

A person in a military uniform is seated at a desk in a control room, wearing a headset and looking at two computer monitors. The left monitor displays a map of a city with various data points, and the right monitor shows a world map with a highlighted region. In the background, another person in a military uniform is standing and looking at a screen. The scene is dimly lit with blue and green tones.

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Strengthening military capabilities

The domestic defence industry as a building block for mission success

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About the authors

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Executive summary



The Gulf Cooperation Council (GCC) countries¹ have significant military budgets and are seeking to build their domestic defence capabilities. These countries want domestic industries that can produce not only indigenous products and services, but the support systems to sustain their inventory of platforms and systems. Much of their current procurement budget goes to the initial acquisition of assets from foreign original equipment manufacturers (OEMs), making operational resilience challenging. Consequently, GCC armed forces are vulnerable to such risks as supply chain constraints and geopolitical tensions, which could disrupt supplies and render important assets inoperable. Further, as regional threats change, armed forces could come up short because domestic defence industries lack the customised research and development (R&D) to provide appropriate solutions.

Governments should build the domestic defence industry through dialogue and partnerships. This approach requires thinking differently. It involves transforming the domestic defence industry from a supplier into a planning partner, making it a key element in mission success by improving readiness and sustainment.

This approach uses the need for sustainment to identify and build domestic defence industrial capabilities in line with national priorities. Leading armed forces have long relied on industry being a fundamental input to defence planning, and have worked collaboratively from idea inception to delivery.

This collaborative approach consists of four steps:

- 1** Integrate planning: Involve domestic defence companies in the planning process to develop long-term military capabilities.
- 2** Assess defence industry needs: Understand the industrial elements required to support and sustain those capabilities.
- 3** Develop industry options: Produce and customise domestic defence goods based on these needs, thereby providing a strategic advantage, rather than just the desire for economic development.
- 4** Monitor and improve defence industries: Support the domestic defence industry through long-term contracts and investment.

The procurement challenge

Defence spending in the GCC continues to rise, reaching over US\$100 billion in 2022. However, many defence ministries in the region focus their spending on the initial acquisition of platforms and systems, often without fully considering readiness and sustainment requirements over the long term. They also may not consider the domestic industrial implications. They buy advanced platforms and systems, primarily from global OEMs based outside the region. These contracts with the OEMs frequently do not factor logistics into long-term operational planning. Such agreements also make countries dependent on those foreign players, entail longer turnaround times and high prices, and leave armed forces exposed to political risk and supply chain disruptions. If armed forces do not, or cannot, maintain, repair, and sustain platforms and systems over time, then these platforms and systems can become inoperable—making them worthless to military commanders.

In one recent example, a ministry of defence (MoD) in Asia grounded a vital rotary-wing platform due to a lack of parts and weak maintenance, repair, and overhaul (MRO) capabilities. In the original contract, the ministry had not engaged with the OEMs and domestic industrial players to secure the proper logistics support for the rotary-wing asset. As a result, the armed forces in that country faced delays in getting the fleet operational, with negative implications for national defence and sovereignty.

Today, the challenge of military logistics is intensifying for several reasons. Geopolitical tensions have rerouted matériel for certain assets. Some of the GCC countries' leading suppliers have diverted large amounts of their stocks to support forces in conflicts outside the region. That will make provisioning the GCC in the event of a crisis difficult, especially given how regional threats are changing. Beyond such issues, the COVID-19 pandemic exposed how vulnerable global supply chains are to disruptions. Even though most global trade flows have resumed, military leaders must assume that other issues could affect supply chains in the future.

A further concern is that GCC governments need to be more efficient with their defence spending. Armed forces must factor economics into their acquisition decisions. They need to ensure that they receive the greatest possible payoff in military effectiveness with each program and asset.

The challenge of the domestic solution

At first glance, the obvious solution to these issues of logistics, operability, and readiness is to build the GCC region's defence manufacturing capabilities. In this approach, domestic defence suppliers would make regional armed forces their preferred customers for domestically produced goods, thereby reducing the logistical burden of buying matériel from elsewhere. Regional armed forces would not be dependent on foreign companies, with all the attendant sovereignty implications and exposed supply chains. Growing the defence industrial base is consistent with the long-term aim of GCC governments to develop and diversify their national economies, in part through reallocating military spending from external procurement to domestic investment.

Unfortunately, there is a disconnect within the GCC defence ecosystem. GCC armed forces buy most of their assets from foreign OEMs, and domestic defence manufacturers have little direct communication with, or support from, their national military establishments. Part of the problem is that commercial and national development, rather than military objectives, tends to shape defence priorities and investments. Governments select industrial projects that advance commercial and economic objectives but that only superficially meet domestic military needs. The result is domestic defence suppliers that export rather than sell to their own national armed forces. These companies have yet to develop the capabilities needed to manufacture value-added defence products.

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Making industry central to operational planning

GCC MoDs and military commanders need to make industrial development a central component of their long-term operational planning. To the extent possible, they must anticipate the needs of the future and the corresponding readiness and sustainment requirements, and thereby specify what defence goods they need and what the source should be: foreign, domestic, or a mixture. That process will help them identify which long-term military capabilities they must plan for and what policies they need to build them.

Making industry central to operational planning means looking beyond the initial acquisition of military platforms and systems. Instead, GCC MoDs and military commanders must work to anticipate the sustainment of these platforms and systems over the long term. They can collaborate with domestic and global defence industrial players to determine what they can produce in order to sustain logistics and operation from within their own borders, what needs to be imported, and what needs to be achieved through domestic/foreign industrial collaboration.

Domestic production need not be self-sufficient. It also can occur through secure, resilient supply chains. Some of these supply chains will be closer to home than in the past, an approach known as nearshoring, and some will be predominantly domestic.

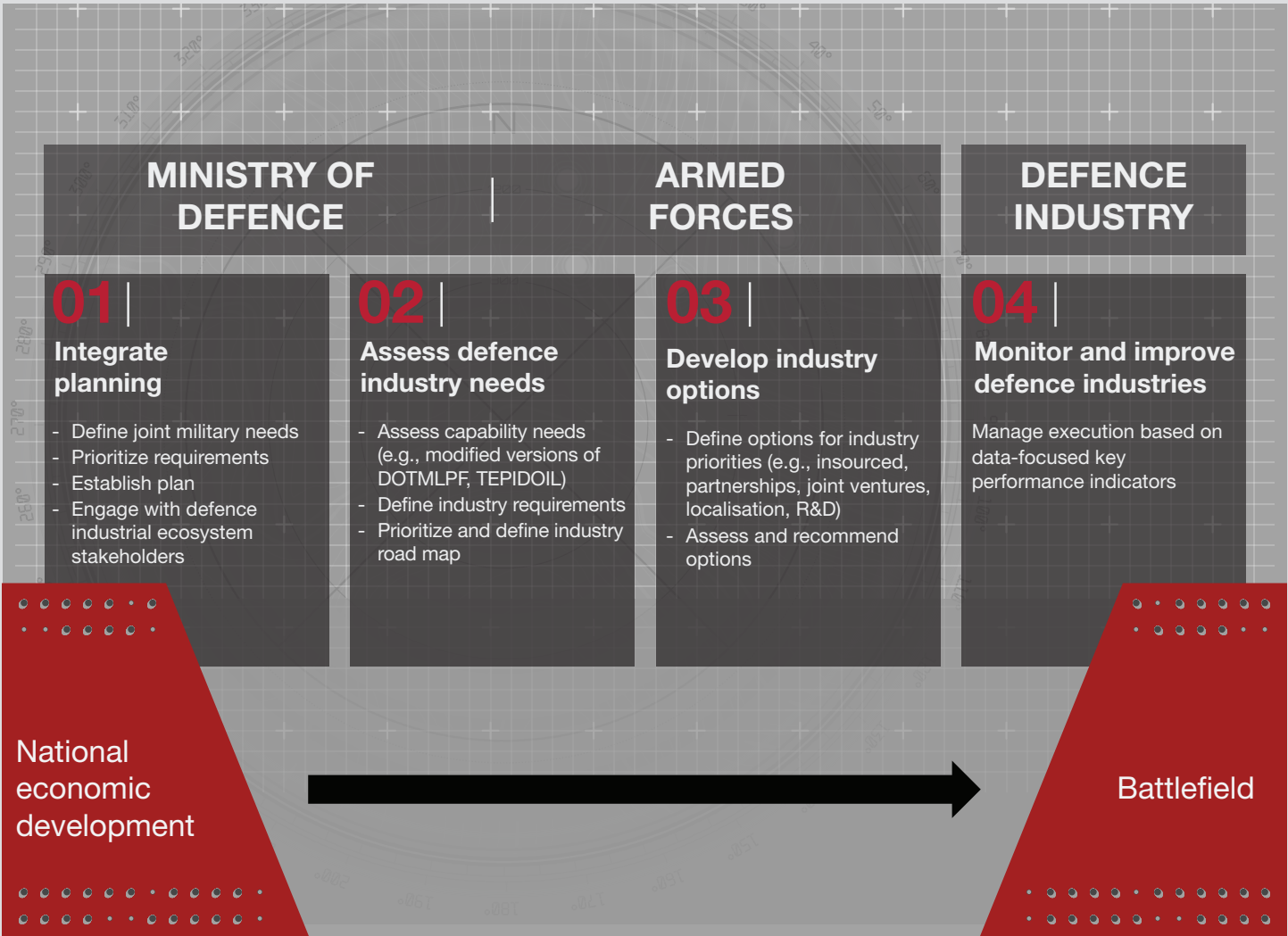
Logistics play a critical role in this process of planning and industrial development. As David Beaumont, an Australian Army officer, has written, logistics can be a “bridge between the national economy and the battlefield, where raw materials, goods and services are shaped through relationships and processes to achieve military outcomes. Industry is where logistics begins.”²



A four-step approach

This new approach consists of four steps (see *Exhibit 1*).

EXHIBIT 1:
FOUR STEPS TO BUILD A DEFENCE INDUSTRY THAT CONTRIBUTES TO
MISSION SUCCESS



Note: DOTMLPF = doctrine, organisation, training, matériel, leadership and education, personnel, and facilities; R&D = research and development; TEPIDOIL = training, equipment, people, infrastructure, doctrine, organisation, information, and logistics.
Source: Strategy&

1. Integrate planning

GCC MoDs should apply an integrated planning process for their armed forces that includes domestic defence manufacturers. They need these domestic defence manufacturers to be involved at the earliest opportunity. Domestic manufacturers possess critical insights. Such MoD–domestic defence industry dialogue enriches each side’s knowledge of the other’s needs, and allows each to build its capabilities in a way that contributes to mission success. The integrated planning method stands in contrast to the traditional method with which MoDs have identified a particular asset required for capability building, and then sought to procure it through a tender. That process excluded manufacturers until they received a formal solicitation to bid.

The U.S. has applied this integrated planning concept, often termed civil–military integration, for several decades. The result has been a stronger R&D ecosystem, reduced manufacturing costs, and improved resilience.³ Similarly, the U.K. government recently took tangible measures to move beyond government–industry collaboration and shift to a closer form of direct integration.⁴

In the GCC, such an approach would take the form of governments, MoDs, and armed forces sharing with their defence industry the capabilities they want to build, and the challenges they need to overcome, over the next 10 to 15 years. Defence industry players would come to the table early as partners. The resulting dialogue would allow the participants in the defence industrial ecosystem to determine which issues they can resolve through domestic manufacturing and which must be resolved through imports.

Such discussion would allow domestic defence companies to adjust their R&D capabilities and ambitions, customise their offerings, and partner with their armed forces to develop jointly long-term solutions. The more familiar they become with their domestic defence customers’ needs, the more able they will be to assist them through incentives and joint R&D. The result would be to strengthen the defence ecosystem so that it can produce the kind of high-profile platforms that build national defence pride (see *“The importance of signature national platforms”*).

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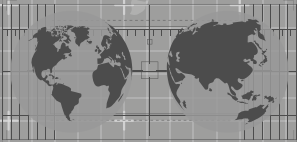
The importance of signature national platforms

The GCC military industries, with a few exceptions, have focused primarily on assembling domestic products, such as defence electronics and land and marine platforms. There is plenty of assembly, but insufficient value added. The amount of production, technology, and capability transfer has been limited. One approach to make faster progress is to focus on a small number of high-profile assets linked to the region’s

force-development priorities. Other countries have applied this approach, either individually or in partnership with allies (see *Exhibit 2*). As a result, they learn faster about complex, emerging technologies by creating a base of expertise in each realm. They have created a priority area for government investment and support. These high-profile platforms boost national pride. They signal that a country has military might and is self-reliant.

EXHIBIT 2:
SIGNATURE DEFENCE PLATFORMS

Country	Producer	Platform	System types
United States	Lockheed Martin	F-22, F-35, and C-130	Stealth fighter jets, military transport
	Northrup Grumman	B-2	Strategic bomber
	General Dynamics	M1 Abrams, F-16	Main battle tank, multi-role combat aircraft
	Raytheon	MIM-104 Patriot	Surface-to-air defence
France	GIAT Industries	CAESAR	Self-propelled howitzer
Türkiye	Baykar	Bayraktar TB2	Unmanned combat aerial vehicle
Ukraine	Luch Design Bureau	Stuhna-P	Anti-tank guided missile
Pakistan/China	Pakistan Aeronautical Complex/ Chengdu Aerospace Corporation	JF-17	Multi-role combat aircraft
India/Russia	BrahMos Aerospace	BrahMos PJ-10	Supersonic cruise missile
China	Chengdu Aerospace Corporation	Chengdu J-20	Stealth fighter jet



Source: Strategy& analysis

2. Assess defence industry needs

Once they have identified their priority long-term military capabilities, MoDs can specify the industrial elements necessary to sustain them. Some assets, such as light armoured vehicles or fighter jets, require a significant amount of matériel to remain effective, including parts and fuel. Others, such as cyber defences, have ongoing software requirements along with highly resilient hardware (such as servers). Regardless of where MoDs and armed forces focus their military capability development, they must also cover sustainment requirements across platforms and systems.

For example, a country may choose to focus on the domestic development of indirect fire capabilities. That country could produce the core system and ammunition domestically. The country may need to import some of the targeting system, such as software, but may be able to co-produce other elements. At a later stage it may be able to produce some of those elements domestically. The country also needs to consider the mobility and supply platforms that support the indirect fire capability. The country can build these and the necessary spare parts at home.

3. Develop industry options

Once the country has integrated planning and assessed its defence industrial needs, it should start producing the required defence goods. At this point, domestic defence production is geared to operational requirements, readiness, and mission success, and not simply the desire for economic development. The government understands that domestic industry is central to defence capabilities (see *“Industry as a mission capability”*). Taking this step also represents a change from the prevailing attitude that the way to sustain weapons platforms and systems is to engage with foreign OEMs.

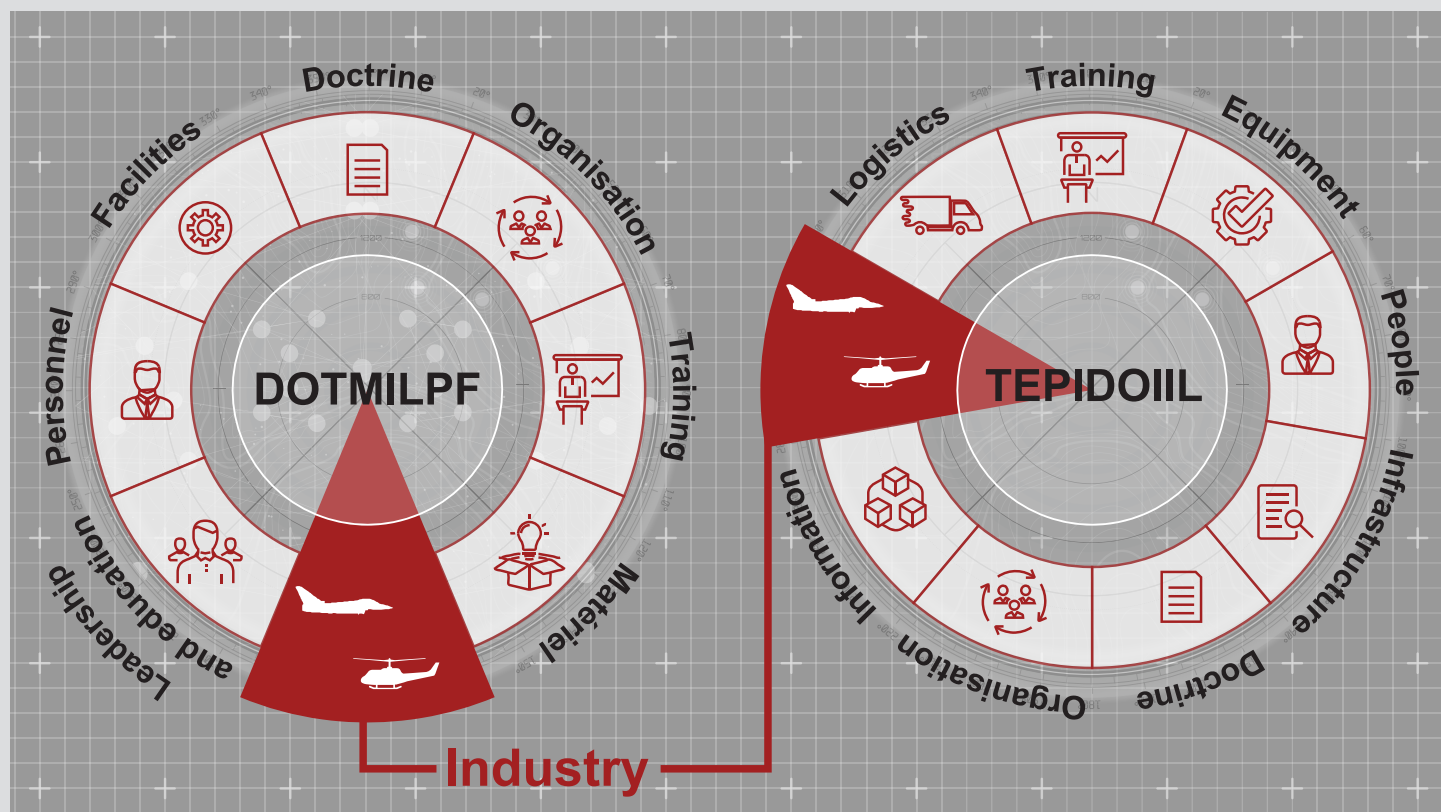
Given the large sums that GCC countries spend on defence procurement, diverting even a modest amount towards domestic industry would provide ample capital. Properly monitored long-term contracts and investment, within a defence ecosystem defined by ongoing consumer–supplier dialogue, can build vital capabilities. Over time, as the domestic defence industry builds sophisticated capabilities, the stronger the country’s operational sovereignty will become and the easier it will be to ensure that supplies reach its armed forces.⁵

Industry as a mission capability

Some countries have standardised capability frameworks that incorporate the industrial attributes required to complete a military mission. For example, the U.S. Department of Defense framework includes doctrine, organisation, training, matériel, leadership and education, personnel, and facilities (DOTMLPF).⁶ The U.K. uses another common framework that assembles such elements as training, equipment, people, infrastructure, doctrine, organisation, information, and logistics (TEPIDOIL).⁷ Both frameworks explicitly include logistics or matériel, thereby providing support and sustainment for physical assets over time.

GCC defence leaders can upgrade their frameworks to incorporate industry for their national needs and as a core aspect of mission readiness. That would mean strengthening these frameworks for regional use: so they become doctrine, organisation, training, matériel, **industry**, leadership and education, personnel, and facilities (DOTMILPF) and training, equipment, people, infrastructure, doctrine, organisation, information, **industry**, and logistics (TEPIDOIL). That can reinforce industry as a critical component through the life cycle of military capability building (see *Exhibit 3*).

EXHIBIT 3: UPGRADED CAPABILITY FRAMEWORKS



Source: Strategy& analysis

4. Monitor and improve defence industries

GCC governments need to both monitor and improve their defence industries. Active monitoring is vital. Armed forces and industry players need to continually assess industry performance. They can use jointly determined, quantifiable key performance indicators and milestones. All defence ecosystem stakeholders need to understand whether objectives are being met, and they must be aligned on next steps.

Continuous oversight can improve all manner of defence goods. For example, the British SA-80 rifle system, which comes in multiple variants, received criticism following its introduction in 1985. Since then, the U.K. has upgraded the system, making major and minor modifications. The SA-80 is now considered a highly lethal and reliable infantry weapon.



Active monitoring is vital. Armed forces and industry players need to continually assess industry performance.

CONCLUSION

As defence platforms and systems become more complex, and global supply chains remain fragile, GCC governments must develop the domestic defence industry as a core capability and embed it into their operational planning. That means collaborating closely with established OEMs and domestic players alike to identify future military demands, plan for their support, and apply a targeted approach to build domestic capabilities. That will transform the domestic defence industry from being a simple supplier to playing a role on the front line. Such a mission-first approach can deliver quality defence goods that build national pride and sovereignty and ensure that armed forces can successfully operate in all circumstances.

ENDNOTES

1. The GCC countries are Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.
2. David Beaumont, “Industry Integration: A New Approach and Attitude to Army Logistics,” Australian Defence Business Review, September/October 2018 (<https://tinyurl.com/2p8zuaa3>).
3. Initial thinking on this matter can be found at: U.S. Office of Technology Assessment, “Assessing the Potential for Civil-Military Integration: Technologies, Processes, and Practices,” September 1994 (<https://ota.fas.org/reports/9402.pdf>).
4. Army Technology, “Why Government and Industry Must Collaborate to Accelerate Multi-domain Integration” (<https://www.army-technology.com/sponsored/why-government-and-industry-must-collaborate-to-accelerate-multi-domain-integration/>).
5. Haroon Sheikh, Bob Mark, and Bassem Fayek, “The Emerging GCC Defence Market: The \$30 Billion Opportunity,” Strategy&, 2017 (<https://www.strategyand.pwc.com/m1/en/reports/the-emerging-gcc-defence-market.pdf>).
6. U.S. Army War College, “DOTMLPF” (<https://ssl.armywarcollege.edu/dde/documents/jsps/terms/DOTMLPF.cfm>).
7. Trevor Taylor, “Britain’s National Audit Office Focuses on Ministry of Defence Capability Delivery, Not Just Equipment,” Royal United Services Institute, April 14, 2020 (<https://www.rusi.org/explore-our-research/publications/commentary/britains-national-audit-office-focuses-ministry-defence-capability-delivery-not-just-equipment>).



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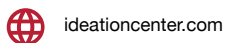
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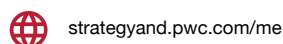
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