, the Baltic Supramax Index (BSI) averaged 728 points derived from the average TC rate of USD 9,462. Compared to that, our Supramaxes earned USD 10,344, outperforming the BSI TC rate by 9.3%!

## THE INDUSTRY OUTLOOK:

Scrapping was robust. 334 ships were removed or scrapped whilst 170 ships were delivered, resulting in a reduction of 164 ships or 5.6%, with the world fleet decreasing from 2,916 ships to 2,752 ships in our sector (10 – 30,000 DWT) during 2012. The continued weakness of the freight market is the main force driving the acceleration of scrapping rates. It also helps that scrap steel prices have remained reasonably robust. It is, however, impossible to escape the conclusion that the increasing age of ships and the depressed levels of the freight markets, will lead to an even greater upswing in scrapping rates in the future.

### **Comparatively weaker supply of new ships is expected for 2013 and 2014:**

**The Cape sector (90,000+ DWT: 1,769 ships of 304 MDWT at the start of 2013):** 303 ships of 54.4 MDWT or 17.9% of the existing DWT are scheduled for delivery up to end of 2016. In this sector, 251/411 ships of 47/74 MDWT or 15.5/24.3% will be over 20/15 years of age by 2016 and likely to be scrapped during 2013 to 2016 should freight rates remain at current levels.

**The Panamax sector (60 – 90,000 DWT: 1,996 ships of 151 MDWT at the start of 2013):** 575 ships of 44.2 MDWT or 29.3% of the existing DWT are to be delivered up to the end of 2016. The saving grace in the Panamax sector is that 386/686 ships of 27/49 MDWT or 17.9/32.5% of the fleet will be over 20/15 years of age by 2016 and would likely be scrapped during 2013 to 2016 should freight rates remain at the current levels, thereby balancing out the fresh supply and restoring freight rates in the near future.

**The Supramax sector (40 – 60,000 DWT: 2,560 ships of 133.5 MDWT at the start of 2013):** 408 ships of 22 MDWT or 16.5% of the existing DWT are scheduled for delivery up to the end of 2016. In this sector, 411/703 ships of 18/32 MDWT or 13.5/24% will be over 20/15 years of age by 2016 and likely to be scrapped during 2013 to 2016, if freight rates remain at their current levels.

**The Handymax sector (30 – 40,000 DWT: 1,415 ships of 48.9 MDWT at the start of 2013):** 337 ships of 11.9 MDWT or 24.3% of the existing DWT are scheduled for delivery up to the end of 2016. In this sector, 361/431 ships of 13/15 MDWT or 26.6/30.7% will be over 20/15 years of age by 2016 and likely to be scrapped during 2013 to 2016 if freight rates remain at current levels for any length of time.

**The Small Handy sector (10 – 30,000 DWT: 2,752 ships of 55.8 MDWT at the start of 2013):** 175 ships of 3.6 MDWT or 6.5% of the existing DWT are scheduled for delivery up to the end of 2016. In our sector, 1,033/1,419 ships of 21/30 MDWT or 37.6/53.8% will be over 20/15 years of age by 2016 and likely to be scrapped during 2013 to 2016 if freight rates remain at the current depressed levels. With this extremely large overhang of very old ships, the supply dynamics appear to be the

strongest in the small handy size sector, the sector in which we operate most of our ships, of the Dry Bulk Tramp Freight market.

When reading the above supply side numbers please keep in mind that the Slippage in delivery for 2008 to 2011 averaged 33%. In 2012 it dropped to 29%. It remains to be seen what this figure will look like in 2013, 2014 and 2015 but we will not be surprised to see it fluctuate inversely with the BDI and availability of finance. Please also bear in mind that the scrapping potential in the existing world fleet is enormous especially if ships as young as 15 years of age are sent to the breakers. We have already seen that happen during 2012 and there is every reason to expect that it will continue during 2013 and become more the norm than the exception.

Our **Competitive Position** based on our existing 36 ships plus the 10 ships on order (6 bulk carriers and 4 Cement ships) and the roughly USD 220 million of funds available to buy another 15 to 20 second-hand replacement ships in lieu of the older ships that we have sold, makes us one of the biggest players in this sector of the market. With the ownership structure in this sector being extremely fragmented, we are recognized as an established brand name with clients wanting to do business with us first before they take their custom to any of the other smaller, and potentially weaker, players within the sector.

Additionally, our plan to rejuvenate our fleet with younger, larger, better geared and more economical vessels from the second hand market at, what could likely be, historically low levels will enhance our competitive position compared to our peers, who have probably purchased second hand ships during the past 4 to 5 years at historically high prices.

## **THE ISSUES FACING OUR INDUSTRY:**

With the Freight Markets hitting all time highs and plunging to two decade lows, most prudent companies that have very little debt on their balance sheets and a lot of cash in their pockets will likely consolidate the industry. This could happen through the judicious purchase of second-hand tonnage or new building ships at historically low prices or via mergers and acquisitions. By whatever means consolidation takes place, it is to be welcomed, as it can only make life a bit better for the remaining participants.

## **SAVING ENERGY AND THE ENVIRONMENT – THE FUTURE OF SHIPPING.**

Fuel efficiency has become a major issue for the Maritime industry, both for preservation of the environment and conservation of fuel, the cost of which is at an all- time high.

Ship builders are actively marketing their vessels as 'eco friendly' and describing them with speed and consumption figures that have previously never been achieved. While many of the following methods have been incorporated into designs using superior technology available today, and achieving great benefits, the figures being bandied about tend to be somewhat inflated and are more realistic when corrections for variables such as calorific value of fuel, design and scantling draft and 'sea margins' are taken into consideration.

Broadly, fuel efficiency of any ship can be improved by

- A) Reducing the resistance (drag) of the ship, and thereby reducing required propulsive power.
- B) Increasing the mechanical and thermal efficiency of the propulsion and power generating systems on board.
- C) External appendages to harness external energy or recover lost energy.

### **A) Components of Ship's resistance and ways of reducing the same:**

A ship's resistance (drag) is made of the following main components.

- 1) Viscous or frictional forces which act along the surface of the hull.
- 2) Pressure forces which act perpendicular to the surface of the hull
- 3) Energy dissipation through hydrodynamic forces such as cavitation, eddies, turbulence in flow etc.

#### **1) Viscous or frictional resistance:**

As the ship moves in the interface of two different media (air and water) the above mentioned drag forces are created in both.

For most cargo ships, drag forces created in the air are negligible. However for special purpose high speed craft and naval ships etc. air drag plays an important role. This is similar to a car driving on the road; at speeds of 30-40 kmph the air drag on a car is not significant; but at speeds of 100-120 kmph or higher, air drag is significant and has to be taken into consideration in the design.

Viscous or frictional resistance is influenced by the friction between water and the ship's hull. It is related to the total submerged area of the hull and smoothness of the hull. The usual way of reducing viscous resistance is to improve smoothness by means such as stream lining, improved quality of paints, reduction of marine growth etc. Recently new technologies are being tried out, such as non-stick type coatings with lower wetting properties and introducing an air cushion between the hull and water.

For a given submerged surface area and speed, the ideal shape of the hull to reduce frictional resistance would be infinitely long and thin (like a surf board). However this is not practical considering other limitations such as building facilities, port facilities, maneuvering and stability. Hence optimization of the hull shape is necessary to achieve a balance between various conflicting requirements.

## **2) Pressure or wave resistance through water:**

When a ship moves in water, the flow pattern around the ship creates a high pressure zone immediately forward of the ship and another high pressure zone near the aft (or back) end. These high pressure zones give rise to wave patterns at the bow (front) and stern (back). The ship transfers some of its energy to create these wave patterns. This is called the wave resistance and it increases rapidly with an increase in speed.

The normal solution lies in modifying the wave pattern distribution by the shape of the hull, to negate one wave with the other. However, this method limits the vessel to operate within a particular speed range. At speeds outside this range wave resistance increases considerably.

The bulbous bow on high speed ships, such as container ships and passenger ships, where wave resistance is a major component of the total resistance is normally designed with this consideration in mind and is an attempt to optimize the pressure wave pattern around the hull. On the other hand, for slow moving ships such as bulk carriers and tankers the purpose of a bulbous bow is to avoid excessive loss due to eddies.

## **3) Resistance due to eddies, cavitation, turbulence in flow etc.:**

Whenever obstructions are introduced in the smooth flow of water (streamlines are interrupted), eddies are created. All appendages and fittings on the hull (rudder, propeller, stabilizing fins, bilge keels, anodes, etc.) are potential causes for the loss of power through formation of eddies, cavitation and turbulence etc. Similarly any abrupt changes in flow caused by openings in the shell such as sea chests, overboard discharges etc., also contribute to this type of resistance. Even protruding and rough discontinuities caused by welding deposits at joints of hull plates add to resistance.

These days modern shipyards use new technology to get smooth even welds on the hull surface. Bilge keels are laid along the lines of flow determined by model tests, anodes are being replaced by impressed current systems, and other appendages are designed to avoid break down in flow lines.

## **B) Increasing the mechanical/thermal efficiency of the propulsion/power plant onboard**

### **1) Increasing the propulsive efficiency:**

The ideal propeller for max efficiency would have the lowest possible revolutions (rpm), the largest possible diameter, the lowest possible pitch, the minimum blade area ratio and the minimum possible number of blades. These features are impractical to implement fully as they conflict with other requirements. The main engine would be much larger if the same power is to be obtained at reduced rpm, and the torsional strength of the shafting would need to be increased. Similarly the draft would have to be increased to accommodate a larger diameter propeller, but at reduced drafts such as in ballast or in partly loaded conditions, the propeller would not be fully immersed. If the number of blades is reduced, or blade areas are minimized the propeller material would be over stressed.

However these days there is a conscious shift in the policy of ship designers to go for larger main engines with reduced rpm, coupled to larger diameter propellers. This trend is seen in all the new 'eco' designs that are being marketed in recent times. These are undoubtedly more energy efficient, under the given specific conditions, but their long term effectiveness under adverse conditions is not yet proven.

## **2) Increasing the thermal and mechanical efficiency of the power plant (main propulsion engine)**

Generally the thermo mechanical efficiency of the Internal Combustion (IC) engines installed onboard is in the region of about 35%. So there is a feeling amongst the designers that scope exists to bring about considerable improvements in improving the thermo mechanical efficiency on the ships. Until late 1970s, Specific Fuel Oil Consumption (SFOC) figures for main propulsion plants used to be about 218-225 g/KW/Hr. This has now been reduced by more than 20%, and the current norm is about 174-180 g/KW/Hr. Several efforts are still being made in this field and new technologies are being developed on a regular basis. These developments can be categorized broadly into following groups:

### **2.1 Improving combustion in engines:**

Recently engine makers have done a lot of research and the basic design of combustion systems have been modernized and updated on most new models of produced recently. There is some conflict in requirements as Nitrogen Oxide (NOx) emissions have also to be controlled. Most engine makers have balanced their designs to meet Regulatory requirement regarding NOx as well as optimizing the SFOC for the engine. New technologies adopted are

2.1.1 Cam-less electronic control of combustion process: This helps in optimizing the engine performance over a wide range of loads and speeds.

2.1.2 Increasing the efficiency of turbo charger: New designs of turbo chargers with higher loading capabilities and operating at much higher speeds (compared to traditional turbochargers) are being developed to increase the combustion efficiency in the engine.

### **2.2 Load management devices:**

This consists of equipment to control the load on electrical power generators by optimizing the operation of pumps and other auxiliary equipment. Computer controlled devices are being installed on the ships to monitor the varying loads on pumps/other equipment, and accordingly change their output to meet the exact load requirements. This technology involves the use of electronically controlled load sensors and devices such as frequency changers which will change the rpm of the pumps and thereby the output of the pumps to suit the load. This is useful for ships which operate in different environmental conditions and have largely varying requirements for cooling, ventilation, lubrication etc. The technology is expensive and so is the equipment to install and maintain, and the benefits are marginal. An engine shaft driven alternator is one such device to boost the fuel efficiency. This device gives an SFOC of about 178-185 g/KW/Hr as compared with medium speed generator engines which drive alternators with SFOC in the range of 200-210g/KW/Hr. (This has already been implemented on our new built vessels where we were involved at the design stage.)

### **2.3 Waste heat recovery systems:**

Recently some new technologies have been promoted which aim to improve the waste heat recovery from the downstream exhaust of the engines and other combustion equipment. Proposal of exhaust gas recirculation, hot water calorifiers operating on incinerator exhaust, improvements in FW generating systems, fuel oil heating systems etc. are all parts of the efforts directed to improving waste heat recovery.

## **C) External aids / devices which will pump in additional energy or recover lost energy.**

Since the fuel crunch began a few years ago, there have been increased efforts to fit such devices on ships, either at NB stage or as retrofits. Such devices can be categorized broadly into two groups. One group will recover the lost energy from the water flow and convert it to useful energy thereby improving the energy efficiency, and the other group will harness energy from external sources and feed it to the ships' propulsion system.

### **1) Devices which recover lost energy from water flow and convert this into useful energy.**

Recently lot of research has been done in this field and several devices have been promoted under this category. They claim fuel savings in the range of 0.5% to 7%. depending upon the complexity of the device and scope of improvement in the initial design. Many of these are patented devices and are expensive due to copy right. Some prominent devices being marketed are as follows:

#### **1.1 Ducts:**

In addition to pushing the water in an aft direction, the propeller of a ship also gives the water a swirling effect due to the effect of the pitch. Hence beyond a certain point increased pitch reduces the propeller efficiency. Ducts are fitted either forward of the propeller such as Mewis duct (Patented), to direct the water flow in a desired way and recover the energy lost by swirl effect of the propeller; or around the propeller in the form of shrouds or nozzles of various designs. These ducts also generate hydrodynamic thrust. At low speeds generally this additional thrust gives considerable advantage, but at high speeds the additional drag created by the duct itself reduces its performance considerably. Fuel efficiency claims range from 3% to 7 % generally.

### **1.2 Fixed or dynamic fins:**

These are attached to the hull in the flow stream forward of the propeller. These also serve the same purpose as the ducts by directing the flow and generating hydrodynamic thrust. Action and effects are somewhat similar to the ducts mounted forward of the propeller.

### **1.3 Fixed or moving fins mounted on the propeller boss cap:**

These fins recover the energy lost in the vortex cavitation of the propeller and also counter the swirl effect in the flow. These are possible to fit at NB stage easily but can be retrofitted after analysis and minor modifications as needed.

### **1.4 Contra-rotating propellers:**

In some special purpose ships such as high speed shallow draft small crafts, contra-rotating propellers are mounted on the same shaft to maximize the power absorption with limited diameter of the propeller and use the swirl effect of one propeller to boost the efficiency of the other. But technology involved is very complex and application is restricted to special purpose ships only.

### **1.5 Rudder mounted devices:**

Devices such as bulb on the rudder, split profile (below and above the shaft centerline level) are used to recover the swirl energy from the water flow and produce hydrodynamic thrust. These devices are generally fitted at NB stage only as it would involve redesign of the rudder with possible effect on steering gear capacity.

## **2) Devices which absorb external energy and feed it to ship's propulsion system**

The technology involved is still in an experimental stage and not implemented on a commercial scale. The benefits claimed are also dependent on external sources from where the energy is absorbed and are not predictable. Under ideal conditions savings in fuel to the extent of 30% have been claimed. It will be some years before this form of energy saving device becomes commercially feasible. The research involves following two alternatives:

### **2.1 Solar panels:**

Solar panels have been mounted on certain ships to absorb solar energy and convert it to electrical energy which is then fed to the ship's power system.

### **2.2 Wind turbines:**

The experiments involved setting up wind turbines, similar to the ones installed on land in wind energy farms. These would convert wind energy into electrical energy which is fed to ship's power grid.

### **3) Sails:**

Installations that have been experimented with are in the form of collapsible sails fitted to the ship which can be rigged up or folded down with hydraulic computer controlled mechanism depending upon the prevailing conditions and ship's requirement. Some experiments have also involved flying wind sails (like giant kites) which are attached to the ship by ropes and transfer the wind energy directly to the ship. With very few exceptions, most of the measures mentioned above can only be implemented on ships in the design stage, before building. Modern technological advancements and computer generated graphics can accurately calculate wave forms, hull resistance and create the ideal hull form and simulated model tests can fashion the ideal propeller, place suitable ducts and fins.

Draft and trim optimisation is an option available to passenger and container vessels which unlike bulk carrier and tankers are not always loaded to their marks.

Improved paint schemes and sailing at optimized drafts are the few measures that can be adopted on existing vessels. The cost of research and analysis involved in fitting of appendages makes their usage unattractive. Hull form changing can be a very expensive proposition but in the case of large container vessels bulbous bows are being modified, the owners having come to the conclusion that slowing down their vessels is here to stay.

A fuel optimisation method that appeals to most charterers is reduced speed operation. This is very effective if applied correctly. Unfortunately, most main engines have their peak efficiency level at close to the designed Maximum Continuous Rating (MCR) revolutions. While operating below this level results in fuel saving, it also reduces efficiency, increases unwanted emissions and may accelerate wearing out of the machinery. This method of reduction of consumption needs to be applied with proper evaluation of all the affected parameters.

**Operating Costs** of our Company continued to ease in 2012. Most components have decreased from their previous levels, some more than others. The most notable cost reductions include stores, spares and insurance. Crew wages however increased and are expect to increase further in the years to

come for us as well as the Industry. Younger ships are naturally less expensive to operate and maintain, and the cost of stores and spares are proportionately less. Most quality operators have taken advantage of the current situation to rejuvenate their fleets by disposing older ships. We expect this trend, of improving our efficiency and saving costs, through fleet rejuvenation, to continue.

The requirement for experienced senior personnel continues to remain a serious issue. The shortage is due to reasonable employment available ashore and in the offshore industry - a much safer environment. Technological advancements on board modern ships both in navigation systems and machinery operations demand highly trained officers which only serves to exacerbate the situation.

**The Protection & Indemnity (“P&I”) insurers**, or ‘P&I Clubs’ as they are known in the industry, had an awakening of sorts by way of increased claims, coming after several low-claims years; both frequency as well as unit value of claims increased in the current year. On the other hand, their premium income was adversely affected due to the “churn effect”, with several shipowners replacing their old vessels with new young & modern ones paying lower rates. The Clubs’ position was further compounded by the fact that the investment income was at best uncertain and almost non-existent. As a result, all Clubs belonging to the International Group of P&I Clubs announced their intention to impose higher premium for the next policy year commencing 20<sup>th</sup> Feb 2013. As reported earlier, the P&I insurance is unique and unavoidable as it provides almost limitless cover with top-quality claims-handling service for any situation that could arise from owning/operating ships. It is therefore extremely important that the P&I Clubs remain financially strong and so the Clubs’ attempts to shore up their finances would be welcome, even if burdensome. The Clubs with which we are associated are financially robust, and as a result we expect our premiums for 2013 to remain stable.

For all the reasons cited above, our average operating costs per day per ship for 2012 was about 2% lower than the previous year; whilst we do not have figures for the industry norm, we expect we would have done better than others based on past experience.

**International Maritime Organization (IMO) conventions** are constantly updated to match demands for enhanced steps to protect the environment. Marine Environment Protection Committee of IMO recently approved major changes to MARPOL (Annex VI) regulations to reduce harmful air emissions from ships. Special sea areas for controlled discharges from ships have been increased. Rule requirements for carriage of certain bulk cargoes have become stricter. The Bulk Cargo Code (BC Code) has been replaced by the new International Maritime Solid Bulk Cargo code (IMSBC code). More countries are insisting on stringent ballast water management practices on board ships. As a result of initiatives from the International Labor Organization (ILO), working and living

conditions of crewmembers on board are receiving increased importance. In order to formalize this and ensure uniform compliance, (ILO) has adopted the Maritime Labour Convention 2006 (MLC 2006). A Maritime Labour Certificate (MLC) and a Declaration of Maritime Labour Compliance (DMLC) will be required on board to ensure compliance with the Convention for all ships above 500 tons in international trade. These certificates are to be obtained from the Flag state and their recognized organizations after thorough verification and surveys on board each vessel. The MLC 2006 has attained the required number of member state ratifications in August 2012. All ships will need to meet the compliance requirement and have valid certificate for compliance with MLC convention before 20 August 2013. Company is working closely with the Flag authorities and recognized organizations to have all its vessels certified well before the compliance dead line. Focus on the environment is becoming even more important. It is no longer just fashionable to say we are "Going Green"; organizations world-over are being pushed by their stakeholders to become more environment-conscious, guided by compliance with the newer regulations. The various measures adopted voluntarily by the Company to reduce its Carbon footprint has been explained in our Sustainability Report in the 2012 Annual Report; besides, there are specific IMO Conventions and regulations mandated by individual countries, to control the emission of Sulphur dioxide, Nitrogen oxides, Halons and CFCs from our ships which contribute to Green House Gases. These regulations are expected to become more stringent in the coming years. In addition, certain states in the USA are likely to require ships calling their ports to use shore power which is greener than the power generated on board ships. 'Bonnet' technology is another concept, presently available only in certain ports, which can receive the exhaust gas from ships for treatment before discharging into the atmosphere. These measures are still evolving and there will likely be operational problems; besides, these will most likely result in additional expenses for the ship owners/operators. To formalize the Company's commitment towards preserving and conserving environment and to reduce carbon footprint, the Company has obtained ISO 14001:2004 certification from Class NK of Japan. The ISO 14001:2004 provides a framework for a holistic and strategic approach to the Company's environmental policy, plans and actions, and will demonstrate that the Company is an environmentally responsible organization. PSL vessels have implemented "Ship Energy Efficiency Management Plan" (SEEMP) required by MARPOL Annex VI regulations from January 2013. Vessels are also fully prepared to implement more stringent garbage disposal regulations required by MAROL Annex V commencing January 2013.

**Maritime Training Center:** As previously reported, the Company set up a full-fledged Maritime Training Center at its Head Office in Bangkok in March 2008. The PSL Training Center includes a state-of-the-art Bridge Navigation Simulator for training of maritime personnel. The Bridge Navigation Simulator

recreates the actual bridge on a ship as it enters a major port and provides ideal conditions in which to train Officers in hands-on practices for effective bridge teamwork and competence in ship-handling and navigation. This is a significant step taken by the Company to train and equip its Officers and Crew to take better care of themselves and their ships, all with a view to ensuring safety of the crew and the ship by preventing accidents, thus also helping to preserve the environment. In the current scenario of a worldwide shortage of trained personnel, and the rapid promotions that is a natural result of such a shortage, this is a major step to provide specialized training that would otherwise have been acquired 'on the job'.

**Maritime Resource Management (MRM):** MRM is a training program for ship's officers, engineers, pilots and shore-based personnel. The aim is to increase knowledge about human capabilities and limitations and to reinforce positive attitudes towards safety and teamwork. MRM is generally accepted to be one of the most efficient means of improving crew cooperation and minimizing the risk of accidents caused by human errors as well as failures in effective teamwork and resource management. The MRM course is authorized and licensed by The Swedish Club, a member of the International Group of P&I Clubs, and one of the few insurers providing Hull as well as P&I insurance covers. Apart from the MRM courses, the PSL Training Center has classrooms, Video-Based Training (VBT) and Computer based training (CBT) for the ship staff. Courses include MRM, Bridge Team Management (BTM), Bridge Team Competency (BTC), Officer Of the Watch (OOW), Chief Mate Course (CMC), Command Course (Command), Shipboard Safety Course (SSC), Maritime Professional Briefing (MPB), Maritime English training (divided into 5 course levels) programs for safety and efficient ship operations of deck and engine departments. The Training Center also conducts lectures on VTS (Vessel Traffic Separation) & SMCP (Standard Marine Communication Phrases) within the BTM and MRM courses, with the aim of developing our officers' communication skills in communicating with a VTS officer using standard maritime phrases in various simulations. The courses are upgraded regularly and provide a solid foundation to the Company's training activities and enable our Officers and Engineers to keep abreast of the latest developments in ship operations.

The PSL Training Center liaises very closely with the Technical Department in order to identify the training needs of officers and crew and special training courses are designed to suit them. In this manner, new training courses were introduced for Engineer officers ("Engine Room Management and Competency Enhancement" - "EMC" for Senior Engineers, and "Engineer on Watch" - "EOW" for Junior Engineers); future plans include courses on "stern tube sealing systems" and "ships' cargo gears with special focus on hydraulic", and "Shipboard Safety for Ratings"(SSR) for crew. The PSL Training Center

has certain basic (but important) equipment such as a turbocharger and a purifier for practical training to accompany class-room theoretical courses. These will augment the Bridge Simulator (which is essentially for Deck Officers) and enable the Training Centre to address the requirements of both Deck and Engine officers & crew.

The use of “Electronic Chart Display and Information System” (ECDIS) is becoming mandatory for new ships built from July 2013. Many new vessels are already equipped with ECDIS. For existing vessels, ECDIS will become mandatory from 2018. ECDIS requires special generic training as well as specific training for each manufacturer’s equipment. Navigating officers using ECDIS need to be suitably trained and certified before they can use it as a primary means for navigation.

With every other technical advance in navigation, such as radar, AIS and GPS, officers have gained an additional navigational aid. With mandatory ECDIS, on the other hand, a navigational aid will be taken away from them – the paper chart. ECDIS has to work and officers have to know how to work it. Any operational error could have disastrous consequence.

PSL is committed to ensure that navigating officers working on board vessels fitted with ECDIS are fully conversant with the equipment prior joining the vessel. Officers are given generic ECDIS training at approved institutes. They are also required to undergo maker specific familiarization training by the ECDIS manufacturer. Realizing the fact that certification alone does not make an officer fully familiar and confident to use ECDIS, PSL training centre has equipped itself and developed ECDIS training course. After attending approved ECDIS training course, officers are required to undergo further ECDIS familiarization course at our in-house facility.

**The scourge of piracy**, predominantly originating from Somalia, but now spread to the whole of Arabian Sea/Indian Ocean, continues to be a cause for great concern, even though 2012 saw a decline in pirate activity in this region. The entire ocean area from India to Africa and between Gulf of Oman and Madagascar remains a breach area by London war risks insurers.

In most cases, the added costs of protecting vessels and the additional insurance premium is directly or indirectly passed on to cargo interests, but the effect on crew morale is most visibly seen in declining officer and crew availability and a waning interest in a sea going career.

Although the shipping industry has been afflicted by piracy for centuries, it assumed a totally new dimension in recent times ever since the Somalis turned it into a lucrative commercial enterprise. The swashbuckling pirate of the past is tame compared with today's heavily armed criminals scouring the expanse of ocean from Somalia to India for vulnerable vessels to hijack. It is important to note that Piracy is a commercial venture. Pirates are not really interested in the cargo. They just want the ransom money

and use the crew as bargaining power. Of course, if the cargo is valuable they get a little more leverage to extract an even bigger booty.

The pirates now possess a number of fishing boats and dhows which are being used as 'mother-ships'. These provide the pirates with a degree of camouflage at sea, but more importantly, allow them to operate at much greater distances from the shore. They can carry greater supplies of fuel, food and water, and these vessels are far more seaworthy than the Somali skiffs designed for fishing in coastal waters and calmer seas.

There were 35 pirate attacks in 2012 in the Somali basin as opposed to 176 in the previous year. 5 of these attacks resulted in successful hijacking as compared with 25 vessels captured last year.

The recent decline in pirate successes is not to be taken lightly. The industry is fearful of possible revamping of the pirates' tactics to counter the protective measures now being employed by most vessels transiting the dangerous areas.

Apart from the Somali pirates and their attacks in the Arabian Sea/Indian Ocean, Nigeria and its offshore oil installations continues to be vulnerable to pirate attacks. Recent months have seen an alarming increase in this region. The primary difference between the two is that Nigeria has an elected Government with clear policies to deter piracy in its waters and that helps localize the menace and also control/handle it.

## **JOINT VENTURES:**

The status of our joint-venture investments is as follows:

- **Southern LPG Pvt Ltd. (SLPG):** The process of closing down this entity is nearly complete. We have completed the sale of all the major assets in this company with full receipt of sale proceeds and we shall now close this Company in an orderly manner.
- **International Seaports (Haldia) Pvt Ltd:** This is now our only operational investment in Ports in the Haldia Dock Complex (about 22.4% of the total capital) under our port projects investments. This JV continues to operate very well and we have to-date received total dividends of USD 1.34 million, which works out to about 66% of our original Investment made in years 2002-2003. We find strategic value in this investment and hope to increase our shareholding at an opportune time in the future.

## IN CONCLUSION:

**Demand:** The environment for 2013 is going to be extremely challenging. The EU is still in a slow-down phase, while China trying to stimulate its domestic markets and economic traction in the USA is fragile enough for the Federal Reserve to engage in an additional dose of monetary stimulus via QE4. However, with commodity prices expected to stay low, price arbitrage between cheap imports and expensive domestic production would allow China to increase its iron ore and coal imports. The various coal fired port based power plants that are coming on stream strongly indicate that India could be the largest importer of coal in the world, overtaking China with about 250 to 300 MMT annual imports by 2016. As a result, DNB Markets in one of their recent reports have indicated that annual tonne-mile growth for the period 2013 to 2015 would average 11%!

**Supply:** Due to the extremely favourable freight markets in the recent past most ship-owners have kept their older ships operating well beyond their useful economic life. Under normal freight market conditions, approximately 18% of the existing world fleet should have been scrapped. Under the present market conditions, this figure could rise to around 29%, and would only be constrained by the available scrapping capacity in the world.

With respect to the approximately 19.6% by DWT of new ships (135.8 MDWT) scheduled to be delivered to the end of 2016, the financial crisis would subject their delivery to delays that would not be considered normal by any standards. An indication of what we could expect is evident from the slippage figures of 29% in 2012, possibly rising to 30%+ in 2013 and beyond.

The supply side could come into balance with the demand side of the equation in a couple of years time just about when the EU should have got its act together, and we could see another bull run in the freight markets post 2014. We think that 2013 will therefore remain an extremely challenging year when even the most astute and conservative ship-owners' best laid plans will be sorely tested.

**Financing:** Fund raising will be one of, if not, the biggest challenge that ship-owners will have to face during 2013. Shipping banks with their 'easy loans' have assisted ship-owners to purchase too many ships during the bull run. Due to the rapid fall-off in values, these ships must have lost around 70% from their peak values reached in the first half of 2008. Most, if not all, such loans would have breached their loan to value covenants at the minimum. Banks have been calling such loans into default and accelerating the repayment of all outstanding loans. If such ships are also exposed to the spot markets, the banks would be in serious trouble with cash flows being unable to cover interest or principal

repayment and the loan to value covenants having been breached. Obviously such owners would not find friendly bankers waiting with easy loans anytime soon.

Financial procrastination by shipping banks which characterized 2009 to 2011 with an “amend, extend and pretend” policy changed partly in 2012. We have already experienced the various financial restructurings and or bankruptcies of large and mainly publicly listed shipping companies during 2011 and 2012. Banks are being forced to bite the bullet and call such loans into default, sell the ships at the best possible price and recoup a part of the loans made to ship-owners. This would stress the balance sheet of the banks and, most likely, make the ship-owner go bust. If such a ship-owner has new ships on order, and has got funding commitment from his banks, all such financial support would evaporate leaving the contract to build the new ships invalid. This in turn would pass the financial stress on to the shoulders of the shipyards and their banks. The shipping industry is seeing its own version of sub-prime toxic waste threatening to engulf ship-owners, shipyards and their banks.

This financial stress in the maritime world has given rise to statements from ship-owners and shipping analysts that the mountain of new ships for delivery between now and the end of 2015 could be just a mirage, as a lot of them may have already been cancelled. However, please keep in mind that Hartland Shipping Services, born via a management buy-out of the HSBC Shipping Services, state in their Points of View that “We have reached a dangerous consensus around 2014 being the year in which supply and demand will balance; and consensus is always wrong. If what we term ‘slippage’ in the order book actually turns out to be significant cancellations then we will reach that point sooner than expected.”

**Concluding Remark:** Considering all the above, we are taking advantage of the opportunities that the Dry Bulk Tramp Freight Markets has thrown our way. We hope to deliver to all our stakeholders the promise of this potential. This will in no small measure be due to the very dedicated and hardworking professionals that make up the office, as well as, the floating staff at PSL.

Please be informed accordingly.

Yours sincerely,  
Precious Shipping Public Company Limited

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Khalid Moinuddin Hashim  
Managing Director

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Khushroo Kali Wadia  
Director