VESTED® For Success Case Study

The Royal Australian Navy FFG Enterprise:

A Journey from Antagonism to High-Performing Relationship

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EXECUTIVE SUMMARY

Three men sit around a table in the Navy cafeteria enjoying a cup of coffee. They show up every Friday at 8:30 AM and, frequently, other days of the week as well. Observing them, one might assume it is a group of collegial friends catching up on the week's event. Or perhaps it is a close team of coworkers having an informal meeting tackling the problems foreseen for the coming week.

Both assumptions are correct. Yet, what became commonly known as the Coffee Club represents more. Strictly speaking, the meeting is one of a buyer with two suppliers. However, it is also a meeting among friends and strategic business collaborators coming together as a high performing team to deliver top-performing results. In reality, the Coffee Club represents the collaborative spirit needed to embody relational contracting practices. Practices that form the foundation for a high performing contract between the Royal Australia Navy, BAE Systems and Thales. The agreement provides maintenance and logistics support to the Navy's Guided Missile Frigate (FFG) warships with award-winning success.

University of Tennessee (UT) researchers first met the FFG trio while attending an International Association for Commercial and Contract Management conference in the United States. A hearty dialogue along the surf line of a San Diego, California beach piqued the interest into more in-depth research behind the award-winning results of the FFG Enterprise.

UT has long been a thought leader in performance-based agreements and relational contracting. UT's original research was funded by the U.S. Air Force to study best practices in performance-based logistics contracts. The research was later expanded to study best practices across all types of complex sourcing relationships. A key finding of the UT research is that the best sourcing relationships apply what is known as "relational" contracting principles, which create flexible contract frameworks and embody "win-win" behaviors. They also apply "five rules" which, when followed, enable a buyer and supplier to shift from a transactional or output (performance-based) model to a highly strategic outcome-based model known as a "Vested" agreement.

The FFG team embodies relational contracting practices through the creation of a formal "Charter". However, the agreement is still anchored in a more traditional, transactional contract. A key purpose of this research report is to identify improvement opportunities for future contracts. As such, this research report provides detailed observations regarding how applying the Vested "five rules" could further strengthen the FFG's relationship and likely yield even more improved results.

The research report is written in the format of a case study versus a more formal "report". The rationale is simple; people learn from real examples, not from stacks of data and observations. A key purpose of this report is not just to highlight improvement opportunities for the FFG/BAE Systems/Thales team, but also to inspire others to have the courage to apply relational contracting practices and ultimately apply the "rules" that enable the shift to a true outcome-based contract.

BACKGROUND*

The FFG Enterprise (a term that describes the collaborative and win/win approach relationship between the Navy and two suppliers) exists to provide the Royal Australian Navy with materially seaworthy FFG guided missile warships - *on time, every time* - until they are withdrawn from service. There are four frigates (vessels) supported by the FFG Enterprise.

The Adelaide Class Guided Missile Frigate first entered service in 1980. The Adelaide is joined by three sister ships capable of countering simultaneous threats from the air, surface and sub-surface. The frigates operate around the world protecting their Australian homeland as well as responding to the needs of allies around the world. The ships are a complex engineering platform comprising multiple propulsion and power generation plants, extensive weapon systems including gun, missile, torpedo, and self-protection systems. They also have integrated aviation capabilities and other support systems required to accommodate, feed and support over 200 people away from home for months at a time.

The ships are the heart of Captain Brad Smith's existence as the Director of the Royal Australian Navy's FFG System Program Office (FFG SPO). "As the Head of the FFG System Program Office, I need to have confidence that the FFG Enterprise is delivering the best capability *on time, every time.* This allows the ships' commanding officers to sail the ships and meet the requirements of not only the Royal Australian Navy but also the Australian government."[1]

But getting capable ships on time, every time was not always something that was easy for Captain Smith or his predecessors. In fact, getting a ship proper and timely maintenance was one of the Navy's Achilles heels – especially after the Australian Navy moved to a "privatization" effort that began in the 1980s. It was during the 1980s that the Navy moved from owning the means of naval production, upgrade, repair, and maintenance to owning none. During this transition, little attempt was made to use strategic demand to shape and sustain the naval industrial base or to influence market pressures through the responsible use of monopsony† power.[2]

As the Government moved to privatization, there were predictable consequences. Fear of losing control led to procurement tenders that were deep in dictating how the suppliers should operate. Also, a short-term focus encouraged potential suppliers to under-bid their price, play-down risk, and offer artificially shortened, unachievable schedules in order to win work. The result was suboptimal for both Navy and the suppliers. Suppliers submitted low-ball offers for the basic work and made their profits through "growth work" - that is, change orders and newly identified projects.

Captain Greg Laxton, held the role of Director FFG SPO before Captain Smith. He was also the Chair of the Governance Board which meant he had both a strategic and tactical perspective. Laxton describes the environment as VUCA - Volatile. Unpredictable. Complex. Ambiguous. "These four words summarize the operational conditions that faced the global Defense sector at this time." Laxton

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* *Throughout the report we use many acronyms that are highly specific to the Australian Navy. We try to explain what each is in the first instance in the text. To assist readers with understanding context we have created a list of Defined Terms at the end of the report.*

† *Monopsony refers to a single customer market.*

elaborates, "After years of successive privatizations, attitudes had become entrenched and archaic – the tendering process itself had become a barrier to good practice. First of all, we were always on the back foot because we were always late. We were not engendering a learning culture. We could roll a whiteboard of all the things that went wrong from one project to another and they were 90% the same. We weren't learning anything new."[3]

Laxton joined other Navy personnel who had been clearly frustrated and proposed a series of reform initiatives.

- In 2002, Navy leaders proposed the Australian Naval Shipbuilding and Repair Sector Strategic Plan. The Plan argued that revenue from ship repair and maintenance was not enough to support multiple repairers. It further determined the current approach was not cost-effective. The Plan called for an alliance relationship between Defense and a sole-source industry supplier linking the capabilities and skills required for shipbuilding to those required for upgrade, repair and maintenance. Sadly, the Australian Commonwealth did not accept the Plan's broad policy initiatives and chose to continue the status quo.
- In 2003, the Australian Commonwealth instigated the Ship Refit & Repair Panel. The initiative called for suppliers to be pre-qualified and to operate under a previously agreed set of terms & conditions. A key goal was to make it easier to contract with pre-approved high-quality suppliers by creating a master contract where procurement professionals would just need to add the scope of work. The concept was good, but implementation was less than successful.
- In 2005, the Chief of Navy's Senior Advisory Committee developed a concept for batching several maintenance activities together into a single contract to cover all maintenance activities between successive dockings. A separate contract would be awarded to cover the docking. Ultimately the well-intentioned plan proved to be an artificial condition of demarcation that complicated rather than assisted the process.

While each initiative had good intentions, none of the initiatives had much impact on the results. Captain Laxton sums up the situation. "We had created a highly bureaucratic and transactional system that pitted the Navy against the suppliers. The results were staggering. Maintaining the FFG fleet had become a complex and costly business, with sustainment costs contributing more than two-thirds to the total cost of ownership."[4]

To make matters worse, the Navy faced an increasingly constrained budget environment and a 45% decrease in FFG SPO Full-time Equivalent (FTE) staff as resources dropped from 100 to 55 personnel. Add to this increased regulatory compliance obligations such as those around Work, Health, and Safety, it quickly became apparent innovative approaches were essential for contracting, supplier engagement, and asset management.

What resulted was a decade long effort to create a paradigm shift focused on two critical enablers: 1) a shift from arms-length and highly competitive contracting process to a collaborative approach built on relational contracting principles; and, 2) improved asset management practices that leveraged the strengths of both the Navy and strategic industry partners. The paradigm shift ushered in what is now known as the FFG Enterprise. The FFG Enterprise, representing the best of the best between the Navy and suppliers – has blazed the trail to put relational contracting theory into practice. It is a testament to the perseverance and commitment of courageous leaders who made the 10 years+ journey worth every minute.

The results are nothing short of spectacular, winning both internal and external awards for excellence.

The rest of this case study shares the journey taken by the Australian Navy to accomplish this paradigm shift. It also highlights what University of Tennessee researchers believe will become the next challenges for the Navy and its suppliers – aligning contractual elements to support the collaborative mindset that has brought the parties award-winning success and doing so in a way that can be replicated in other Defense procurement projects.

RECOGNIZING THE NEED FOR RELATIONAL CONTRACTING

Bruce McLennan sat at his desk, his head swimming on a warm and sunny Australian summer day during the Christmas stand-down in 2007. He had been tasked to draft a letter summarizing the supplier performance issues to the CEO of the Defense Materiel Organization (DMO).

McLennan joined the Major Surface Ships Branch as its Chief of Staff and was familiar with the long and arduous list of complaints about suppliers that had haunted him since he took the job in late 2005. Suppliers were not performing; they offered unrealistic schedules; they bid low and then found profit in growing the scope of work and change orders; they captured niche monopolies and used them to leverage prices charged for supplies by up to 300%. Simply put, a majority of the Senior Advisory Panel believed suppliers could not be trusted.

McLennan reflected on the highly competitive system he had inherited in 2005. He listed the pitfalls:

- Competitive tendering up to six times per year that often increased cost and administrative burdens associated with recurring tendering, evaluation, and negotiations with suppliers
- An arm's length at best (and adversarial at worst) approach for managing suppliers which resulted in resource-heavy organizational structures and overheads
- Short term relationships and contracts which discouraged learning and limited incentive for suppliers to make investments in continuous improvement and innovations
- Misalignment of resources that provided little incentive to drive efficiencies, or invest in skills, sustainment or infrastructure
- Significant schedule uncertainty and the delayed provision of capability due to the inability to accurately forecast work volume or schedule
- A perverse incentive for suppliers to tender aggressively (against cost, schedule and risk) to secure work with the hope they would get additional scope changes to make the contract commercially viable

McLennan described the situation as an operational model offering value less than the sum of its parts. "We had created a highly transactional business with the FFG SPO acting as the gatekeeper interface between all contractual activities and stakeholders. It was inefficient and ineffective. We needed to change."[5]

McLennan found himself conflicted between the organizational realities before him and the apparent less-than-wonderful relationships. Not to mention unacceptable results.

"Initially I was tasked to write a letter so the CEO of the Defense Materiel Organization could basically chastise these naughty suppliers. It was only when trying to put the letter together, I came to the realization there was almost a linear transfer between the commercial motivations that we were creating and the behaviors we were seeing."[6] In other words, McLennan believed, at the very crux of the matter, Defense needed to change. "Suppliers were simply responding to the conditions set by the guys with the money, in this case the Navy. I thought to myself, 'If there was indeed a direct relationship between the motivations and behaviors, then surely we would be able to generate the desired behaviors by creating the motivations that would encourage them.'"[7]

Instead of drafting the letter, McLennan wrote a staff paper – *Doing Business – Naval Upgrade, Repair & Maintenance Industry Sector*.

The response from McLennan's peers and executives was lukewarm; most agreed with the theoretical concept but thought it impractical to implement. Opposition lined up quickly in the form of 'passive resistance', determined to withhold approval for the radical concept. Primarily, they rejected the thought that the Navy received negative supplier results because it set up a system that spawned bad behavior. Contract managers, finance officers, and commercial regulators staunchly believed 'We are paying for the service – we expect the supplier to do what we say'.

Captain Greg Laxton was not surprised by the lack of support McLennan's report received. "The Navy doesn't have many futurists sitting around, and Chief of Staff McLennan's letter definitely challenged conventional wisdom and even Navy policies."[8]

McLennan fought furiously against the naysayers, encouraging them to forego the master-slave mentality the Navy had created with suppliers. "Industry is nothing but a mirror of us. We pay the cheques. If we use sticks, the contractors have to modify their behavior to mitigate against the stick. We have to change first. Then contractors can come to us. They can participate and show value by taking risks and coming up with ideas themselves. We need to focus on the outcome. That's the leadership key that will lead us into a place of growth."[9] The argument fell on deaf ears.

McLennan's inability to break through the status quo was seemingly hopeless. Tired and discouraged, McLennan looked forward to an upcoming sabbatical to attend an Executive Masters Program in Complex Project Management. He was ready for a change when he set off for his Executive Masters Program in 2009. "The escape was welcomed."[10]

As a parting gesture from his role as Chief of Staff, McLennan included the staff paper in the Major Surface Ship's (MSS) Business Plan as a discussion paper. Greg Combet, then the Minister for Defense Materiel read the paper. He then asked the CEO of the Defense Materiel Organization (DMO), Dr. Gumley, as to the progress of McLennan's initiative. Gumley knew nothing of it.

THE RELATIONAL CONTRACTING JOURNEY

Bruce McLennan used his time away well. The Executive Masters program provided him with new research and best practice that coincided well with the ideas McLennan espoused in 2008 prior to leaving his role as Chief of Staff. It also enabled him to meet thought leaders like Andrew Jackson (systems thinking) and Tim Cummins, CEO of the International Association for Contract and Commercial Management (IACCM).

Dr. McLennan reflects, “As Chief of Staff, I was the lone voice in the walls of the office. But outside of the Navy, in my Masters program, I became energized by others who were pushing similar concepts. Tim Cummins is now a lifelong friend to whom I have turned multiple times for counsel.” To this day, McLennan recalls many of the papers and studies as his “Bibles”. For example, he keeps a white paper published by The University of Tennessee, IACCM and Cirio Law Firm titled *Unpacking Relational Contracts: The Practitioner’s Go-to Guide for Understanding Relational Contracts* handy on his desk. McLennan adds, “When you are attacked by everybody, you need someone to be in your corner, even if it’s sometimes in the form of a pamphlet.”[11]

Towards the end of 2009, Rear Admiral Robinson - then Head of Maritime Systems Division - approached McLennan and challenged him to continue his journey to bring fresh thinking to the Navy. McLennan still remembers the exchange: “Well you started this, now finish it.”[12] McLennan found himself in a role where he could drive positive change within DMO.

One of the first things McLennan did was propose a move away from throughput-based profit-making towards efficiency-based profit-making. McLennan’s goal - to be a partner rewarded through performance and efficiency. His ideas were simple. The stated aim was to provide suppliers with greater predictability, certainty, and stability in the repair and maintenance of the Navy's major fleet.

McLennan knew Group Maintenance Contracts (GMC) would be a key enabler for turning things around for the Navy. The underlying constructs of Group Maintenance Contracts were fundamentally different than conventional defense supplier contracts – shifting from a short term transactional contracting approach to a longer-term performance-based contract. McLennan comments, “We don’t often think of the obligation on the government to suppliers to provide the stability, commercial incentives, and platform on which they can run their business. But that is what would be needed to lay the foundation for success.”[13]

One of the early wins was the adoption of the Major Fleet Unit (MFU) Ship Reform program. A principle element of this initiative was the establishment of three Group Maintenance Contracts where the Navy would create long-term (up to 5 years) contracts for three groups of assets:

- Group 1 – Amphibious & Afloat Support ships;
- Group 2 – Four *Adelaide* Class frigates (FFGs); and
- Group 3 – Eight *ANZAC* Class frigates (FFHs).

While a five-year contract might not sound like a long time to many contracting professionals, to the Navy and their suppliers, it was a game-changer. The underlying constructs shifted from a transactional contracting approach to a performance-based contract focused on the delivery of a materially seaworthy FFG capability in accordance with three tenets:

1. A 'whole-of-life support' approach for the FFG capability (e.g. embody a total cost of ownership vs simply lowest price mentality);
2. Driving the integration of services and deliverables from a matrix of suppliers, and appropriately appraising and apportioning risk among the Commonwealth and industry partners;
3. Adherence to a performance- based contracting philosophy and its supporting performance management framework, including two (2) tiers of assessment for driving behaviors and assessing performance:
   - Key Performance Indicators (KPIs) which focused on the contracted services and linked directly to a performance payment regime; and
   - System Health Indicators (SHIs) which were not linked to payment; but provided as a mechanism for identifying and managing future performance.

The Group Maintenance Contract concept would become a key enabler for the Navy to make step-function changes in how they approached sustainment of the FFGs. The performance-based contracts would put the potential supplier's profit at risk based on their ability to perform. The contracts would also use a 'rolling-wave' award-term where supplier efficiency would be rewarded with contract extensions and incentives.

While the Navy had blessed the concept of Group Maintenance Contracts, the rank and file were slow to respond. In fact, so slow that Dr. McLennan once again grew frustrated. McLennan believed the Navy needed to "put away the concept of a parent/child relationship and accept a two-way exchange."[14] McLennan realized the Navy's contracting process was too adversarial in nature and that success ultimately came from changing the Navy's mindset in how the Navy approached the entire contracting process. True success, he believed, would come from a "partnership" mentality that embraced true collaboration.[15]

McLennan set out to recruit early pioneers that would help him deploy relational contracting principles into the GMC concept for the FFG with the hope to change the culture from one of antagonistic buyer-supplier relationship to one of an alliance partnership.

Early Pioneers Paved the Way

A few key leaders began to emerge who shared Bruce McLennan's philosophies and were committed to bringing Group Maintenance Contacts to reality. They include Michael Houghton, Mona Shindy and Mark Bailey.

Michael Houghton – Director General of Major Service Ships - believed the Group Maintenance Contract concept was tailor-made for FFG SPO, which was drowning in transactions with unreasonable maintenance expectations written into contracts for no reason.

Houghton saw Group Maintenance Contracts as a solution for FFG's problems. The Group Maintenance Contracts would enable a commercial structure in which the Navy and suppliers worked together to define the scope of work and solve problems. "People who understood the requirements best were placed together to challenge documents and create collaborative solutions. The Group Maintenance Contract replaced the endless passing of paperwork with collaboration at levels of the work being done."[16]

Mona Shindy (then Director of the FFG SPO) and Mark Bailey (Shindy's deputy) also became two of the biggest change champions to get behind the implementation of Group Maintenance Contracts. Captain Shindy and Mark Bailey held McLennan's belief that negotiating the Group Maintenance Contracts for the FFG was only part of the solution. The other part would lie in changing the culture in how the Navy worked with suppliers along the way.

Captain Shindy and Deputy Bailey arrived in difficult circumstances. In 2012, direct reports were unhappy. Navy customers and contractors waited for ships stuck in the dockyard. There were long hours and plenty of blame thrown around. And, of course, skeptics remained who espoused conventional wisdom that the work should be channeled through highly competitive and frequent bids where suppliers quote a hard and fast price upfront. These naysayers openly accused suppliers of pushing work to get more money.

It seemed an insurmountable task considering a culture filled with senior people averse to change. Navy personnel clung to the comfort of the status quo and did not choose to learn, or even read about, new ways. To make matters worse, there was a Navy hiring freeze at the time, which translated to a reluctance to replace those who reached retirement status. The folks left were entrenched in long hours and big-time stress. There was clearly unhappiness. Oh, so much unhappiness.

Greg Laxton remembers the blame game clearly. Captain Laxton was employed as a Navy Capability Manager at the time and remembers standing with regularity to repeat the bad news to admirals and other senior officers. "I recall seeing a humorous chart that demonstrated how to point fingers at the other guy. When it came to you and asked, 'Can you blame somebody else?' and you replied no, the answer was 'You poor bastard.' It was a total blame game."[17]

Captain Shindy and Mark Bailey decided to tackle the naysayers and negative culture head-on. Captain Shindy called the department together with a rallying cry: "This is what we have. We are not getting more help. If you want things better than what you have…if you want less stress, we need to dare to step out and try something new"[18] Captain Shindy's common-sense words struck a chord within the ranks and helped light the flame of new thinking. She hosted frequent workshops called "offsites" which provided safe places to hold difficult discussions.

Deputy Mark Bailey witnessed the spark for change first hand. "I found enthusiasm for change, both for the new operating paradigm and to be characterized as a team willing to innovate and a driven to achieve."[19]

Two Sides to the Coin – Suppliers Perspective

Tony Mills (Thales Technical Services Manager at the time), was also a fan of the change he perceived at the FFG System Program Office (SPO). "In those days, the SPO pretty much considered Thales the worst contractor ever. So, when a new approach to sourcing emerged that called for communication through all levels, shared risk and reward, and collaboration, Thales became pretty much all-in."[20]

Mills describes the perverse incentives of the conventional competitive, transactional system the Navy had created. "Contractor strategy at the time was to respond to tenders with a competitive low bid with the intention to pick up money in growth work." Mills believes it is not an exaggeration that a combination of the original job – only 1/10 – and growth work – 9/10 – would sometimes make up the final compensation for contractors. While the Navy created the environment, the suppliers only made it worse with our behaviors. It makes perfect sense there were unhealthy relationships because that is the system that everyone was operating under."[21]

Paul Tenten, Program Manager - Warship Support, was the BAE Systems lead for the FFG relationship and engineering services delivery project with the Commonwealth of Australia and Royal Australian Navy. Early in his role, his direct customer, Captain Mona Shindy, sought a different engagement model between their two teams as preparation for a potential extension to their service delivery contract. Tenten naturally supported the idea of the Commonwealth wanting to create a longer-term relationship and, as a realist, he saw the immediate challenge before both the Commonwealth and BAE Systems. "Outcomes to the Navy were not being achieved, the client distrusted us, and the contract was being delivered in a very transactional manner." [22]

A workshop was conducted between our two leadership teams and initial discussions between the leaders focused on what was working and what was not. "We had some major issues. The ensuing conversation was very open, from the heart and even brutal at times, but the process built trust. The dialogue changed from 'this isn't working' to 'how are WE going to work together?' The process convinced us we were on the right track and culminated in a number of actions where we held each other to account."[23]

Tenten joined Shindy and Bailey's efforts in tackling change where it is hardest – at the behavioral level. "I went back to Leadership 101. How do I encourage my team to think creatively, act proactively, and engage at a personal level with our day-to-day customer and delivery partners? Through three very hard years of coaching and mentoring, I felt I acted more as an HR organizational change consultant than as a delivery executive. That's a strange place for an ex-sailor to find himself."[24]

To get wins on the board, Tenten and his lead team concentrated on creating ownership of their business throughout their delivery team by encouraging continuous improvement at all levels. As natural attrition occurred, they brought new recruits into the project with a focus on the required behavioral attributes rather than the traditional primary emphasis on technical skills. "We can teach technical skills. But it's more difficult to shape mindsets and align behaviors. We needed people who understood we treat people with respect, don't burn bridges, and who understand the context of their part in the bigger picture. Our goal was to fix how we were engaging in delivery more so than in what we were delivering. My tag line was 'inclusive, intelligent, inspiring' – that is, while my team was delivering our services, I wanted them to seek inputs from all sources and bring other people on the journey with them. That way all delivery partners would want to engage next time and even seek my team's input on other matters."[25]

Tools of the Trade

Captain Shindy believed to get traction she needed to create simple yet effective ways to drive collaboration. Two of the go-to tools of the trade Shindy turned to were Swim Lane documents and a concept she coined as the SPO Café.

Swim Lane Documents: The Swim Lane documents were literally lines drawn in parallel down the length of a piece of paper to create 'lanes'. The names of each party were listed at the top of each lane. For example, Thales had one lane, BAE had another, a Navy as a customer a third lane, and the Navy SPO yet a fourth. The swim lane concept came to life during offsite workshops where groups of people would go through the existing contract with the goal to document accountabilities. The end result was a visual representation of current responsibilities, which could then be assessed for a realistic scope of work and time constraints. "The result was surprising to many. Some people were doing work they were not charged with. Others were not doing work they were supposed to. And nearly all parties came to understand the time schedules were unworkable. Understanding each other's constraints enabled all of the parties to come together with positive solutions."[26]

The SPO Café: The SPO Café began as an initiative to encourage the culture to accept mutual respect and collaboration. Captain Shindy reflects, "I used to tell folks we are going to turn this place from a miserable, unhappy, excessive work environment into a bit of a café. My idea was a place where people come together in a nice environment, where people are talking over a coffee, solve the problem, and walk away happy."[*27]

The SPO Café was not an instant hit, but eventually won over the hearts and minds of Navy and supplier personnel. "It was only when we gave each other respect and understood everyone's point of view that the culture changed. Both Navy and contractors changed to accept the possibility of collaboration and collegiality – all the while making sure we get ships to sea on time, every time."[27]

The SPO Café took on a life of its own. An SPO Café wooden sign sat atop a tall bureau in Shindy's office as a symbol of the new endeavor. In December 2014 when the Navy Fleet Review (with participants from the worlds' navies) came to Sydney, Navy men stole the sign and carried it through the parade route. A video produced as a Christmas gift for Mona showed the sign showing up everywhere – in the hands of a Nigerian, held by a group from Malaysia, and perched underneath the harbor bridge. It had become a fun symbol of work well done. People even signed their emails, "This is an *SPO Café Initiative."*[28]

By 2014, the early pioneer had achieved what McLennan had set out to accomplish; using more collaborative relational contracting practices to change the contracting process from antagonistic to one with a spirit of an alliance partnership. The results were three performance-based contracts; BAE (platform systems) and Thales (combat systems and maintenance execution).

Captain Shindy reflects on the evolution that took place while she was at the FFG SPO between 2012 and 2014. "By the time I left in 2014, a radical change in working relationships occurred as Group Maintenance Contracts were in place, spawning the way for even more progressive changes. The Café SPO had evolved to what would become known as the FFG Enterprise."[29]

The Emergence of the FFG Enterprise

Following the award of the Group Maintenance Contracts in 2014, a gathering reflected on the future ahead. Leadership realized that simply entering into the long-term performance-based GMC's for maintenance would not be enough; they would also have to change the nature of how the Navy and the suppliers collaborated *after* the contract was signed. The idea of the FFG Enterprise emerged as a formal integration role to drive collaboration at the delivery level – not just among the leadership who has collaborated at the contracting level. What evolved was the FFG Enterprise system comprised of these seven stakeholders:

- Navy — the 'customer' for the FFG Enterprise's collective outputs;
- FFG SPO — the Capability, Acquisition and Sustainment Group (CASG) is the office responsible, on behalf of the Navy, for the on-going materiel readiness and seaworthiness of the FFG capability;
- BAE Systems Australia — provides engineering, and supply support services contributing to the materiel seaworthiness of the FFG capability;
- Thales Australia — under two (2) distinct contracts, provides specialist support services for the FFG combat system and performs planned and corrective maintenance contributing to the materiel seaworthiness of the FFG capability;
- Fleet Support Unit (FSU) — a Navy organization that assists with maintenance activities in an effort to develop and maintain technical skills-sets and know-how within Navy;
- Maritime Cross Platform SPO (MCP SPO) — the office responsible for procurement of common inventory; and
- Foreign Military Sales (FMS) — recognizing the relationship with the US DoD whereby Defense can obtain information, advice and equipment.

A key part of the FFG Enterprise included purposefully creating an environment where commercial competitors in the same market segments (BAE and Thales) would work together to collaboratively develop a total asset management framework in order to generate value for all stakeholders. This would mean ensuring collaboration across the three distinct contracts: BAE (platform systems) and Thales (combat systems and maintenance execution).

The FFG Enterprise represents a fundamental shift in how military capability is sustained and the collaborative approach for the development of a total asset management framework in order to generate value for all stakeholders; depicted in Figure 1 below.

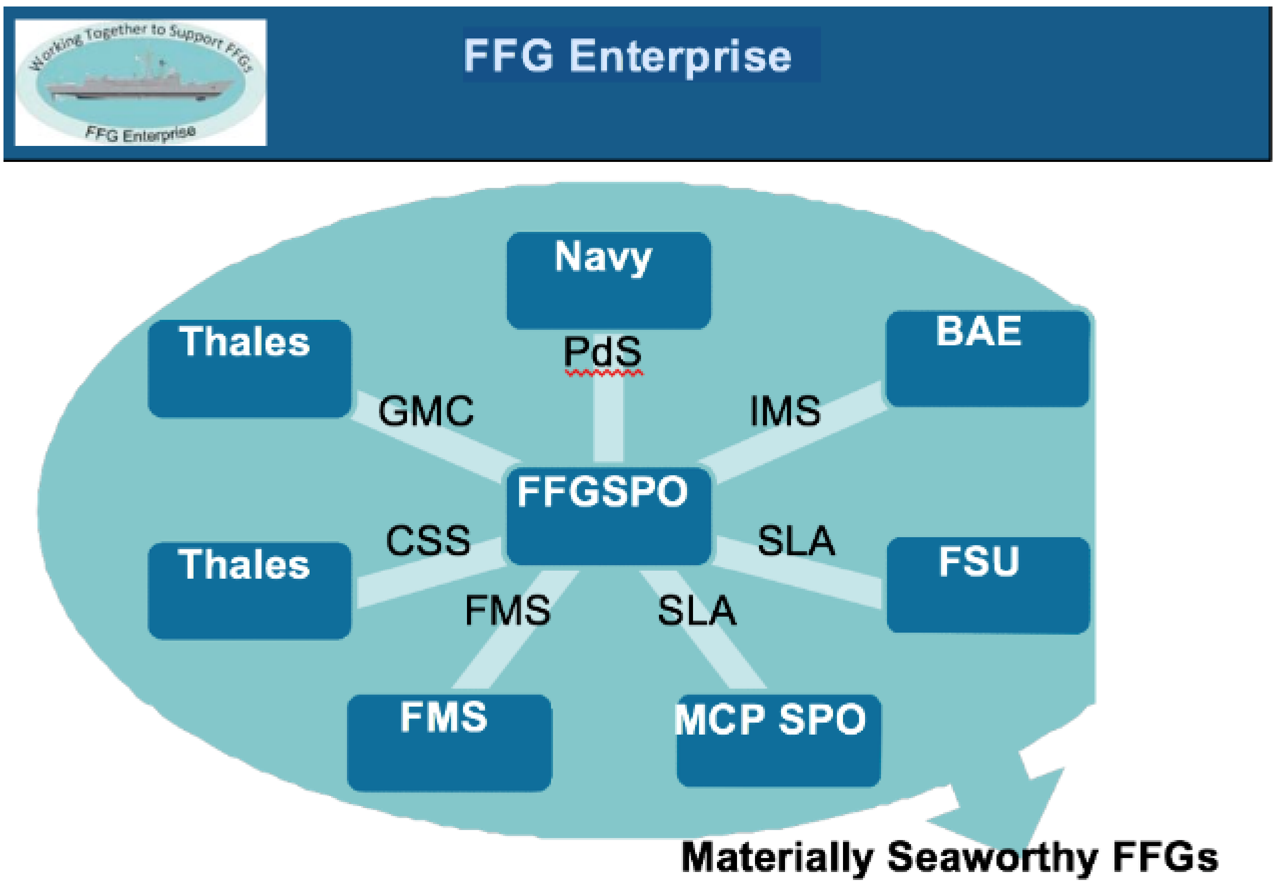

Figure 1: FFG Enterprise Partners

* *Please note the lines within the above model depict the contracts and agreements and do not represent lines of communication, as all FFG Enterprise members collaborate to deliver materially seaworthy FFGs.*

A Turning Point: Becoming "One Team"

The FFG Enterprise became the testing ground for how well the various stakeholders lived relational contract philosophies used during the contracting process. Relational contracts had been attempted in the past, but, never, with success. Unfortunately, attitudes and behaviors did not automatically align with the intent of the FFG Enterprise. Instead, relationships and behaviors stayed entrenched in traditional supplier engagement work practice; that is, transactional throughput management and adversarial behaviors. Simply put, behaviors needed to align with the achievement of efficient, effective, and economical sustainment of vision of what the FFG Enterprise and the Group Maintenance Contracts could deliver.

Key leaders once again turned to IACCM for support for a lesson on how to make the "relational" aspect of their contract come to life. IACCM conducted several workshops where the FFG Enterprise leaders collaboratively developed a formal "Charter". As part of the series of workshops, the group created a formal mission and vision.

Mission:

Materially Seaworthy FFGs to meet the Navy mission on time, every time

Vision

One Team delivering excellence in FFG sustainability

The Mission and Vision became part of a one-page Charter document that details the agreed relational ideals in a single page document bearing the seven (7) signatures of the principals for each of the FFG stakeholder groups (see Figure 2 on the following page). A key part of the Charter was the agreement and codification of desired behavior "attributes" that the stakeholder groups agreed to 'live into'.

The FFG Charter "sits atop" the traditional performance-based contracting framework between the Navy and the suppliers. A key feature of the FFG Enterprise Charter is the documented agreement regarding relational ideals.

When issues or problems arise, the parties go back to the Charter for inspiration on how to stay true to their Mission, Vision and ideals. Simplistic in concept, the FFG Enterprise Charter has driven significant cultural change and is recognized by IACCM as among the world's best practices. The result has been a clear shift to collaborative behaviors replacing traditional adversarial and transactional thinking. The FFG Enterprise has grown into a role model approach for how to create a collaborative, transparent, and effective relationship. Today, the FFG Enterprise is no longer an aspiration, but a reality that has evolved into best practice for the Navy.

Captain Shindy is quick to point out creating a "one team" culture is definitely a team effort. "It was certainly a team effort for cultural reform; we weren't going to get there with one person pushing the barrel."[30] While the early leaders like Shindy laid the foundation – it would be up to the next generation of leaders to make it sustainable.


FFG Enterprise Charter

Working Together to Support FFGs
FFG Enterprise

OUR MISSION
Materially Seaworthy FFGs to meet the Navy mission on time, every time

OUR VISION
One Team delivering excellence in FFG sustainability

Attribute	Definition
Instilling the common purpose	Cascade mutual enterprise objectives with a clear line of sight to achieving our Mission
Optimising relationship performance	Enterprise governing structure fostering an environment for recognition, proactive dispute prevention and team retention
Championing problem solving	Empowered to work together to openly and honestly raise, discuss, record and resolve problems; and wherever possible solve tomorrow's problems today
Instilling a "no blame" culture	One team delivering solutions who are accountable for our actions as we act, learn and improve as individuals and as an enterprise.
Fostering joint working	Achieve a collaborative culture through integration that streamlines policies and processes
Enhancing communication	Open and effective communication through proactive, honest and regular interactions
Promoting continuous improvement	Encouraging identification and implementation of improvements through all levels of the enterprise
Embracing gain sharing arrangements	Collectively recognise individual and group success and sharing in mutual benefits

We give our full commitment to ensure that all staff working within the FFG Enterprise shall act in accordance with this charter and in the spirit of cooperation

Michael Turner
CAPT RAN
SCGRP CMR

Damien Efford
Director Above Water Systems
Thales Australia

Martin Drebber
Director Operations
FSU

Greg Laxton
CAPT RAN
Director FFGSPO

Paul Fenton
Program Manager
BAE Systems Australia

Max Kufner
Director Asset Management Services
Thales Australia

[illegible] Metal
CAPT RAN
Director MCPSPO

THALES
BAE SYSTEMS
INSPIRED WORK
THALES

As of 27 July 2016

Figure 2: Original FFG Enterprise Chart

CREATING SUSTAINABILITY

It's one thing to lay a good foundation for a relational contract. It's another to maintain it. Skeptics of relational contracting often accredit the personalities involved for success. A common comment is 'They are only collaborative because they get along well. Bring a new sheriff into town and relationship may fall apart'.

When Captain Greg Laxton replaced Mona Shindy as Director FFG System Program Office (SPO) in 2014, he knew his biggest challenge would be to create sustainability for what the early pioneers had built, as the FFG operationalized the Group Maintenance Contracts with BAE and Thales. Being the new sheriff in town meant building on – not tearing down – what the early pioneers had built. And Captain Laxton was the right man for the job due to his strong technical background.

Laxton - a career Navy man - joined the Royal Australian Navy service straight from school in 1988. He was a fellow of the Institute of Engineers Australia and Institute of Marine Engineering, Science and Technology (IMarEST). In his early years he was a Weapons Electrical Engineer Officer. Laxton got a solid vantage point for seeing the issues with the FFG fleet when he was deployed in 2011 to the aftermath of September 11th.

While Captain Laxton's technical savvy gave him instant credibility with the rank and file, it was his leadership savvy that helped him build upon the strong foundation Shindy and Bailey had laid. Captain Laxton understood where the Navy was heading with the desire to drive a partnership mentality with suppliers. Laxton's perspective was straightforward. "The tangible goal for everyone involved is the vessel – to see it floating in the water. The shared belief between Navy and suppliers is the Navy deserves the best. The best frigates to be sent out to protect folks around the globe and then bring sailors home to their families. And that translates to ships on time, every time.[31]

Laxton passionately carried forward the "one team" approach his predecessors had fostered. Advocates of relational contracting know the process of how you get there matters. While the Charter documents the principles for the relationship it is essential to onboard the broader community to the new constructs. It is equally important to create sound governance structures that embrace and embody the relational principles outlined in the Charter. Great onboarding helps ensure the changes envisioned by the early pioneers stand the test of time as leaders of the FFG Enterprise move on to other roles. One way Captain Laxton did this was by encouraging Navy leaders within the FFG SPO to purposefully build trusting relationships with their industry counterparts.

Laxton knew the contractors were choosing positive people for lead roles in the relationship. He wanted to do the same. When Laxton's time came to cease being the Director of the FFG SPO, he wanted a really solid person to take the Navy SPO lead and continue to carry the torch of relational contracting principles throughout the life of the program. Captain Laxton thought Commander Brad Smith would be the perfect fit for the job. Smith had a highly technical Navy background and was eligible to be a Captain. After getting the go-ahead from the Deputy Chief of the Navy, Laxton confronted Smith directly asking if he wanted the job.[33] Brad Smith ultimately joined forced with Tony Mills and Andrew Laing as part of the Coffee Club.

Captain Brad Smith - FFG System Program Officer

In 2015, Brad Smith joined the Guarded Missile Frigate System Program Office. "I came in about three months into the execution phase. My job was to continue the journey by building upon the progress already made. I knew the only way to build trust was to deliver the objectives. But, in order to ensure we delivered as promised, we needed to forgo some controls that we, as the customer, had previously insisted on. We needed to trust industry to decide the best way to achieve outcomes."

Learning to limit micro-management resulted in a perceived increased level of risk to both the Navy and the contractors. Let's say a contractor is undertaking a task on a ship to a defined scope and price. Then they identify a problem that was not part of the original task (for example a defective valve). In the old system, the supplier would be required to stop work, document the issue, have it reviewed by the Navy for approval, then price the work, and ask for approval again. "This valve might represent $5000 worth of work, which is less than 0.1% of the overall project cost. If it doesn't get done, work cannot proceed and the overall schedule is placed under pressure. Because we committed to a relationship based on outcome and trust, if the work is required and impacts the overall outcome, the contractor will either absorb the cost or receive payment through the carefully crafted project costing model that permits true-up of overall cost based on performance indicators. The point is getting the ship out to sea – now, they do the task to achieve the goal, and all stakeholders gain value from the outcome: increased trust, improved performance and a far greater final product."[34]

Captain Smith recounts, "Success was enhanced by the three leaders making a conscious decision at the beginning to demonstrate to the entire Enterprise that we live the behaviors agreed to in the Charter. We show others we are serious about the behaviors and values and that the Enterprise is focused on the outcome for all. When we sit together openly in the coffee shop, we talk and engage in such a manner that everyone witnesses collaboration is ongoing and natural."[35]

In 2017 Captain Smith became the Director FFG System Program Officer, replacing Captain Laxton.

Tony Mills, FFG GMC Program Manager Maritime / Asset Management - Thales Australia

Tony Mills was excited to lead Thales efforts with the FFG as the Thales Program Manager under the Group Maintenance Contract. Mills is a positive get-things-done leader and a fan of a collaborative approach. He learned the hard way that the best way to get things done was through collaboration. "I once held a job in Venezuela where I was a minority. I figured I could change things around but it didn't work. I quickly realized I was the one who needed to change. That experience helped me realize (the hard way) that the best way to get things done is with the collaborative approach"[36]

Mills is responsible for calling for the Coffee Club meetings between the three leaders. Actually, he is a fan of coffee for everybody. "As the Thales FFG leader, my job is to help people talk to one another, getting the right people talking to each other about the right subjects. The majority of my time is spent drinking coffee with all kinds of folks. Listening is a key to success."

But leadership does not stop at the informal meetings. Mills continues, “The executive meetings are especially critical as they provide the example for workers. They generate trust as problems are addressed as soon as they are caught in an honest and forthright conversation.”[37]

Andrew Laing, Project Manager FFG Integrated Materiel Support Maritime & Integrated Systems - BAE Systems Australia

The first thing Tony Mills did upon signing the Group Maintenance Contract was to call up his peer Paul Tenten at BAE Systems. Getting together over coffee (of course), the two discussed how they could work together as partners rather than competitors. It was not so far-fetched that Thales and BAE could form a fresh relationship. Garden Island is a small place where technicians and managers move freely from one company to another. It is common to find pre-existing friendships, so the thought of creating congenial working relationships among competitors was not farfetched.

In mid-2015, BAE tasked Laing to bring the FFG Enterprise system to a new stage as Change Manager. Laing comments, “When I walked in the door, I sensed something very different was going on. I thought all this partnership talk sounded great. However, I questioned if reality would kick in and rivalries would re-emerge. But Mills and Captain Smith offered so much help. I quickly became aware of how easy it was to work with my counterparts at the Navy and Thales. It was easier for us when we had a common goal. We all knew where we were trying to go. We are all trying to create a future for others to take up the same construct.”[38]

Just two short months later Laing was named Project Manager (taking over from Paul Tenten).

The Coffee Club Turns Hopeful Thinking to Sustainable Reality

The challenge for the Coffee Club was clear; to build upon the significant progress already made and permanently embody the collaborative spirit of FFG Enterprise into sustainable results. They wanted to make the One Team vision a reality where the Navy, BAE and Thales would consistently focus on the all-important vision of “ships on-time, every time. This would mean suppliers that in the past had been fervent competitors would become collaborators.

Together, the trio set out to climb the uphill battle of changing the hearts, minds and behaviors of the hundreds of personnel across the three organizations that would turn the Charter into a sustainable culture – delivering on the promise of the performance-based Group Maintenance Contracts.

Captain Smith (then Commander) knew the onus and leadership was on him and the FFG SPO to change their own behaviors first. Working tirelessly to get his workforce to fully appreciate the potential, he was determined to make the FFG Enterprise achieve high performance. Smith desired success that would inspire other Maritime agencies to emulate its example. Currently, this is occurring within other Navy programs and is delivering similar results and is promoted as a model to emulate within the Australian Defense Force.

Mills agrees. “Leadership is everything. We have to consistently display behaviors of the Charter. That doesn’t mean you have to agree. But you are expected to engage in productive and healthy conversations. Brad may come into my office and we may not agree. But we are seen walking in collaboratively and walking out collaboratively.”[40]

The trio built a trusting and transparent relationship living the intentions of the Charter. But they knew to succeed they would need to institutionalize the Charter among the hundreds of personnel in the ranks and file across the three organizations.

The challenges were many – but the group dealt with them in stride and positive “One Team” mindset.

One of the biggest challenges was to gain what Captain Smith calls a “ship-by-ship buy-in”. Captain Smith explains, “When a ship comes into port, they bring approximately 200+ sailors. These sailors had been technically trained and often believed they knew what was needed. Their previous experience led them to believe the contractor wouldn’t provide what they wanted without lots of instruction. As such, we knew there was going to be distrust - we would have to take each of the ship’s crews through a journey to change the mindset of how the new approach could provide value to them. The crew had never experienced FFG Enterprise, so it meant nothing to them. We had to guide and help them to trust in the system we had created and to collaborate - not control - the contractors. What was fascinating to witness was each ship undertaking this same journey and altering their perceptions of the SPO and the Industry suppliers. Each ship ultimately became subsequent change-agents for the FFG Enterprise, promoting and selling the virtues of the system willingly.”[41]

Laing points out the stark contrast between the past transaction contract and the new FFG Enterprise model. “In the past, if contractors had a problem, we would send it back to the SPO for review. It went back and forth. Back and forth. Now, when ships come onshore, industry partners communicate with each other to solve problems, and the Navy customers trust the contractors. In 2014, at the start of the FFG Enterprise, the ships had a high priority defect list that numbered between 73 and 80. Now, the defects list runs between 13 and 20.”[42]

To further improve buy-in and build collaborative relationships, the team involved significant members of the FFG Enterprise to go onboard the ships and spend time at sea. Captain Smith explains, “Many folks supporting the ships never understood the link between their role and the ships. We actually scheduled days during which staff would join the sailors for ‘a day in the life.’ When they experience life at sea, they begin to understand things such as the cramped living conditions and the fact that things like securing straps are important because a ship moves heavily at sea. They begin to feel differently, connecting their own roles to the ships and a sense of purpose. They understand that what they do is important to the navy. They understand that, if the air conditioning isn’t working, it does not just impact personal comfort. Major systems will fail and it is critical to the ship's function.”[43]

Another strategy involved a more collaborative approach for the writing of plans. Mills explains, “By having all parties together at the time of writing, we could ensure alignment and get approval concurrently with the writing.”[44] This fundamental change of thinking ignored traditional planning and avoided multiple reviews going back and forth, wasting time. “We were able to get plan submissions approved within 5 days because of the pre-approvals and having the right people all together in the same room.”[44]

Senior management of the three organizations also found ways to support the FFG Enterprise efforts. The FFG Enterprise Advisory Group (FEAG) and the FFG Enterprise Governance Board (FEGB) consist of senior FFG Enterprise leadership and acts to resolve issues and assure that strategic direction and goals are being met.

The Charter helped the trio articulate what it meant to "behave" collaboratively. The onboarding and governance mechanisms they created helped people learn what it meant to be collaborative. "Now we have ships coming in for a second time and third time...coming in with better attitudes and willing to engage directly with contractors, eliminating previous arms-length and specific detailed task-oriented interaction." [45]

Desirable behaviors began to emerge while the adversarial and heavily transactional approach began to fade. The FFG Enterprise approach evolved into a collaborative, transparent, and high performing alliance.

Results improved as collaboration increased. The Coffee Club trio reflects, "We were very motivated – not just by the improved results, but also by seeing the change in people's behaviors. Cultural assessments indicated we were pretty to very good, that we were progressing along the path well. However, we knew our journey was not finished - we could do even more. We could do even better."[46]

Today there are regular communications – both formal and informal – between all levels. 'Clear Lower Deck' forums (over 200 personnel attend) emphasize the mission, highlight significant achievements, celebrate success and innovation, and call attention to upcoming priorities and challenges for all FFG Enterprise members.

The Charter: V2

When the trio reflected on what had worked well, all unanimously pointed to the Charter as "the light bulb moment" that got everyone on common ground regarding intent and behavioral expectations.

The parties decided to revise the original Charter. While it had worked well in the early years, many felt it was time to revise the Charter to make it more actionable and understandable by the rank and file. Once again, the parties turned to the tried and true "offsite" sessions to help them design their future state. The updated FFG Enterprise Charter (Figure 3 – following page) was approved in February, 2017.

A quick comparison between the original Charter (Figure 2) and the revised Charter shows a marked difference in tone. The new Charter reflects a focus on specificity, accountability, and teamwork. It speaks directly to the culture of the organizations and the mutual trust and collaboration reflected in behaviors. Two important elements were added. The first was an objective to lead and drive change not just within the FFG Enterprise, but across the broader Maritime Systems Division. The second was an emphasis on safety, a critical factor made easier by the straight-forward communication between individuals.

Although the underlying contracts form the official, legal documents that set parameters and rules for the Navy and its contractors, the Charter sets forth the standards for day-to-day operations. The Charter, in essence, supersedes the contract when making decisions about solving emerging issues and achieving goals as a team. On paper and in action, the FFG Enterprise embodies collaborative principles, placing a priority on behaviors, culture, accountability, and trust.

The Charter "sits on top" of the formal contract and helps guide decision making. In short – this means the actual contract (which is written as a traditional contract) does not include the relational contracting components (e.g. the Charter) that embody the spirit of the FFG partnership. Captain Brad Smith explains how it works, "I sometimes have to make decisions that don't entirely align with manuals or the contract. The way we make decisions speaks to the goals and mutually accepted behaviors."[47]

FFG Enterprise Charter

Working Together to Support FFGs
FFG Enterprise

OUR MISSION

Capable and Materially Seaworthy FFGs to achieve the Navy mission on time, every time, until they are withdrawn

OUR VISION

One Team safely delivering excellence in FFG sustainability

Attribute	Definition
Instilling the common purpose	Cascade mutual enterprise objectives with a clear line of sight to achieving our Mission
Optimising relationship performance	Enterprise governing structure fostering an environment for recognition, proactive dispute prevention and team retention
Championing problem solving	Empowered to work together to openly and honestly raise, discuss, record and resolve problems; and wherever possible solve tomorrow's problems today
Instilling a "no blame" culture	One team delivering solutions who are personally accountable for our actions as we act, learn and improve as individuals and as an enterprise
Fostering joint working	Achieve a collaborative culture through integration that streamlines policies and processes
Enhancing communication	Open and effective communication through proactive, honest and regular interactions
Promoting continuous improvement	Encouraging identification and support implementation of innovation and improvements at all levels of the enterprise
Embracing gain sharing arrangements	Collectively recognise individual and group success and sharing in mutual benefits

We fully commit to this Charter. It's the compass for behaviour. We support our staff working together safely and in the spirit of cooperation

Michael Turner
CAPT RAN
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Damien Elford
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John Metzl
CAPT RAN
Director MCPSPO

THALES
BAE SYSTEMS INSPIRED WORK
THALES

As of Feb 2017

Figure 3: 2017 Enterprise Charter

Measuring Success

What and how organizations measure success determine and define what gets done. When the measures sync up with the major objectives, it unlocks the power to achieve transformation. The FFG Enterprise embedded elements of relational contracting into the actual contract. But to truly be successful, the parties needed to ensure the metrics aligned to the intent. The Capability Acquisition and Sustainment Group (CASG) formally measures each supplier using a Company Scorecard based on these specific areas:

1. Technical Performance
2. Cost
3. Contract Schedule
4. Round Schedule
5. Contracting
6. AIC
7. Sub/Prime Relationship
8. Defense Contractor Relationship

It is important to note that one of the dimensions is to measure the contractor relationship – not just performance against operational metrics. The Scorecard also includes a 360-degree element that sees the supplier equally rate the FFG SPO as a customer.

Since the inception of the FFG Enterprise, there has been considerable improvement in the Scorecard ratings compared to previous contracts. Performance has steadily increased under the new Group Maintenance Contracts as collaboration increases and the relationship matures.

The Scorecard results are a regular agenda item in the Governance meetings, and the parties agreed upon a plan called 'Pathway to Purple' that would see a combined effort to support each other and to see the ratings assigned reach the highest score possible.

Strategic Performance Measures

Another area of measurement introduced by the Maritime Systems Division (MSD) in the early days of the FFG Enterprise was that of the Strategic Performance Measures (SPM). These are enterprise-wide metrics which include three dimensions:

1. Organizational Resilience
2. Best for Program
3. Relationships

All FFG Enterprise partners willingly accept the inclusion of these enterprise-wide measures, and the FFG Enterprise has seen several occasions where the behaviors of the SPMs have delivered superior results for the program as the partners strive to collaborate to meet enterprise-wide goals.

THE RESULTS

The FFG Enterprise has achieved outstanding results using performance-based contracts that operate under a common Charter. Since its inception, the FFG delivered tangible benefits with decreased costs that deliver more value. Mills sums it up nicely: "The system is performing well. Ships are available for the Navy to do what they want them to do, when they want them to do it. The system has become so reliable they get more value. "[48]

Rear Admiral Adam Grunsell - head of Maritime Systems Division – is full of praise for what the FFG Enterprise team has done. He points out that relational contracting sounds good in theory, but often falls apart in practice. At Garden Island, BAE and Thales have proven it could work. "BAE and Thales would normally be competitors. But they came together under the FFG Enterprise and made this an award-winning project. The Charter was a single piece of paper which committed the parties to missions and values, and to work to outcomes rather than hide behind what was in the contract." He adds, "It's been an incredible success."[49]

In fact, the FFG Enterprise has an award-winning track record since its inception. In 2015, the Australian Fleet awarded HMAS Melbourne with the prestigious Gloucester Cup, the highest of the Fleet Awards, and the Spada Shield for the most capable and effective warship. 2017 brought more recognition with the Deputy Secretary of the Capability Acquisition and Sustainment Group (CASG) - Kim Gillis - announcing the FFG Systems Program Office received the Essington Lewis Trophy for Excellence in a Major company team.

The FFG Enterprise's relational contracting efforts are being recognized externally as well. In 2015 the team earned a second-place finish for the International Association for Commercial and Contract Management's "Excellence in Contract Management Award", and in 2016 received the IACCM Innovation Award for Operational improvement.

Results, In Hard Numbers

For the Coffee Club, awards are nice. But the best feeling comes in the form of the real results that the FFG Enterprise is delivering day-in-and-day-out to the Navy customers who rely on the FFG fleet. Captain Brad Smith frequently shares two graphs that demonstrate and support the significant improvements achieved by the FFG Enterprise. The first graph (Figure 4) is a representation of the improved delivery of ships to the Navy. It is the metric of how many days per year an FFG is available to the Navy to utilize. You can see from Financial year 2014/2015 the dramatic increase in the availability of FFGs, which coincides with the creation of the FFG Enterprise.

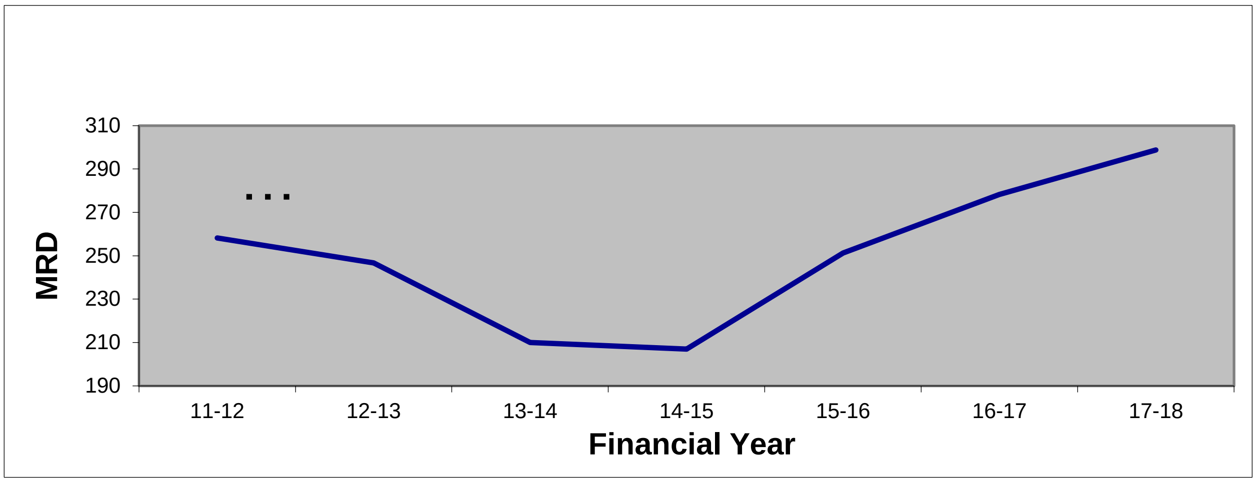

Figure 4: Days per year FFGs are available to the Navy Comparison

Another key success indicator is the significant improvement in the reliability of the FFGs (their ability to do the job required of them once they go to sea). Figure 5 shows there is a significant improvement in the quality from 67 Significant Defects in 2015 to 16 in 2017. For a ship over 25 years old and nearing the end of its service life, it is the counter-argument to the 'bath-tub curve' theory which has its premise of increased defects, reduced reliability, and performance of a product as it gets older. This, coupled with a reduction in cost, is what the FFG Enterprise has delivered.

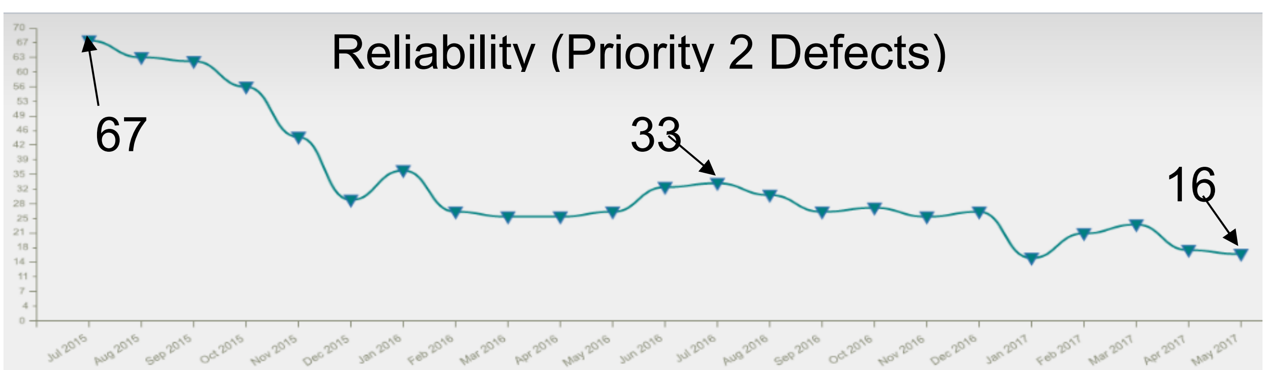

Figure 5: Improvement of FFG reliability

These are just two of the impressive results from the FFG Enterprise. More detailed results are profiled below.

Total Cost of Ownership Savings

In any organization, costs are front and center. This is no different with the FFG Enterprise. But what is different is the way they think about costs. The traditional focus on the lowest price per transaction has been replaced with an emphasis on lowering the overall total cost of ownership. Results include:

- **Over 20% realized cost savings**, in the order of AUD$28 million per year
- **45% savings** on a like-for-like scope of work
- **46% reduction** in costs per task
- **43% reduction** in labor hours per task
- **44% reduction** in labor costs per hour
- **8+ labor hour reduction** per Technical Repair Specification (**TRS**), a document which informs the costing and conduct of maintenance, as a result of process improvements identified through the conduct of Lean Six Sigma (**LSS**) activities

Capability Enhancements

The long-term contracts are enabling suppliers to justify investment in capability enhancements. Some of the more notable capability enhancements include:

- **100% on-time or early** delivery of the FFG capability out of maintenance
- **25% increase** in the achievement of Material Ready Days (MRDs), days the FFG capability is available for operational requirements, from 82% of the target agreed with Navy in 2012 to 102% in 2015, to 107% in 2016
- Improved confidence in the FFG materiel state due to the ability to conduct additional work, through efficiencies generated by advanced planning and communication
- A collaborative organic-level maintenance (maintenance outside the remit of FFG contracts) support solution, allowing critical planned maintenance to proceed as scheduled and resulting in the operational deployment of the FFG capability on time with significantly reduced risk
- World-first operational deployment of a fully integrated Unmanned Aerial Vehicle (UAV) into the ships combat system achieved through complex engineering change introduced into a constrained maintenance period that had already commenced
- A decreased incidence of reported post-maintenance Urgent Defects (**URDEFs**), defects that cause a loss of capability, under the FFG Enterprise operating model; including:
    - **38% decrease** in URDEFs per task completed – one (1) reported URDEF for every 2.9 tasks completed reduced to one (1) reported URDEF for every 4.7 tasks completed; and
    - **16% decrease** in total URDEFs reported as
- A declining trend in the number of Priority 2 URDEFs in the class. Priority 1 URDEFs are ship stoppers that prevent the mission from being achieved. Priority 2 URDEFs are those that must be rectified at the first available opportunity. A key indicator of the materiel state of our Navy assets is the number of Priority 2's they are carrying.

Overall Business Improvement

Co-location of integrated teams also yields tangible benefits, such as:

- Increased knowledge transfer and collective learning opportunities through continuous shared improvement activities such as Lean Six Sigma (LSS) and IACCM Supplier Relationship Management (SRM) training
- Reduction in the time required to complete a combat system that for the previous 20 years had taken weeks down to hours, which is now being adapted for other Navy programs
- **30% reduction** in micro-transactions (i.e. the double-handling and administrative interfaces related to certification documentation processes)
- FFG Enterprise's willingness to champion thought leadership such as a strategic risk management tool now being adopted by the entire Maritime Systems Division (MSD)

Intangible Results

Cost savings and business improvement results are easy to quantify. But success comes in all shapes and sizes, some of which are hard to put a number on.

One benefit that McLennan is most proud of is the positive culture change. Early on McLennan was proud to see the positive impact because of the relational contracting efforts. For example, IACCM increased their grade in relationship maturity from a "B–" in April 2015 to an "A–" in October 2015. (This result is based on improvements observed over several facilitated workshops.) There was also a significant increase in internal engagement and trust that resulted from open attendance at previously closely guarded Commonwealth-only forums.

In their quest to create a "One Team" culture, the FFG Enterprise also established a cultural assessment to reflect what the people want their culture to be. As part of the assessment, a preferred culture (right circle) was mapped which shows the desire to work constructively (**blue**), but still allows the Australian cultural norm of challenging the status quo (**red oppositional spike**). Seeing the comparison between the traditional international culture norm (left circle) and the desired culture (right circle) helped the team identify areas they needed to consciously work on improving.

FFG Enterprise Preferred Collaborative End-state

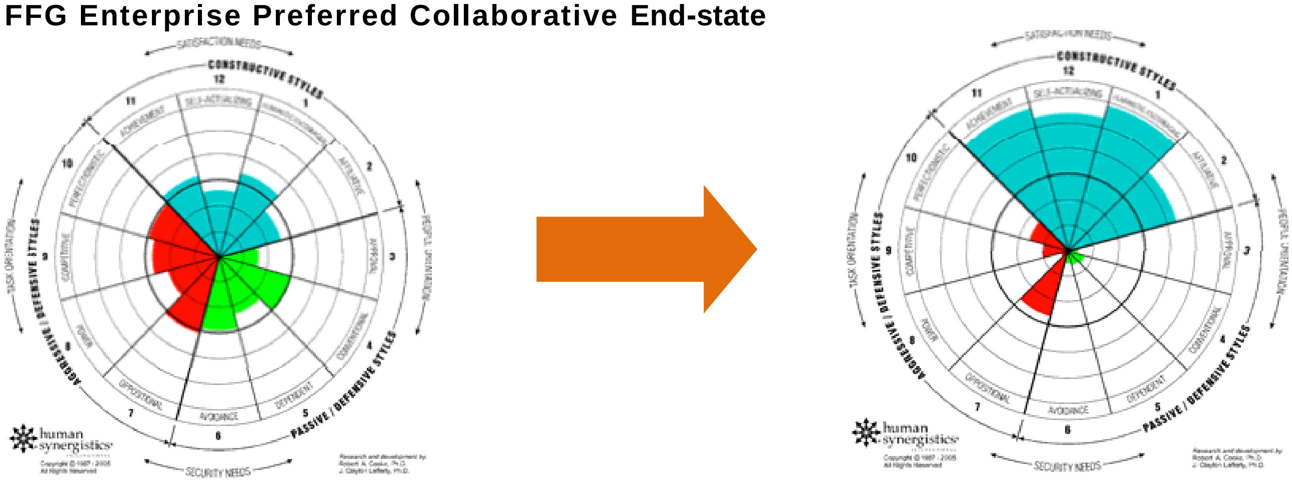

Figure 6: Comparison of Traditional Culture vs Preferred Collaborative Endstate

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Also, the FFG witnessed a more integrated workforce due to willingness to 'take a walk in each other's shoes' (e.g. organized sea days where FFG Enterprise personnel who had never been to sea before are exposed to a day in the life of an FFG and its crew. The activity offers valuable context and generates additional personal commitment from FFG Enterprise staff). This and other "One Team" initiatives ultimately helped shift FFG Enterprise culture and behavior from a siloed mentality of transaction-heavy activity towards an efficiency-based 'best for program' goal.

The FFG has also created formal relationship management constructs as they seek to further improve the relationship between the Navy stakeholder groups and BAE and Thales. This includes the establishment of an active Governance structure that supports the aims, goals and intent of the FFG Enterprise. Key governance activities include:

- FFG Enterprise Advisory Group (FEAG) meets quarterly and consists of the senior leaders within the FFG Enterprise, generally Naval One Star ranked officers and Industry Vice Presidents;
- FFG Enterprise Governance Board (FEGB) meets monthly to set and monitor the high-level priorities, review initiatives, discuss our cultural journey, examine business and asset management risks, agree to plans to resolve issues, and assure that the FFG Enterprise is meeting its strategic direction and goals;
- The Executive Management Team (the Coffee Club) meets 3-4 times per week to openly discuss issues and maintain the tactical direction of the FFG Enterprise. The majority of the day-to-day issues have been resolved at this more relaxed forum;
- Collaborative Support Team is comprised of production-level members. This team meets weekly with the primary focus being active engagement and resolution of issues identified by staff within the FFG Enterprise. These may be either business improvements or identified rub points where the spirit and intent of the FFG Enterprise is not being maintained. This team aims to solve problems at the lowest level possible.
- Regular delivery of jointly developed FFG Enterprise-wide communication activity, such as the valued 'Clear Lower Deck' forums; and endorsed by the FFG Enterprise.

The development of formal governance tiers and cadence has reduced the need for 'gatekeeper' activities previously provided by the Commonwealth. Increased trust between FFG Enterprise partners means ships and industry now interact directly; issues are resolved before the need for arduous reporting.

Contractors also have a new attitude. Damien Elford, Director Above Water Systems (Thales Australia) provides an example. "A great example occurred about a year ago. I brought Captain Michael Turner through my Perth office to meet the team and see software support activities as well as new and innovative solutions we were working on. The Captain's eyes showed excitement. He saw potential solutions to problems and challenges he had elsewhere but didn't know that we were working on these areas. Because the FFG Enterprise allows the contractors to work directly and more collaboratively with customers and end-users, we were able to fulfill the Captain's request within 6 months rather than the two or more years normal channels would have taken to deliver new capability. We learned we could operate better, faster, and smarter."[50]

This proactive, thoughtful maintenance simply was nonexistent under the legacy contracts. This conversation led to the operational deployment of another world-first Navy boarding party system and was the winner of the Australian Maritime Conference (the largest Maritime Conference in the world in 2017) Innovation award.

A Reflection on Success

Andrew Laing sums up the value of making the shift to collaborative contracting. "In the old days, everything was very transactional. When we changed the story to long-term commitment and partnership, and focused on outcomes, we began to look at the art of the possible." [51]

Tony Mills agrees. For Tony – and hundreds of others working under the FFG Enterprise - good care of the fleet is not just a job, it is a visceral response to the ships and all they represent. Deep commitment is the thread that propels the journey and holds it together during times of stress. Tony Mills explains as he points out the window, "Look at those ships outside. They are the only ones I ever want to work on. I now work for Thales; in the past, I have worked for BAE systems. The company is secondary to working on ships. It's a way to pay back."[52]

When the Coffee Club reflects on their success, one of the best indicators is other Australian Navy organizations are now turning to relational contracting practices supported by a collaborated "Enterprise" approach to their operations.

But probably no one is prouder of where the relational contracting journey has taken both him and the Navy than Bruce McLennan. However, Dr. McLennan is quick to point out their work is not done. "I am reminded of the quote from Chris McGeown, "*Know the difference between those who stay to feed the soil, and those who come to grab the fruit.*"[53]

It is this reason the FFG sponsored University of Tennessee researchers to document their story, summarize lessons learned, and point out further opportunities for improvement. While the first part of this report documented the journey and results, the rest of this report focusses on lessons learned and improvement opportunities.

LESSONS LEARNED

The establishment and implementation of the FFG Enterprise reveals many lessons learned. The most significant is that relational contracting is not just a nice theory, but it can and does work in practice to facilitate real results. No matter who you talk to – one of the biggest lessons learned is that neither the Charter nor the Group Maintenance Contracts made the difference. Rather they were enablers. The real inflection point came from having the courage to change – and this included the conscious decision to change behaviors.

Captain Smith describes supplier behaviors as a 'mirror of the Navy'. Ultimately the Navy is writing the cheques thus suppliers have little choice to align themselves with the behaviors of the customer. Captain Smith rightfully knew the FFG SPO needed to change their own behaviors first."[54]

The Coffee Club reflects on the other lessons learned hoping others can benefit from their journey.

Leadership is Essential

Leadership is essential to uphold the intent of the FFG Enterprise. A key strength of the FFG Enterprise is the relationships. However, the relationships that provide strength for the FFG Enterprise are also its Achilles heel. For example, in the Navy, it is common for leaders to not hold positions for a long tenure due to the military posting cycle. A key learning for the FFG Enterprise is to plan for transition between key personnel. Building a culture that supports collaborative relational contracting is also key (see next lesson learned – building culture is a never-ending activity).

Building Culture is a Never-Ending Activity

Strategy can dictate an organization's intent, but culture enables the strategy to be realized. Creating a formal Charter is a key enabler if "lived into". As such, it is essential to incorporate onboarding and governance mechanisms that institutionalize the Charter. These can be things like:

- Knowledge transfer programs – including sea days on FFGs to provide context to members' work and establish rapport among personnel;
- Culture coaching – assigning an independent 'Culture Coach' to assist and shape the desired culture;
- Culture surveys - for showing progress against a cultural baseline
- Regular communications – both formal and informal. 'Clear Lower Deck' forums (over 200 personnel attend), help emphasize the mission, highlight significant achievements, celebrate success and innovation, and call attention to upcoming priorities and challenges for all FFG Enterprise members.

Contracts are a Tool, Not a Weapon

There is a collective recognition within the FFG Enterprise that contracts are a set of minimum obligations that should evolve over time to suit dynamic changes in business practices. Where there is ambiguity in applying contract clauses, parties work together to find the most practical solution, both technically and commercially. For example, Strategic Performance Measures (SPMs) are used to supplement contractual performance management frameworks in order to drive behavior. Most important, when there is misalignment or conflict, the parties look to the Charter and not the overly rigid contract clauses or outmoded practices that pit the Navy against the suppliers.

Co-location is an Operational Multiplier

FFG team members all point to co-location as a key enabler. Enterprise members physically co-locate, increasing dialogue and situational awareness of all parties. This ultimately helps to increase the efficiency within which sustainment solutions are agreed. As a future step, the parties seek to bring co-location across the team members with the ultimate goal to have a fully integrated workspace across the FFG Enterprise.

Continuous Improvement is Indeed Continuous

The collective FFG Enterprise personnel have generated numerous ideas that have led to tremendous success. However, leaders recognize that continuous improvement efforts are indeed continuous. The parties actively explore ways to bring continuous improvement efforts to life. For example, the team is now exploring the use of 'Theory of Constraints', 'Critical Chain Portfolio Management', and Vested Outsourcing as potential ways to help them further improve.

Contractual Gaps Can and Do Create Perverse Incentives

One of the most frustrating lessons learned is that the contract itself can create inherent perverse incentives counter to the Charter. Looking at problems through the lens of the Charter has uncovered the fact that, despite a shared desire and ability to perform, the contracts themselves often constrain the intent of the relationship. The Coffee Club has been compelled to lead many initiatives to resolve multiple forms of contractual misalignment where the spirit and intent of the FFG Enterprise is not aligned with the actual contracts.

For example, when the Navy wished to maximize the HMAS Darwin's availability, they modified the operating profile from a single 8-week maintenance period to a number of small discreet maintenance periods. The impact was an increase in overhead for the suppliers because applying multiple discreet activities is less efficient from a project management and resources perspective. While it increased the availability of the platforms and was good for the customer, it had the potential to erode margins and value for the supplier.

To combat negative supplier results, the parties used transparency and communication to clearly show the impact on decisions for each party. The Charter gives them the trust needed to transparently share information they do not normally share. With trust comes openness and willingness to approach problem-solving in a fair give-and-take manner. The result? The parties reached amicable pricing considerations because the contractors opened their books to reveal how they resourced against an eight-week availability compared to shorter times. This is only one of many examples that highlight how the more traditional performance-based contracting philosophy created unwanted tension.

While the Group Maintenance Contracts enabled the suppliers to come to the table as partners, the performance-based pricing mechanisms had drawbacks such as the one shown above. The above example clearly points out the impact of one of many contractual constraints that create perverse incentives for between the Navy and suppliers. To combat this, the Coffee Club is constantly searching for creative ways to reduce or remove the natural contractual tensions to align the Charter with the contracts.

One of these alignments was the inclusion of the Strategic Performance Measures (SPMs) into the performance management framework of each contract (mentioned previously). Another example is an Enterprise-wide efficiency gain-share mechanism to drive performance within the existing individual contracts. The exceptional part of this initiative is that all three contracts rely on each other. Regardless of which contractor delivers the efficiency, the gain is shared equally. And it was agreed that if any individual contractor was under-performing then no dividend would be received. The cultural change is that individual companies (Thales and BAE) will step in and support each other to ensure that all contractors are performing at the optimum level to achieve the outcomes of the FFG Enterprise.

The bottom-line lesson learned is that the bottom line matters. When contract language does not fully support the intent of a relationship, friction can and does occur when one partner will “gains” at the other partner’s expense. This misalignment creates a risk that the contract could be used to the detriment of FFG Enterprise objectives. With this in mind, the FFG Enterprise leadership still follows contractual guidelines, but not in an adversarial manner. The mantra has become “contracts are tools not weapons.”

In consideration of these very real risks, the FFG Enterprise leadership is seeking to learn more about the Vested business model for creating highly collaborative relationships. The next section of this report shares a review of the gaps between the FFG Enterprise’s current contracts with the “Five Rules” of a Vested agreement.

MAKING THE LEAP TO A VESTED AGREEMENT

Andrew Laing makes no bones about it. "It's my job to perform to 'Best of Program', which comes directly from the Charter. The Charter represents the big picture we use every day to look at issues where we make decisions. In our day-to-day business, it removes us from what is best for my company to what is best for the Enterprise. Living to that is a real test for senior managers of the respective Companies."[55]

It is this mindset that led the Coffee Club to question if more can be done systematically to drive further alignment of interests that mitigated or even eliminated many of the inherent perverse incentives that can cause friction between the parties. When the Coffee Club learned about the University of Tennessee's work on "Vested Outsourcing", they were intrigued. Could the Vested methodology help them close the gaps between their intent and their contract? The trio asked UT researchers to review their contract and make recommendations on how the Vested methodology could help them reduce or even eliminate the friction caused by a misalignment between their intent and their contract.

What is a Vested Agreement?

A Vested agreement is a hybrid business model that combines an outcome-based economic model with a relational contracting model. It incorporates the Nobel Prize-winning concept of behavioral economics and the principle of shared value into an outcome-based economic model.

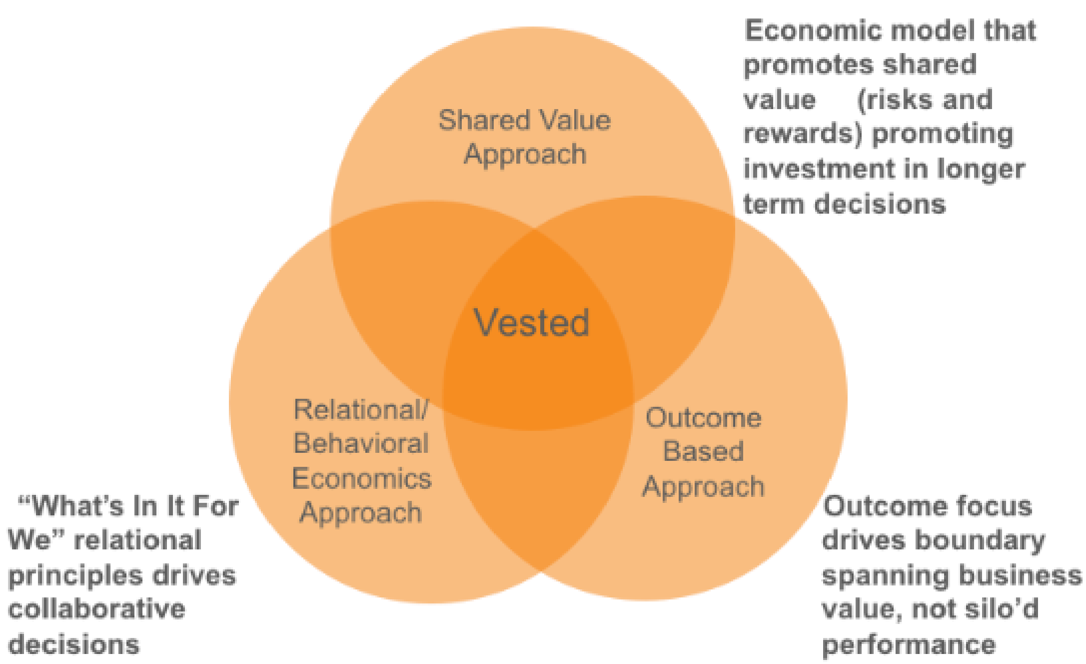

Figure 7: Vested Is A Hybrid Model

Using these concepts, organizations enter into highly collaborative arrangements designed to create and share value for buyers and suppliers above and beyond conventional buy-sell economics of a transaction-based or performance-based agreement. In short, the parties are equally committed (Vested) to each other's success. Of particular note is how, in a Vested agreement, suppliers are incentivized to be innovative in how they support the shared outcomes developed with the customer.

The researchers codified their learnings into what they coined the "Vested" model because the research revealed the best results of the buyer and supplier when creating a 'win-win" economic model for driving business outcomes. Simply put, a win for the buyer is a win for the supplier. Ergo, the parties are Vested in each other's success.

Why a Vested Agreement for the FFG Enterprise?

The FFG Enterprise is, by any measure, a great success. The turnaround in performance from the early days to the award-winning results of 2016/17 is remarkable. This fantastic performance comes about through the hard work and dedication of the leadership and the teams from all three organizations involved. Reliance on the people to deliver results is both a strength and a weakness. The strength comes from the people being clearly focused on the end goal as expressed clearly in the Charter. The weakness comes from the Charter and other operating documents not being included or referenced clearly in the formal contract. The contract came into effect first and the relationship and Charter came later.

As the Coffee Club has learned, the contract itself often created less than desirable consequences that put tension into the relationship. What might be a good decision consistent with the contract is not a good economic decision for one or more of the parties. Simply put, the current contract often promotes win-lose economics while the Charter promotes win-win thinking.

There are two key differences between what the FFG Enterprise is doing and what a Vested agreement does. The first is that the Vested methodology formally embeds the relational contracting components into the actual contract. The second is that a Vested agreement shifts from transactional economics (pay for transactional activities) or performance-based economic (pay for supplier-controlled outputs) to a boundary-spanning business economic model based on the parties' ability to cooperate to achieve desired business outcomes. Each is explored below in the form of "why a Vested agreement".

Why a Vested Agreement: The Risk of the "Real Deal" vs the "Paper Deal"

As mentioned previously, the current relationship structure is based on the Charter identifying the guiding principles needed to support the formal supplier contracts. The Charter contains the "relational" principles that guide behaviors while the contract contains the actual commercial aspects of the agreement. It is important to recognize that both drive behaviors. As the FFG Enterprise has learned, having a Charter does not prevent contractual conflicts that arise from misaligned commercial interests.

It is not unusual for business partners to sign a formal agreement and then ignore the contract and operate their arrangements in a more functional manner. In fact, many critics of relational contracting suggest the best contract is one that is put in a drawer with little need to be referred to. "Build a strong relationship and you never need to look at the contract," many argue.

Often, what evolves is a functional working relationship that operates outside of the written contract. In some cases, the functional approach goes undocumented, with key decisions and new operational protocols simply being captured in emails, PowerPoint presentations, or meeting notes. In other cases, decisions are captured in "shadow" agreements that are physically documented but are held outside of the actual contract. This is the case of the FFG Enterprise, where the Charter is a "shadow" agreement which 'sits atop' the actual contract but is not included in the actual contract. Finally, sometimes some decisions are formally embedded into the actual contract through a contract change order. Sometimes, the FFG Enterprise has done this with key decisions such as the inclusion of Strategic Performance Measures to augment the more transactional and operational Key Performance Indicators mandated in the original contract.

This situation has been long recognized in the legal and academic world. Stuart Macauley (one of the two founding fathers of relational contracting theory along with Ian Macneil) talked about the "Paper Deal" and the "Real Deal". Macauley, a Law Professor at the University of Wisconsin, suggested "Often paper deals will not reflect the real deal; a written contract can be inconsistent with the actual expectations of the parties."[56] He could easily have been describing the FFG Enterprise.

A Vested agreement consciously closes the gap between the intent of the relationship (the real deal) and the actual contract (the paper deal) by formally embedding the relational principles (e.g. the Charter and formal relationship management protocols) into the actual contract. Also, a Vested agreement consciously aligns the contractual components of the contract (e.g. scope of work, performance metrics, pricing model) to support the intent of the relationship outlined in the Charter. This is done at the onset of the contract development, but it is also done through the use of formal governance mechanisms. The result is the "paper deal" and the "real deal" are always in harmony.

So, what's the harm of the FFG Enterprise continuing with the practice of having a "paper deal" and a different "real deal"? After all, many would argue to the parties are getting on with each other and delivering results. The answer is that complex contracting situations are very people-based. As mentioned previously in the Lessons Learned section, the very strength of the FFG Enterprise is the relationship of the people; but it is also the FFG Enterprise's Achilles heel.

We highly recommend the FFG Enterprise consider formalizing the relational contracting principles formally into the BAE and Thales contracts rather than having it "sit atop" the contract as a shadow document. Why? First, people change. Second, failing to document it makes the process difficult to replicate. Let's explore each in more detail.

Risk 1: People Change

UT researchers have documented common "Ailments" of complex outsourcing initiatives. One of the Ailments is "Strategic Drift". Early efforts such as what the FFG Enterprise did in the development of their Charter creates tight alignment. The original participants become committed and aligned with the mission and vision – largely because they are the ones that participated in the meetings and documented them. But over time the original leaders move on. New people arrive who are not familiar with the original intent and the differences between the "real deal" and the "paper deal".

Strategic Drift is frequently a slow process not easily detected until there is a considerable gap between interpretations of the real deal and the paper deal. It often evolves, through a creeping series of moves that reassert rights not previously demanded, to enforce the paper deal versus what has evolved over time in the relational "Coffee Club" type of relationships.

Not including relational "shadow agreements" in the formal contract places the relationship and performance at risk because, at any time, one of the parties may seek to enforce rights under the formal contract. This is often seen by what UT researchers coin as "The New Sheriff in Town" Ailment. Usually the New Sheriff in Town Ailment occurs when a new leader rides in intending to make his mark. This usually means change. While change is often good, it can be risky when the "real deal" differs from the "paper deal". Because the New Sherriff was never part of the "real deal", all he has to go on is the "paper deal" – especially if a "shadow" agreement has not been memorialized in a memorandum of understanding, emails, PowerPoint documents, or other forms. If the deal seems better on paper than the real deal, it is often tempting for the New Sherriff to pull the contract out of the drawer and enforce what may no longer be viable commercial terms. This could be terminally damaging to the relationship.

It could be further argued that the Navy, as the buyer, is not fully committed to a collaborative relationship if they reserve the right to revert to an adversarial and transactional approach. This would likely result in the gains made through the FFG Enterprise efforts being lost. As such, UT researchers suggest the Navy needs to change the contract to reflect the intent of the Charter if nothing more than to protect the Navy from themselves.

As Ian Macneil, a legal scholar and founding father of relational contracting put it, the contract should be a mechanism for social cooperation.[57] As such, we believe the FFG Enterprise (Navy, BAE and Thales) would benefit greatly by closing the gaps between their "real deal" and their "paper deal" by more formally linking their Charter into their actual Group Maintenance Contracts. Doing so would embed the relational contracting principles into the very heart of the commercial agreements between the Navy and its suppliers.

Fortunately, the FFG Enterprise relationship and its existing Charter and governance structure embody the principles of relational contracting. The next step is simply formalizing the relational contracting components into the formal contracts to protect the relationship from future opportunistic behaviors that might arise due to Strategic Drift and any New Sheriffs in Town.

Risk 2: It's Difficult to Replicate

The second key reason for using a formal approach to embed relational contracting practices is because an informal approach makes the process difficult to replicate. Dr. Andrew Jacopino, Assistant Secretary - Supplier Analysis and Engagement at Capability Acquisition and Sustainment Group (CASG) openly cites the FFG Enterprise model as an exemplar and is implementing relational contracting across CASG under the banner of 'collaborative contracting'.

But Richard Massey, Missions Solutions Manager for Engineering Services within Maritime, points out the Navy may have difficulty meeting Dr. Jacopino's goal to spread relational contracting practices. "The success of the FFG Enterprise is substantially driven by the happy accident of three leaders, Captain Brad Smith, Tony Mills and Andrew Laing, who possessed both the vision and the ability to get on with each other (fuelled by a mutual love of coffee.) They also benefited from the persistence and wisdom of their predecessors. Not all projects can expect to be this lucky without a process to help the parties work through the relationship development task."[58]

Because the Navy is planning to expand its relational contracting efforts, we recommend that the Navy formally adopt a process for relational contracting that can help them replicate their success to other complex contracts. (Refer to Figure 8 that follows) We recommend the Navy adopt the methodology outlined in the white paper published by the University of Tennessee, the International Association of Contract and Commercial Management, and the Swedish Law Firm Lindahl.[59] The white paper outlines a formal five-step process for adopting relational contracting practices.

1. **Focus on the relationship, not the deal**. This step builds the trust necessary to focus on the relationship. It ensures alignment within the organization and uses a process for choosing a partner that considers relational competencies in addition to service offerings, quality levels, etc.
2. **Establish a Partnership instead of an Arms-Length Relationship**. This step explores and lays the foundation of trust, transparency and compatibility between the parties.
3. **Embed Social Norms in the Relationship.** This step helps the parties jointly discover and formally agree to six guiding principles: reciprocity, autonomy, honesty, loyalty, equity, integrity.
4. **Avoid and Mitigate Risks by Alignment of Interests**. This step lays the foundation for continuously aligning interests, beginning with an agreement on a shared vision and strategic objectives for the partnership, specifying what joint success and value look like.
5. **Create a Fair and Flexible Framework**. Establish a governance framework for continuous relationship management. The parties also agree upon the contract clauses necessary to establish more specific rules of the relationship, all of which align with the guiding principles.

Why a Vested Agreement: Output vs Outcome-Based Economic Model

While one can easily argue that the parties could just adopt rigorous contractual change order protocols to capture changes, University of Tennessee (UT) researchers point out that the very nature of the FFG Enterprise Performance-Based contract architecture likely holds the parties back.

Researchers at UT developed a sourcing continuum that positions supplier agreements across a continuum (Figure 9) of Sourcing Business Models ranging from highly commoditized "market" based type agreements to highly strategic "investment" agreements where a company chooses to "make" vs buy (e.g. develops their own in-house shared services capabilities or invests in an equity partnership to acquire the needed capabilities.)‡

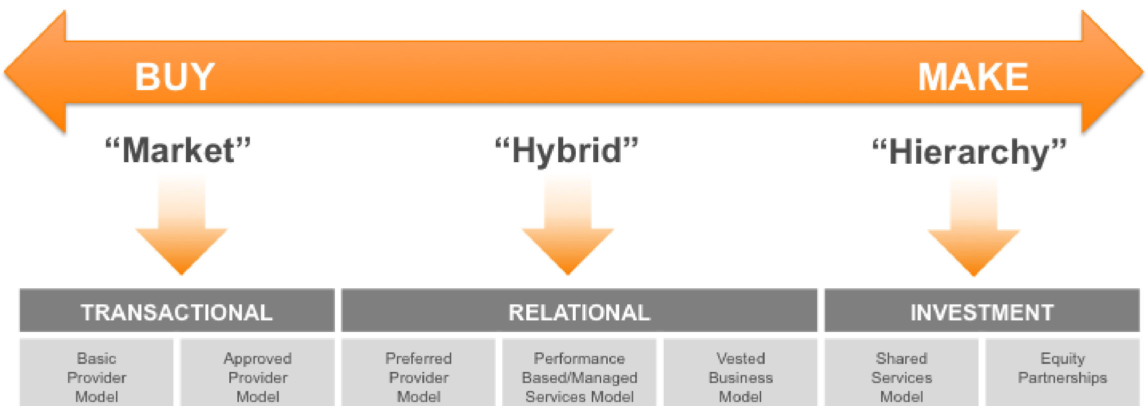

Figure 8: Continuum of Sourcing Business Models

It is important to point out the middle of the continuum is labeled as "hybrid" and includes three types of "relational" contracts: Preferred Provider, Performance-Based and Vested. All three are considered to be relational contracts because the complex nature involved requires the buyer to consciously create a longer-term "relationship" with the supplier. Typically, this comes in the form of a Master Services Agreement. However - by design - the contractual architecture is different for Preferred Provider, Performance-Based and Vested agreements.

It is also worth highlighting that before the Navy moved to the Group Maintenance Contracts, agreements were highly transactional and could be depicted as an "Approved Provider" sourcing model. The Navy's goal in shifting to Group Maintenance Contracts was to create Performance-Based contracts (or managed services model) that are generally a formal, longer-term supplier agreement. Partners wished to combine a relational contracting model with an output-based economic model. A Performance-Based model seeks to drive supplier accountability for output-based service-level agreements (SLAs) and/or cost reduction targets. A Performance-Based agreement typically creates incentives (or penalties) for hitting (or missing) performance targets.

‡ The University of Tennessee work is based on and leverages the work of Oliver Williamson (2009 Nobel Prize winner in Economics). UT's work maps the types of contracts across Williamson's continuum – which only had three types of relationships (market, hybrid, and hierarchy)

University of Tennessee research shows that organizations in complex and dynamic business environments benefit from shifting along the sourcing continuum to a Vested Sourcing Business Model.[§] A Vested relationship combines an outcome-based economic model with a relational contracting model and incorporates the principle of shared value into an outcome-based economic model. Companies enter into highly collaborative arrangements designed to create and share value for buyers and suppliers above and beyond conventional buy-sell economics of a transaction or performance-based agreement. In short, the parties are equally committed (Vested) to each other's success. Of particular note is how, in a Vested agreement, suppliers are incentivized to be innovative in how they support the shared outcomes developed with the customer.

Creating a Vested Agreement

The Vested methodology was developed as a by-product of a multi-year research project funded by the United States Air Force to explore why some performance-based deals succeeded while others fell short of their promise.

A key finding in the research is that how you structure a deal matters. In fact, the most effective performance-based contracts transcend the concept of "pay for performance" for supplier-controlled service levels/metrics and shift to a highly collaborative approach based on the buyer and supplier achieving boundary-spanning business outcomes.

A Vested agreement is made up of a Master Services Agreement (the overarching legal document) and a number of schedules that encapsulate the "business" aspects of the agreement. The contract itself is built on a flexible contractual framework designed to embrace the dynamic nature of business.[**]

The Master Service Agreement (MSA) contains much of the "legal-ese" that you find in a traditional contract. For example, it contains any legal definitions, and protections and responsibilities not covered by the business terms in the schedules. A good example is liabilities and indemnification clauses. Contractual schedules include the "business" components of the agreement that follow "five rules" supported by 10 contractual "elements". (See Figure 9 below) The "rules" establish the design principles of critical business aspects of the contract/relationship (e.g. the workscope, performance management, economics, governance). The "elements" represent the individual business aspects that must be collaboratively designed and documented in the contract. For example, Rule 5 of Vested is "Insight versus Oversight Governance Structure" which includes four design elements that parties need to agree on and document as part of their contract.

These four elements are relationship management framework, transformation management mechanisms, exit management provisions, and compliance requirements such as external regulations (e.g., government required safety regulations) or buyer-supplier unique compliance requirements (e.g. privacy requirements).

[§] The University of Tennessee research has led to six books on the topic of Vested. The work is primarily case based and profiles many case studies of organizations who have made the shift to Vested. For examples and benefits of Vested in practice, see the book Vested: How P&G, McDonald's and Microsoft are Redefining Winning in Business Relationships.

[**] For more about Vested, refer to the book Vested Outsourcing: Five Rules That Will Transform Outsourcing or The Vested Outsourcing Manual.

10 Elements of a Vested Agreement	
Rule 1: Outcome-Based vs. Transaction-Based Business Model	
Element 1	Sourcing Business Model
Element 2	Shared Vision / Statement of Intent
Rule 2: Focus on the WHAT, Not the HOW	
Element 3	Statement of Objectives & Workload Allocation (Scope)
Rule 3: Clearly Defined and Measurable Outcomes	
Element 4	Performance Measures
Element 5	Performance Management
Rule 4: Pricing Model with Incentives That Optimize the Business	
Element 6	Pricing Model with Incentives
Rule 5: Insight vs. Oversight Governance Structure	
Element 7	Relationship Management
Element 8	Transformation Management
Element 9	Exit Management
Element 10	Special Concerns and External Requirements

Figure 9: Rules and 10 Elements of Vested

Combined, the MSA and the schedules create a flexible relational contract framework where the "paper deal" is proactively aligned with the dynamic changes in the business through Rule 5 (insight vs oversight governance) design principles. The parties make decisions using the guiding principles (e.g. The Charter). This ensures the "paper deal" is always in alignment with the "real deal".

The Vested methodology employs a "workshop" approach where the parties work collaboratively to make decisions and document each of the 10 contractual elements. The approach is similar to how the FFG Enterprise approaches "offsites". During the workshops, stakeholders co-create the "rules" of the relationship which ultimately become the contract. Once all parties agree, the parties formally embed the "rules" into an actual contract document.

For example, under Rule 1 (Outcome Based vs Transaction-Based Business Model), the parties document the vision and overarching Desired Outcomes for the relationship. This would be quite similar to the activity undertaken with the help from IACCM to develop the existing Charter. As such, little (if any) work would need to be done outside of writing contract language to formally embed the Charter into the contracts.

A key benefit of the Vested methodology is the parties create a "paper deal" that is fully aligned to the intent of the "real deal". The Vested methodology builds on itself as the parties align across all five rules which comprise the business elements of the contract (scope of work, metrics, economics, governance). While the FFG Enterprise team will likely have a limited amount of work on Rule 1, they will have more work in areas where larger gaps between the real deal and the paper deal exist.

UT researchers provide a high-level summary of the gaps the FFG Enterprise would need to close to create a Vested agreement, closing the gaps between the "real deal" and the "paper deal". (see Appendix B). The summary defines the pitfalls of the current structure and opportunities offered by a Vested agreement.

Recommended Path Forward

The ideal approach would be for the Navy, Thales and BAE to formally restructure their existing contract to a Vested agreement. This would eliminate the frictions caused because the existing Integrated Materiel Support and Group Maintenance Contracts do not consistently support the Charter (e.g. closing gaps between the Real Deal and the Paper Deal).

Entering into a fully Vested deal would be difficult at this time because of the limited life of the contract (less than two years). Therefore, as an alternative, we suggest a two-prong approach, which can either be pursued separately or simultaneously.

Prong one is a short-term fix that includes amending the existing contracts whereby the parties would formally recognize the Charter and existing "shadow agreements" as part of the main contract. Doing an amendment would provide FFG Enterprise leaders with legal justification to make decisions consistent with the Charter if the Navy is receiving better value for money by doing so.

To pursue prong one, the FFG Enterprise would need to gain formal support for adding the "real deal" elements to the existing "paper deal". While this sounds easy, UT researchers caution that many legal and contracting professionals are reluctant to formally include "soft and fuzzy" concepts into an actual contract. Rather they prefer to follow conventional wisdom to use time tested legal clauses that protect the interests of the buyer (or supplier) with 'templates' and other boilerplate commercial contracts. This is especially true for organizations where risk management is such an overarching focus, such as government entities like the Navy's Capability, Acquisition and Sustainment Group.

It may not be practical for the FFG Enterprise and the suppliers to close all of the contractual gaps between the existing contract/shadow agreements and the Vested 5 Rules/10 Elements. However, the FFG program intends to continually improve how it operates. As such, we can easily see the Navy using the Vested methodology for a renewal effort for the FFG – or as a way to greenfield the next generation of the FFG program. Therefore, prong two is a longer-term approach that involves the parties creating a new contract that follows the Vested Five Rules/10 contractual elements.

Implementing either recommendation would follow a similar approach to how the FFG SPO used "offsite workshops" to drive design thinking in the original FFG program. A "core' design team is selected to architect (or design) each of the contractual elements that will become the contract. The core team would take the University of Tennessee 'Creating a Vested Agreement' online course where they learn the essential design principles required to follow each of the Five Rules. (See Appendix C for complete details) The team then comes together in an offsite workshop format to collaboratively agree on how the parties will institutionalize the specifics of each of the rules for their unique relationship. The decisions are then documented in the form of the MSA and schedules.

The fundamental intent of these workshops is to empower the individuals that are part of the relationship to be involved in creating and documenting the "rules" of the relationship. Typically, organizations hire a neutral third-party facilitator trained in the Vested methodology as a "coach" much the same way the FFG SPO reached out to IACCM to assist them in developing their Charter. If the decision is to make the shift to a Vested agreement, we recommend engaging a University of Tennessee trained Certified Deal Architect formally trained in the Vested methodology.

Ultimately, we recommend the Navy Capability, Acquisition and Sustainment Group (CASG) group and each supplier consider investing in their own team members to become Certified Deal Architects (CDA) as an excellent way for team members to gain the knowledge and skills they need to create future Vested agreements beyond the FFG program.

Having each of the key parties involved in the CDA program would yield several benefits.

- The Navy and suppliers would learn a common language and structured process for closing the gaps between their "real deal" and "paper deal". This includes learning proven design principles that minimize or eliminate friction as a result of misaligned interest.

- By involving all parties, the knowledge gained enables the parties to better sustain any future agreement as people understand "why" and "how" to sustain alignment when "business happens".

- Any graduating Certified Deal Architects are granted access to the full range of University of Tennessee tools, including any updates developed as a result of ongoing research and program development. This not only keeps team members "fresh" for sustaining the FFG deal, it enables them to bring their skills and tools to other relationships. This trained expertise allows the Navy and suppliers to leverage proven tools that cross contractual relationships.

CONCLUSION AND CALL TO ACTION

Bruce McLennan remembers the FFG Enterprise journey with pride. He is no longer the lone voice tirelessly preaching the virtues of collaborative relational contracting with suppliers. What started as a task to write a report about supplier issues eventually evolved to the FFG Enterprise, an award-winning program built on relational contracting principles and governed by the FFG Enterprise Charter. Captain Brad Smith and the Coffee Club have proven the "soft and fuzzy" relational contracting concepts Dr. McLennan espoused way back in 2007 are paying off with hard, quantifiable results.

While it is fun to tell and read a good story, this report was not written for fun. It was written with two primary purposes in mind.

One reason is to inspire others, motivating them to begin their own relational contracting journey. It is important to understand that success will likely not happen overnight. In the case of the FFG Enterprise, it took over a decade to break old paradigms and embody a new collaborative culture. However, we believe that following the five steps outlined in the *Unpacking Relational Contracting* white paper will help others to jump-start their own relational contracting journeys and exponentially speed efforts of change.

The second reason is to identify improvement opportunities for the FFG Enterprise. The Navy/Thales/BAE Contracts are set to expire in 2019 – in less than two short years. While the early pioneers successfully laid the foundation for relational contracting with the formal creation of the Charter, there is more to be done. It is much harder to create a sustainable system that enables ongoing results after like-minded leaders eventually move on. This paper argues it is essential to close the gaps between the "real deal" and the "paper deal". It also highlights key contractual gaps likely holding the parties back and suggests how the parties can use the Vested methodology to close the gaps.

We challenge the Australian Navy's Capability, Acquisition and Sustainment Group and the FFG Enterprise leadership to learn more about the Vested Sourcing Business Model for creating highly collaborative win-win agreements. We suggest the Australian Navy and its strategic suppliers select key personnel to go through the University of Tennessee's Certified Deal Architect program (learn more in Appendix C) Much like a Six Sigma Black Belt program, UT's Certified Deal Architect program is designed to give individuals the skillsets needed to ultimately achieve self-sufficiency in running collaborative contracting and Vested workshops. This would allow the organizations to internalize the skills and knowledge required to continue to develop further relationships both within the FFG Enterprise and across other complex contracts.

In summary, perhaps the voice of Captain Greg Laxton best captures the need to look at the Vested methodology as the way to sustain the FFG Enterprise for the long run. "The strength of the enterprise is this one piece of paper sitting atop everything else. One person could do a lot of damage. Vested offers stability for the long run for the FFG program and provides a roadmap for others to create their own collaborative relationships."[60]

APPENDIX A: LIST OF ACRONYMS

Acronym	Meaning
CASG	Capability, Acquisition and Sustainment Group
CDA	Certified Deal Architect
CEO	Chief Executive Officer
DMO	Defense Materiel Organization
FEGB	FFG Enterprise Governance Board
FEAG	FFG Advisory Group
FFG	Australian Navy Guided Missile Frigate Warships
FFG SPO	FFG System Program Office
FFH	Anzac Class Frigates
FMS	Foreign Military Sales
FSU	Fleet Support Unit
FTE	Full-Time Equivalent
GMC	Group Maintenance Contract
IACCM	International Association for Contract and Commercial Management
IMarEST	Institute of Engineers Australia and Institute of Marine Engineering, Science and Technology
IMMS	Inter-dependent Mission Management System
LSS	Lean Six Sigma
MCPSPO	Maritime Cross Platform SPO
MRD	Material Ready Days
MSA	Master Service Agreement
MSD	Maritime Systems Division
MSS	Major Surface Ship
SLA	Service Level Agreements
SPMs	Strategic Performance Measures
SRM	Supplier Relationship Management
TRS	Technical Repair Specification
UAV	Unmanned Aerial Vehicle
URDEF	Urgent Defects

APPENDIX B:

CLOSING THE GAPS: GETTING TO A VESTED AGREEMENT

Fortunately, there is some overlap in the principles of relational contracting the FFG Enterprise has used and the Vested methodology. As such, the parties don't have to "throw the baby out with the bathwater". Rather, the parties can easily use the excellent work the FFG Enterprise has done in both their Charter and in "shadow" agreements as a launchpad for closing gaps between the existing Group Maintenance Contracts and a Vested agreement. This section provides a high-level summary of the gaps.

Master Services Agreement

A Vested agreement is built on a flexible contracting framework that recognizes that business is dynamic and will need to change. As such, a Vested agreement separates the more formal "legal" aspects of an agreement from the business aspects, putting the business aspects into Schedules that can more readily be changed through a formal governance process (Rule 5). Legal topics such as liabilities, indemnification and confidentiality are addressed in the MSA.

Rule 1: Outcome-Based (not Transaction) Based Business Model

Rule 1 of Vested is to lay the foundational elements of the relational contract. As part of Rule 1, contracting parties establish a formal shared vision, guiding principles and intended behaviors that ultimately define the intent and expectation for the relationship. The FFG Enterprise Charter encompasses Rule 1 of the Vested methodology and would likely need only minor changes. For example, while the existing Charter spells out expected behaviors, it does not formally address all six of the social norms known to create strong and sustainable relationships. We recommend the parties participate in an offsite workshop to discuss and document the Guiding Principles espoused in *Unpacking Relational Contracting* white paper and add these to the existing Charter.

Formally embedding the "soft" components of a relational contracting approach may be a challenge for those in the wider Capability, Acquisition and Sustainment Group organization which has responsibility for the 'templates' and boilerplate commercial agreements. While the UT researchers do not pretend to know all laws of all countries, we have seen it is possible for government agencies to support relational contracting practices in formal contracts (see Vancouver Coastal Health and Discovery Health case studies).[61]

Rule 2: Focus on the What, not the How

Vested Rule 2 exists to enable business parties to draw on the strength of each party and to specifically prevent micromanagement. The output of Rule 2 is the scope of work for the contract. As part of the FFG Enterprise journey, the parties developed swim lane documents that clearly captured the accountabilities of each party. They have also been building trust which has enabled the Navy to be in control without having the urge to control.

The swim lane documentation process is a tool that the Vested methodology also uses (It is called the Taxonomy and Workload Allocation). As such, we perceive there would be little work to close the gaps in Rule 2 unless the swim lane documents have not been updated in the past 12 months. Going forward, we would recommend workload allocation be regularly reviewed and perhaps created as an agenda item for quarterly reviews.

Rule 3: Clearly Defined and Measurable Desired Outcomes

Rule 3 of a Vested agreement is where the parties formally link operational, relational and transformational metrics to the contract. It is interesting to note that the KPI's, SLA's and incentives are the few areas in which the shadow agreements make an entrance into the formal contract. The contract formally includes KPIs (operational metrics) and SPM (relational metrics). There are also incentives available for the suppliers to work on relationship focussed activities. While this is good, we would recommend a much stronger linkage between the mutually agreed Desired Outcomes, metrics and the incentives. In a Vested agreement, this is achieved by using the Requirements Roadmap which clearly links the mutually defined Desired Outcomes to the metrics through a formal alignment process/tool which results in the Requirements Roadmap. This document also formally links incentives to the achievement of the outcomes.

Also, Rule 3 of a Vested agreement creates mutual accountability as an enabler, with both the buyer and supplier having performance obligations. The parties would identify and contractually obligate each other to mutually manage performance against the mutually defined Desired Outcomes. The Requirement Roadmap literally "maps" the who is responsible for which metrics and includes details such as the calculation, frequency, and data source for each metric. Typically, this differs from a conventional contract, which outlines the performance obligations of the supplier only.

Rule 4: Pricing Model with Incentives that Optimize the Business

Rule 4 of the Vested methodology is a pricing model with incentives that optimizes the business. The key to a successful Pricing Model is that all parties to the arrangement have a financial incentive to improve performance and there are no 'perverse incentives' that cause behaviors that are not in line with the achievement of the Desired Outcomes.

In spirit, the FFG Enterprise is indeed "vested" with its suppliers. As Tony Mills reminds us, "In the past, it was two different worlds. The Thales VP job was to make money; his currency was Thales revenue and profit. The navy's currency is ships at sea. Now, when I ask the VP about currency, he responds 'Surely, Thales VPs job is to deliver on our promises/meet our contractual commitments first, then look out for the money.' "[60] Proof positive the team, that is, customer and suppliers have become Vested partners.

However, in practice, there are still gaps between the theory of a Vested pricing model and the actual pricing approach outlined in the BAE and Thales contracts as shared earlier in this report where sometimes a "win" for the Navy equates to a "loss" for the suppliers. Fortunately, FFG Enterprise is finding ways to address this such as with the "gainsharing" concept mentioned earlier in the report. Also, on occasions, the Navy has made relationship-based decisions on charges or claims from the suppliers that fall into the grey area of the contract. If the parties chose to create a Vested agreement, the existing pricing model will likely need to be revamped to comply with the philosophies espoused in the Vested model.

An element of the existing pricing model similar in a Vested agreement is that materials and labor used to carry out maintenance tasks are ‘cost pass through’. The supplier does not bear the risk of the variability of the underlying cost, but the supplier does bear the risk of their profit (or margin) on these activities with both upside and downside potential for the supplier dependent on performance against the Desired Outcomes. An aspect that will likely be a new element of the pricing model under a Vested agreement is the concept of margin matching, Margin matching offers the supplier protection on their profit margins if the supplier comes up with an innovation that benefits the Navy but causes their income to fall. Ergo their margin is “matched” or protection to ensure that their profitability stays the same or improves with incentives when they drive innovation.

Rule 5: Insight vs Oversight Governance Structure

Rule 5 of the Vested methodology helps the parties define the rules for how the parties will guide the relationship. Rule 5 includes four design elements that ultimately define how the parties govern the partnership. Governance constructs are then formally embedded into the physical contract. There are four design elements which include: 1) relationship management framework; 2) transformation management mechanisms; 3) exit management provisions; and, 4) compliance requirements such as external regulations (e.g., government required safety regulations) or buyer-supplier unique compliance requirements (e.g. privacy requirements).

The biggest area of change for the FFG Enterprise team would be in adopting Rule 5. While the parties have created excellent mechanisms for managing the relationship, the current Group Maintenance Contracts have little to say about the governance processes. While the FFG Enterprise has done an excellent job of defining relationship behaviors through the Charter and has addressed other aspects via the creation of ‘shadow’ arrangements, we recommend the parties go further. Not that the Charter and other governing mechanisms are wrong. When John Nash, the Nobel Prize-winning economist, was asked whether his theory meant that Adam Smith was wrong, Nash suggested, “Smith was not wrong, just incomplete!”[62] Therefore, we would paraphrase Nash by saying the Charter and other governance mechanisms the FFG Enterprise has created in their pursuit of a collaborative and relational contract is not wrong …. just incomplete!

So, what would be contained in Element 7 (Relationship Management Schedule) of a Vested agreement? First, it would include formal written commitments on how the parties will govern – or manage – the relationship. While the FFG Enterprise team has developed many sound governance protocols, they are not formally documented in the contract. For example, Element 7 for Relationship Management would:

- Formalize and document both formal and informal governance mechanisms the parties will use to manage decision making.
- Document formal protocols for managing continuity of resources. This would include defining the approach for identifying key personnel to the relationship. Rules would be put in place regarding

the time these key persons are expected to remain in their roles. Besides this, we suggest there be a set of criteria that should be satisfied before a replacement is appointed.

- Outline guidelines and requirements for “onboarding” – which is currently in the works as a Lessons Learned. For example, it might include the requirement for development and training in collaborative and relational contracting by any new “key personnel”.
- Describe the process by which the Charter and associated behaviors are created, reviewed and refreshed.
- Provide a direct connection between the Charter and behaviors, and the dispute management processes. In doing so, the contract would clarify that the Charter is the first reference point in seeking a solution to a disagreement and that all levels in the hierarchy refer to this for guidance to reach a solution. We would also recommend that, before reverting to a strictly legalistic interpretation of the clauses of the contract (with its use of mediation, arbitration, or the courts), the parties proactively engage a “standing neutral’[6] to act as an independent third party to facilitate the parties to a solution that maintains the relationship. Unlike a mediator or arbitrator, a standing neutral is a person that is embedded as part of the formal governance protocols and is used in a proactive manner rather than how a mediator or arbitrator is used in a reactionary manner after the parties already have a dispute. Using a standing neutral recognizes that the relationship is, in essence, the source of the superior performance and must be protected so that the benefits continue to flow.

The parties would also need to address gaps in how they oversee transformation management (Element 8), exit management (Element 9), and compliance requirements (Element 10). The contract review revealed the largest gaps in transformation management – or how the parties use formal protocols and mechanisms to drive change.

[6] *The concept of a standing neutral first emerged in the construction industry. The concept has been proven as an effective proactive approach for preventing misalignment from becoming a formal dispute – saving time and money as well as keeping the relationship in harmony during potential misalignments.*

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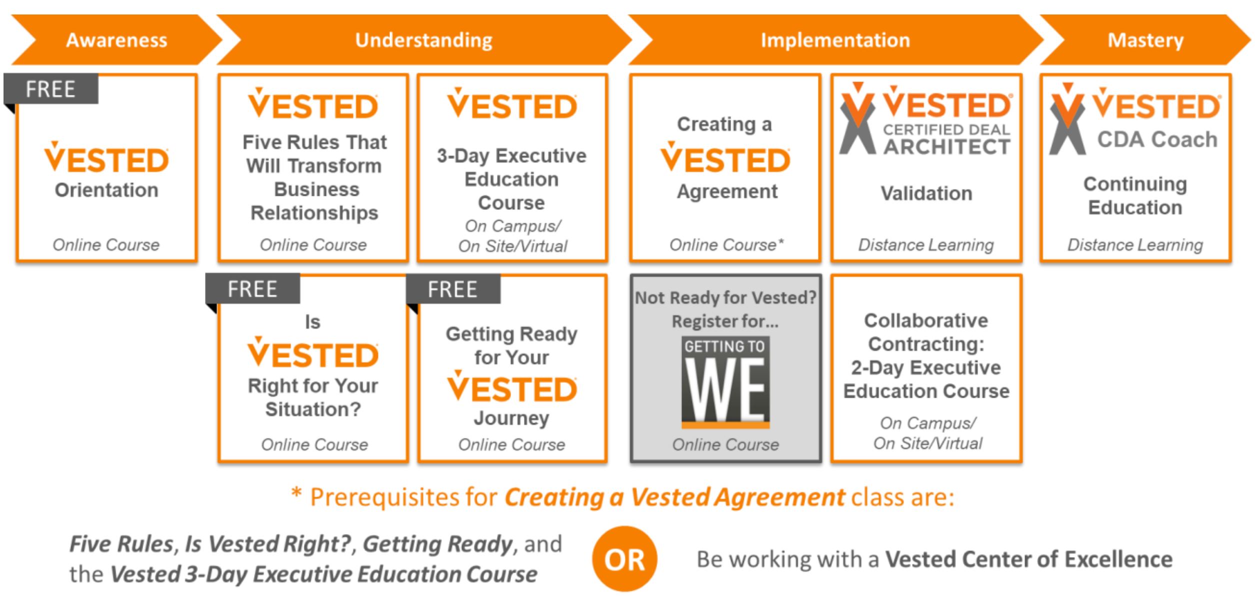
FOR MORE INFORMATION

The University of Tennessee is highly regarded for its Graduate and Executive Education programs. Ranked #1 in the world in supply chain management research, researchers have authored seven books on the Vested business model and its application in strategic sourcing.

We encourage you to read the books on Vested, which can be found at most online book retailers (e.g., Amazon, Barnes and Noble) or at [www.vestedway.com/books.](http://www.vestedway.com/books)

For those wanting to dig deeper, UT offers a blend of onsite and online courses including a capstone course where individuals get a chance to put the Vested theory in practice. Course content is designed to align to where you are in your journey ranging from Awareness to Mastery. For additional information, visit the University of Tennessee's website dedicated to the Vested business model at http://www.vestedway.com where you can learn more about our Executive Education courses in the Certified Deal Architect program. You can also visit our research library and download case studies, white papers and resources. For more information, contact kvitasek@utk.edu.



ENDNOTES

1 Online conferences with Brad Smith, Andrew Downard, and Jeanne Kling; May 29, June 5, and June 15, 2017
[2] Online conference with Brad Smith, Andrew Laing, Tony Mills, Andrew Downard, and Jeanne Kling; May 8, 2017
[3] Online conference with Greg Laxton, Andrew Downard, and Jeanne Kling; June 6, 2017
[4] Ibid # 3
[5] Online conference with Bruce McLennan, Andrew Downard, and Jeanne Kling; June 20, 2017
[6] Ibid # 5
[7] Ibid # 5
[8] Ibid # 3
[9] Ibid # 5
[10] Ibid # 5
[11] Ibid # 5
[12] Ibid # 5
[13] Ibid # 5
[14] Ibid # 5
[15] Ibid # 5
[16] Online conference Andrew Downard and Michael Houghton
[17] Online conference with Greg Laxton, Andrew Downard, and Jeanne Kling; June 6, 2017
[18] Online conference with Mona Shindy, Andrew Downard, and Jeanne Kling; June 16, 2017
[19] Email message from Captain Mark Bailey to Jeanne Kling September 20, 2017
[20] Online conference with Tony Mills, Andrew Downard, and Jeanne Kling; May 25, 2017
[21] Ibid # 20
[22] Online conference Paul Tenten, Andrew Downard, and Jeanne Kling;
[23] Email conversation between Paul Tenten and Jeanne Kling, September 11, 2017
[24] Ibid # 23
[25] Ibid # 22
[26] Ibid # 23
[27] Online conference with Mona Shindy, Andrew Downard, and Jeanne Kling; June 16, 2017
[28] Ibid # 27
[29] Ibid # 27
[30] Ibid # 27
[31] Ibid # 27
[32] Online conference with Greg Laxton, Andrew Downard, and Jeanne Kling; June 6, 2017
[33] Ibid # 32
[34] Online conferences with Brad Smith, Andrew Downard, and Jeanne Kling; May 29, June 5, and June 15, 2017
[35] Ibid # 34
[36] Online conference with Tony Mills, Andrew Downard, and Jeanne Kling; May 25, 2017
[37] Ibid [38] Ibid # 35
[39] Online conference with Andrew Laing, Andrew Downard, and Jeanne Kling; June 5, 2017
[40] Ibid # 34
[41] Ibid # 34
[42] Ibid # 39
[43] Ibid # 34
[44] Ibid # 39
[45] Ibid # 39

[46] Ibid # 39
[47] Ibid # 34
[48] Ibid # 34
[49] BAE Systems and Thales turn Competition into Cooperation on FFG; Mark Abernathy; November 28, 2016; http://www.afr.com/news/special-reports/defence-and-national-security/bae-systems-and-thales-turn-competition-into-cooperation-on-ffg-20161127-gsyh47 Accessed September 7, 2017
[50] Online conference with Damien Elford, Andrew Downard, and Jeanne Kling; June 28, 2017; augmented by email September 12, 2017, between Jeanne Kling and Damien Elford
[51] Ibid # 36
[52] Ibid # 36
[53] Online conference with Bruce McLennan, Andrew Downard, and Jeanne Kling; June 20, 2017
[54] Online conferences with Brad Smith, Andrew Downard, and Jeanne Kling; May 29, June 5, and June 15, 2017
[55] Online conference with Andrew Laing, Andrew Downard, and Jeanne Kling; June 5, 2017
[56] The Real and the Paper Deal; Empirical Pictures of Relationships, Complexity, and the Urge for Transparent Simple Rules; Stewart Macauley; http://law.wisc.edu/facstaff/macaulay/papers/real_paper.pdf Accessed September 9, 2017
[57] Relational Contract: What we do and Do Not Know; Ian McNeil; http://www.cisr.ru/files/publ/lib_pravo/Macneil%201985%20Relational%20contract.pdf Accessed September 7, 2017
[58] Online conference with Richard Massey, Andrew Downard and Jeanne Kling; July 18, 2017
[59] Unpacking Relational Contracts: The Practitioner's Go-To Guide for Understanding Relational Contracts; Tennessee, the International Association of Contract and Commercial Management, and the Swedish Law Firm Lindahl
http://www.vestedway.com/vested-library/
[60] Online conference with Greg Laxton, Andrew Downard, and Jeanne Kling; June 6, 2017
[61] Vested for Success: How Vancouver Coastal Health Harnessed the Potential of Supplier Collaboration; the University of Tennessee, the International Association of Contract and Commercial Management, and the Swedish Law Firm Lindahl
[62] Adam Smith's Lost Legacy; Gavin Kennedy; February 7, 2009; http://ada61msmithslostlegacy.blogspot.co.uk/2009/02/hollywood-john-nash-was-wrong.html