



Subsea cluster for booming oil and gas industry

With 22 offshore oil and gas projects worth \$14 billion carried out off the coast of Western Australia in 2005, the need for locally-based subsea technology and expertise is rapidly increasing.

In March this year the WA Oil and Gas Coordinating Council commissioned a report on the outlook and analysis for the global oil and gas industry, with a view to identifying major niche opportunities for WA and WA-based companies.

The report was released this month and one of the recommendations was the creation of a specialised subsea cluster at the Australian Marine Complex to service WA's growing subsea production needs.

Traditionally, oil and gas projects have been undertaken by building platforms that are effectively towers standing on the sea floor and rising above sea level.

However, as production moves into deeper water, the cost of building these platforms increases and subsea technology becomes a more economical approach.

Two companies keen to see the cluster at the AMC take off are FMC Technologies and Advanced Well Technologies.

FMC Technologies is a leading manufacturer and supplier of subsea production systems, including subsea trees, controls and manifold and tie-in systems.

The company has six manufacturing facilities worldwide and 14 customer support, service and maintenance facilities; one of which is located at the AMC.

In April this year FMC Technologies became the first subsea technology company based at the AMC, with a two-year lease at Building 4 in the Common User Facility.

"We were attracted to the AMC for a number of reasons," FMC Technologies Operations Manager Kevin Long said.

"It is an excellent location; has world-class facilities and excellent support companies located close by; a proactive and supportive management organisation; and reasonable rates.

"A subsea cluster at the AMC would be good for the overall subsea industry and we support this direction."

FMC Technologies plans to invest in its own premises at the AMC once its lease has expired.

Perth-based Advanced Well Technologies (AWT) is another company keen to participate in the cluster.

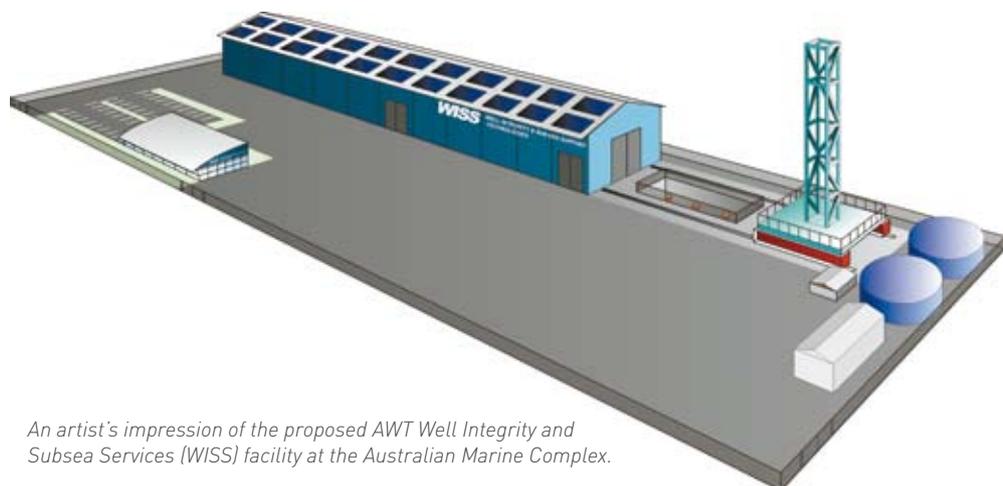
AWT is close to finishing a detailed feasibility study into the viability of constructing a world-class, high-technology Well Integrity and Subsea Services (WISS) facility at the AMC.

In March this year, Minister for Science and Innovation Francis Logan announced the Department of Industry and Resources support for the WISS feasibility study through the Investment Promotion Scheme.

At the same time, Vetco Gray announced it would be a foundation participator in the WISS facility.

Chevron also came onboard as a corporate sponsor, allocating significant funding to the feasibility study in July 2006.

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An artist's impression of the proposed AWT Well Integrity and Subsea Services (WISS) facility at the Australian Marine Complex.

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Subsea cluster for booming oil and gas industry

The WISS facility would enable simulated testing of multi-million dollar subsea equipment before it is deployed on the sea floor.

It would be an independently managed, open-access facility, providing expertise and capabilities to support the operations of WA companies, relieving them of the burden of developing such capabilities themselves.

The first phase of the WISS facility is expected to commence in the third quarter of this year, with completion scheduled for mid-2007. It will include construction of a technology workshop, storage facility, office complex, clean room and undercover dry testing pit area.

The second stage would follow rapidly and include test pits for dry and wet testing of subsea and down-hole components and several fully-contained research test wells, designed specifically to meet industry needs.

This phase would commence in the latter part of 2006, with completion expected by December 2007.

When completed, other features would include subsea and down-hole equipment storage, maintenance and refurbishment, new technology development and testing capabilities and hands-on, practical training in all aspects of well operations and subsea disciplines.

The escalating price of oil and gas, and the migration of exploration and production into deeper water, requires a proactive approach to securing WA's future hydrocarbon energy needs and DoIR is actively encouraging the development of a subsea cluster with this in mind.



FMC technicians prepare subsea completion equipment for an upcoming offshore project.

Construction of both the FMC and WISS facilities would mark the first stage in the development of an oil and gas cluster at the complex and would enhance WA as a centre of capability in the subsea sector, servicing the south east Asian and Australasian regions.

The cluster would also complement the Government's investment of \$20.4 million through Challenger TAFE to develop the Australian Centre for Energy and Process Training (ACEPT) facility in the AMC Technology Precinct, which is due to open in early 2007.

Professional development and training programs in these areas will go a long way towards addressing the vocational needs of the petroleum industry and developing WA's extensive oil and gas resources.

Significant economic and capability benefits are expected to flow to WA as the WISS facility becomes a centre for well integrity and subsea equipment testing, refurbishment and research and development in oil and gas well and subsea technologies.

Stakeholders Forum

The second Stakeholders Forum was held at the Ship and Dock Inn at the Australian Marine Complex on July 11.

More than 120 marine and defence industry personnel and local government and union representatives attended the event, which provided an overview of key defence projects taking place at the AMC.

As a key speaker for the event, Minister for Science and Innovation and MLA for Cockburn Francis Logan took the opportunity to network and build relationships with local industry.

Minister Logan also launched the State Government's Logical Choice campaign. The campaign aims to convince the Commonwealth Government that Western Australia should play a major role in a \$2 billion Australian Navy vessel contract to build two amphibious ships in Australia.

DoIR AMC Manager John O'Hare joined Minister Logan and Deputy Chief Executive Officer from ASC Pty Ltd, Ross Milton, on a panel to address the campaign and other relevant issues.

Mr O'Hare said the forum provided stakeholders with a medium to discuss issues and ideas important to the long-term success of the complex.

"The event was a successful evening and we are now looking at holding them on a regular basis," Mr O'Hare said.

"Attendance was more than we expected, which showed the AMC community is genuinely interested in, not only what is happening within their industries, but also what is happening on a whole as a marine and defence cluster."

World-class submarine repair and maintenance facility

Australia's naval submarine designer and builder, ASC Pty Ltd, is working with the State Government to establish a world-class submarine repair and maintenance facility at the Australian Marine Complex.

The company is building its new submarine facility on a site adjacent to the Common User Facility.

In 2003, following the completion of the contract to design and build six Collins Class submarines for the Royal Australian Navy, ASC entered into a new contract to provide through-life support and upgrades to the class over the next 25 years.

With all six of the Collins Class submarines based in Western Australia at Fleet Base West, Garden Island, ASC chose the AMC as the location to build its new repair and maintenance facility.

When completed, about 185 people will be employed at the submarine facility, which will bring several million dollars of submarine repair and maintenance work to WA each year.

ASC Deputy Chief Executive Officer Ross Milton said the company would use the CUF's new floating dock, with its land-transfer capability and rail transfer system, for docking submarines.

"It is also envisaged that on completion of extensions to the CUF eastern wharf, submarine 'along-side' maintenance will also be undertaken by ASC at the AMC," Mr Milton said.

"This will mean all submarine maintenance and upgrade work required to be undertaken in WA will be completed at the one site."

The CUF would allow ASC to carry out work on up to three submarines at any one time - a unique capability vital for ASC's future operations in the State.

The wharf interface and transfer system, currently in the detailed design phase, is expected to go to tender in October 2006 with the contract scheduled to be awarded in February 2007. Construction completion is expected in October 2007.

Tenders were called for the ASC facility in July 2006 and construction is expected to run parallel with the floating dock - both should take about 12-18 months to complete. ASC plans to undertake the first submarine maintenance docking at the new facility in 2008.



An artist's impression of the proposed ASC facility.

ASC opportunities for WA businesses

Moves to increase local business opportunities from the construction of three new Air Warfare Destroyers for the Royal Australian Navy are underway with the key subcontracts team visiting the Australian Marine Complex recently.

South Australian based shipbuilders ASC Pty Ltd won the contract for the \$6 billion destroyers in May 2006. Western Australia backed the SA bid in the hope of capturing a larger slice of module fabrication and associated works, which could be undertaken at the AMC.

The visit in August saw ASC's Air Warfare Destroyer Module Procurement Manager Melvyn Slater and his team shown around the award winning Common User Facility and other areas at the AMC to demonstrate the complex's substantial capabilities.

AMC Management General Manager Richard Clark said ASC winning the destroyer contract meant Western Australian businesses would probably be given an opportunity to bid for work on ship fore and aft ends, machinery space, piping and electrical work, equipment installation and the fit-out of magazines for weapons systems.

"In the construction of the Air Warfare Destroyers we see one of the most significant shipbuilding projects to be undertaken in Australia," Mr Clark said. "It has the potential to generate significant local employment opportunities as well as a considerable financial injection into the economy."

It is anticipated that contracts associated with the Air Warfare Destroyer build program could deliver \$400-500 million of work to WA.



ASC subcontractors team visit the Australian Marine Complex.



Tenix Defence successfully converts commercial chemical tanker Delos into naval oiler HMAS SIRIUS.

Tenix Defence completes major tanker conversion

Tenix Defence has successfully completed one of the biggest jobs – in sheer scale - carried out at the Australian Marine Complex to date.

Tenix Defence has converted the 37,000 tonne commercial chemical tanker Delos into a naval oiler to be named HMAS SIRIUS, a direct replacement for HMAS WESTRALIA, for the Royal Australian Navy.

Chief Executive Officer of Tenix Defence Robert Salteri said the program demonstrated Tenix Defence's capability to successfully modify an existing ship design to meet the navy's needs within a tight schedule and budget constraints.

"The successful completion of this complex project is a tribute to our outstanding workforce and a positive and effective working relationship with our customer," Mr Salteri said.

"It is also a clear demonstration of what can be achieved with the facilities at the AMC."

Tenix Defence was awarded the \$60 million contract to upgrade the tanker's capability in February 2005 and all work was carried out at the AMC.

The upgrade included seven major modification packages.

The first major package required installation design of the Replenishment at Sea (RAS) capability, including RAS masts, mechanical and electrical equipment and a control centre.

This will enable SIRIUS to receive and distribute fuel, water and hard stores to other navy and allied vessels.

The second major package required a helicopter deck to be designed and integrated onto the stern of the vessel – the first of its kind in the world to be completed under classification requirements.

A container deck, capable of holding 12 20-foot shipping containers, was also added to the existing cargo deck.

Tenix Defence also installed two upgraded Solas boats, each with a 70-man capacity, and two Rigid Hull Inflatable Boat's from HMAS WESTRALIA, as well as modified the interior and the latest communications equipment.

In addition to its Western Australian resources, Tenix Defence called in personnel from its Williamstown (Vic) operation and the group's commercial arm, Tenix Alliance.

The converted ship was delivered to the navy on 8 August 2006, ahead of schedule and on budget.

It was a major challenge for engineering, production and procurement, with more than 1100 tonnes of steel being consolidated and major internal and external modifications completed in the 16 months since the contract was awarded.

Over the same period, Tenix Defence also completed a \$22 million upgrade at the AMC to HMAS ANZAC, constructed at its Williamstown dockyard 10 years ago.

Work included installation of Harpoon anti-ship missiles and mine avoidance sonar, as well as upgraded communications and crew accommodation.

The two projects employed about 300 Tenix Defence employees and 250 subcontractors.

Common User Facility update

Defence leads demand

Demand for the world-class, multi-user facilities at the Common User Facility continues to grow - particularly from companies involved in the defence and petroleum sectors.

Since its establishment in July 2003 the CUF has generated more than \$90 million for the local economy and created more than 800 jobs from about 100 projects, using the world-class wharf and fabrication facilities.

The adjacent chart shows the market profile for CUF business for the financial year 2005-06 based on the number of users and revenue generated by the facility.

AMC Management General Manager Richard Clark said that while the oil and gas industry frequently use the facility, a number of large contracts meant the defence sector was presently the biggest user of the site.

"In previous years, the percentage by income across each of the four key target sectors was more evenly distributed," Mr Clark said.

"However, recent navy contracts such as the ANZAC upgrades and the Delos conversion (to HMAS SIRIUS) have required the use of the CUF.

"This trend in defence work is expected to continue through 2006-07 and beyond.

"However, the oil and gas and mining sectors will continue to play significant roles in the usage of the CUF."

AMC Management handles the day-to-day running of the CUF, under contract with LandCorp which manages the facility on behalf of the State Government.

FMC Technologies opens for business

FMC Technologies now provides maintenance and after-market support in Western Australia for subsea modules used by the offshore oil industry.

FMC Technologies has taken an extended agreement on the CUF's small fabrication hall while the company obtains a permanent purpose-built subsea maintenance and test facility within the AMC's Fabrication Precinct, adjacent to the CUF.



The first project being undertaken by FMC is the refurbishment of Woodside's Enfield subsea modules. Woodside's Perseus over Goodwyn (POG) subsea production equipment will also be stored at the facility prior to installation in late 2006.

FMC Technologies team outside the CUF small fabrication hall.

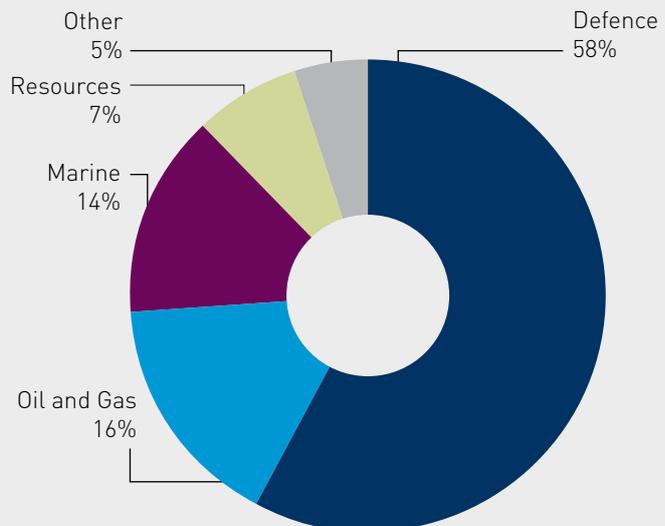


Figure 1 **Common User Facility: use by industry sector (income %) 2005-06**

Expansion update

Work on the expansion of the multi-user facilities at the CUF continues, with John Holland commencing construction on the \$17 million eastern wharf extension.

The extension will increase the capacity of the eastern wharf from one berth to three.

The project is expected to be completed in May 2007 and will service commercial and Royal Australian Navy operations.

LandCorp Business Manager Dr John Yeates said tenders for the first stage of the floating dock closed on 14 August.

On the basis of present plans, tenders are currently being assessed with the contract due to be awarded in late October or early November.

"The floating dock will be used to transfer submarines and other marine vessels to shore for maintenance and upgrade," Dr Yeates said.

"Its other uses include the testing of subsea structures for the oil and gas industry.

"The floating dock will add significantly to the capability of the AMC, providing Western Australia with an opportunity to bid for a whole range of additional maintenance and construction projects across the marine, defence and resources sectors."

In associated works, tenders have also closed for additional dredging to the harbour and for the provision of a high voltage electricity upgrade to the site.

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The 650 tonne Tuttt Bryant crane will be used on sites throughout Australia.

Tutt Bryant super crane

Tutt Bryant Crane Hire is currently building a 650 tonne capacity Hitachi-Sumitomo SCX6500 Crawler Crane in the laydown area at the CUF. Once assembled, the crane will be tested and demonstrated to potential clients on site.

The crane is equipped with a main boom that has the capacity to reach up to 109.7m, or 68.5m when used in a tower configuration with a tower jib of up to 79.25m. The crane is the largest crawler standard lift crane in Australia.

Forty trucks delivered the crane pieces from Fremantle Port to the CUF. Tuttt Bryant intends to contract the crane out for use on sites across Australia.

AGC completes \$11 million biodiesel plant

Western Australian engineering firm AGC used the CUF's large fabrication hall to construct a biodiesel plant for Natural Fuels Australia's biodiesel facility in Darwin.

The 420 tonne module was shipped from the CUF to Darwin in mid-July on the MV Wiebka. It was the first time in the world that a large-scale biodiesel plant had been built with the specific intention of transporting it to another site.

When operational the plant will manufacture about 105,000 tonnes of biodiesel a year - a fuel derived from natural vegetable oil, which can be used to replace fossil diesel fuel.

AGC is also using the CUF to complete a \$12 million contract to fabricate, assemble, deliver and install four 54 metre steel modules, each weighing 400 tonnes. The modules will be used to form the deck of a new 250m section of wharf at Dampier.

The module components were fabricated at AGC's Kwinana plant and will be loaded out from the CUF's wharf in October 2006.

Last year AGC used the CUF to complete a contract to build modules used to construct a 450m extension to the Dampier wharf, which is used to load iron ore ships.



The 420 tonne biodiesel plant being loaded for marine transport to Darwin.

Land for sale in Support Industry Precinct

New land released in the Support Industry Precinct at the Australian Marine Complex provides an outstanding opportunity for support industries to join in the success of the AMC.

The Support Industry Precinct is located at the corner of Russell Road and Cockburn Road, Henderson; is serviced by high-wide load roads; and is in close proximity to the Kwinana industrial area.

LandCorp Business Manager John Hackett said the release of 11 lots in Stage 2A in the Support Industry Precinct provided a unique opportunity for small to medium sized businesses to co-locate and benefit from the synergies created by the clustering of more than 80 specialist businesses supporting the shipbuilding, defence, petroleum and mining sectors.

"The new special use industrial lots are now available for pre-sale by Private Treaty 'Offers Invited'," Mr Hackett said.

"However, through the sales process, potential purchasers will need to demonstrate that their business is principally involved in supplying goods and services to the target sectors."

The serviced lots range in size from about 2200m² to 3300m².

Each lot has a minimum road frontage of about 33m, offering excellent access for larger vehicles.

Existing support businesses in the AMC include Akso-Nobel, Beurteaux, Trailcraft, Millenium Chemicals, Alphablast, Contract Marine Coatings, The Simmons Group, Nomad, United Industries and Specialized Tank Cleaning Services. Offers close 3 October.

For more information about the new land release, please contact Ben Widdowson or Matthew Lyford of Industrial and General Real Estate Agents on 9478 5777 or Rocco Demaiio of NSC Corporate on 9325 4477.





Raytheon - a leading systems integrator for the Australian Defence Force, providing systems integration for submarines and aircraft.

Raytheon - a year on and going strong

In April 2005 Raytheon Australia became the initial tenant at the Technology Precinct in the Australian Marine Complex.

As a leading systems integrator for the Australian Defence Force, Raytheon's move from its humble offices in Rockingham to the AMC was a strategic step for the company.

With a focus on future growth and sustainability, Raytheon chose the AMC as the ideal location to service its clients and network with key industry players.

As the first tenant in the precinct the State Government also saw the move as evidence of the company's strong commitment to the Western Australian marine and defence industry.

Systems integration for submarines and aircraft, including simulation, is at the heart of Raytheon's capability.

They also provide through-life support solutions such as aircraft maintenance for both fixed and rotary wing aircraft.

The company consists of a forward-focused engineering and technical workforce, backed by sound, audited and certified program management and quality processes.

With more than 80,000 people employed world-wide by Raytheon, 70 are located at the Technology Precinct.

However, Raytheon's presence in WA is not limited to the AMC. Technicians and engineers are working in the Submarine Training and Systems Centre at HMAS STIRLING at Garden Island.

Raytheon's first year in the precinct has been dominated by work on the Collins Class Submarine Combat Systems.

Through its in-service support contract with the Commonwealth Government, the company has installed, integrated and tested an augmented combat system to a Collins Class submarine and acted as the integration agent for the installation and testing of the new replacement combat system at the Submarine Training and Systems Centre.

In addition to its submarine work in WA, Raytheon Australia's Adelaide team is conducting the installation of the replacement combat system into HMAS WALLER, which is undergoing a full cycle docking at ASC's facility in Outer Harbour.

Raytheon remains strongly committed to Western Australia and also has interests in supporting its products on both the ANZAC and FFG frigates that are home-ported in WA.

AMC company profiles



TSG Key Group - Engineered to lead the way

With the acquisition of Western Australian engineering company Key Group Engineering in February 2006, The Simmons Group Pty Ltd (now marketed as TSG Key Group) is at the top of its game.

Key Group was one of the first companies established in the fabrication precinct at the Australian Marine Complex and has built a reputation for professional and timely workmanship across the full range of engineering services.

TSG Key Group Sales and Marketing Manager Tony Borger said The Simmons Group and Key Group had worked on a number of projects together over the years and the acquisition was a strategic decision to expand capabilities.

"It has made us a force to be reckoned with in the engineering industry," Mr Borger said.

"We are a wholly owned and operated WA engineering, mechanical construction and contracting company.

"With most of the Key Group staff staying on with us we have gone from five employees to more than 60 in the past three years."

The acquisition has allowed TSG to compete for complete project packages for a cross section of industries. No longer having to outsource parts of a project was a big advantage for major client, Hlsmelt, with a recent shutdown and installation being completed entirely in-house.

Some of the company's other major clients include Alcoa, BP, Transfield, Nagata, Cockburn Cement and the Spotless Group.

"We are now better placed to handle major projects and we are constantly looking at ways to not only expand our business but also become more competitive," Mr Borger said.

"By using one company for entire projects, our clients can be assured that risks are minimised.

"They have a better understanding of the complete project and only have to deal with one project manager for all aspects of the task."

Since the acquisition TSG Key Group has doubled in size and the future is looking bright.

"TSG founder Dave Simmons is a very ambitious man," Mr Borger said.

"He incorporated TSG in 1999 shortly before acquiring his first company (Boiler Technics) at just 25 years old.

"In TSG's first year the turnover was about \$80,000. Last year that figure was \$7 million and this year it is expected to be about \$27 million.

"We are looking at opportunities right across the nation as well as overseas."

For more information visit www.tsgcorp.com.au or contact Tony Borger on 9499 2000.



Newport Engineering Company - Gear cutters and precision engineers

Sergio Sussa first established Newport Engineering Company at the Australian Marine Complex in 1988.

Nearly 20 years later the specialised gear cutting and precision machine shop is still in the family name with Sergio's sons Michael Sussa (Manager) and Daniel Sussa (Workshop Supervisor) now pulling the ropes.

With a long history servicing the marine industry, Newport Engineering Company manufactures gears for winches on various ships.

"We are one of the most innovative workshops within the AMC in terms of gear technology," Mr Sussa said.

"We have manufactured gears for Navy vessels such as the HMAS WESTRALIA and the HMAS ADELAIDE and our team has a strong reputation for providing a fast break-down service.

"We also service the mining, drilling, processing, chemical and printing industries."

Newport can manufacture gears up to 1.5 metres in diameter, as well as spur gears, helical gears, worms and worm gears and internal and external splines.

They also have extensive experience in gear box overhauls.

"We specialise in high precision gear grinding and have our own heat treatment facilities," Mr Sussa said.

"We also do precision machining, such as turning, milling, slotting, boring and grinding.

"All this is carried out in our large, fully-equipped, modern workshop, which contains 12 gear machines and allied equipment."

For more information visit www.newportgears.com.au, or contact Michael Sussa on 9410 2881.

PROMOTE YOUR COMPANY IN THE AMC NEWS

The AMC News is received by more than 2000 readers including other businesses within the AMC, key industry representatives from many organisations, local councils and the media. This newsletter is a great way to promote your business and the new ventures at the AMC. In each issue we profile different companies within the Shipbuilding, Fabrication, Technology and Support precincts as well as activities in the Common User Facility.

So if you have some news or a story to tell about what your company is up to at the AMC contact:

Aimee Bresland
Department of Industry and Resources
Phone: 9222 3789
Email: aimee.bresland@doir.wa.gov.au

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