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Advanced MENA defence contracting

Partnerships for improved performance

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Executive summary

Militaries in the Middle East and North Africa (MENA) spend a lot on defence, yet their defence contracting is relatively undeveloped. Most spending comes through traditional, transactional contracts, which are easy to create and function well enough when requirements are clear and customer–supplier relationships are uncomplicated. However, these basic contracts do not operate well under the conditions common to the modern defence sector. Such contracts offer less value for money than alternatives. They are insufficiently flexible when requirements are more complex, suppliers have little competition, and risks are high or unavoidably shared. Under such circumstances, closer customer–supplier relationships, established through more-advanced defence contracting structures, prove to be far more advantageous.

As an alternative to traditional, transactional contracts, there are three types of advanced defence contracts, each of which is more mature and complex than the previous: performance-based logistics (PBL) contracts, availability-based contracts, and capability-based contracts.

Advanced defence contracting models are more challenging to produce and manage, often requiring behavioural and cultural changes from both buyers and suppliers. However, these advanced arrangements offer significant advantages. By enabling closer partnerships among customers and suppliers, advanced contracts can deliver reliability and availability improvements of more than 20 percent, customer cost savings of 15 percent to 20 percent, and higher profit margins for suppliers. They also lay the groundwork for positive economic development by boosting the network of defence suppliers in the region.

The defence contracting landscape

Modern defence contracting offers both advanced and emerging militaries a range of options to suit the needs of various stakeholders (such as governments, armed forces, and suppliers) and situations. Broadly, these options consist of four basic contract types, each with varying levels of maturity and complexity (*see Exhibit 1*).

Traditional, transactional contracts
In traditional, transactional defence contracts, suppliers provide stipulated goods or services at prices that they agree in advance with customers. This is the most common type of contract employed by most MENA militaries. It is straightforward to create and administer, and allows customers to manage relationships at a distance.

Transactional contracts, however, have clear shortcomings. Customers shoulder most of the risk. Consequently, they tend to take an adversarial approach to ensuring compliance by their suppliers. For their part, the suppliers have to contend with the comparatively lower margins of these simple contracts. To cope with these unappealing margins, suppliers often improve profitability by offering lower levels of service. In extreme cases, this can lead to disputes involving situations that contracts have not stipulated in advance.

Exhibit 1

There are four main types of defence contracting

Contract complexity →

	Traditional, transactional, contracts	Performance-based logistics contracts	Availability-based contracts	Capability-based contracts
Pros	⊕ Simple to structure and execute ⊕ Easy to measure performance/delivery	⊕ Greater OEM visibility on spares sourcing needs ⊕ Reduced maintenance lead times ⊕ Increased vehicle availability	⊕ Higher supplier profitability/ customer savings ⊕ Greater risk sharing ⊕ Reduced maintenance ⊕ Increased capability, availability, and reliability	⊕ Highest supplier profitability/customer savings ⊕ Greatest risk sharing ⊕ Turnkey capability availability
Cons	⊖ Minimal savings ⊖ All risk borne by customer	⊖ Complex to execute and measure ⊖ Moderate supplier/ customer trust requirement	⊖ Very complex to execute ⊖ High supplier/customer trust requirement	⊖ Very complex to execute ⊖ Not suitable for core military competencies ⊖ Very high supplier/ customer trust requirement
Best when	- Requirement well defined - Experienced contractors - Market conditions stable - Low financial risk	- Support outcomes can be defined and measured - Risk can be transferred - Some financial risk can be transferred	- Ultimate outcomes can be defined and measured - Highly capable contractor - High financial risk that is largely transferable	- Well-defined capability requirements - Not critical military domain - Highly capable contractor - Very high financial risk that is mostly transferable
Example	- GAMCO aircraft maintenance contract	- AMMROC-JAC MRO Contract - U.S. F/A-18 avionics repair facility	- RAF Tornado engine maintenance - Royal Norwegian Navy fleet availability	- RAF Air Tanker Consortium air-to-air refuelling and transport

Note: OEM = Original Equipment Manufacturer; GAMCO = Gulf Aircraft Maintenance Company; AMMROC = Advanced Military Maintenance Repair and Overhaul Center; JOC = Joint Aviation Command.

Source: Strategy& analysis

Performance-based logistics (PBL) contracts

PBL contracts tie supplier remuneration to measurable key performance indicators (KPIs) such as speed of service, cost effectiveness, and the number of repeat repairs. The targets ensure that suppliers deliver high service levels, and incentivize contractors to render services at, or above, specification. In this way, PBL contracts introduce a degree of risk-sharing and improved commercial terms for suppliers. The U.S. pioneered PBL contracts after the Cold War to improve readiness and reduce logistics spend.[1] The U.S. Department of Defense (DoD) today uses PBL-based contracts for most of its purchasing.[2]

PBL contracts are, however, more complex to administer properly. Responsibility for the primary desired outcome, military readiness, remains chiefly with the customer. If contracts are not properly structured, they can include KPIs that are difficult to measure or do not correspond to improved readiness, which leads to misaligned incentives between the two sides. In other cases, militaries can enforce process- or cost-based KPIs to a degree that actually harms long-term readiness. For example, if a military imposes a set cost-per-flying-hour for air maintenance, repair, and overhaul (MRO) services without factoring in fixed costs for the supplier, then a reduction in the flight hours could put undue financial pressure on the supplier. Indeed, early attempts to institute PBLs in some MENA countries, such as in the Gulf Cooperation Council countries,[3] have led to precisely these kinds of issues.

Availability-based contracts

Availability-based contracting involves more shared responsibilities and allows for a better allocation of risks to the party best placed to bear them. It is more akin to a partnership than transactional or PBL contracting. Availability-based contracting evolved from PBLs during the 2000s, particularly in the U.K. and other European countries, where defence ministries faced stiffer budgetary pressures than their U.S. counterpart.

For example, an availability contract may allow customers to purchase a certain number of "flying hours" whereby suppliers promise to ensure aircraft availability for the stipulated number of hours, whatever the cost. Availability contracting tends to produce better working practices and results in a higher quality of maintenance because suppliers have an incentive to deliver and take responsibility for the output. Their margin is dependent on how seldom repairs need to be performed, rather than how frequently.[4] Customers, meanwhile, can reduce their service logistics footprint.

Availability-based contracting involves more shared responsibilities and allows for a better allocation of risks to the party best placed to bear them.

European militaries offer several examples of successful availability-based contracting relationships. In the U.K., a Royal Air Force contract with Rolls Royce for the maintenance and upgrade of Tornado jet engines resulted in a 35 percent reduction in the overall number of repairs required.[5] Similarly, an availability contract to service the U.K.'s Harrier jump jets resulted in savings of more than £100 million (US$126 million) over a five-year period and a 44 percent reduction in the cost per flying hour.[6]

In a more extreme example, the Norwegian navy entered into an advanced availability contract with Spanish shipbuilding firm Navantia (formerly IZAR) to provide Norway with its Fridtjof Nansen-class frigates in 2005. Navantia owned the vessels, maintained responsibility for their operational readiness, and even partially crewed the vessels under the command of Norwegian sailors.[7]

Availability-based contracting depends upon high levels of trust between supplier and customer, usually through long-term arrangements, sometimes in excess of 20 years. These contracts also work better when contractors own key parts of the value chain, such as the sourcing and management of spare parts.[8] The customer transfers a degree of responsibility and financial risk to the supplier, but needs to ensure quality control throughout the process.

Capability-based contracting

In capability-based contracts, the supplier provides all aspects of an end-to-end capability normally handled by the customer. Capability-based contracts tend to be the most lucrative for suppliers and offer customers the greatest opportunity to rationalize their uniformed logistics footprint and costs. This is the most advanced form of defence contracts.

The complexity and degree of trust required to execute successfully such typically long-term contracts means they will be restricted to only the most capable of suppliers with reputations to match. In 2008, AirTanker, an Airbus-led consortium (previously known as EADS), won a £13 billion ($16 billion), 27-year contract with the U.K. Ministry of Defence to provide the RAF with mid-air refuelling and air transport services.[9] The consortium will invest £2.5 billion ($3.2 billion) to create the fleet, underscoring the need for a long-term contract given that the supplier is taking responsibility for everything from infrastructure and ground services to fleet operations and pilot training.[10]

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The case for more-advanced contracting

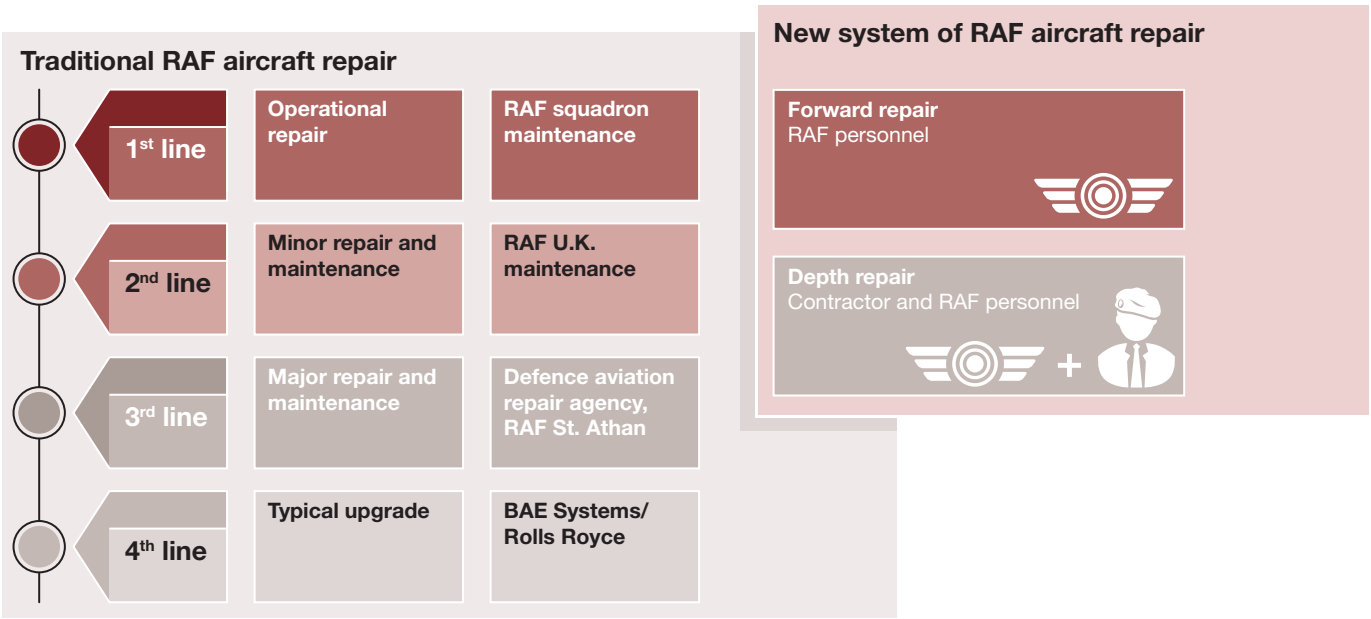
As armed forces in the MENA region mature in terms of their platforms, systems, and operational requirements, the reliance on traditional, transactional contracting is becoming a hindrance. Instead, advanced contracting models offer advantages for militaries, suppliers, and the region's overall economy.

Advantages for militaries
Multiple studies by governments, the aerospace and defence industry, and academia have shown that PBL and availability-based contracts regularly lead to improvements of more than 20 percent in terms of platform and system capability, reliability, and availability. The same studies show reductions in overall costs by 15 percent to 20 percent.[11] Such savings are enviable in an age of squeezed military budgets. Concurrent improvements to performance and operational readiness only strengthen the argument.

Beyond providing more value for money, advanced contracting helps to allocate better the financial risks (and associated costs) between customers and suppliers, by having suppliers take ownership of sections of the value chain, actual assets, or infrastructure. This shift helps armed forces reallocate scarce military manpower and capacity to more critical areas and enables a greater focus on operations. For example, the RAF generated significant efficiencies by getting private-sector partners more involved in maintenance. Instead of four lines of repair, with only the most complex covered by the private sector, the RAF now has two repair categories: forward and depth (*see Exhibit 2*). The support/engineering authority decides whether the maintenance is forward or depth. The RAF runs forward repair with RAF manpower, and deploys this function with combat forces. The contractor is in charge of depth repair. Although the contractor provides most of the staff, the depth repair function includes some military personnel who are present to develop skills for use on operations. Similar efficiencies would be beneficial for MENA armed forces, especially given that national uniformed manpower is sometimes at a premium.[12]

Exhibit 2

The RAF transformed aircraft repair through deeper contractor involvement in repair



Source: U.K. National Audit Office; Strategy& analysis

Advantages for suppliers

The shift is also beneficial for suppliers. Properly constructed and executed contracts tend to include higher margins and greater control over the supply chain, thus incentivizing suppliers to continuously improve, innovate, and apply best practices in ways that make them more competitive overall. For national defence players, the emphasis on partnering with customers offers a larger share of MENA defence spending, and greater access to long-term revenue, given the fact that advanced contracts typically run for considerable periods.

Advantages for the national defence ecosystem

Advanced contracting has benefits for the national defence ecosystem. The greater partnering and trust required between militaries, defence ministries, and contractors enables stakeholders to cooperate in pursuing a unified national defence industrial strategy.

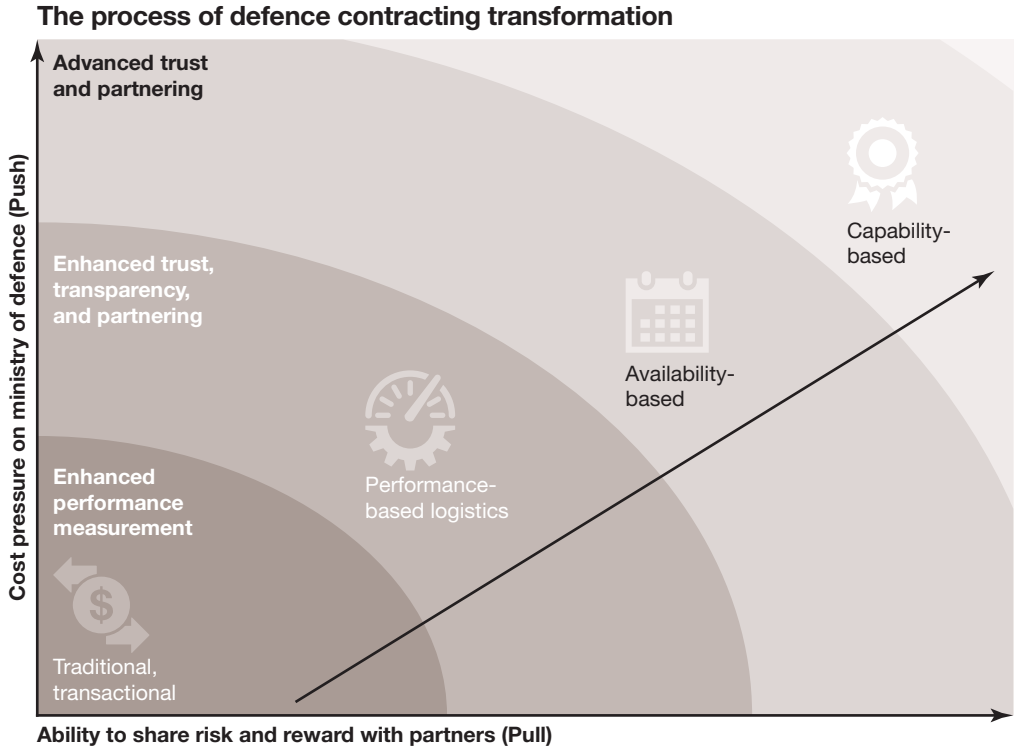
Increased opportunities for the private sector, along with increased responsibility for more aspects of the value chain, also develop the national defence industry, increase national defence value-add, and boost national economic output. For example, the Airbus-led AirTanker consortium contract alone added over 7,500 jobs in the U.K.[13] Advanced contracting therefore offers a vehicle with which MENA countries can develop more of their national defence production value chain.

How to make the transition to advanced contracting

The journey to more advanced contracting happens through a number of "push" and "pull" factors. Push factors include cost pressures from increased operational requirements, squeezed defence budgets, and a scarcity of military manpower/capacity. Meanwhile, improved capabilities among suppliers pull governments and armed forces toward advanced contracting, in that they can reallocate risk to the more appropriate party, partner with a more capable private sector, and more efficiently achieve outcomes (*see Exhibit 3*).

Exhibit 3

Cost pressures can lead to more-advanced contracting if partners can share the risk



Source: Strategy&

At the same time, the success of advanced contracting ultimately hinges on the quality of the relationship between the involved parties. Getting that balance right means properly understanding what different entities are willing and able to bring to the table.

Customers
Militaries must shed stale approaches to procurement and undergo a cultural shift so that they see suppliers as valued strategic partners, rather than just vendors that they have to manage. From the customers' standpoint, successful advanced defence contracts require a clear understanding of the ultimate target outcome, the cost drivers to achieve that, and the risks involved in collaborating with private-sector partners. Customers also need to recognize that pricing in advanced contracting is connected closely to risk — they will need to compensate suppliers that assume higher risk levels accordingly.

Augusta Westland's availability contract with the RAF for helicopter MRO reflects this partnering approach. The company charges flying hours in structured bands that reflect the RAF's understanding of what availability really costs Augusta Westland to deliver. The RAF has a close partnership with Augusta Westland, which means that it has a grasp of the company's cost structure. Furthermore, KPI-based performance penalties apply only after a two-year grace period that allows Augusta Westland to resolve any emerging issues with the contract early on.[14]

In addition, customers will need to show patience, knowing that savings will not appear on the first day of the contract. Rather, those savings will come through continuous improvement efforts and long-term investments made by industry to service these contracts.[15]

Suppliers
For their part, suppliers must thoroughly understand customers' requirements so that they offer products and structure contracts appropriately to address those needs. For example, offering customers full transparency on cost models will foster trust and help customers view suppliers as strategic partners that they must work with, rather than as vendors through which they can reduce costs.

The success of advanced contracting ultimately hinges on the quality of the relationship between the involved parties.

Suppliers must also be ready to shoulder the increased responsibility that comes with owning the ultimate outcome of defence provision. As Kate Vitasek and Steve Geary warned in 2008, "[w]hen individuals without the proper training and experience attempt to implement a performance-based contract, the results are understandably and expectedly poor."[16] Suppliers that try to shave down the margins on spare parts or training regimes, for example, risk more than having to redo work, and therefore profitability. They also jeopardize mission readiness and ultimately mission success. Last, suppliers should think about strategic partnerships with each other as well. Collaborating and forming partnerships and consortia can increase the ability of suppliers to offer value to customers as part of more-advanced contracts.

Policymakers

National and defence policymakers, whether governments or defence ministries, need to set the stage by defining national defence industrial strategies and outlining the intended outcomes and rules of play for various stakeholders. Such an approach is especially important for countries with emerging militaries such as in the MENA region. Military contracting to date has been mostly on a competitive basis with international original equipment manufacturers. That has been an understandable approach to get fair value for acquisitions, but it has put national defence suppliers at a disadvantage. By crafting a defence industrial strategy, particularly one that nominates and backs a national champion, policymakers can introduce a trusted partner into the contracting landscape.

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Policymakers must also ensure that regulatory frameworks align with intended outcomes. Shifting to PBL, availability-based, or capability-based contracting usually involves private-sector partners investing heavily in equipment, infrastructure, platforms, and training. The return on investment typically occurs over a long period. Policymakers should be ready to implement long-term contracts and expect to shoulder some of the inherent risk and investment burden at the outset. One of the reasons why defence contracting in the U.S. has not appreciably advanced in the past two decades is that federal regulations prohibit contracting for the long durations that are normal in the U.K. and other European countries.[17]

Conclusion

The future of military readiness in the MENA region lies in advanced contracting and partnerships between the defence industry and the region's armed forces. With typical reliability and availability gains of over 20 percent and cost reductions of 15 percent to 20 percent, the value at stake is clear enough to justify that military and government policymakers invest the effort necessary to transform legacy attitudes and procurement cultures.

Aligning defence suppliers and customers in strategic partnership roles will lead to improved military readiness, manpower allocations, cost savings, and national economic development. Advanced contracts are not a panacea for defence procurement. They will not remedy poor planning, a lack of funding, or inadequate leadership, and they will not deliver results overnight. However, a shift to properly structured advanced contracts would represent a step-change in the maturity of defence procurement in the MENA region, and the ultimate impact on military readiness promises to be significant.

Endnotes

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[2] Ibid.

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