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Subcorp 'comes of age' with record profit result

ASC Pty Ltd (the former Australian Submarine Corporation) and its controlled entities – ASC Engineering Pty Ltd, ASC Shipbuilding Pty Ltd (including ASC Modules Pty Ltd, and ASC AWD Shipbuilder Pty Ltd), and ASCOV Pty Ltd - has achieved a consolidated after tax profit for the year ended 30 June 2007 of \$29.6m (cf \$18.5m in 2005/06), calculated on total revenue (given \$325.4m of cash receipts) of \$312.4m (cf \$260.9m previously).

■ Trevor J Thomas/OSBORNE (SA) & HENDERSON (WA)

Consistent with a previous 'Statement of Intent' issued by the ASC's board to sustain a dividend payout rate of 60% of profit, directors declared a fully franked 2006/07 final dividend to the Commonwealth of Australia (CoA) of \$9.825m (payable at a date to be determined), which came on top of an interim fully franked dividend of \$7.975m that was paid on 28 February 2007.

Total dividend payments (fully franked) for the reporting financial year, therefore, represent a distribution to the 100% shareholder (ie: the CoA, via the Minister for Finance & Deregulation) of \$17.8m (cf \$11.1m in 2005/06) - on a total equity base of \$158.9m.

This yielded an 11.2% return on investment - calculated on an adjusted asset base (ie: accelerated depreciation of +\$7.3m from the 'Collins' submarine build was brought to account from the previous financial year's outcome) - and impacting on the value of the business by a positive 31% to deliver a \$37.4m increase from the previous year's figure of \$121.5m.

TIME FOR NEW CHALLENGES: Having now capitalised upon three successive years of substantive financial recovery from

Key Points

- **The ASC has turned in** an impressive 2006/07 financial report that, arguably, puts the company in its best position ever for re-privatisation should Labor sustain previous corporate sale plans.
- **Investments now being made** at ASC's home in Adelaide and a new submarine support facility south of Perth, will likely position the company for extra efficiency gains and improved profit results.
- **Australia's submarine fleet** is currently undergoing an historically high level of maintenance and repair activity, with combat system and other capability enhancements currently at a peak.
- **During the 2007 Federal election** campaign, Kevin Rudd promised to fund in the 2008/09 Defence Budget a series of studies on what sort of capability should replace the 'Collins' fleet.
- **Rapid changes in technology** and threat scenarios are having a major impact on the mission profiles anticipated for future underwater warfighting platforms, especially the enhancement of manned systems with unmanned underwater vehicles.

the just over break-even result posted in the 2003/04 Annual Report (when only \$5m in dividends were declared – the majority of which was generated via interest from bank deposits), and without any major incremental movements in 'Trade and Other Payables' liabilities, ASC's financial outcome for 2006/07 shows the enterprise particularly well positioned to take on new business challenges arising from recent Australian Government military capability enhancement contract awards.

New challenges for ASC immediately present themselves in the form of the imminent construction of the Royal Australian Navy's (RAN) three new 'Hobart'-class Air Warfare Destroyers (AWDs) - with some prospect of a fourth - whilst the company is also settling into a comfortable rhythm in satisfying its 25-year 'Collins'-class submarine Through Life Support (TLS) contract (signed in

December 2003), and leveraging further efficiencies and costs savings from the opening in March 2008 of its new Western Australian-based 'Collins' submarine support facility (see page 23).

The 2006/07 Annual Report makes particular reference to the company's implementation of substantive knowledge development programs during the year, including leadership development and skilling upgrade programs via a TAFE Partnership, Certified Project Managers' Program, and the introduction of two masters' programs in association with the Defence Materiel Organisation's (DMO) Skilling of Australia's Defence Industry (SADI) package.

On the industrial front, ASC submarine production employees are currently working under a three-year Australian Workplace Agreement (AWA) terminating in 2008/09, whilst the workforce agreement (EBA) for shipbuilding employees expired on 14 December 2007. A substantive worker recruitment program is also under way to resource-up for the AWDs, with a particular focus on local apprenticeships, undergraduates and graduates.

In short, and having absorbed substantive non-reimbursable costs of at least \$25m (principally funded from cash reserves) in successfully positioning itself for the project Sea 4000 AWD build, the annual report shows ASC running into 2007/08 with: \$9m 'Cash at Bank'; being substantially debt free (ie: \$109,000 bank overdraft and negligible other financial liabilities); and sitting on \$80 million in short- and longer-term financial institution deposits.

At an effective interest rate of 6.09% in the year under review, these deposits yielded the company a clean \$5.0m in interest which – because the cash is not currently required to support operations – moved straight to the company's bottom line.

LEAD NAVAL DEFENCE CONTRACTOR: On the back of the June 2007 selection of Spain-based Navantia's F-100 'existing design' (ExD) for Australia's new AWDs, the continuing good financial news for 2006/07 saw ASC Chairman, John Prescott, comfortable in declaring the company had achieved a "coming of age" in terms of its positioning as the nation's leading naval defence contractor - for both submarines and surface ships.

As part of this construct, the Annual Report says ASC had previously extended its relationship with General Dynamics-owned Electric Boat Corporation through to 2008, "with a particular focus on continuous upgrades and supporting the company in its long-term objective of co-designing Australia's next generation of submarines."

Prescott similarly pointed to the annual report's confirmation that ASC was "achieving unprecedented levels of efficiency and effectiveness" in its maintenance of the 'Collins' fleet, while building a strong position within the AWD Alliance as it headed into phase 3 detailed design, engineering and construction activities for the new warships.

He further noted that the third full year of the 'Collins' submarine TLS contract "has seen ASC complete the transition from the submarine builder to the Commonwealth's trusted provider of the TLS for the 'Collins'-class. ASC sees its open, alliance-style relationship with the Commonwealth as providing a platform for delivering better than 'business as usual' performance."

Closer study of the 2006/07 Annual Report reveals the company performed 13 (submarine) maintenance availabilities over the year, with 11 said to have been completed (consistent with customer requirements) on-time and on-budget. The two outstanding activities related to two full-cycle dockings (FCDs – aka major refits) that were scheduled to run into 2007/08.

In short, HMAS 'Waller' was delivered back to the Navy in June following an intensive three-year FCD at Osborne (South Australia), which included facilitation of the 'replacement combat system' as part of the \$857m project Sea 1439 upgrade (based on the

ASC fattened up for no sale?

The close of 2007 has also seen ASC Pty Ltd move a step closer to its re-privatisation, with completion of a Scoping Study and former Howard government approval to commence pre-sale preparations following Sparke Helmore's appointment as 'process advisor' (complementing earlier appointments of Lazard Carnegie Wylie as 'business advisor', and Frehills as 'legal advisor') - all to oversee a proposed competitive tender 'trade sale' by the second half of 2008, and facilitated by October 2007 signature of the AWD Alliance ship acquisition contract.

■ Canberra Bureau Report

As first announced by the former Howard Government on 16 August 2006, the Commonwealth's objectives in advancing the re-privatisation of ASC were: to preserve and enhance the long term viability of ASC, both financially and operationally, including (its) ability to perform its role in relation to the 'Collins'-class submarine Through Life support (TLS) contract and AWD project; and enable ASC to contribute to an efficient and competitive Naval Shipbuilding & Repair Sector which is capable of delivering the best defence technology available to meet Australia's national security needs.

Next on the 'objectives' list came the need: to ensure the fair and equitable treatment of ASC's employees; to minimise ongoing risk and liabilities to the Commonwealth following re-privatisation; and subject to the above, to maximise sale proceeds, and achieve a value for money outcome for the Commonwealth on a whole-of-Government basis.

Then Minister for Finance & Administration, Senator Nick Minchin (now Shadow Minister for Defence), noted any prospective ASC purchaser needed "to demonstrate its ability to comply with these sale objectives", as well as a foreign ownership limit of 49%.

A number of other protections were also proposed to be put into place to secure Australian national security interests, such as: the

Chairman, CEO and a majority of directors needing to be Australian citizens; and ASC's head office, substantial operations and place of incorporation needing to remain in Australia.

The change of Federal Government on 24 November 2007 has had the natural impact of engendering some short-term uncertainty to the ASC re-privatisation roadmap laid out by the Howard government, given Prime Minister Kevin Rudd and Joel Fitzgibbon (now Minister for Defence) have gone into 'review' mode - especially in terms of bringing forward a new Defence White Paper - before making any sudden, substantive new military capability acquisition decisions.

In the aftermath of a major review of defence-industry policy brought down by former Defence Minister Nelson on 1 March 2007 – the first major work since Bronwyn Bishop's seminal work in 1998 - it could be expected that Labor's new (probably 2009) Defence White Paper would contain a substantive discussion of defence-industry policy issues.

This is especially so in light of BAE Systems' acquisition of Tenix Defence, but it would also need to reflect the substantial consolidation of global defence industry over the past decade. In short, it could be expected some new thought might be given to the idea of retaining ownership in key defence materiel production assets, as a means of assuring a competitive environment between defence materiel suppliers.

US Navy's AN/BYG-1 submarine tactical and sonar capability), and the project Sea 1429/2 Mk48 Mod-7 ADCAP Common Broadband Advanced Sonar System (CBASS) anti-surface warfare and anti-submarine warfare heavyweight torpedo upgrade.

Other technological advances installed into HMAS 'Waller' (and subsequently to be extended across the whole 'Collins' fleet) include: improved fire-fighting systems, diesel modifications, fuel system safety improvements, sewerage automation, and implementation of Special Forces operational capability.

HMAS 'Dechaineux' is currently undergoing its FCD at Osborne (began in April 2006, and running through to late-2008), whilst HMAS 'Sheean' began pre-FCD activities at the same site prior to entering its scheduled major refit running through to mid-2008. The 2007/08 Defence Budget papers further revealed HMAS 'Farncomb' was to enter a mid-cycle docking shortly after July, with expected completion in mid-2008.

'COLLINS' FLEET NEEDS BODIES: This essentially leaves the RAN for an extended period with only three operational submarines – HMAS 'Rankin', HMAS 'Collins' (which returned to service in October 2005 after a FCD), and HMAS 'Waller'.

Whilst unfortunate for the Navy, in terms of Australia's sustainment of a credible rate of submarine operations – estimated at 1,000 Unit Ready Days (URDs) for 2007/08 (down from 1,265 URDs in 2006/07, and slashed to 817 URDs in the Additional Estimates) – the concentration of repair and maintenance effort has clearly had a major impact on boosting ASC revenue from the rendering of services, which jumped 20% to \$305.8m in 2006/07.

Further, it sets a baseline on-going revenue picture of at least \$250m per annum given recent experience that higher rates of 'discovery' work are driving up the cost of FCDs, just at the time ASC is gearing up for the AWD build, when expenses will most likely be at their heaviest.

ASC fattened up for no sale? - Ctd from p 21

During the 2007 election campaign, Labor did not contest the Howard Government's proposed ASC re-privatisation agenda, given the whole process of defence materiel production asset dispositions had been kicked off during the term of former Labor Defence Minister, Senator Robert Ray, after receipt of a substantive report prepared by Roger Price, MP in 1989.

The mood to rush ahead with ASC re-privatisation consistent with the previous government's agenda, nevertheless appears to have been muzzled as there is discussion within ALP policy circles about the quantum of Government business assets that should desirably be retained in Commonwealth hands if – as Labor canvassed during the election campaign – it was to advance a more interventionist industry policy to drive innovation and international competitive-

ness (a theme regularly espoused by the now Minister for Innovation, Industry, Science & Research, Senator Kim Carr).

Outside of tariffs, subsidies and the increased regulation through Government procurement policies (as also mooted for consideration by Senator Carr), Labor will need to retain some substantive Government-controlled entities if it is to be able to leverage desired industry policy outcomes, such as the retention of a viable (and competitive) surface and underwater naval combatant design, construction, maintenance and repair industry in Australia over the longer-term.

The new government might also want to retain ASC if it is of a view to directly influencing (as similarly championed during the election campaign), the build location of the replacement 'Collins'-class submarine fleet (ie: Adelaide) from 2017 (see article page 25).

The ASC's case is not a one off, with other examples of Labor decisions to retain an ability to influence industry outcomes including: the retention of Medicare - by dumping the proposed \$2b sale; moving responsibility for Information Technology from the Department of Communications to Senator Carr's restructured (around Innovation) Industry Department; and proposals to adjust the structure (and total value) of subsidy payments in the automotive industry to ensure not only that Australia retains a viable vehicle design, manufacturing and component supply base, but one that can increasingly produce 'green' (including hybrid) cars.

As an aside to debate on sustaining the Howard government's ASC re-privatisation schedule, an early opportunity for the new Labor government to immediately wrestle some substantive influence within ASC's management fortuitously arose 30 December 2007 upon expiry of the terms of

two current ASC Directors – Charles Bagot and Graeme Bulmer.

Giving up the industry policy leverage inherent in substantive ownership (ie: >50%) of the ASC, may thus be a more difficult challenge for the new Rudd Government (noting Rudd was a lead opponent of the sale of Telstra), especially prior to the fuller canvassing of pros and cons relating to industry's increasingly significant position as the 'fourth arm' of defence in supporting expeditionary operations.

To satisfy the new PM's penchant for the application of 'new thinking' to issues of national import, ADBR understands there is a feeling within Labor circles the process might now require a little more time than the 'sale in the second half of 2008' timetable readily adopted by the former government.

At this stage, the odds appear more likely that the sale (if it pro- >>> page 24

Table B: ASC Pty Ltd - Long-term ADBR Projections of Financial Performance Metrics

ROAD TO RE-PRIVATISATION	TLS(1)-13	12	11	10	9	8	7	6	5	4	3	2	1	TLS (2)-5	
Corporate Performance Measure	Actual FY 2006/07 (\$m)	Projected FY 2007/08 (\$m)	Projected FY 2008/09 (\$m)	Projected FY 2009/10 (\$m)	Projected FY 2010/11 (\$m)	Projected FY 2011/12 (\$m)	Projected FY 2012/13 (\$m)	Projected FY 2013/14 (\$m)	Projected FY 2014/15 (\$m)	Projected FY 2015/16 (\$m)	Projected FY 2016/17 (\$m)	Projected FY 2017/18 (\$m)	Projected FY 2018/19 (\$m)	Projected FY 2019/20 (\$m)	SUB-TOTALS (\$m)
Financial Income	5.1														
Other Revenues from Ordinary Activities	1.5														
Project Sea 4000 (Contract Year)		1	2	3	4	5	6	AWD#1	8	9	10	AWD#3	12	13	
- ASC AWD Revenues (Projection)		150	250	350	550	600	450	350	250	175	150	100	75	50	3500
- ASC 'Collins' TLS Revenues	305.8	264.6	265.0	260.0	255.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0	250.0	3295
Total Revenue	312.4	414.6	515.0	610.0	805.0	850.0	700.0	600.0	500.0	425.0	400.0	350.0	325.0	300.0	6795
Operating Profit before Tax	42.1	28.1	54.6	64.7	85.3	90.1	74.2	63.6	53.0	45.1	42.4	37.1	34.5	31.8	
Operating Profit after Tax	29.6	20.1	39.3	46.6	61.4	64.9	53.4	45.8	38.2	32.4	30.5	26.7	24.8	22.9	
Total Assets	276.6	284.6	300.4	319.0	343.5	369.5	390.9	409.2	424.4	437.4	449.6	460.3	470.2	479.4	
Total Shareholder Equity	158.9	123.8	128.9	136.8	147.4	158.5	167.7	175.5	182.1	187.7	192.9	197.5	201.7	205.7	
Total Fully-franked Dividend Declared	17.8	12.0	23.6	27.9	36.9	38.9	32.1	27.5	22.9	19.5	18.3	16.0	14.9	13.7	304.2
Return on Equity	18.6%	16.2%	30.5%	34.0%	41.7%	40.9%	31.9%	26.1%	21.0%	17.3%	15.8%	13.5%	12.3%	11.1%	ADBR

To illustrate the point, the latest ASC Annual Report reveals the company having been hard at work rectifying 560 'Collins' submarine urgent defects over 2006/07, as part of a program focused on reducing 'Priority 2' (ie: mission degrading) Urgent Defects from 30 per submarine in July 2006 (a peak), to 14 per submarine – said to be “a massive improvement on last year's results.”

This quest is said to have helped Navy capability planners via a flow-on effect in improving the availability of submarines for operational 'sea-days' (the criteria against which incentives are assessed and paid by the Navy), despite the high tempo of submarine maintenance activity yielding fewer overall submarine sea-days.

ASC nevertheless points out that available sea-days reached an all-time high of 695 days (89%) in 2006/07, compared to 67% in the previous financial year – all credited against the variety of initiatives implemented by ASC to improve system and platform reliability. ASC Managing Director, Greg Tunny, told ADBR “this result is not only pleasing for our customer, but is also a clear indication that our change and improvement initiatives are delivering results.”

The improved performance on submarine support in turn drove record incentive payments to the company under the provisions of the 2003 TLS contract, with Tunny further noting, “the improved efficiency is evidenced by our achieving a 26% increase in submarine support days, for only a 13% price increase (including CPI). We also concluded the year with a continuation of our very good occupational health and safety record. The company-wide Lost Time Injury Frequency Rate of 5.9 achieved (including contract labour), positions ASC within the best practice range of our industry.”

INVESTMENT IN TECHNICAL CAPABILITY: The Annual Report also reveals that during 2006/07, ASC made significant investments in upgrading its engineering simulation and modelling toolsets, as well as implementing an enhanced product lifecycle management system.

Work on an upgraded computer-aided design (CAD) environment was well underway at financial year's end, and “designed to ultimately put ASC at the leading edge of naval design and engineering competencies.”

Tunny expects that accumulating improvements from these investments will deliver the ASC “a quantum leap in (its) continuous improvement of quality, efficiency and effectiveness, supported with other initiatives such as the Capability Maturity Model Integration (CMMI) program already under way.”

He added that in conjunction with the Defence Science and Technology Organisation (DSTO), we intend to “further invest and expand R&D activities designed to explore new ideas and build on the experience gained through our 20-year involvement with the 'Collins' submarines.”

In short, and leveraging off these investments, the subsequent financial year's results are expected to sustain the company's strong profit result of recent years, acknowledging that the rate of growth in this measure may decline given ASC is close to capping out on incentive payments provided courtesy of its TLS contract.

Ten maintenance activities (including two intermediate dockings and one propeller change) were conducted on in-service RAN submarines during 2006/07 from the ASC's Western Australian support facility – currently located at the Navy's HMAS 'Stirling' base on Garden Island in a contractors area - known as 'White City' for its numerous demountable offices.

NEW DIGGS AT THE AMC-CUF: Frustrated with the difficulties associated with working from such accommodation, ASC pushed ahead over 2006/07 with construction of a new \$35m submarine repair and maintenance facility (including office accommodation for 185 people), being built as part of a parallel \$90m development plan on the Australian Marine Complex (AMC) at Henderson, and being funded by the WA Government.

When it comes on-stream over 2008, the new support facility will provide a means to consolidate ASC's current three work sites in and around the AMC, as well as provide a dedicated environment for submarine maintenance and repair (up to three submarines at any one time). In short, it means ASC - for the first time ever - will have a permanent home in the State.

Broad Construction was selected after an extensive tender evaluation program to undertake construction of the new 'Collins' support facility, with the overall project being managed by Worley Parsons for completion in early-2008. One glitch in the plan involved the new support facility using a rail-transfer system (similar to that proposed for the SA CUF), and drawing submarines into the new maintenance hall after being raised from the sea via a new 12,000 tonne lifting capacity floating dock being acquired by the WA Government.

ASC put \$5m of its own money into the \$65m floating dock currently under construction by Strategic Marine in Vietnam, with finishing work to be done at the AMC-CUF. It appears, however, that land alignment issues associated with the new floating dock having to be geometrically aligned – to accurately and safely link-up to the shore rails – were discovered to similarly necessitate a realignment of existing CUF wharf infrastructure, thus leading to substantial additional costs for the WA Government.

In response to this discovery, AMC officials are understood to have alternatively proposed that adjustments be made to the angle of the floating dock's land-mating system, meaning that the transport of surface vessels, submarines (and potentially, hull modules for the AWDs) will instead be undertaken via a wheel-based (ie:



MORE ROOM FOR PRODUCTIVITY GAINS & COST SAVINGS: ASC has spent \$35m at the Australian Marine Complex (AMC) at Henderson to secure its own greenfields 41,600 sqm site (far L), upon which it has had constructed a 26m high 'Collins'-class submarine-sized maintenance hall (L) and associated engineering support offices of 2,500 sqm, along with adjacent warehouse capacity of 1,600 sqm. The new facility - expected to begin accommodating up to 185 personnel from end-March - will be a welcome relief for ASC engineering staff who have sweated it out for years in temporary accommodation at the contractor support area on HMAS 'Stirling' (R). Assuming Strategic Marine and AMC management deliver the new 12,000 tonne lifting capacity floating dock and wheel-based mobility infrastructure by the end of the year, ASC is hopeful it can undertake its first 'Collins'-class docking, thus achieving further consolidation and operating cost savings from having to hire Tenix Defence waterfront facilities (far R), just purchased as part of a \$686m deal by UK-based BAE Systems.

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roller) system – thus mitigating the need for extensive wharf and shore infrastructure realignments.

Tortuous discussions between ASC and AMC officials running up to Xmas 2007 saw resolution in favour of a roller system, with a rapid-acquisition order being placed upon Kamag as a means of ensuring sufficient infrastructure would be available to ASC to support company objectives for undertaking its first ‘Collins’-class maintenance docking at Henderson in late-2008 - thus freeing ASC from the cost of hiring facilities formerly provided by Tenix.

The 2006/07 ASC Annual Report also makes substantive reference to a \$100m investment in re-developing its shipbuilding facilities on the former Eglo Engineering site in preparation for commencement of AWD construction.

Following an intensive evaluation and workshop process on these proposals - involving ASC shipbuilding capability partners General Dynamics-owned Bath Iron Works (BIW), builders of the US Navy’s DD-51 ‘Arleigh Burke’-class destroyers, and Sinclair Knight Merz (SKM) - Hansen Yuncken was selected to design and construct the new yard, including wharf-side support and administration buildings, the refurbishment of existing buildings and services, site pavements and landscaping, and new infrastructure motivated by OH&S/productivity enhancement considerations.

Hansen Yuncken was subsequently engaged by ASC for the design phase of the new shipyard (which will be located adjacent to

the SA Government-funded Common User Facility – see below) and, if the subsequent design meets ASC’s budget criteria upon completion of the design phase, the company will then be engaged for the construction phase of the project. A team of consultants – including Hassel, Bestec, KBR, ACOR and Currie & Brown – have also been engaged to manage due diligence studies and the design process.

As at the close of 2007, Hansen Yuncken was still to be engaged for the ASC facility build, with debate ongoing in terms of the demolition of the former Eglo Engineering buildings (as an alternative to their refurbishment) in order to start over again with a new construction that sat at the same ground level as the new CUF as a means of eliminating drainage issues and associated flood risk with the old building. Cost estimates for such work, however, were anticipated to exceed the ASC’s original facilities upgrade budget.

In terms of South Australian government provided project Sea 4000 support infrastructure, officials originally raised a Port Adelaide Maritime Corporation (PAMC) entity to carriage responsibility for delivering AWD Program infrastructure.

The PAMC has since been restructured as the ‘TechPort Australia’ Naval Industry Hub, and is now managed within a restructured South Australian Government defence-business attraction operation – now called DefenceSA. In short, the development

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AIR WARFARE DESTROYER INFRASTRUCTURE: ASC has drawn extensively on capability partners Bath Iron Works and Sinclair Knight Merz, for assistance in planning the facilities within which it will bring together the RAN’s new ‘Hobart’-class destroyers (AWDs), which are based on the Spanish Navy’s F-100-class (far L). The company is spending \$100m substantially upgrading a site adjacent to a group of common user facilities now under construction by the SA government (L) to support both the AWD construction program, and the new ‘Techport Australia’ naval industry hub. The driving of piles and the laying of concrete courses to accommodate cabling and piping to support the hardstand upon which the AWDs will be assembled, is now well underway (R) although second thoughts are being given to whether ASC will refurbish or replace former Eglo Engineering buildings (far R), whose ground level will sit substantially below that of the common user facilities unless replaced.

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ASC fattened up for no sale? - Ctd from p 22

ceeds at all) will be delayed into 2009 - which will create its own problems in terms of settling down the ‘build’ philosophy governing construction of the three new AWDs, as well as prolonging the desired settlement of relationships between the three AWD Alliance partners – the Defence Materiel Organisation (DMO), Raytheon Australia and ultimately, ASC under new management.

Whatever path the new Rudd Government takes in regard to future ownership of the ASC, after six and a half financial years of reconstitution since it was nationalised in November 2000, the company is set to grow substantially over the roughly 12-

year period from the current financial year (2007/08) through to 2019/20, which also marks the end of the first 15-year component of ASCs 25-year (15 + 5 + 5) ‘Collins’-class Through Life Support (TLS) contract.

Further, company operations will have become more sophisticated on the back of ASC-controlled operations into two States, and will have benefitted from over \$400m worth of investment in naval construction and repair assets in South Australia, and close to \$300m of State and Federal investment (including bicentennial grants) in Western Australia.

Beyond 2019, the outlook for ASC is a further decade of growth should subsequent Federal gov-

ernments act on Labor’s election grandstanding, and commitment that replacement ‘Collins’ submarines will first be built, and second, they will be built in Adelaide.

Bolstered by at least ten years of AWD construction revenue kicking-in from 2007/08, it becomes possible to make some simple estimates of the ASC’s future overall financial health using key accounting measures sourced from successive Annual Reports, and deriving some qualified averages from the previous four years’ (2003/04 to 2006/07) financial outcomes to establish a baseline for forward estimates of revenues, expenses, and profits.

Despite the trumpeting of the replacement ‘Collins’ program by Labor during the 2007 election campaign - given a ‘second pass’

decision date is well beyond the term of the current government - it is anticipated that in valuing the ASC for sale, potential bidders will focus on what is more certain. In short, that is the nearer term decade running roughly to 2019/20 – which should see off launching of the third AWD, as well as expiry of the first 15-year tranche of the ‘Collins’-class TLS contract.

Taking the upper range of the now \$8.1 billion project Sea 4000 outturn (ie: adjusted for future inflation) cost estimate, at least \$2 billion will first be lost to ASC as a result of the predominantly imported (components and software) Lockheed Martin ‘Aegis’ combat system ordered by the former government in

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The new submarines are now able to launch 154 'Tomahawk' land attack cruise missiles from canisters held within the 40ft tall/7ft diameter tubes previously used to house 'Trident II' D5 missiles, as well as being able to inject ashore as many as 75 Special Operations Forces by swimmer delivery vehicles embarked from dry deck shelters inside the host submarine.

A French/DCNS concept has alternatively emphasised the use of unmanned underwater vehicles (UUV) in enhancing the surveillance and

intelligence gathering capabilities of next-generation submarines. The SMX-22 combination envisages a Network Centric Warfare (NCW) command submarine, which also provides at-sea support for two smaller high-efficiency multiple operations (OPS) submarines.

The NCW and OPS submarines could then operate docked to form a combination vessel operating as a single unit, or alternatively, all three can undertake independent operations. The OPS vessels could be used to emplace new types of re-

motely deployed sensor systems drawing from environmentally-sourced power to undertake slow-roaming ocean surveillance functions, or deploy small underwater swarming robots and other similar systems that could potentially place submarines at the heart of future Network Centric Warfare constructs.

Outside of US Navy submarines (which are not viably an option for Australia due to their size and nuclear propulsion), there are two possible paths to a future submarine de-

sign – both sourced from Europe – from which Australia might be able to develop an approach for replacement of the 'Collins'-class.

The first is the new French 'Barracuda'-class, which at 5,300 tonnes (submerged) is similar to the size (given currently anticipated growth in the range of missions to be performed) envisaged for the 'Collins' replacement. The only problem with this boat is that it is nuclear powered, and therefore prospects for retrofitting more conventional propulsion (or Air



NEED FOR 'FRESH THINKING' ON 'COLLINS' CAPABILITY REPLACEMENT: Rapidly changing threat scenarios and technology are impacting dramatically on the range of tasks envisaged to be undertaken by future submarines. The US Navy has already moved to convert some of its Cold War 'Ohio'-class boats (far L) to more effectively support land attack and covert operations, with former nuclear missile cells now used to launch divers (L). French-based DCNS also has some ideas about submarines playing a central role in network centric warfare scenarios (R), and is already cutting steel on the French Navy's next-generation (and nuclear-powered) 'Barracuda' fleet (far R).

US NAVY PHOTOS & DCNS IMAGES

ASC fattened up for no sale? - Ctd from p 24

December 2006, as well as the growth of non-Aegis' system integration costs which will accrue to Raytheon Australia in its role as Combat System Systems Engineer (CSSE).

ASC has previously stated that 70% of the block (module) work for the three AWDs would be contracted off-site, however, judiciously reserved the other 30% of higher complexity (and thus, higher relative value) modules for itself. This means the value of work likely to be retained by the company will be closer to 50% of the budget for modules - thus suggesting the volume of revenue lost to ASC (as indicated in late-2007 at AWD Alliance briefings), will be the lower of a range of \$1 billion to 1.5 billion.

In response to a 2007 solicitation of Expressions of Interest for AWD module fabricators – which now appears unlikely to number more than three – ASC declared it would act to hold AWD contract value within the company by limiting outsourcing to

simple labour contracting. In short, ASC will procure and supply module sub-contractors with 'all material required for the manufacture, painting, assembly, outfitting (and related installations) of and within the modules'.

Of course, the AWD Alliance as a functioning project manager will have its own operating expenses - along with design fees and related costs to Navantia as platform designer (Euros 285m), suggesting another \$1 billion will have no trouble bleeding off from available projects funds over the next substantive decade of the project.

In short, net revenue accruing to ASC from the AWD construction contract is estimated by ADBR to be in the order of \$3.5 billion over the period to 2019/20. Added to this is another \$3.3 billion anticipated to accrue from submarine TLS and related 'Collins' submarine capability enhancement work.

The company's most recent Annual Report suggests, however, that TLS revenue is likely to peak over the period 2007 to 2009,

given its hands will be full dealing with three submarines simultaneously (an historically high level of activity), and incentive payments will reach a ceiling as the company caps out on efficiency measure increment scales contained in the initial TLS contract.

Spreading the receivables from AWD construction across the period to 2019/20 – and loading the forward years in a manner that would see 70% of the contract value paid in the years running up to launching of the first AWD in 2014 (ie: delayed from 2013) – ADBR has built a spreadsheet upon which to consider valuation metrics affecting the company (see chart page 22).

The baseline for this rests on the \$158.9m of Total Equity declared in the 2006/07 Annual Report (and comprising Contributed Equity of \$10m, Reserves of \$54.5m and adjusted Retained Earnings of \$94.4m), and recognising substantive new investments hitting the accounts of close to \$150m from work currently being undertaken at Osborne (SA) & Henderson (WA).

As this begins to hit the accounts (via depreciation) over the next couple of financial years, the growth of Total Equity may slow considerably, although current corporate retention policy (40% of profit after tax) could be expected to see this climb to around \$200m by 2019/20.

As derived from baseline annual report metrics, the next twelve years could see ASC expecting to generate \$6.5-6.8 billion in revenues. Using averages of the previous four years' financial results to set a trend base for 2007/08, ADBR then converted these into a series of corporate performance measures.

It is conceivable that such ratios may continue to improve in future years given ASC's continued honing of its submarine support activities to higher levels of efficiency, with more to come as the new AMC-CUF facility in WA is commissioned. Adjusting asset levels to reflect new investments and the current 40% retention policy, ADBR's analysis suggests

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proven technology onto the ship, the 'Anzac'-class will indeed be fitted with the latest digital radar capabilities available to modern warships.

Significant work has also been undertaken in designing the means (see image page 8) by which the six faces of the CEAFAR radar (which provide the simultaneous tracking of multiple targets), and the four faces of the CEAMOUNT illuminator will be eventually accommodated on a re-designed top hamper of each frigate.

This process has now gone through several iterations, but has recently settled on an option that shifts the citadel well back from the bridge - roughly mid-centre along the length of the ship - and with the SPS-49 horizon search radar sitting atop the CEAFAR/CEAMOUNT housing.

Relocating and raising of the superstructure containing the subject radar faces - as high as possible consistent with maintenance of the ship's metacentre (ie: ensuring the vessel is able to right itself after rolling in heavy seas) - is believed to have delivered further substantial increases in range detection - estimated to be well beyond the generally understood 30 nautical mile range of Raytheon's Evolved Sea Sparrow Missile (ESSM) embarked upon the 'Anzac'-class.

Added to this, the combined system of radar, illuminator and central equipment group (incorporating mainly power supplies), is able to generate in excess of ten simultaneous fire control channels, thus providing a huge increase in defensive power over the existing 'Anzac' ships, and driv-

ing a decision to increase the number of ESSMs carried onboard to thirty-two missiles.

Croser says a key element of the CEAFAR's technical development involves the location of all the components needed for radar generation on the face of the new radar. He adds, it's important to understand this "really is a software-based radar. So as threats change in the future, you can develop new modes (algorithms) for the system without having to implement new hardware changes."

Further, he says the technology and its inherent capability is also easily transferable to other areas, in particular, mobile ground-based air defence, as well as for airborne use.

In these respects, CEA Technologies is now actively engaged in pursuit of international Naval programs in Europe and North

America (including the Canadian 'Halifax' upgrade), with opportunities currently estimated by the firm to be in excess of A\$250 million.

For the immediate future, however, the company's focus remains on production of the first two deliverable Sea 1448 systems, which are currently in a state of assembly at CEA's Canberra facilities, and due for delivery in December 2009, with system level grooming and integration to commence in 2008.

Croser says the company's immediate product development outlook remains on-time and budget in a manner consistent with expectations that first ship installation work should start in early 2009 (after final acceptance testing), in order to achieve a target 'first-of-class' delivery in June 2011. **ADBR**

ASC fattened up for no sale? - Ctd from p 27

ASC will pay upwards of \$300m in dividends through to financial year 2019/20.

So depending on what the actual value of the AWD 'build' contracted negotiated by ASC was (ie: this figure will likely never be published) - and assuming payments for work undertaken will not require the firm to continue past practices of internally funding non-reimbursable costs, and hard won 'Collins' productivity is successfully transferred to the AWD build - ASC's return on equity is forecast to significantly expand into the mid-term of the AWD construction contract - up from the 18.6% recorded in 2006/07 to around a four-year average of 35% per annum by the time the first destroyer is scheduled to be delivered.

Such high rates of return would then progressively fall towards the norm experienced in more recent financial years (ie: as the construction program matures), and ASC's source of revenue began to fall back onto substantive reliance on the submarine TLS contract.

The foregoing analysis assumes the absence of approval

for a fourth destroyer, and does not consider any long-lead payments that might be made in advance of ASC undertaking the 'Collins'-class replacement underwater warfare capability build.

ADBR emphasises that the above projections are derived from limited-variable ratio spreadsheet modelling of historical ASC financial outcomes, with analysis outcomes not specifically discussed with company management prior to publication.

ADBRs estimates only consider some of the better known fundamentals that are expected to drive future ASC corporate performance, assumes government policy towards the company's re-privatisation does not substantially change, and - post re-privatisation - financial directives maintained by the current management are sustained by the company's new owners.

Adding together the above projections for shareholder equity and prospectively to be declared dividends, the analysis supports a current valuation of ASC at around \$500m, prior to the application of any premiums that might be paid as part of securing ASC as a stra-

tegic business asset, including its positioning in terms of the replacement 'Collins' submarine build.

Other considerations relevant to a contemporary valuation of ASC declared in the company's 2006/07 Annual Report, relate to its practice of 'self insurance' in terms of covering risks (and costs) associated with workers' compensation.

As noted above, ASC has undertaken a concerted program to improve safety across the enterprise, with substantive reductions achieved in the annual 'lost time injury frequency' rate, as well as reductions in the 'medically treated injury rate. ASC's practice is to raise its provision for self-insurance when an accident occurs that may give rise to a workers' compensation claim. Accordingly, in 2006/07, this provision stood at \$6.1m.

ASC also maintains a warranty provision for 'Collins' submarine related activities calculated on the basis of claims received, and expected future claims based on past sales and historical claim rates. Former ASC Annual Reports have highlighted 'significant uncertainty' related to estimates for contracting activities as the estimates are said to depend on the

circumstances particular to the submarine build contract.

The TLS contract commenced with the Commonwealth on 1 July 2004 is noted in the latest annual report as providing "little historical evidence for the calculation of the warranty provision", thus meaning historical data from the previous submarine build contract has been used to determine potential future warranty claims.

ASC acknowledges the above discussion yields only 'best estimates', given evidence that prior accounting periods saw potential warranty claims being recorded and incorrectly treated as 're-work'. After the receipt of payments from the Commonwealth, provisions of \$1.1m were made by ASC management during the year in relation to warranty, leaving the total warranty provision at \$8.8m as at 30 June 2007.

ASC is also currently enjoying a 'contribution holiday' in terms of payments to its defined benefits superannuation plan, a state that is now scheduled to be reviewed by actuarial recommendation - to take place no later than 1 July 2008. **ADBR**

the 'ScanEagle' provided live, high-quality video to help develop and maintain a 'recognised maritime picture', and further enhance the strike group's maritime domain awareness. Similar to Australia's uptake of the 'ScanEagle' for operations in the Middle East, contractors operate the UAV while Navy intelligence specialists and flight deck crew work side-by-side with the civilians. The 'ScanEagle' can fly as high as 10,000-feet, with the capability to fly more than 20 hours, both day and night.

RNZN to sharpen up its two Anzacs

The New Zealand Cabinet confirmed 26 November funding had been approved to progress an upgrade of the platform systems on the RNZN's two 'Anzac'-class frigates, HMNZ Ships 'Te Kaha' and 'Te Mana' – first envisaged under the nation's long term defence development plan (LTDP). According to NZ government officials, the upgrade includes control and monitoring systems, stability management, attention to each ship's propulsion system, as well as heating, ventilation and air conditioning. The project is expected to cost NZ\$50-\$60m depending on contract negotiations, with the upgrade beginning in 2009.

Mediaware goes overseas

General Dynamics (GD) confirmed 15 November its acquisition (terms undisclosed) of Australian-based and privately held Mediaware International, a developer of real-time full-motion compressed

digital video processing software and systems for defence, intelligence and commercial customers. The Sydney-based company of 40 employees will now become part of GD Advanced Information Systems. Mediaware's most familiar defence and national domestic security (NDS) product is the Digital Video Exploitation System (D-VEX), which provides US and international customers with an end-to-end solution for real-time video processing and exploitation of full-motion video from airborne electro-optical and infrared sensors and sources.

Boeing totals up its economic contribution

An ACIL Tasman study released 14 November 2007 – and looking into the Boeing Company's contribution to Australian GDP – says "direct and indirect contributions to GDP could be as high as \$536.2 billion, with the direct contribution equating to about 0.036% of Australia's GDP in 2006." For the period under review, Boeing's direct contribution to Australian GDP jumped over 26% in the last two years – to \$361.8m (2006), the company directly employed 3,974 people in Australia (June 2007), and the company's total investment in Australia was calculated at \$580m. In 2006, Boeing has 3,623 suppliers – mostly small to medium-sized businesses – directly supporting operations across all states and territories, and supplying Boeing with more than \$310m in goods and services. Boeing exports topped \$387m in

2006 – principally from its Hawker de Havilland subsidiary.

RAN upgrades a 'Phalanx'

Raytheon confirmed 12 November it had been awarded two contracts totalling US\$241.8m to overhaul and upgrade 34 'Phalanx' Close-In Weapon Systems (CIWS) for the US Navy, and one system for the Royal Australian Navy. The company will also build twelve Land-based Phalanx Weapon Systems (LPWS) for the US Army, and provide associated

hardware to all three services under the agreements. The 'Phalanx' is a rapid-fire, computer-controlled radar and 20mm gun system that automatically acquires, tracks and destroys enemy threats. More than 850 sea-based systems have already been built and deployed in the navies of 25 nations. The LPWS version has been customised to defeat in-coming threats (ie: rockets, artillery and mortars) while they are still airborne, thus providing protection to ground forces and civilians. **ADBR**

SubCorp 'comes of age' - Ctd from page 24

comprises a 70-hectare zone located mid-way between the ASC's historical Osborne submarine construction/support facility, and the new \$100m ASC-funded AWD module construction and warship consolidation facility (on the former Eglo Engineering site), which will be run as ASC Shipbuilding.

Establishment of the CUF zone has been achieved by ASC transferring back to the SA Government the required parcel of land which will principally accommodate the new dry berth, rail transfer system and Rolls-Royce supplied 9,300 tonne ship lift jutting into (by the time of completion), a newly dredged Port Adelaide river.

Outside of the area comprising ASC-controlled facilities (ie: submarine and AWD), the SA State Government is funding a \$300m (depending on subsequent stages developed) naval industry hub, which includes in Stage I a new \$6m Maritime Skills Centre (already under construction), office accommodation and workshops.

The new development will also house the AWD Systems Centre (to accommodate the AWD Alliance workforce once it moves from its temporary accommodation at Felixstowe), and prospectively a blast and paint facility subject to the further clarification of outsourced 'Hobart'-class module-build requirements by ASC Shipbuilding.

BREAKING GROUND AT OSBORNE: Construction activities for the SA Government-funded AWD support infrastructure were well under way at the time ADBR visited the site in December 2007, with the CUF wharf and hard-stand scheduled to be completed by February 2009 (in order to begin receiving out-sourced AWD modules), followed by completion of the ship-lift in January 2010.

In these respects, the AWD Alliance issued a notice 4 January advising it would hold a 'bidders conference' in Adelaide just prior (24 January) to Sydney's Pacific 2008 international maritime exhibition, and relating to the construction of ship blocks (modules) for the first and subsequent ships.

Block sizes are anticipated to be 15m x 12m x 9m, and weighing approximately 200 tonnes. Work packages are expected to range between 20-40 blocks for the currently three-ship program, requiring between 1.6 million to 3.2 million hours for completion of all blocks.

Fabrication is expected to commence in the third quarter of 2009, with final deliveries expected in late 2014. Completed blocks will need to be able to be transported to a wharf for on-shipment to ASC Shipbuilding at Osborne, in Adelaide. **ADBR**

Combat - Ctd from p19

Perhaps signalling a move back to more regulatory approaches to achieve real industry policy outcomes in parallel with major defence equipment acquisition, Labor proposed in its 'Plan for Defence' to introduce "new reporting obligations on (the Department) to include in its Annual Report a specific section outlining Australian involvement in major equipment acquisition projects."

Specifically, the undertaking was to: "implement new systems to provide better access for Australia's small and medium enterprises to information on 'minor' capability projects; formalise assessment processes in the DMO for 'unsolicited' capability proposals that are submitted by industry; and further expand and encourage links between the DSTO and Australian defence-industry to ensure better technology transfer to Australian industry." **ADBR**