

01 September 2015

Anthony Pitt
Glencore Coal Assets Australia Pty Ltd
Level 38 Gateway Building
1 Macquarie Place
SYDNEY NSW 2000

Dear Anthony

POTENTIAL FOR INCREASE IN NAVIGATION SERVICES CHARGES AT PORT OF NEWCASTLE

Following significant increases in the Navigational Services Charge by Port of Newcastle (PON) from January 2015, Glencore applied to the NCC for declaration of the shipping channel service. At the end of July, the NCC released its draft decision to not declare the service, on the basis that port charges are not material enough to materially influence competition.

Glencore's concern is that, without regulatory oversight, PON has the potential to implement further substantial price increases, which would place unsustainable cost pressures on the coal industry in the foreseeable commercial environment. In this context, you have requested that Synergies advise you of the approximate level of annual revenues, and resulting increase to current annual revenues, that PON could potentially seek if it aimed to earn a commercial return on its investment in the Port of Newcastle (noting that the acquisition cost does not provide a proper basis for regulatory price setting).

In performing this assessment, we have adopted a standard building block methodology for assessing target annual revenues, relying on publicly available information to inform the buildup of costs, including PON's successful bid price for the PON package. While this is inevitably imprecise, our analysis indicates that, in order to earn a commercial return on its

investment¹, PON may seek additional increases in navigation services charges beyond those implemented in January 2015 in its first year of ownership and in the range of 70-84% in future years.

If PON were to seek full recovery of its published value of its trade assets of \$2.398bn, this would indicate that it may seek additional increases in navigation services of up to 211% in subsequent years.

Attachment A sets out the methodology and assumptions that we have used in this analysis.

Yours sincerely



Euan Morton
Principal

¹ On the assumption that the target rate of return is estimated in accordance with IPART's standard WACCC methodology and that PON applies an average 50 year remaining economic life to its port investment in order to ensure that it is substantially recovered within the remaining expected life of the Hunter Valley coal reserves.

A Assessment methodology and results

A.1 Results

PON started trading on 30 May 2014 at which time it took over responsibility for port operations from Newcastle Port Corporation (NPC). PON has to date only published financial results for the half year 1 June to 31 December 2014 and commodity results for the full 2014 calendar year. Given this lack of historical comparative information, Synergies has estimated PON's expected annual revenue for the current financial year, i.e. 2015/16, based on this published information and information provided to Glencore by PON (shown in Appendix B). Synergies has estimated the expected annual revenue associated with PON's trade assets for this financial year to be approximately \$111m. This amount includes the price increase that was brought into effect 1 January 2015 but ignores any future price increases. Further details on how this result was established is given below.

Synergies has modelled a number of scenarios for the determination of possible Annual Allowable Revenue (AAR) levels that PON may seek given the combination of a number of varying assumptions related to the opening asset value and the life applied to the channel assets:

- Opening asset value as at 31 December 2014 of \$2.398b (PON's state value of trade assets),
- Opening asset value as at 31 December 2014 of \$1.75b (PON's purchase price for the lease)²,
- Channel life as at 31 December 2014 of 98 years to align with the long term leasing arrangements,
- Channel depreciated over an economic life reflecting the potential life of the coal resource, and therefore reflecting a remaining average life as at 31 December 2014 of 50 years,³ and
- Channel life assessed having an infinite life and therefore no depreciation.

The Annual Allowable Revenue (AAR) for 2015/16 based on our analysis for these scenarios is given in **Table 1**, which also shows estimated current revenue for comparison. This table also shows the potential increase in charges assuming that the charging component that is most likely to increase is the Navigational Service Charge.

² Synergies has made no adjustment to the value of the stated purchase price of \$1.75b for the timing difference between the purchase date and the start of the asset roll forward at 1 December 2014.

³ We note ARTC applies a remaining economic life to its assets in the order of 30 years. We have assumed PON would seek to recover the majority of its asset life over a similar timeframe, but then allow a longer period for recovery of the remaining asset value due to ongoing use by non-coal trades. On this basis, we assumed an average remaining economic life of the channel of 50 years.

Table 1 2015/16 Annual Allowable Revenues

	Scenario Description	2015/16 AAR	2015/16 Allowable NSC charge ¹	% increase from current NSC
Base case	Current estimated revenue	\$111,201,486	\$84,121,301	
Scenario 1	Asset Value at PON's stated trade asset value of \$2.398b Channel life at 98 years	\$268,566,009	\$241,485,325	187%
Scenario 2	Asset Value at PON's stated trade asset value of \$2.398b All asset lives at maximum of 50 years	\$288,438,024	\$261,357,840	211%
Scenario 3	Asset Value at PON's purchase price of \$1.75b Channel life at 98 years	\$170,404,974	\$143,324,790	70%
Scenario 4	Asset Value at PON's purchase price of \$1.75b All asset lives at maximum of 50 years	\$181,911,882	\$154,831,698	84%

¹ Allowable NSC charge is determined by deducting current revenue from other charges from the total assessed ARR for 2015/16. This assumes that price increases would most likely to be applied to the NSC charge component, which is largely paid by the coal industry.

Source: Synergies

This analysis indicates that, in order for PON to achieve a commercial return on its invested capital, significant further increases in port charges can be expected beyond those implemented in January 2015. While we cannot comment on the timing for such price increases, to earn a commercial return on PON's purchase price, we estimate that PON will seek further cumulative price increases in the range of 70-84%. If PON were instead to seek a return on its stated value of trade assets, these cumulative price increases could be in the range of 187-211%.

A.2 Methodology

We have calculated the expected AAR for PON based on a standard building block approach using information that is publicly available.

As with most capital intensive businesses, the majority of the AAR would be made up of the return of and on the asset base. In a regulatory process, the regulatory asset base (RAB) would be based on the regulator's assessment of the optimised level of asset required to provide the required level of service, valued based on the replacement cost of the asset. However, in the absence of regulation, we have assumed that the asset base could reflect either

- PON's investment in trade related assets at Port of Newcastle, using an allocation of the \$1.75b PON paid for the long-term lease of the Port assets, or

- its published value of trade assets. In this regard, in PON's letter to Glencore dated 19th December 2014, PON state that an evaluation of the Trade Assets⁴ has been undertaken based on "methodology commonly used by regulators" and has been valued at \$2.398b⁵.

A.2.1 Annual Allowable Revenue (AAR)

The building block components and the methodology used for determining AAR are,

$$AAR = ROA + Depreciation - Inflation + Opex$$

where,

ROA is the annual return on the trade asset base (TAB) calculated as the opening TAB asset value for the relevant year multiplied by WACC (nominal, pre-tax),

Opex is the efficient level of operating costs and maintenance costs for the relevant year,

Depreciation is annual depreciation of the TAB,

Inflation is the annual amount of inflation of the TAB based on a forecast CPI of 2.5%.

A.2.2 Trade Asset Base (TAB)

The TAB is rolled forward each year based on,

$$OAV_t = CAV_{t-1} + Capex_t + Inflation_t - Depreciation_t$$

where,

OAV_t is the opening asset value for year t,

CAV_{t-1} is the closing asset value for year t-1,

Capex_t is the amount of capital expenditure that is commissioned in year t (all Capex is assumed to be commissioned mid year),

Inflation_t is the amount of inflation for year t on the OAV_t and Capex_t using CPI of 2.5%,

⁴ PON in their 2014 Annual Trade Report have defined Trade Assets are those assets which generate revenue for the Company excluding those assets which are associated with property leasing activities.

⁵ Port of Newcastle's 2014 Annual Trade Report

$Depreciation_t$ is the amount of depreciation for year t on the OAV_t and $Capex_t$ and applied on a straight line basis.

A.3 Modelling Assumptions

Our primary source of information in developing the expected level of AAR has been PON's 2014 Annual Trade Report which contains financial information for the first half of the 2015 financial year, i.e. 1 June to 31 December 2014. The financial information on trade revenue collected provided in this report is relevant to the period prior to PON's recent changes to their pricing arrangements which took effect from 1 January 2015.

Other sources of information that were publicly available and were used in our analysis are set out below where applicable.

A.3.1 Opening TAB Value

The opening TAB value for the base case has been based on the PON sale price of \$1.75b to show the amount of revenue PON would expect in order to provide an adequate return on the investment. This purchase price was inclusive of land assets associated with leasing arrangements that has been explicitly removed from the Trade Assets and Trade Revenue reported by PON and subsequently used in Synergies build up of AAR. As we have assessed revenue excluding land rentals, we have also identified and removed from the purchase price an estimated amount associated with these land assets in determining the Opening TAB value. Detail on the approach taken in relation to identifying asset categories is given in the following section. This removal of leased land assets results in an Opening TAB value of \$1.389b.

We have also performed analysis of a second scenario where the opening TAB value reflects PON's valuation of Trade Assets of \$2.398b. Though it is not explicitly stated in PON's Annual Trade Report, we have assumed this valuation is current at 31st December 2014 and has been used as the Opening TAB Value for our analysis.

A.3.2 Asset Categories

Detail on the breakup of PON's Trade Assets into asset categories or remaining lives have not been released by PON. In order to better reflect an expected level of AAR for PON, it is important to identify asset categories within the TAB and assign appropriate remaining lives to each category. We have done this based on publicly available information presented in Newcastle Port Corporation's (NPC) 2013-14 Annual Report. This report was prepared by NPC when it was responsible for the now leased assets i.e. prior to when the leasing arrangements with PON were finalised.

On 1 January 2014, in preparation for the sale and lease of a majority of its assets, NPC transferred all relevant assets to two subsidiaries, Port of Newcastle Lessor Pty Ltd and Port of Newcastle Operations Pty Ltd. These assets were later acquired by PON.

NPC's Annual Report details the amount of assets transferred to the subsidiary, which total \$1.255b⁶. It also identifies a breakup of this total into a number of asset categories including, land and buildings, roads, wharves and jetties, breakwaters/dredged assets, plant, rail and construction in progress.⁷

This value is clearly much lower than that developed by PON, but the report does provide information on the breakup of the assets into asset categories. Given the lack of alternative information, Synergies has assumed the relative breakup of assets into asset categories presented in NPC's report is an appropriate proxy to apply to PON's valuation of assets. The breakup of the Opening TAB value for the \$2.398b and \$1.75b asset values discussed above are both based on this information. The percentage breakup to apply for each asset category used to split the \$2.398b asset bundle has been determined excluding the amount associated with land leasing arrangements. In applying this to the \$1.75b total asset value, we have first deducted an amount for leased land (estimated at 95% of total landholdings, with land value as per NPC's Annual Report) to arrive at a total opening TAB value of \$1.389b. The resultant breakup of both Opening TAB values into asset categories are given in Table 2.

Table 2 Breakup of \$2.398b Opening TAB Value into Asset Categories

Asset Category	% split applied	Split of \$2.398b opening TAB value into asset categories	Split of \$1.389b opening TAB value into asset categories
Berths, Wharves and Jetties	9.10%	\$218,230,019	\$126,366,276
Roads	1.23%	\$29,381,555	\$17,013,415
Breakwaters	2.35%	\$56,305,480	\$32,603,737
Land not assoc with leasing and Buildings	2.13%	\$51,038,613	\$29,533,953
Plant	2.27%	\$54,400,549	\$31,500,684
Rail	0.43%	\$10,198,091	\$5,905,213
Land assoc with leasing	0%	\$0	\$0
Channel	82.50%	\$1,978,445,693	\$1,145,620,670
Total Opening TAB Value		\$2,398,000,000	\$1,389,000,000

Source: Synergies

⁶ NPC's 2013-14 Annual Report, p31

⁷ The asset value for the channel is captured in the breakwaters/dredged asset category. Synergies has sought to separately identify the channel in its own asset category and has allocated \$737.4m of the breakwaters/dredged assets (totalling \$758.386m) as channel specific based on Note 19(a) of the Financial Statements that states that of the asset revaluation reserve amount, \$737.4m was specific to the valuation of the channel.

A.3.3 Asset Lives

Asset Lives are needed to calculate depreciation of the TAB. NPC's Annual Report states straight line depreciation rates for each category of fixed assets in the following ranges⁸ :

Buildings	2 – 7%
Roads	1.7 – 14%
Wharves and jetties	2.5 – 10%
Breakwaters	1%
Plant	2.5 – 85%

Given the lack of alternative information, Synergies have used the average of these ranges to apply to the relevant asset categories when calculating depreciation in the modelling.

Synergies has assessed a scenario that assumes an infinite life is assigned to the channel assets, and hence no depreciation of the channel is recorded. This results in a depreciation estimate similar to that reported in the Trade Report.

However, we consider that it is more likely that investors will seek both a return on and a return of their investment over time. In this regard, a plausible assumption of an economic life of 98 years could be applied to the channel assets in line with the life of the leasing arrangements, and have included this as a scenario in our modelling.

It is also plausible that PON will seek to recover the majority of its investment during the remaining economic life of the major port user, being the export coal industry. ARTC bases the remaining economic life of its assets on an estimate of the Hunter Valley coal reserves having a remaining life of approximately 30 years. Applying a remaining average life assumption of 50 years would provide that 60% of the port value was depreciated within this same timeframe. The remaining port value could then be depreciated over the longer term use of the residual trade assets.

A.3.4 Weighted Average Cost of Capital (WACC)

Synergies has assessed an indicative WACC based on the methodologies adopted by IPART. IPART has been selected as the relevant regulator on the basis that Port of Newcastle is subject to state based price monitoring in NSW.

The parameters of the WACC estimate are set out in Table 3.

⁸ NPC's 2013-14 Annual Report, p11

Table 3 WACC parameters

Parameter	Value	Notes
Risk free rate	3.86%	The mid-point estimate of IPART's long-term average of the risk-free rate and the contemporaneous estimate produced by Synergies.
Debt margin	2.54%	The debt margin as provided by the Bloomberg BVAL service for 10 year BBB rated corporate bonds.
Debt raising costs	0.125%	Debt-raising costs as applied by IPART.
Gearing (debt to debt plus equity)	60%	Gearing assumption based on IPART transport WACC and DBCT gearing.
Market risk premium	7.4%	The mid-point estimate of the long-term IPART estimate of the MRP along with a contemporaneous measure calculated using dividend discount models.
Gamma	0.25	Gamma as set by IPART.
Tax	30%	Australian corporate tax rate.
Asset beta ^a	0.5	Asset beta set equal to the asset beta for DBCT as determined by the QCA.
Equity beta ^a	1.24	The asset beta transformed with 60% gearing using the Monkhouse formula.
Cost of debt	6.52%	
Cost of equity	13.08%	
Post tax nominal (vanilla) WACC	9.15%	
Pre tax nominal WACC	10.66%	

a: IPART's assumed transport equity beta is 0.90, however this is primarily applicable to public transport and we believe this is too low based on PON's assumed gearing of 60%.

Source: Synergies calculations

A.3.5 Opex

Synergies has included both direct and indirect operating expenses in the build up of anticipated AAR based on PON's Trade Report, which reports Operations Expenses – Trade Assets and Allocated Overheads – Trade Assets as separate cost categories.

Operations Expense – Trade Assets have been defined by PON as those expenses that are made up of salary and wages, repairs and maintenance, external services, fuel and security and that these costs relate to dredging, survey, repairs, maintenance and other minor costs that are directly related to Trade Assets.

Synergies assumes that 100% of these direct costs would be sought to be captured in PON's build up of its annual required revenue. Allocated Overheads – Trade Assets have been defined by PON as indirect costs including transition costs (costs not directly related to income earning operations or capital projects) and have been allocated based on relative revenue. Synergies assumes that this allocation of overheads to Trade Assets would be sought to be recouped by PON in its build up of annual required revenue.

Opex has been based on the six months of operating expenditure of \$17.236m given in PON's Annual Trade Report. This year to date expenditure amount has been assumed to be representative of the full year's anticipated expenditure profile such that the full amount of opex expected to be spent for FY2015 is \$34.472m. Synergies' analysis assumes that the current operating conditions remain constant over time and as such, forecast operating expenditure for future years has been assumed consistent with this amount in real terms and escalated at CPI each year. One unknown in this context is future maintenance dredging requirements.

A.3.6 Capex

Given our base assumption in this analysis is that current operating conditions and volume remain constant into the future, there is no allowance for growth capex in future years. A minimal annual spend for asset renewals of \$10m per annum (FY2016 \$) indexed by CPI each year has been included in the analysis. All renewals capex is assumed to have a 30 year life.

A.3.7 Volume

Changes in costs and revenues due to volumetric variation over time have not been contemplated in the modelling as the base assumption that volumes remain consistent with current operating conditions has been adopted for this analysis.

A.3.8 Estimated Current and Future Revenue

PON began trading on 30 May 2014. It has provided six months' worth of trade revenue for 1 June to 31 December 2014 in its 2014 Annual Trade Report where it reported its trade revenue from port charges (including navigation services charge, wharfage, site occupation, security and utilities) at \$43.65m. This half year result related to the period prior to the price increase introduced by PON as of 1 January 2015.

In PON's letter to Glencore dated 19 December 2014, PON state that, based on the weighted average size vessel, the increase to navigation service charges (NSC) for coal vessels will be approximately 12.7 cents per tonne of coal and that all other charges will incur a price increase of 3.9% in 2015 and 2016.

Based on this information and the reported amount of coal exported through the port in the 2014 calendar year given in PON's Annual Trade Report of 159,035,923 tonnes, we estimate that, over a full year, this will result in addition revenue collected by PON of approximately \$21m. Based on this, we have estimated the total 2015/16 annual trade revenue as \$111m.

Table 4 below details Synergies method and assumptions applied for estimating this annual revenue amount.

Table 4 Estimation of PON's future revenue

	Half year result 1 January to 31 December 2014	Assumed full year result 2014/15 exclusive of price increase	\$ increase due to price increase at 1/1/15 ¹	Estimated total full year revenue 2014/15	Estimated 2015/16 annual revenue ⁴
Port Charges	\$000	\$000	\$000	\$000	\$000
NSC	30,936	61,872	20,198 ²	82,070	84,121
Wharfage	10,292	20,584	803 ³	21,387	21,921
Site Occupation	1,769	3,538	138	3,676	3,768
Security	609	1,218	48	1,266	1,297
Utilities	44	88	3	91	94
Trade Revenue	43,650	87,300	21,189	108,489	111,201

	Half year result 1 January to 31 December 2014	Assumed full year result 2014/15 exclusive of price increase	\$ increase due to price increase at 1/1/15¹	Estimated total full year revenue 2014/15	Estimated 2015/16 annual revenue⁴
2014 calendar year coal volume ⁵		159,035,923 tonnes			
\$ increase per nt coal		\$ 0.127	\$/t		
% increase for all charges other than NSC		3.9%			

Notes:

1. This price increase was brought into effect mid financial year at 1 January 2015, but for the purposes of estimating future full year revenue results the increase has been applied as per a full financial year.
2. The increase to the NSC has been calculated as 159,035,923t multiplied by \$0.127/t.
3. The increase to wharfage, site occupation, security and utilities charges has been calculated by applying the 3.9% increase to the 2014/15 annual revenue for each charge.
4. 2014/15 estimated annual revenue has been escalated by 2.5% to give annual revenue estimate for 2015/16.
5. This reported level of coal tonnage through the port is for the 2014 calendar year. For the purposes of calculating approximately annual revenue amounts in has been assumed that this 12 months of throughput is also indicative of the throughput expected for the 2014/15 year.

B PON letter to Glencore

Ref: A617869

19 December 2014

Mr Anthony Pitt
Glencore
PO Box R1543,
Royal Exchange NSW 1225

Dear Anthony

Thanks for your letter of 15 December 2014 regarding the changes to Port of Newcastle (PON) pricing to apply from 1 January, 2015.

Our letter of 26 November advised you of the increase in the wharfage charge which we invoice Glencore and enclosed our schedule of charges. I note your interest in the Navigation Services Charge (NSC) that we charge to the shipping lines and I will address the changes we have made below.

Pricing Realignment

In addition to the capital cost incurred by Port of Newcastle in acquiring port assets, including the channel, there are a number of other factors that have necessitated this realignment.

The previous pricing was well below market rates and had not been subject to annual price review. From July 1995 to July 2014 the NSC only increased by 1.2%. The NSC for a vessel up to 50,000 Gross Tonnes (GT) was 42.4 cents per GT in 1995 and is only 42.9 cents per GT now (exclusive of GST). If inflation alone, in accordance with the Consumer Price Index (CPI), had been applied each year across this period, NSC would have increased by 73%.

Given regular cost increases incurred in operating the port (including the channel licence, dredging, survey, vessel scheduling, and the maintenance of navigation aids and the breakwaters) this was an unsustainable position and restricted ability to maintain existing infrastructure and invest in new port infrastructure.

The historic pricing level does not reflect the intrinsic value of assets leased or licensed by PON from the State which are more than the assets owned by the former Newcastle Port Corporation or the costs involved in maintaining port assets and services. The most significant additional asset licensed to PON is the channel.

The intrinsic value of our trade assets (which includes the channel), revenue earned and costs incurred are now transparent and publicly disclosed on our website. The link is:

<http://www.portofnewcastle.com.au/Company-Information>.

The valuation of Trade Assets was independently prepared by a leading international professional services firm and was based on methodology commonly used by regulators. This will allow you to understand our current financial position.

Navigation Services Charge for Coal and Non Coal Vessels

In your letter you reference changes to charges for non-coal vessels being impacted in a similar way to coal vessels. This is incorrect. From 1 January 2015 there will be a separate NSC for coal vessels and non coal vessels.

- The maximum NSC for coal vessels will be uncapped and charged at a flat \$0.69 per Gross Tonnage (GT), exclusive of GST.
- The NSC for non coal vessels will be \$0.4459 per GT for the first 50,000 GT plus \$1.0033 per GT thereafter (exclusive of GST).

The change to the pricing structure reflects the operational characteristics of the port. Non-coal ships are generally far smaller and with less draft than coal ships and use less of the channel. We are conscious of the need to charge fairly for the use of the channel which is our most valuable trade asset. Maintenance dredging is undertaken to preserve design depth which is utilised by many of the coal vessels which require all of the depth available in the channel. With coal ships using by far the largest and most costly parts of the channel in terms of both the intrinsic value and operating costs there should be a different charge to be fair on non-coal trades.

Under the current pricing arrangements non-coal commodities pay significantly more NSC per tonne of cargo than coal and this does not properly reflect the maintenance cost and intrinsic value of the assets used.

You reference the removal of the cap on NSC. Coal ships use the largest and most costly part of the channel to create and maintain, they therefore should pay a fair share. These vessels carry the largest cargo loads and are able to deliver strong economies of scale for the cargo owner. The intrinsic value and maintenance cost of the channel becomes significantly higher the deeper the dredging required. Coal ships also travel further up the channel to K10 with coal ships being the sole users of berths from K4 to K10.

Competitive Position of Exporters

In determining the pricing strategy, we have been mindful of our competitive position and of the competitive position of exporters through the port. Our new pricing is in line with the market, and all ship-based charges are less than our nearest comparative port, Port Kembla, which operates in the same regulatory and statutory pricing environment and is also privately owned. We understand Glencore is an exporter through Port Kembla and will therefore understand this comparison.

PON has a far larger and more valuable channel than Port Kembla and a significant ongoing need to dredge with our own trailing suction dredge operating 12 hours per day 7 days per week. Even with these significant additional costs our new NSC pricing is around 10% less per GT than is being paid by ships calling to receive your coal at Port Kembla.

I note your comments regarding how the changes we have made to the NSC that we charge to the shipping lines will flow back to Glencore. You have a much better understanding of how your commercial arrangements with your customers work but I would make the following points. NSC is a minimal part of the price paid for coal by the overseas buyer. We estimate that the NSC is about 0.5% of the delivered cost of coal to overseas buyers, and is effectively the same as the towage cost.

We have also benchmarked the new NSC relative to the Australian dollar price of coal over the past 20 years and the new charge sits comfortably within the range of this charge which further demonstrates that the new charge is reasonable in an historic context given the various coal price cycles that have occurred in this time.

The impact of the NSC increase will depend on the size of the vessel. In the year to 30 June 2014, the weighted average coal ship was 58,000 GT and had 92,500 tonnes of coal on board. Based on the weighted average size vessel the NSC increase will be approximately 19 cents per GT, exclusive of GST, or approximately 12.7 cents per tonne of coal. By comparison, fluctuations in exchange rates, fuel prices and vessel charter rates are likely to have a far more significant impact on the customer's cost structure.

I understand that price increases are never welcome however this realignment was necessary to reflect the costs in owning and maintaining the channel and associated infrastructure, and to fairly reflect the operations of the port and the different port users.

Apart from the navigation services charge for coal vessels, the pricing increase for 2015 is 3.9%. We understand the need for pricing certainty and therefore commit that the pricing increase for 2016 will be 3.9%.

Yours sincerely



Jeff Coleman

CHIEF EXECUTIVE OFFICER